2015-16 Mathematics Interim Review Recommendation & Summary

Publisher Name:	Big Ideas Learning
Title:	Big Ideas Math 6th (Green)
ISBN #	**978-1-60840-449-0**
Grade Level(s) or Course:	6th (Green)
Reviewer ID:	MN DA

RECOMMENDED AS:

____X___**Core Mathematics Program-** a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials. Substantial evidence clearly supports the designation of this program as Core.

_____**Other Mathematics Program-** a program that substantially, but partially, meets the *focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for* supplemental materials. Substantial evidence clearly supports the designation of this program as Other.

_____**Component Mathematics Program-** a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs. Substantial evidence clearly supports the designation of this program as Component.

_____**Intervention Program-** a program designed and intended to target and support students' specific needs. Substantial evidence clearly supports the designation of this program as Intervention.

_____ **Does not meet criteria** for recommendation as a Curricular Material or Online Resource for Mathematics.

EVIDENCE SUMMARY:

FOCUS-

All materials meet grade level content. The majority of time spent in major works. Students spend 103 days (67%) in major clusters.

COHERENCE-

Not only the book lessons but there is additional lessons within the record and practice journals and enrichment and extension lessons. Laurie's Notes are also beneficial.

RIGOR-

There is multiple practice forms to bring in procedural fluency. The student book has ample practice but when needed Record and Practice Journal and resources by chapter workbooks are available.

CONCEPTUAL UNDERSTANDING-

Different types of questions are asked throughout to encourage higher level thinking. Students are asked to represent understanding multiple ways (tables, diagrams, models, pictures, drawings, and graphs).

MATHEMATICAL PRACTICES-

All mathematical practice standards are evident throughout the text. They are shown throughout Laurie's notes in every section. Each lesson is based on a concept then reaches out and expects the student to reason and explain through a variety of methods.

ACCESSIBILITY OF STANDARDS TO ALL STUDENTS-

Text supports all levels of learners from interventions (Review), online tutorials to activities for the advanced self-learner.

OTHER:

Lots of resources for students, teacher, and parents. Laurie's Notes are a great resource for teachers.

2015-16 Interim Mathematics Review

Mathematics Evaluation Tool Grades K-8

Publisher: Big Ideas Learning

Title of Material: Big Ideas Math 6th (Green) A Common Core Curriculum

Author: Ron Larson and Laurie Boswell
ISBN #: 978-1-60840-449-0 Copyright 2014

Reviewer ID: MN DA

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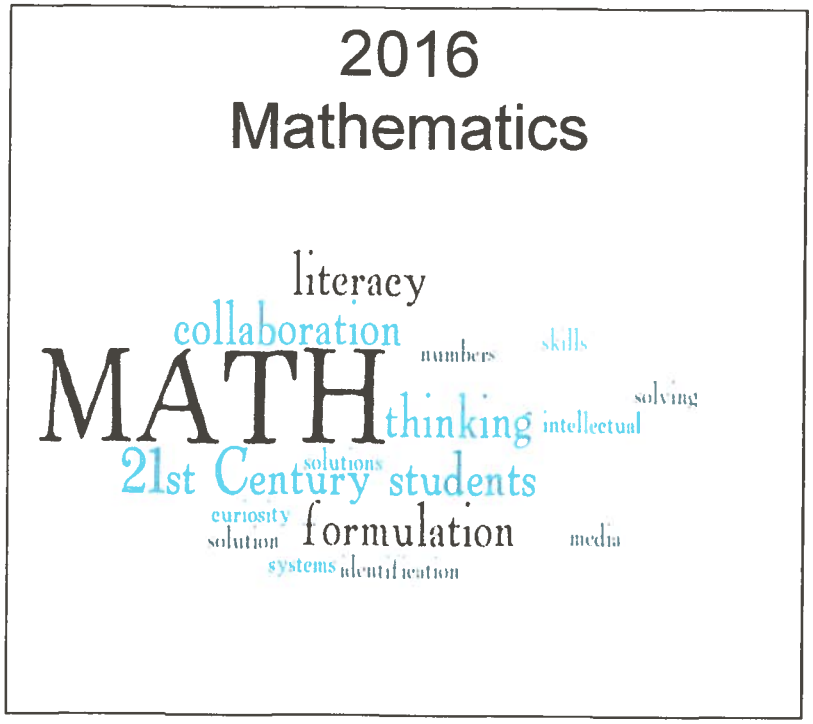
Substantial evidence clearly supports the designation of this program as Core.

Other Mathematics Program- a program that substantially, but partially, meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Other.

Component Mathematics Program- a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs.
Substantial evidence clearly supports the designation of this program as Component.

Intervention Program- a program designed and intended to target and support students' specific needs.
Substantial evidence clearly supports the designation of this program as Intervention.



- Evaluation Form adapted from Instructional Materials Evaluation Toolkit (IMET).

The IMET was developed by Student Achievement Partners. Educators may use or adapt. http://creativecommons.org/licenses/by/3.0/ Download this tool at http://achievethecore.org/IMET

Instructional Materials Evaluation Tool
Mathematics, Grades K-8

What Are the Purposes of the IMET?

This Math IMET is designed to help educators determine whether instructional materials are aligned to the Shifts and major features of the Common Core State Standards (CCSS). The substantial instructional Shifts (http://www.corestandards.org/other-resources/key-shifts-inmathematics/) at the heart of the Common Core State Standards are:

- **Focus** strongly where the Standards focus
- **Coherence**: Think across grades and link to major topics within the grade
- **Rigor**: In major topics, pursue conceptual understanding, procedural skill and fluency, and application with equal intensity.

The IMET draws directly from the following documents:

- Common Core State Standards for Mathematics (www.corestandards.org/Math)
- Publishers' Criteria for the Common Core State Standards in Mathematics grade K-8 (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)

When to use the IMET

1. Purchasing materials: Many factors go into local purchasing decisions. Alignment to the Standards is a critical factor to consider. This tool is designed to evaluate alignment of instructional materials to the Shifts and the major features of the CCSS. It also provides suggestions of additional indicators to consider in the materials evaluation and purchasing process.

2. Evaluating materials currently in use: The IMET can be used to analyze the degree of alignment of existing materials and help to highlight specific, concrete flaws in alignment. Even where materials and tools currently in use fail to meet one or more of these criteria, the pattern of failure is likely to be informative. States and districts can use the evaluation to create a thoughtful plan to modify or combine existing resources in such a way that students' actual learning experiences approach the focus, coherence, and rigor of the Standards.

3. Developing programs: Those developing new programs can use this tool as guidance for creating aligned curricula.
Please note this tool was designed for evaluating comprehensive curricula (including any supplemental or ancillary materials), but it was not designed for the evaluation of standalone supplemental materials.

Who Uses the IMET?

Evaluating instructional materials requires both subject-matter and pedagogical expertise. Evaluators should be well versed in the Standards (www.corestandards.org/Math) for all grades in which materials are being evaluated. This includes understanding the Major Work of the grade (www.achievethecore/focus), the Supporting and Additional work, how the content fits into the progressions in the Standards (www.achievethecore.org/progressions), and the expectations of the Standards with respect to conceptual understanding, procedural skill and fluency, and application. Evaluators also should be familiar with the substantial instructional Shifts (http:// www.corestandards.org/other-resources/key-shifts-in-mathematics/) of Focus, Coherence and Rigor that are listed above.

Getting Started
Prior to Evaluation

Assemble all of the materials necessary for the evaluation. It is essential for evaluators to have materials for all grades covered by the program, as some criteria cannot be rated without having access to each grade. In addition, each evaluator should have a reference copy of the Common Core State Standards for Mathematics (CCSSM) and the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013).

Before conducting the evaluation itself, it is important to develop a protocol for the evaluation process. The protocol should include having evaluators study the Publishers' Criteria and the IMET. It will also be helpful for evaluators to get a sense of each program overall before beginning the process. At a minimum, this would include reading the front matter of the text, looking at the table of contents and paging through multiple chapters.

Sections 1-3 below should be completed to produce a comprehensive picture of the strengths and weaknesses of the materials under evaluation. Information about areas in need of improvement or supplementation should be shared with internal and external stakeholders.

Navigating the Tool

Begin with Section 1: Non-Negotiable Alignment Criteria

- The Non-Negotiable Alignment Criteria must each be met in full for materials to be considered aligned to the Shifts and the major features of the Common Core State Standards. Each Non-Negotiable Alignment Criterion has one or more metrics associated with it; every one of these metrics must be met in order for the criterion as a whole to be met.

- Examine the relevant materials and use evidence to rate the materials against each criterion and its associated metric(s).

- Record and explain the evidence upon which the rating is based.

Continue to Section 2: Alignment Criteria

- The Alignment Criteria must each be met for materials to be considered aligned to the Shifts and the major features of the Common Core State Standards. Each Alignment Criterion has one or more metric associated with it; a specific number of these metrics must be met or partially met in order for the criterion as a whole to be met.

- Examine the materials in relation to these criteria, assigning each metric a point value. Rate the criterion as "Meets" or "Does Note Meet" based on the number of points assigned. The more points the materials receive on the alignment Criteria, the better they are aligned.

Record and explain the evidence upon which the rating is based.

Proceed to Section 4: Indicators of Quality

- Indicators of Quality are important considerations that will help evaluators better understand the overall quality of instructional materials. These considerations are not criteria for alignment to the CCSS, but they provide valuable information about additional program characteristics. Evaluators may want to add their own indicators to the examples provided.

Directions for Non-Negotiable 1

Freedom from Obstacles to Focus

Criterion	Evidence- Give specific examples.	Rating: (Reviewer only.)
Non-Negotiable 1: **Freedom from Obstacles to Focus** **Materials must reflect the content architecture of the Standards by not assessing the topics named before the grade level where they first appear in the Standards.** The Standards foster students' progress to algebra by focusing strongly on arithmetic. Consistent with this focus, certain topics from outside of arithmetic appear only in later grades. Thus, to be aligned, materials must reflect the content architecture of the Standards by not assessing the topics named before the grade level where they first appear in the Standards. In this criterion, "topics named" means the topics that are explicitly named in Metric 1A. No other topics should be added to the list in Metric 1A. (Note that other topics in the standards are addressed in criterion NN2.)	**Required Materials** • Common Core State Standards for Mathematics (www.corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf) • From the materials being evaluated: teacher guides and all assessment components	**Rating this Criterion**: Non-Negotiable 1 is rated as Meets or Does Not Meet. To rate Non-Negotiable 1, begin by rating Metric 1A. Since Metric 1A is the only metric for Non-Negotiable 1, the rating for Non-Negotiable 1 is the same as the rating for Metric 1A. If Metric 1A is rated as Does Not Meet, include evidence of when the named topic(s) is/are assessed. If the metric is rated as Meets, list the grade(s) examined in the evaluation.

Metric NN1A: **Materials ref the basic architecture of the Standards by not assessing the listed topics before the grade level indicated.** • Probability, including chance, likely outcomes, probability models. (Introduced in the CCSSM in grade 7) • Statistical distributions, including center, variation, clumping, outliers, mean, median, mode, range, quartiles; and statistical association or trends, including two-way tables, bivariate measurement data, scatter plots, trend line, line of best fit, correlation. (Introduced in the CCSSM in grade 6) • Similarity, congruence, or geometric transformations. (Introduced in the CCSSM in grade 8) • Symmetry of shapes, including line/ reflection symmetry, rotational symmetry. (Introduced in the CCSSM in grade 4) **How to Find the Evidence:** Evaluate the table of contents, all chapter tests, all unit tests, and other such assessment components (including rubrics). For context, read Criterion #2 from the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013). NOTE: Grade alignments of other topics are addressed in Non-Negotiable 2, Focus and Coherence.) In this criterion, "topics named" means the topics that are explicitly named in Metric 1A. No other topics should be added to the list in Metric 1A. (Note that other topics in the standards are addressed in criterion NN2.)	**Evidence-** All materials meet grade level content.	**(Reviewer only.)** **__X__Meets** **____Does Not Meet**
Non-Negotiable 1: Materials must reflect the content architecture of the Standards by not assessing the topics named* before the grade level where they first appear in the Standards. NN 1 If Metric 1A was rated as Meets, then rate Non-Negotiable 1 as Meets. If Metric 1A was rated as Does Not Meet, then rate Non- Negotiable 1 as Does Not Meet. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion.**(Reviewer only.)** **Before moving to Non-Negotiable 2, record the final Meets or Does Not Meet rating in the Evaluation Summary.**		**(Reviewer only.)** **__X__Meets** **____Does Not Meet** **Strengths/Weaknesses:**

Directions for Non-Negotiable 2

Focus and Coherence

Non-Negotiable 2: **Focus and Coherence** **Materials must focus coherently on the Major Work of the grade in a way that is consistent with the progressions in the Standards.** Focus and coherence are the two major evidence-based design principles of the Common Core State Standards for Mathematics (CCSSM, p. 3). Focus is necessary in order to fulfill the ambitious promise the states have made to their students by adopting the Standards: greater achievement at the college and career ready level; greater depth of understanding of mathematics; and a rich classroom environment in which reasoning, sense-making, applications, and a range of mathematical practices flourish. In simpler terms, a mile-wide, inch-deep curriculum translates to less time per topic. Less time means less depth and moving on without many students. Thus, materials must focus coherently on the Major Work of the grade in a way that is consistent with the progressions in the Standards.	**Required Materials** • Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf) • Focus by Grade Level for the grade being evaluated (www.achievethecore.org/focus) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion:** Non-Negotiable 2 is rated as Meets or Does Not Meet. To rate Non-Negotiable 2, first rate metrics 2A–2H. Each of these eight metrics must be rated as Meets in order for Non-Negotiable 2 to be rated as Meets. Rate each metric 2A-2H as Meets or Does Not Meet/Insufficient Evidence. If the evidence examined shows that the Criterion is met, then mark the Criterion Meets. If the evidence examined shows that the Criterion is not met—or if there is insufficient evidence to make a determination—then mark the Criterion as Does Not Meet/Insufficient Evidence. Support all ratings with evidence.
Metric NN2A: **In each grade K–8, students and teachers using the materials as designed devote the large majority of time to the Major Work of the grade.** **How to Find the Evidence:** Familiarize yourself with the Major Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, lessons, homework assignments, and assessments. (Evaluate both student and teacher materials.) Consider time spent on the Major Work of the grade and judge qualitatively whether students and teachers using the materials as designed will devote the large majority of time to the Major Work of the grade. For context, read Criterion #1 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013)	**Evidence-** The majority of time spent in major works. Students spend 103 days (67%) in major clusters.	**(Reviewer only.)** **__X__Meets** **____Does Not Meet/** **Insufficient Evidence**

Metric NN2B: **Supporting W[illegible]k, where present, enhances focus and coherence simultaneously by also engaging students in the Major Work of the grade.** **How to Find the Evidence:** Familiarize yourself with the Major Work and Supporting Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate chapters and lessons that focus on Supporting Work. NOTE: Example of evaluating this Criterion might include looking at whether materials for K–5 generally treat data displays as an occasion for solving grade-level word problems using the four operations (e.g., see 3.MD.B.3); or whether materials for grade 7 take advantage of opportunities to use probability to support ratios, proportions, and percentages. For context, read Criterion #3 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** After topics are introduced they are brought back into practice with other activities. Essential Questions for each chapter.	**(Reviewer only.)** **__X__Meets** **____Does Not Meet/ Insufficient Evidence**
Metric NN2C: **Materials base content progressions on the grade-by-grade progressions in the Standards. Content from previous or future grades does not unduly interfere with or displace on-grade-level content.** **How to Find the Evidence:** Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, and lessons in both student and teacher materials. NOTE: In some cases it may be possible that aligned materials might address some aspects of a topic in a strategic way before or after the grade level in which the topic is central in the Standards' progressions; for example, a curriculum author might purposefully choose to explore adding fractions with unlike denominators in a way appropriate to grade four, recognizing that this work is not really required until the next grade. However, any such purposeful discrepancies in content progressions should enhance the required learning in each grade; not unduly interfere with or displace grade-level content; and be clearly aimed at helping students meet the Standards as written rather than effectively rewriting the progressions in the Standards. And in all cases, note that Non-Negotiable 1 must be met for materials to be aligned. For context, read Criterion #5a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Content progresses throughout the program allowing for building on previous knowledge. Scope and Sequence and Pacing Guide with all concepts linked to Common Core.	**(Reviewer only.)** **__X__Meets** **____Does Not Meet/ Insufficient Evidence**

Metric NN2D: **Materials gi[illegible] students extensive work with on-grade-level problems.** **How to Find the Evidence:** Evaluate both student and teacher materials. If the materials provide resources for differentiated learning, consider whether lower-performing students have opportunities to engage with grade-level problems. Also consider whether higher-performing students are given opportunities to learn current grade-level content in greater depth. For context, read Criterion #5b in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Not only the book lessons but there is additional lessons within the record and practice journals and enrichment and extension lessons. Laurie's Notes are also beneficial.	**(Reviewer only.)** **__X__Meets** **____Does Not Meet/ Insufficient Evidence**
Metric NN2E: **Materials relate on-grade-level concepts explicitly to prior knowledge from earlier grades.** **How to Find the Evidence:** Evaluate both student and teacher materials. NOTE: Examples of evaluating this Criterion might include looking at the way the materials extend basic ideas of place value across the decimal point; or the role that properties of operations play when the materials extend arithmetic beyond whole numbers to fractions, variables, and expressions. More generally, cluster headings in the Standards sometimes signal key moments where reorganizing and extending previous knowledge is important in order to accommodate new knowledge (e.g., see cluster headings that use the phrase "Apply and extend previous understanding"). For context, read Criterion #5c in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Each lesson ties to previous concepts. Each chapter begins with a section titled "What You Learned Before". Additionally, each lesson includes a "Previous Learning" statement addressing the specifics for the given lesson.	**(Reviewer only.)** **__X__Meets** **____Does Not Meet/ Insufficient Evidence**
Metric NN2F: **Review of material from previous grades is clearly identified as such to the teacher, and teacher and students can see what their specific responsibility is for the current year.** **How to Find the Evidence:** Evaluate the table of contents, but do not stop there; also evaluate units, chapters, lessons, homework assignments and assessments. (Evaluate both student and teacher materials.) Identify any content from previous grades and check whether it is identified as such. For context, read Criterion #5a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** There is a what you learned before page at the beginning of each chapter but a handbook is also available covering skills review and basic skills. There is also a Fair Game Review in the record and practice journal.	**(Reviewer only.)** **__X__Meets** **____Does Not Meet/ Insufficient Evidence**

Metric NN2G: **Materials include learning objectives that are visibly shaped by CCSSM cluster headings.** **How to Find the Evidence:** Select several clusters from the Major Work in the grade being evaluated. Evaluate teacher and student materials in relation to these clusters. For context, read Criterion #6a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Learning objectives are located at the beginning of each lesson for easy access to students. Table of contents has all information.	**(Reviewer only.)** **__X__Meets** **____Does Not Meet/ Insufficient Evidence**
Metric NN2H: **Materials include problems and activities that serve to connect two or more clusters in a domain, or two or more domains in a grade, in cases where these connections are natural and important.** **How to Find the Evidence:** In the grade being evaluated, choose two or more clusters or two or more domains for which connections are natural and important. Evaluate the units, chapters, and lessons that deal with the chosen topics, looking for problems and activities that serve to connect the chosen clusters or domains. NOTE: An example of evaluating this Criterion might include looking at whether problems in grade 4 sometimes or often involve students applying their developing computation skills (detailed in domain NBT) in the context of solving word problems (detailed in domain OA). For context, read Criterion #6b in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Connections are made throughout the book bringing previous concepts importance into additional activities. Laurie's notes has connections layout and in her introduction.	**(Reviewer only.)** **__X__Meets** **____Does Not Meet/ Insufficient Evidence**
Non-Negotiable 2: **Focus and Coherence** **Materials must focus coherently on the Major Work of the grade in a way that is consistent with the progressions in the Standards.** **NN 2** If all Metrics 2A – 2H were rated as Meets, then rate Non-Negotiable 2 as Meets. If one or more Metric was rated Does Not Meet/Insufficient Evidence, then rate Non-Negotiable 2 as Does Not Meet. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)** **Before moving to Alignment Criterion 1, record the final Meets or Does Not Meet rating in the Evaluation Summary.**		**(Reviewer only.)** **__X__Meets** **____Does Not Meet** **Strengths/Weaknesses:**

Now continue by evaluating the Alignment Criterion 1 for Rigor and Balance.

Directions for Alignment Criterion 1

Rigor and Balance

Alignment Criterion 1: Rigor and Balance **Materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.** The Standards set expectations for attention to all three aspects of rigor: conceptual understanding, procedural skill and fluency, and applications. Thus, materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.	**Required Materials** • Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf) • Focus by Grade Level for the grade being evaluated (achievethecore.org/focus) • Situation Types for the Operations in Word Problems (achievethecore.org/situation-types) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion:** Alignment Criterion 1 is rated as Meets or Does Not Meet. To rate Alignment Criterion 1, first rate metrics 1A, 1B, and 1C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). For each metric, guiding questions are provided to aid in gathering evidence. Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 1 if the materials rate 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as rigor and balance, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.
Metric AC1A: **The materials support the development of students' conceptual understanding of key mathematical concepts, especially where called for in specific content Standards or cluster headings.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Major Work for the grade being evaluated that relate specifically conceptual understanding to use throughout the questions associated with this metric. NOTE: Some examples of clusters or Standards that call for conceptual understanding include: K.OA.A.1, (1.NBT.B, 1.NBT.C), (2.NBT.A, 2.NBT.B), (3.OA.A.1, 3.OA.A.2), 4.NF.A, (4.NBT.A, 4.NBT.B), 5.NF.B, (5.NBT.A, 5.NBT.B), 6.RP.A, 6.EE.A.3, 7.NS.A, 7.EE.A, 8.EE.B, 8.F.A, 8.G.A Clusters or Standards grouped by parentheses are closely connected and could be analyzed together. For context, read Criterion #4a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	-Choose a cluster/Standard from the Major Work that is aligned to each aspect of rigor and use it to evaluate these metrics. It is most helpful if the same clusters/Standards are chosen for all of the programs being evaluated. (Guidance In choosing clusters/Standards is included in "How to Find the Evidence".)	**Use the questions for AC Metric 1A to evaluate Metric 1A. Record evidence for each question and rate Metric 1A.** **__X__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**

Is conceptual understanding attended to thoroughly where the Standards set expectations for understanding or interpreting? Evaluate lessons, chapter/unit assessments and homework assignments, paying attention to work aligned to Standards that explicitly call for understanding or interpreting. NOTE: Examples of evaluating this Criterion might include looking at how well the multi-digit addition and subtraction algorithms are developed and explained on the basis of place value and properties of operations; or how well the multi-digit multiplication and division algorithms are developed and explained on the basis of place value and properties of operations; or how well solving equations is presented and explained as a process of reasoning.	**Evidence-** Lessons give great ideas for teachers, and thought provoking questions.	
Do the materials feature high-quality conceptual problems and conceptual discussion questions? Evaluate lessons, chapter/unit assessments, and homework assignments. NOTE: Example of conceptual problems might include such questions as "Find a number greater than 1/5 and less than 1/4," or "If the divisor does not change and the dividend increases, what happens to the quotient?"	**Evidence-** Different types of questions are asked throughout to encourage higher level thinking.	
Do the materials feature opportunities to identify correspondences across mathematical representations? Evaluate lessons, chapter/unit assessments and homework assignments. NOTE: Examples of evaluating this Criterion might include looking at whether students are supported in identifying correspondences among: the verbal description of a situation, the diagrams that distill its mathematical features, and the equations that model it; or equivalent forms of numbers (e.g., 3 and 6/2) and the number line; or rational number operations and representations of them via models such as the vector model; or the expression that defines a function and the graph that shows the relationship.	**Evidence-** Students are asked to represent understanding multiple ways (tables, diagrams, models, pictures, drawings, and graphs).	
Metric AC1B: **The materials are designed so that students attain the fluencies and procedural skills required by the Standards.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Major Work for the grade being evaluated that relate specifically to fluency and procedural skill to use throughout the questions associated with this metric. NOTE: Some examples of Standards that call for procedural skill and fluency include: K.OA.A.5, 1.OA.C.6, 2.OA.B.2, 2.NBT.B.5, 3.OA.C.7, 3.NBT.A.2, 4.NBT.B.4, 5.NBT.B.5, 6.NS.B.2, and 6.NS.B.3, 6.EE.A, 7.NS.A, 7.EE.A.1,7.EE.B.4a, 8.EE.C.7, 8.EE.C.8b For context, read Criterion #4b in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).		**Use the questions for Metric 1B to evaluate Metric 1 B. Record evidence for each question and rate Metric 1B.** **(Reviewer only.)** **__X__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**

Is progress toward fluency and procedural skill interwoven with students' develo conceptual understanding of the operations in question? Evaluate lessons, chapter/unit assessments, daily routines, and homework assignments for evidence that the development of fluency and procedural skill is supported by conceptual understanding.	**Evidence-** There is multiple p ice forms to bring in procedural fluency. The student book has ample practice but when needed Record and Practice Journal and resources by chapter workbooks are available.	
Are purely procedural problems and exercises present that include cases in which opportunistic strategies are valuable and generic cases that require efficient algorithms present? Evaluate lessons, chapter/unit assessments, daily routines, and homework assignments. NOTE: Examples of problems in which opportunistic strategies are valuable might include the sum 698 + 240 or the system x + y = 1, 2x + 2y = 3. Examples of generic cases that require efficient algorithms might include the sum 8767+2286 or the system 6y + x = x + 3, – x = 1 + 2y.	**Evidence-** Each lesson has plenty of practices contained within.	
Do the materials in grades K–6 provide repeated practice toward attainment of fluency Standards? Evaluate lessons, daily routines, and homework assignments for evidence of repeated practice toward attainment of the following K–6 Standards that set an explicit expectation of fluent (accurate and reasonably fast) computation: K.OA.A.5, 1.OA.C.6, 2.OA.B.2, 2.NBT.B.5, 3.OA.C.7, 3.NBT.A.2, 4.NBT.B.4, 5.NBT.B.5, 6.NS.B.2, 6.NS.B.3.	**Evidence-** Repeated practice is evident in each lesson.	
Metric AC1C: **The materials are designed so that teachers and students spend sufficient time working with engaging applications, without losing focus on the Major Work of each grade.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Major Work for the grade being evaluated that relate specifically application to use throughout the questions associated with this metric. NOTE: Some examples of clusters or Standards that call for application include: K.OA.A.2, 1.OA.A, 2.OA.A, 3.OA.A.3, 3.OA.D.8, 4.OA.A.3, 4.NF.B.3d, 4.NF.B.4c, 5.NF.B.6, 5.NF.B.7c, 6.RP.A.3, 6.NS.A.1, 6.EE.B.7, 6.EE.C.9, 7.RP.A, 7.NS.A.3, 7.EE.B.3, 8.EE.C.8c, 8.F.B For context, read Criterion #4c in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).		**Use the questions for Metric 1C to evaluate Metric 1C. Record evidence for each question and rate Metric 1C.** **(Reviewer only.)** **__X__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Are there are single- and multi-step contextual problems, including non-routine problems, that develop the mathematics of the grade, afford opportunities for practice, and engage students in problem solving? Do the problems attend thoroughly to those places in the content Standards where expectations for multi-step and real-world problems are explicit? Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** Every section has problems from basic practice to real life application, and age appropriate.	

Do application problems particularly stress applying the Major Work of the grade? Evaluate lessons, chapter/unit assessments, and homework assignments. NOTE: Examples of evaluating this Criterion might include looking at: how well, by the end of grade 2, students using the materials as designed can represent and solve a full range of one-step addition and subtraction word problems; or how well, by the end of grade 3, students using the materials as designed can represent and solve a full range of one-step multiplication and division word problems; or how well these basic situation types for each operation are carried coherently across the grades, (e.g., with fractions and algebraic expressions); or, in all grades, whether the problems connect concepts, Standards, and domains in ways that are natural and important. For a list of situation types for one-step addition, subtraction, multiplication, and division problems, see Situation Types for the Operations in Word Problems	**Evidence-** There are application and real world problems in every section.	
Does modeling build slowly across K–8, with applications that are relatively simple in earlier grades and when students are encountering new content? In grades 6–8, do the problems begin to provide opportunities for students to make their own assumptions or simplifications in order to model a situation mathematically? Read Standard for Mathematical Practice 4, Model with Mathematics. Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** Students are given opportunity to think for themselves.	
Alignment Criterion 1: **Rigor and Balance** **Materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.** **AC1** Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 out of 6 points, the Criterion has not been met. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)** **Before moving to Alignment Criterion 2, record the final Meets or Does Not Meet rating in the Evaluation Summary.**		**(Reviewer only.)** **__X__Meets** **____Does Not Meet** **Strengths/Weaknesses:**

Directions for Alignment Criterion 2

Standards for Mathematical Practice

Alignment Criterion 2: Standards for Mathematical Practice

Materials must demonstrate authentic connections between content Standards and practice Standards.

The Standards require that designers of instructional materials connect the mathematical practices to mathematical content in instruction. Thus, materials must demonstrate authentic connections between content Standards and practice Standards.

Required Materials:

- Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf)
- Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)
- Focus by Grade Level for the grade being evaluated (www.achievethecore.org/focus)
- From the materials being evaluated: teacher guides, student texts and workbooks

Rating this Criterion

Alignment Criterion 2 is rated as Meets or Does Not Meet.

To rate Alignment Criterion 2, first rate metrics 2A, 2B, and 2C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). For each metric, guiding questions are provided to aid in gathering evidence.

Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 2 if the materials earn 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as mathematical practices, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.

Metric AC2A:

Materials address the practice Standards in such a way as to enrich the Major Work of the grade; practices strengthen the focus on Major Work instead of detracting from it, in both teacher and student materials.

How to Find the Evidence:

Familiarize yourself with the Major Work of the grade being evaluated (see the Focus by Grade Level documents.)

Evaluate teacher and student materials for evidence that the mathematical practices support and connect to the focus of the grade.

NOTE: Examples of evaluating this Criterion might include looking at whether, in grades K–5, students using the materials are supported to look for and express regularity in repeated reasoning about the addition table, the multiplication table, the properties of operations, the relationship between addition and subtraction or multiplication and division, and the place value system; or whether, in grades 6–8, students using the materials are supported to look for and express regularity in repeated reasoning about proportional relationships and linear functions.

For context, read Criterion #8 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013).

Evidence-

All mathematical practice standards are evident throughout the text. They are shown throughout Laurie's notes in every section. Each lesson is based on a concept then reaches out and expects the student to reason and explain through a variety of methods.

(Reviewer only.)

__X__Meets (2)

____Partially Meets (1)

____Does Not Meet (0)

Metric AC2B: **Materials attend to the full meaning of each practice Standard.** **How to Find the Evidence:** For context, read Criterion #7 and Criterion #9 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).		**Use the questions for Metric 2B to evaluate Metric 2B. Record evidence for each question and rate Metric 2B.** **(Reviewer only.)** **__X__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Over the course of any given year of instruction, is each mathematical practice Standard meaningfully present in the form of assignments, activities, or problems that stimulate students to develop the habits of mind described in the practice Standard? Evaluate lessons, chapter/ unit assessments, and homework assignments for evidence of each mathematical practice being meaningfully present in instruction.	**Evidence-** Each mathematical practice can be used throughout the year.	
Do the materials treat the practice Standards as developing across grades or grade bands? Are the practice Standards in early grades appropriately simple? Do they display an arc of growing sophistication across the grades?	**Evidence-** More explanation required as the course progresses.	
Are there teacher-directed materials that explain the role of the practice Standards in the classroom and in students' mathematical development? Are alignments to practice Standards accurate?	**Evidence-** Laurie's Notes As the student progresses through the year the content becomes more sophisticated and expects the student to do more explaining.	
Metric AC2C: **Materials support the Standards' emphasis on mathematical reasoning.** **How to Find the Evidence:** For context, read Criterion #10 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).		**Use the questions for Metric 2C to evaluate Metric 2C. Record evidence for each question and rate Metric 2C.** **(Reviewer only.)** **__X__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Do the materials support students in constructing viable arguments and critiquing the arguments of others concerning grade-level mathematics that is detailed in the content Standards? Read Standard for Mathematical Practice 3. Evaluate teacher and student materials to ensure that students are given opportunities to reason with grade-level mathematics.	**Evidence-** The program expects the student to explain, justify, and reason especially in the Error Analysis exercises.	
Do the materials support students in producing not only answers and solutions, but also, in a grade-appropriate way, arguments, explanations, diagrams, mathematical models, etc., especially in the Major Work of the grade? Familiarize yourself with the Major Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate teacher and student materials, to understand the types of work students are expected to produce.	**Evidence-** Content is designed at a level appropriate to the student's interest. It is visually appealing to the student.	

Do materials explicitly attend to the specialized language of mathematics? Is language of argument, problem solving, and mathematical explanations taught rather than assumed? Evaluate teacher and student materials, paying attention to how mathematical language is taught. NOTE: Examples of evaluating this Criterion might include looking at whether students are supported in: basing arguments on definitions; using the method of providing a counterexample; or recognizing that examples alone do not establish a general statement.	**Evidence-** Key Ideas and Vocabulary Sections of each lesson teach the language of math.	
Alignment Criterion 2: **Standards for Mathematical Practice** **Materials must demonstrate authentic connections between content Standards and practice Standards.** **AC2** Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 out of 6 points, the Criterion has not been met. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)** **Before moving to Alignment Criterion 3, record the final Meets or Does Not Meet rating in the Evaluation Summary.**		**(Reviewer only.)** **__X__Meets** **____Does Not Meet** **Strengths/Weaknesses:**
Alignment Criterion 3: **Access to the Standards for All Students** **Materials must provide supports for English Language Learners and other special populations.** Because Standards are for all students, alignment requires thoughtful support to ensure all students are able to meet the Standards. Thus, aligned materials must provide supports for English Language Learners and other special populations.	**Required Materials:** • Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion:** Alignment Criterion 3 is rated as Meets or Does Not Meet. To rate Alignment Criterion 3, first rate metrics 3A, 3B, and 3C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 3 if the materials earn 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as support for special population, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.

Metric AC3A: **Support for English Language Learners and other special populations is thoughtful and helps those students meet the same Standards as all other students. The language in which problems are posed is carefully considered.** **How to Find the Evidence:** Evaluate teacher and student materials, paying attention to supports offered for special populations.	**Evidence-** Online resources to translate vocabulary in other languages to help students of English language learners.	**Reviewer only.)** **__X__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Metric AC3B: **Materials provide appropriate level and type of scaffolding, differentiation, intervention, and support for a broad range of learners with gradual removal of supports, when needed, to allow students to demonstrate their mathematical understanding independently.** **How to Find the Evidence:** Evaluate teacher and student materials, paying attention to whether materials provide differentiation that will lead all learners to engage with on-grade-level content.	**Evidence-** Text supports all levels of learners from interventions (Review), online tutorials to activities for the advanced self learner.	**Reviewer only.)** **__X__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Metric AC3C: **Design of lessons recommends and facilitates a mix of instructional approaches for a variety of learners such as using multiple representations (e.g., including models, using a range of questions, checking for understanding, flexible grouping, pair-share).** **How to Find the Evidence:** Evaluate teacher materials, noting instructional approaches suggested for whole class and differentiated lessons and activities.	**Evidence-** Desmos applications, Geogebra applications, and Think. Pair. Share. Ideas.	**Reviewer only.)** **__X__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**

Alignment Criterion 3: Access to the Standards for All Students **Materials must provide supports for English Language Learners and other special populations.** AC3 Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 points, the Criterion has not been met. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion.**(Reviewer only.)** **Move to the Evaluation Summary and record the final Meets or Does Not Meet rating .**	**(Reviewer only.)** **___X_Meets** **____Does Not Meet** **Strengths/Weaknesses:**

Once an evaluation for alignment to the Shifts and major features of the CCSS has been conducted using Sections 1-3, it's important to evaluate for overall quality and best practices. A starting list of Indicators of Quality are suggested below. States, districts and others evaluating instructional materials are encouraged to add to this list to ensure materials reflect local contexts. For background information on some of the Indicators of Quality in this section, refer to pp.18–21 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).

Indicators of Quality	Evidence- Give specific examples.	Rating: (Reviewers only.)
1. Lessons are thoughtfully structured and support the teacher in leading the class through the learning paths at hand, with active participation by all students in their own learning and in the learning of their classmates.	**Evidence-** Tips in Laurie's Notes to motivate the students and work together.	**(Reviewer only.)** **___X___ Yes** **_____ No**
2. The underlying design of the materials includes both problems and exercises. (In solving problems, students learn new mathematics, whereas in working exercises, students apply what they have already learned to build mastery.) Each problem or exercise has a purpose. **NOTE: This Criterion does not require that the problems and exercises be labeled as such.**	**Evidence-** Each lesson has a variety of methods and progressions. From self-guided sections to teacher instructions there is multiple approaches within each lesson.	**(Reviewer only.)** **___X___ Yes** **_____ No**

3. Design of assignments is not haphazard: exercises are given in intentional sequences in order to strengthen students' mathematical understanding.	**Evidence-** Progression is systematic to help the student gain confidence as they approach more difficult problems.	**(Reviewer only.)** **___X___ Yes** **_____ No**
4. There are separate teacher materials that support and reward teacher study including, but not limited to: discussion of the mathematics of the units and the mathematical point of each lesson as it relates to the organizing concepts of the unit, discussion on student ways of thinking and anticipating a variety of students responses, guidance on lesson flow, guidance on questions that prompt students thinking, and discussion of desired mathematical behaviors being elicited among students.	**Evidence-** Laurie's Notes are an excellent resource for teachers to help students.	**(Reviewer only.)** **___X___ Yes** **_____ No**
5. Manipulatives suggested in the materials are faithful representations of the mathematical objects they represent and are connected to written methods.	**Evidence-** Models of area used correctly.	**(Reviewer only.)** **____X__ Yes** **_____ No**
6. Materials include a variety of curriculum-embedded assessments. Examples include pre-, formative, summative, and self-assessment resources.	**Evidence-** Pre-tests, post tests, mini assessments, quizzes, and online testing tools are all summative assessments available. Formative assessments are imbedded within Laurie's Notes.	**(Reviewer only.)** **___X___ Yes** **_____ No**
7. Assessments contain aligned rubrics, answer keys, and scoring guidelines that provide sufficient guidance for interpreting student performance.	**Evidence-** All assessments have detailed keys and scoring rubrics. Online tests are automatically corrected.	**(Reviewer only.)** **___X___ Yes** **_____ No**
8. Materials assess student proficiency using methods that are accessible and unbiased, including the use of course-level language in student prompts.	**Evidence-** Yes, assessments are consistent with unit instructions.	**(Reviewer only.)** **___X___ Yes** **_____ No**

9. Materials are carefully evaluated by qualified individuals, whose names are listed, in an effort to ensure freedom from mathematical errors and course-level appropriateness.	**Evidence-** Developed by a team of educators with years of experience.	**(Reviewer only.)** **___X___ Yes** **_____ No**
10. The visual design supports students in engaging thoughtfully with the subject. Navigation through the text is clear.	**Evidence-** The text is visually interesting and easy to follow.	**(Reviewer only.)** **___X___ Yes** **_____ No**
11. The materials engage parents in appropriate ways. For example, homework assignments in elementary grades, consist of routine problems, practice with getting answers, and fluency-building exercises that parents can easily support.	**Evidence-** Lessons are easy for parents to follow as well as online tutorials in multiple languages.	**(Reviewer only.)** **___X___ Yes** **_____ No**

Reviewer IMET Evaluation Summary **Title/Level: _6th Grade_____**

Publisher: _Big Ideas Learning_____ Copyright: __2014_____ ISBN:_978-1-60840-449-0____

Reviewer ID # __MN___DA_____Date Review Completed:__7 March 2016_____

Non-Negotiable Criteria- Each Non-Negotiable must be met in order for the Non-Negotiable Alignment Criteria to be met overall.

Non-Negotiable 1: Freedom from Obstacles to Focus	Non- Negotiable 2: Focus and Coherence
___X____ Meets _____ Does Not Meet	__X___ Meets _____ Does Not Meet

Non-Negotiable Overall:

___X__ Meets _____ Does Not Meet

Alignment Criteria- Each Alignment Criterion must be met with a sufficient number of points in order for Alignment Criteria to be labeled as "Meets" overall. The more points the materials receive on the Alignment Criteria, the better they are aligned.

Alignment Criterion 1: Rigor and Balance	Alignment Criterion 2: Standards of Mathematical Practice	Alignment Criterion 3: Access to Standards for All Learners
Points: __6___ of 6 possible. (Materials must receive at least 5 of 6 points to align.) _____X__ Meets _____ Does Not Meet	Points: ___6__ of 6 possible. (Materials must receive at least 5 of 6 points to align.) ____X___ Meets _____ Does Not Meet	Points: ___6__ of 6 possible. (Materials must receive at least 5 of 6 points to align.) ___X____ Meets _____ Does Not Meet

Alignment Criteria Overall:

___X__ Meets _____ Does Not Meet

If the materials meet both Non-Negotiables and relevant Alignment Criterion, they are aligned to the Shifts and major features of the Core Standards. **Do the materials meet every Non-Negotiable and Alignment Criterion? __X___ Yes _____ No**

What are the specific areas of strength and weakness based on this evaluation? Publishers or others modifying or developing assessments can use this information to make improvements and/or to remedy gaps in the alignment of assessment materials.

Strengths

-Lots of resources for students, teacher, and parents.

-Laurie's Notes are a great resource for teachers

-Progression is great across all grades.

-Different paths for regular and accelerated.

Weaknesses

-Can't think of any, keep up the great work!

2015-16 Mathematics Interim Review Recommendation & Summary

Publisher Name:	Big Ideas Learning
Title:	Big Ideas Math 7th (red)
ISBN #	978-1-60840-[redacted] 450-6
Grade Level(s) or Course:	7th ~~Accelerated~~ (red)
Reviewer ID:	MN DA

RECOMMENDED AS:

____X___**Core Mathematics Program-** a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials. Substantial evidence clearly supports the designation of this program as Core.

_____**Other Mathematics Program-** a program that substantially, but partially, meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for supplemental materials. Substantial evidence clearly supports the designation of this program as Other.

_____**Component Mathematics Program-** a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs. Substantial evidence clearly supports the designation of this program as Component.

_____**Intervention Program-** a program designed and intended to target and support students' specific needs. Substantial evidence clearly supports the designation of this program as Intervention.

_____ **Does not meet criteria** for recommendation as a Curricular Material or Online Resource for Mathematics.

EVIDENCE SUMMARY:

FOCUS-

All materials meet grade level content. The majority of time spent in major works.
Students spend 103 days (67%) in major clusters.

COHERENCE-

After topics are introduced they are brought back into practice with other activities. Content progresses throughout the program allowing for building on previous knowledge.

RIGOR-

There is multiple practice forms to bring in procedural fluency. The student book has ample practice but when needed Record and Practice Journal and resources by chapter workbooks are available.

CONCEPTUAL UNDERSTANDING-

Different types of questions are asked throughout to encourage higher level thinking.
Students are asked to represent understanding multiple ways (tables, diagrams, models, pictures, drawings, and graphs).

MATHEMATICAL PRACTICES-

All mathematical practice standards are evident throughout the text. They are shown throughout Laurie's notes in every section. Each lesson is based on a concept then reaches out and expects the student to reason and explain through a variety of methods

ACCESSIBILITY OF STANDARDS TO ALL STUDENTS-

Text supports all levels of learners from interventions (Review), online tutorials to activities for the advanced self-learner.

OTHER:

Lots of resources for students, teacher, and parents. Laurie's Notes are a great resource for teachers Progression is great across all grades.

2015-16 Interim Mathematics Review

Mathematics Evaluation Tool Grades K-8

Publisher: Big Ideas Learning

Title of Material: Big Ideas Math 7th (Red) A Common Core Curriculum

Author: Ron Larson and Laurie Boswell

ISBN #: 978-1-60840-450-6 Copyright 2014

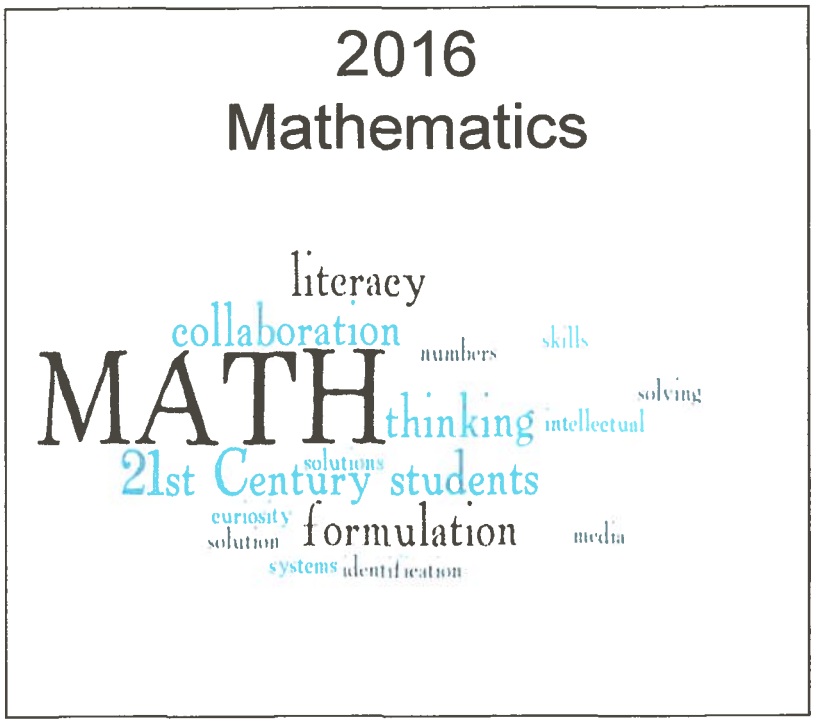
Reviewer ID: MN DA

Core Mathematics Program- a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Core.

Other Mathematics Program- a program that substantially, but partially, meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Other.

Component Mathematics Program- a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs.
Substantial evidence clearly supports the designation of this program as Component.

Intervention Program- a program designed and intended to target and support students' specific needs.
Substantial evidence clearly supports the designation of this program as Intervention.



- Evaluation Form adapted from Instructional Materials Evaluation Toolkit (IMET).

The IMET was developed by Student Achievement Partners. Educators may use or adapt. http://creativecommons.org/licenses/by/3.0/ Download this tool at http://achievethecore.org/IMET

Instructional Materials Evaluation Tool
Mathematics, Grades K-8

What Are the Purposes of the IMET?
This Math IMET is designed to help educators determine whether instructional materials are aligned to the Shifts and major features of the Common Core State Standards (CCSS). The substantial instructional Shifts (http://www.corestandards.org/other-resources/key-shifts-inmathematics/) at the heart of the Common Core State Standards are:
- **Focus** strongly where the Standards focus
- **Coherence**: Think across grades and link to major topics within the grade
- **Rigor**: In major topics, pursue conceptual understanding, procedural skill and fluency, and application with equal intensity.

The IMET draws directly from the following documents:
- Common Core State Standards for Mathematics (www.corestandards.org/Math)
- Publishers' Criteria for the Common Core State Standards in Mathematics grade K-8 (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)

When to use the IMET
1. Purchasing materials: Many factors go into local purchasing decisions. Alignment to the Standards is a critical factor to consider. This tool is designed to evaluate alignment of instructional materials to the Shifts and the major features of the CCSS. It also provides suggestions of additional indicators to consider in the materials evaluation and purchasing process.

2. Evaluating materials currently in use: The IMET can be used to analyze the degree of alignment of existing materials and help to highlight specific, concrete flaws in alignment. Even where materials and tools currently in use fail to meet one or more of these criteria, the pattern of failure is likely to be informative. States and districts can use the evaluation to create a thoughtful plan to modify or combine existing resources in such a way that students' actual learning experiences approach the focus, coherence, and rigor of the Standards.

3. Developing programs: Those developing new programs can use this tool as guidance for creating aligned curricula.
Please note this tool was designed for evaluating comprehensive curricula (including any supplemental or ancillary materials), but it was not designed for the evaluation of standalone supplemental materials.

Who Uses the IMET?
Evaluating instructional materials requires both subject-matter and pedagogical expertise. Evaluators should be well versed in the Standards (www.corestandards.org/Math) for all grades in which materials are being evaluated. This includes understanding the Major Work of the grade (www.achievethecore/focus), the Supporting and Additional work, how the content fits into the progressions in the Standards (www.achievethecore.org/progressions), and the expectations of the Standards with respect to conceptual understanding, procedural skill and fluency, and application. Evaluators also should be familiar with the substantial instructional Shifts (http:// www.corestandards.org/other-resources/key-shifts-in-mathematics/) of Focus, Coherence and Rigor that are listed above.

Getting Started
Prior to Evaluation

Assemble all of the materials necessary for the evaluation. It is essential for evaluators to have materials for all grades covered by the program, as some criteria cannot be rated without having access to each grade. In addition, each evaluator should have a reference copy of the Common Core State Standards for Mathematics (CCSSM) and the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013).

Before conducting the evaluation itself, it is important to develop a protocol for the evaluation process. The protocol should include having evaluators study the Publishers' Criteria and the IMET. It will also be helpful for evaluators to get a sense of each program overall before beginning the process. At a minimum, this would include reading the front matter of the text, looking at the table of contents and paging through multiple chapters.

Sections 1-3 below should be completed to produce a comprehensive picture of the strengths and weaknesses of the materials under evaluation. Information about areas in need of improvement or supplementation should be shared with internal and external stakeholders.

Navigating the Tool

Begin with Section 1: Non-Negotiable Alignment Criteria

- The Non-Negotiable Alignment Criteria must each be met in full for materials to be considered aligned to the Shifts and the major features of the Common Core State Standards. Each Non-Negotiable Alignment Criterion has one or more metrics associated with it; every one of these metrics must be met in order for the criterion as a whole to be met.

- Examine the relevant materials and use evidence to rate the materials against each criterion and its associated metric(s).

- Record and explain the evidence upon which the rating is based.

Continue to Section 2: Alignment Criteria

- The Alignment Criteria must each be met for materials to be considered aligned to the Shifts and the major features of the Common Core State Standards. Each Alignment Criterion has one or more metric associated with it; a specific number of these metrics must be met or partially met in order for the criterion as a whole to be met.

- Examine the materials in relation to these criteria, assigning each metric a point value. Rate the criterion as "Meets" or "Does Note Meet" based on the number of points assigned. The more points the materials receive on the alignment Criteria, the better they are aligned.

Record and explain the evidence upon which the rating is based.

Proceed to Section 4: Indicators of Quality

- Indicators of Quality are important considerations that will help evaluators better understand the overall quality of instructional materials. These considerations are not criteria for alignment to the CCSS, but they provide valuable information about additional program characteristics. Evaluators may want to add their own indicators to the examples provided.

Directions for Non-Negotiable 1

Freedom from Obstacles to Focus

Criterion	Evidence- Give specific examples.	Rating: (Reviewer only.)
Non-Negotiable 1: **Freedom from Obstacles to Focus** **Materials must reflect the content architecture of the Standards by not assessing the topics named before the grade level where they first appear in the Standards.** The Standards foster students' progress to algebra by focusing strongly on arithmetic. Consistent with this focus, certain topics from outside of arithmetic appear only in later grades. Thus, to be aligned, materials must reflect the content architecture of the Standards by not assessing the topics named before the grade level where they first appear in the Standards. In this criterion, "topics named" means the topics that are explicitly named in Metric 1A. No other topics should be added to the list in Metric 1A. (Note that other topics in the standards are addressed in criterion NN2.)	**Required Materials** • Common Core State Standards for Mathematics (www.corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf) • From the materials being evaluated: teacher guides and all assessment components	**Rating this Criterion**: Non-Negotiable 1 is rated as Meets or Does Not Meet. To rate Non-Negotiable 1, begin by rating Metric 1A. Since Metric 1A is the only metric for Non-Negotiable 1, the rating for Non-Negotiable 1 is the same as the rating for Metric 1A. If Metric 1A is rated as Does Not Meet, include evidence of when the named topic(s) is/are assessed. If the metric is rated as Meets, list the grade(s) examined in the evaluation.

Metric NN1A: **Materials reflect the basic architecture of the Standards by not assessing the listed topics before the grade level indicated.** • Probability, including chance, likely outcomes, probability models. (Introduced in the CCSSM in grade 7) • Statistical distributions, including center, variation, clumping, outliers, mean, median, mode, range, quartiles; and statistical association or trends, including two-way tables, bivariate measurement data, scatter plots, trend line, line of best fit, correlation. (Introduced in the CCSSM in grade 6) • Similarity, congruence, or geometric transformations. (Introduced in the CCSSM in grade 8) • Symmetry of shapes, including line/ reflection symmetry, rotational symmetry. (Introduced in the CCSSM in grade 4) **How to Find the Evidence:** Evaluate the table of contents, all chapter tests, all unit tests, and other such assessment components (including rubrics). For context, read Criterion #2 from the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013). NOTE: Grade alignments of other topics are addressed in Non-Negotiable 2, Focus and Coherence.) In this criterion, "topics named" means the topics that are explicitly named in Metric 1A. No other topics should be added to the list in Metric 1A. (Note that other topics in the standards are addressed in criterion NN2.)	**Evidence-** All materials meet grade level content.	**(Reviewer only.)** **__X__Meets** **____Does Not Meet**
Non-Negotiable 1: Materials must reflect the content architecture of the Standards by not assessing the topics named* before the grade level where they first appear in the Standards. **NN 1** If Metric 1A was rated as Meets, then rate Non-Negotiable 1 as Meets. If Metric 1A was rated as Does Not Meet, then rate Non- Negotiable 1 as Does Not Meet. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion.**(Reviewer only.)** **Before moving to Non-Negotiable 2, record the final Meets or Does Not Meet rating in the Evaluation Summary.**		**(Reviewer only.)** **__X__Meets** **____Does Not Meet** **Strengths/Weaknesses:**

Directions for Non-Negotiable 2

Focus and Coherence

Non-Negotiable 2: **Focus and Coherence** **Materials must focus coherently on the Major Work of the grade in a way that is consistent with the progressions in the Standards.** Focus and coherence are the two major evidence-based design principles of the Common Core State Standards for Mathematics (CCSSM, p. 3). Focus is necessary in order to fulfill the ambitious promise the states have made to their students by adopting the Standards: greater achievement at the college and career ready level; greater depth of understanding of mathematics; and a rich classroom environment in which reasoning, sense-making, applications, and a range of mathematical practices flourish. In simpler terms, a mile-wide, inch-deep curriculum translates to less time per topic. Less time means less depth and moving on without many students. Thus, materials must focus coherently on the Major Work of the grade in a way that is consistent with the progressions in the Standards.	**Required Materials** • Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf) • Focus by Grade Level for the grade being evaluated (www.achievethecore.org/focus) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion:** Non-Negotiable 2 is rated as Meets or Does Not Meet. To rate Non-Negotiable 2, first rate metrics 2A–2H. Each of these eight metrics must be rated as Meets in order for Non-Negotiable 2 to be rated as Meets. Rate each metric 2A-2H as Meets or Does Not Meet/Insufficient Evidence. If the evidence examined shows that the Criterion is met, then mark the Criterion Meets. If the evidence examined shows that the Criterion is not met—or if there is insufficient evidence to make a determination—then mark the Criterion as Does Not Meet/Insufficient Evidence. Support all ratings with evidence.
Metric NN2A: **In each grade K–8, students and teachers using the materials as designed devote the large majority of time to the Major Work of the grade.** **How to Find the Evidence:** Familiarize yourself with the Major Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, lessons, homework assignments, and assessments. (Evaluate both student and teacher materials.) Consider time spent on the Major Work of the grade and judge qualitatively whether students and teachers using the materials as designed will devote the large majority of time to the Major Work of the grade. For context, read Criterion #1 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013)	**Evidence-** The majority of time spent in major works. Students spend 103 days (67%) in major clusters.	**(Reviewer only.)** **__X__Meets** **____Does Not Meet/** **Insufficient Evidence**

Metric NN2B: **Supporting W[illegible], where present, enhances focus and coherence simultaneously by also engaging students in the Major Work of the grade.** **How to Find the Evidence:** Familiarize yourself with the Major Work and Supporting Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate chapters and lessons that focus on Supporting Work. NOTE: Example of evaluating this Criterion might include looking at whether materials for K–5 generally treat data displays as an occasion for solving grade-level word problems using the four operations (e.g., see 3.MD.B.3); or whether materials for grade 7 take advantage of opportunities to use probability to support ratios, proportions, and percentages. For context, read Criterion #3 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** After topics are introduced they are brought back into practice with other activities. Essential Questions for each chapter.	**(Reviewer only.)** **__X__Meets** **____Does Not Meet/ Insufficient Evidence**
Metric NN2C: **Materials base content progressions on the grade-by-grade progressions in the Standards. Content from previous or future grades does not unduly interfere with or displace on-grade-level content.** **How to Find the Evidence:** Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, and lessons in both student and teacher materials. NOTE: In some cases it may be possible that aligned materials might address some aspects of a topic in a strategic way before or after the grade level in which the topic is central in the Standards' progressions; for example, a curriculum author might purposefully choose to explore adding fractions with unlike denominators in a way appropriate to grade four, recognizing that this work is not really required until the next grade. However, any such purposeful discrepancies in content progressions should enhance the required learning in each grade; not unduly interfere with or displace grade-level content; and be clearly aimed at helping students meet the Standards as written rather than effectively rewriting the progressions in the Standards. And in all cases, note that Non-Negotiable 1 must be met for materials to be aligned. For context, read Criterion #5a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Content progresses throughout the program allowing for building on previous knowledge. Scope and Sequence and Pacing Guide with all concepts linked to Common Core.	**(Reviewer only.)** **__X__Meets** **____Does Not Meet/ Insufficient Evidence**

Metric NN2D: **Materials gi[illegible] students extensive work with on-grade-level problems.** **How to Find the Evidence:** Evaluate both student and teacher materials. If the materials provide resources for differentiated learning, consider whether lower-performing students have opportunities to engage with grade-level problems. Also consider whether higher-performing students are given opportunities to learn current grade-level content in greater depth. For context, read Criterion #5b in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Not only the book lessons but there is additional lessons within the record and practice journals and enrichment and extension lessons. Laurie's Notes are also beneficial.	**(Reviewer only.)** **__X__Meets** **____Does Not Meet/ Insufficient Evidence**
Metric NN2E: **Materials relate on-grade-level concepts explicitly to prior knowledge from earlier grades.** **How to Find the Evidence:** Evaluate both student and teacher materials. NOTE: Examples of evaluating this Criterion might include looking at the way the materials extend basic ideas of place value across the decimal point; or the role that properties of operations play when the materials extend arithmetic beyond whole numbers to fractions, variables, and expressions. More generally, cluster headings in the Standards sometimes signal key moments where reorganizing and extending previous knowledge is important in order to accommodate new knowledge (e.g., see cluster headings that use the phrase "Apply and extend previous understanding"). For context, read Criterion #5c in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Each lesson ties to previous concepts. Each chapter begins with a section titled "What You Learned Before". Additionally, each lesson includes a "Previous Learning" statement addressing the specifics for the given lesson.	**(Reviewer only.)** **__X__Meets** **____Does Not Meet/ Insufficient Evidence**
Metric NN2F: **Review of material from previous grades is clearly identified as such to the teacher, and teacher and students can see what their specific responsibility is for the current year.** **How to Find the Evidence:** Evaluate the table of contents, but do not stop there; also evaluate units, chapters, lessons, homework assignments and assessments. (Evaluate both student and teacher materials.) Identify any content from previous grades and check whether it is identified as such. For context, read Criterion #5a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** There is a what you learned before page at the beginning of each chapter but a handbook is also available covering skills review and basic skills. There is also a Fair Game Review in the record and practice journal.	**(Reviewer only.)** **__X__Meets** **____Does Not Meet/ Insufficient Evidence**

Metric NN2G: **Materials include learning objectives that are visibly shaped by CCSSM cluster headings.** **How to Find the Evidence:** Select several clusters from the Major Work in the grade being evaluated. Evaluate teacher and student materials in relation to these clusters. For context, read Criterion #6a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Learning objectives are located at the beginning of each lesson for easy access to students. Table of contents has all information.	**(Reviewer only.)** **__X__Meets** **____Does Not Meet/ Insufficient Evidence**
Metric NN2H: **Materials include problems and activities that serve to connect two or more clusters in a domain, or two or more domains in a grade, in cases where these connections are natural and important.** **How to Find the Evidence:** In the grade being evaluated, choose two or more clusters or two or more domains for which connections are natural and important. Evaluate the units, chapters, and lessons that deal with the chosen topics, looking for problems and activities that serve to connect the chosen clusters or domains. NOTE: An example of evaluating this Criterion might include looking at whether problems in grade 4 sometimes or often involve students applying their developing computation skills (detailed in domain NBT) in the context of solving word problems (detailed in domain OA). For context, read Criterion #6b in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Connections are made throughout the book bringing previous concepts importance into additional activities. Laurie's notes has connections layout and in her introduction. Pg. 232 Percent Equation ties Algebra & Percents	**(Reviewer only.)** **__X__Meets** **____Does Not Meet/ Insufficient Evidence**
Non-Negotiable 2: **Focus and Coherence** **Materials must focus coherently on the Major Work of the grade in a way that is consistent with the progressions in the Standards.** **NN 2** If all Metrics 2A – 2H were rated as Meets, then rate Non-Negotiable 2 as Meets. If one or more Metric was rated Does Not Meet/Insufficient Evidence, then rate Non-Negotiable 2 as Does Not Meet. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)** **Before moving to Alignment Criterion 1, record the final Meets or Does Not Meet rating in the Evaluation Summary.**		**(Reviewer only.)** **__X__Meets** **____Does Not Meet** **Strengths/Weaknesses:**

Now continue by evaluating the Alignment Criterion 1 for Rigor and Balance.

Directions for Alignment Criterion 1

Rigor and Balance

Alignment Criterion 1: Rigor and Balance **Materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.** The Standards set expectations for attention to all three aspects of rigor: conceptual understanding, procedural skill and fluency, and applications. Thus, materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.	**Required Materials** • Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf) • Focus by Grade Level for the grade being evaluated (achievethecore.org/focus) • Situation Types for the Operations in Word Problems (achievethecore.org/situation-types) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion:** Alignment Criterion 1 is rated as Meets or Does Not Meet. To rate Alignment Criterion 1, first rate metrics 1A, 1B, and 1C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). For each metric, guiding questions are provided to aid in gathering evidence. Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 1 if the materials rate 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as rigor and balance, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.
Metric AC1A: **The materials support the development of students' conceptual understanding of key mathematical concepts, especially where called for in specific content Standards or cluster headings.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Major Work for the grade being evaluated that relate specifically conceptual understanding to use throughout the questions associated with this metric. NOTE: Some examples of clusters or Standards that call for conceptual understanding include: K.OA.A.1, (1.NBT.B, 1.NBT.C), (2.NBT.A, 2.NBT.B), (3.OA.A.1, 3.OA.A.2), 4.NF.A, (4.NBT.A, 4.NBT.B), 5.NF.B, (5.NBT.A, 5.NBT.B), 6.RP.A, 6.EE.A.3, 7.NS.A, 7.EE.A, 8.EE.B, 8.F.A, 8.G.A Clusters or Standards grouped by parentheses are closely connected and could be analyzed together. For context, read Criterion #4a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	-Choose a cluster/Standard from the Major Work that is aligned to each aspect of rigor and use it to evaluate these metrics. It is most helpful if the same clusters/Standards are chosen for all of the programs being evaluated. (Guidance in choosing clusters/Standards is included in "How to Find the Evidence".)	**Use the questions for AC Metric 1A to evaluate Metric 1A. Record evidence for each question and rate Metric 1A.** **__X__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**

Is conceptual understanding attended to thoroughly where the Standards set explicit expectations for understanding or interpreting? Evaluate lessons, chapter/unit assessments and homework assignments, paying attention to work aligned to Standards that explicitly call for understanding or interpreting. NOTE: Examples of evaluating this Criterion might include looking at how well the multi-digit addition and subtraction algorithms are developed and explained on the basis of place value and properties of operations; or how well the multi-digit multiplication and division algorithms are developed and explained on the basis of place value and properties of operations; or how well solving equations is presented and explained as a process of reasoning.	**Evidence-** Lessons give great ideas for teachers, and thought provoking questions.	
Do the materials feature high-quality conceptual problems and conceptual discussion questions? Evaluate lessons, chapter/unit assessments, and homework assignments. NOTE: Example of conceptual problems might include such questions as "Find a number greater than 1/5 and less than 1/4," or "If the divisor does not change and the dividend increases, what happens to the quotient?"	**Evidence-** Different types of questions are asked throughout to encourage higher level thinking. Pg. 32 #4	
Do the materials feature opportunities to identify correspondences across mathematical representations? Evaluate lessons, chapter/unit assessments and homework assignments. NOTE: Examples of evaluating this Criterion might include looking at whether students are supported in identifying correspondences among: the verbal description of a situation, the diagrams that distill its mathematical features, and the equations that model it; or equivalent forms of numbers (e.g., 3 and 6/2) and the number line; or rational number operations and representations of them via models such as the vector model; or the expression that defines a function and the graph that shows the relationship.	**Evidence-** Students are asked to represent understanding multiple ways (tables, diagrams, models, pictures, drawings, and graphs).	
Metric AC1B: **The materials are designed so that students attain the fluencies and procedural skills required by the Standards.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Major Work for the grade being evaluated that relate specifically to fluency and procedural skill to use throughout the questions associated with this metric. NOTE: Some examples of Standards that call for procedural skill and fluency include: K.OA.A.5, 1.OA.C.6, 2.OA.B.2, 2.NBT.B.5, 3.OA.C.7, 3.NBT.A.2, 4.NBT.B.4, 5.NBT.B.5, 6.NS.B.2, and 6.NS.B.3, 6.EE.A, 7.NS.A, 7.EE.A.1,7.EE.B.4a, 8.EE.C.7, 8.EE.C.8b For context, read Criterion #4b in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).		**Use the questions for Metric 1B to evaluate Metric 1 B. Record evidence for each question and rate Metric 1B.** **(Reviewer only.)** **__X__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**

Is progress toward fluency and procedural skill interwoven with students' develo[illegible]onceptual understanding of the operations in question? Evaluate lessons, chapter/unit assessments, daily routines, and homework assignments for evidence that the development of fluency and procedural skill is supported by conceptual understanding.	**Evidence-** There is multiple pr[illegible]ce forms to bring in procedural fluency. The student book has ample practice but when needed Record and Practice Journal and resources by chapter workbooks are available.	
Are purely procedural problems and exercises present that include cases in which opportunistic strategies are valuable and generic cases that require efficient algorithms present? Evaluate lessons, chapter/unit assessments, daily routines, and homework assignments. NOTE: Examples of problems in which opportunistic strategies are valuable might include the sum 698 + 240 or the system x + y = 1, 2x + 2y = 3. Examples of generic cases that require efficient algorithms might include the sum 8767+2286 or the system 6y + x = x + 3, – x = 1 + 2y.	**Evidence-** Each lesson has plenty of practices contained within.	
Do the materials in grades K–6 provide repeated practice toward attainment of fluency Standards? Evaluate lessons, daily routines, and homework assignments for evidence of repeated practice toward attainment of the following K–6 Standards that set an explicit expectation of fluent (accurate and reasonably fast) computation: K.OA.A.5, 1.OA.C.6, 2.OA.B.2, 2.NBT.B.5, 3.OA.C.7, 3.NBT.A.2, 4.NBT.B.4, 5.NBT.B.5, 6.NS.B.2, 6.NS.B.3.	**Evidence-** Not applicable.	
Metric AC1C: **The materials are designed so that teachers and students spend sufficient time working with engaging applications, without losing focus on the Major Work of each grade.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Major Work for the grade being evaluated that relate specifically application to use throughout the questions associated with this metric. NOTE: Some examples of clusters or Standards that call for application include: K.OA.A.2, 1.OA.A, 2.OA.A, 3.OA.A.3, 3.OA.D.8, 4.OA.A.3, 4.NF.B.3d, 4.NF.B.4c, 5.NF.B.6, 5.NF.B.7c, 6.RP.A.3, 6.NS.A.1, 6.EE.B.7, 6.EE.C.9, 7.RP.A, 7.NS.A.3, 7.EE.B.3, 8.EE.C.8c, 8.F.B For context, read Criterion #4c in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).		**Use the questions for Metric 1C to evaluate Metric 1C. Record evidence for each question and rate Metric 1C.** **(Reviewer only.)** **__X__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Are there are single- and multi-step contextual problems, including non-routine problems, that develop the mathematics of the grade, afford opportunities for practice, and engage students in problem solving? Do the problems attend thoroughly to those places in the content Standards where expectations for multi-step and real-world problems are explicit? Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** Every section has problems from basic practice to real life application, and age appropriate. Pg. 31	

Do application problems particularly stress applying the Major Work of the grade? Evaluate lessons, chapter/unit assessments, and homework assignments. NOTE: Examples of evaluating this Criterion might include looking at: how well, by the end of grade 2, students using the materials as designed can represent and solve a full range of one-step addition and subtraction word problems; or how well, by the end of grade 3, students using the materials as designed can represent and solve a full range of one-step multiplication and division word problems; or how well these basic situation types for each operation are carried coherently across the grades, (e.g., with fractions and algebraic expressions); or, in all grades, whether the problems connect concepts, Standards, and domains in ways that are natural and important. For a list of situation types for one-step addition, subtraction, multiplication, and division problems, see Situation Types for the Operations in Word Problems	**Evidence-** There are application and real world problems in every section.	
Does modeling build slowly across K–8, with applications that are relatively simple in earlier grades and when students are encountering new content? In grades 6–8, do the problems begin to provide opportunities for students to make their own assumptions or simplifications in order to model a situation mathematically? Read Standard for Mathematical Practice 4, Model with Mathematics. Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** Students are given opportunity to think for themselves.	

Alignment Criterion 1: Rigor and Balance

Materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.

(Reviewer only.)

__X__Meets

____Does Not Meet

Strengths/Weaknesses:

AC1 Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 out of 6 points, the Criterion has not been met. Check the final rating.
Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)**

Before moving to Alignment Criterion 2, record the final Meets or Does Not Meet rating in the Evaluation Summary.

Directions for Alignment Criterion 2

Standards for Mathematical Practice

Alignment Criterion 2: Standards for Mathematical Practice

Materials must demonstrate authentic connections between content Standards and practice Standards.

The Standards require that designers of instructional materials connect the mathematical practices to mathematical content in instruction. Thus, materials must demonstrate authentic connections between content Standards and practice Standards.

Required Materials:

- Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf)
- Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)
- Focus by Grade Level for the grade being evaluated (www.achievethecore.org/focus)
- From the materials being evaluated: teacher guides, student texts and workbooks

Rating this Criterion

Alignment Criterion 2 is rated as Meets or Does Not Meet.

To rate Alignment Criterion 2, first rate metrics 2A, 2B, and 2C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). For each metric, guiding questions are provided to aid in gathering evidence.

Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 2 if the materials earn 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as mathematical practices, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.

Metric AC2A:

Materials address the practice Standards in such a way as to enrich the Major Work of the grade; practices strengthen the focus on Major Work instead of detracting from it, in both teacher and student materials.

How to Find the Evidence:

Familiarize yourself with the Major Work of the grade being evaluated (see the Focus by Grade Level documents.)

Evaluate teacher and student materials for evidence that the mathematical practices support and connect to the focus of the grade.

NOTE: Examples of evaluating this Criterion might include looking at whether, in grades K–5, students using the materials are supported to look for and express regularity in repeated reasoning about the addition table, the multiplication table, the properties of operations, the relationship between addition and subtraction or multiplication and division, and the place value system; or whether, in grades 6–8, students using the materials are supported to look for and express regularity in repeated reasoning about proportional relationships and linear functions.

For context, read Criterion #8 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013).

Evidence-

All mathematical practice standards are evident throughout the text. They are shown throughout Laurie's notes in every section. Each lesson is based on a concept then reaches out and expects the student to reason and explain through a variety of methods.

(Reviewer only.)

__X__Meets (2)

____Partially Meets (1)

____Does Not Meet (0)

Metric AC2B: **Materials attend to the full meaning of each practice Standard.** **How to Find the Evidence:** For context, read Criterion #7 and Criterion #9 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).		**Use the questions for Metric 2B to evaluate Metric 2B. Record evidence for each question and rate Metric 2B.** **(Reviewer only.)** **__X__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Over the course of any given year of instruction, is each mathematical practice Standard meaningfully present in the form of assignments, activities, or problems that stimulate students to develop the habits of mind described in the practice Standard? Evaluate lessons, chapter/ unit assessments, and homework assignments for evidence of each mathematical practice being meaningfully present in instruction.	**Evidence-** Each mathematical practice can be used throughout the year.	
Do the materials treat the practice Standards as developing across grades or grade bands? Are the practice Standards in early grades appropriately simple? Do they display an arc of growing sophistication across the grades?	**Evidence-** More explanation required as the course progresses.	
Are there teacher-directed materials that explain the role of the practice Standards in the classroom and in students' mathematical development? Are alignments to practice Standards accurate?	**Evidence-** Laurie's Notes As the student progresses through the year the content becomes more sophisticated and expects the student to do more explaining.	
Metric AC2C: **Materials support the Standards' emphasis on mathematical reasoning.** **How to Find the Evidence:** For context, read Criterion #10 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).		**Use the questions for Metric 2C to evaluate Metric 2C. Record evidence for each question and rate Metric 2C.** **(Reviewer only.)** **__X__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Do the materials support students in constructing viable arguments and critiquing the arguments of others concerning grade-level mathematics that is detailed in the content Standards? Read Standard for Mathematical Practice 3. Evaluate teacher and student materials to ensure that students are given opportunities to reason with grade-level mathematics.	**Evidence-** The program expects the student to explain, justify, and reason especially in the Error Analysis exercises. Every unit embeds and highlights SMPs and in particular the questions titled "What is Your Answer?"	

Do the materials support students in producing not only answers and solutions, but also in a grade-appropriate way, arguments, explanations, diagrams, mathematical models, etc., especially in the Major Work of the grade? Familiarize yourself with the Major Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate teacher and student materials, to understand the types of work students are expected to produce.	**Evidence-** Content is designed at a level appropriate to the student's interest. It is visually appealing to the student.	
Do materials explicitly attend to the specialized language of mathematics? Is the language of argument, problem solving, and mathematical explanations taught rather than assumed? Evaluate teacher and student materials, paying attention to how mathematical language is taught. NOTE: Examples of evaluating this Criterion might include looking at whether students are supported in: basing arguments on definitions; using the method of providing a counterexample; or recognizing that examples alone do not establish a general statement.	**Evidence-** Key Ideas and Vocabulary Sections of each lesson teach the language of math.	
Alignment Criterion 2: **Standards for Mathematical Practice** **Materials must demonstrate authentic connections between content Standards and practice Standards.** **AC2** Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 out of 6 points, the Criterion has not been met. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)** **Before moving to Alignment Criterion 3, record the final Meets or Does Not Meet rating in the Evaluation Summary.**		**(Reviewer only.)** **__X__Meets** **____Does Not Meet** **Strengths/Weaknesses:**

Alignment Criterion 3: **Access to the Standards for All Students** **Materials must provide supports for English Language Learners and other special populations.** Because Standards are for all students, alignment requires thoughtful support to ensure all students are able to meet the Standards. Thus, aligned materials must provide supports for English Language Learners and other special populations.	**Required Materials:** • Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion:** Alignment Criterion 3 is rated as Meets or Does Not Meet. To rate Alignment Criterion 3, first rate metrics 3A, 3B, and 3C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 3 if the materials earn 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as support for special population, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.
Metric AC3A: **Support for English Language Learners and other special populations is thoughtful and helps those students meet the same Standards as all other students. The language in which problems are posed is carefully considered.** **How to Find the Evidence:** Evaluate teacher and student materials, paying attention to supports offered for special populations.	**Evidence-** Online resources to translate vocabulary in other languages to help students of English language learners.	**Reviewer only.)** **__X__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Metric AC3B: **Materials provide appropriate level and type of scaffolding, differentiation, intervention, and support for a broad range of learners with gradual removal of supports, when needed, to allow students to demonstrate their mathematical understanding independently.** **How to Find the Evidence:** Evaluate teacher and student materials, paying attention to whether materials provide differentiation that will lead all learners to engage with on-grade-level content.	**Evidence-** Text supports all levels of learners from interventions (Review), online tutorials to activities for the advanced self learner.	**Reviewer only.)** **__X__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Metric AC3C: **Design of lessons recommends and facilitates a mix of instructional approaches for a variety of learners such as using multiple representations (e.g., including models, using a range of questions, checking for understanding, flexible grouping, pair-share).** **How to Find the Evidence:** Evaluate teacher materials, noting instructional approaches suggested for whole class and differentiated lessons and activities.	**Evidence-** Desmos applications, Geogebra applications, and Think. Pair. Share. Ideas.	**Reviewer only.)** **__X__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**

Alignment Criterion 3: Access to the Standards for All Students **Materials must provide supports for English Language Learners and other special populations.** **AC3** Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 points, the Criterion has not been met. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion.**(Reviewer only.)** **Move to the Evaluation Summary and record the final Meets or Does Not Meet rating .**	**(Reviewer only.)** **___X_Meets** **____Does Not Meet** **Strengths/Weaknesses:**

Once an evaluation for alignment to the Shifts and major features of the CCSS has been conducted using Sections 1-3, it's important to evaluate for overall quality and best practices. A starting list of Indicators of Quality are suggested below. States, districts and others evaluating instructional materials are encouraged to add to this list to ensure materials reflect local contexts. For background information on some of the Indicators of Quality in this section, refer to pp.18–21 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).

Indicators of Quality	Evidence- Give specific examples.	Rating: (Reviewers only.)
1. Lessons are thoughtfully structured and support the teacher in leading the class through the learning paths at hand, with active participation by all students in their own learning and in the learning of their classmates.	**Evidence-** Tips in Laurie's Notes to motivate the students and work together.	**(Reviewer only.)** **___X___ Yes** **_____ No**
2. The underlying design of the materials includes both problems and exercises. (In solving problems, students learn new mathematics, whereas in working exercises, students apply what they have already learned to build mastery.) Each problem or exercise has a purpose. **NOTE: This Criterion does not require that the problems and exercises be labeled as such.**	**Evidence-** Each lesson has a variety of methods and progressions. From self-guided sections to teacher instructions there is multiple approaches within each lesson.	**(Reviewer only.)** **___X___ Yes** **_____ No**

3. Design of assignments is not haphazard: exercises are given in intentional sequences in order to strengthen students' mathematical understanding.	**Evidence-** Progression is systematic to help the student gain confidence as they approach more difficult problems.	**(Reviewer only.)** **___X___ Yes** **_____ No**
4. There are separate teacher materials that support and reward teacher study including, but not limited to: discussion of the mathematics of the units and the mathematical point of each lesson as it relates to the organizing concepts of the unit, discussion on student ways of thinking and anticipating a variety of students responses, guidance on lesson flow, guidance on questions that prompt students thinking, and discussion of desired mathematical behaviors being elicited among students.	**Evidence-** Laurie's Notes are an excellent resource for teachers to help students.	**(Reviewer only.)** **___X___ Yes** **_____ No**
5. Manipulatives suggested in the materials are faithful representations of the mathematical objects they represent and are connected to written methods.	**Evidence-** Models of area used correctly. Manipulatives include positive and negative counters, algebra tiles, and a partition circle.	**(Reviewer only.)** **____X__ Yes** **_____ No**
6. Materials include a variety of curriculum-embedded assessments. Examples include pre-, formative, summative, and self-assessment resources.	**Evidence-** Pre-tests, post tests, mini assessments, quizzes, and online testing tools are all summative assessments available. Formative assessments are imbedded within Laurie's Notes.	**(Reviewer only.)** **___X___ Yes** **_____ No**
7. Assessments contain aligned rubrics, answer keys, and scoring guidelines that provide sufficient guidance for interpreting student performance.	**Evidence-** All assessments have detailed keys and scoring rubrics. Online tests are automatically corrected. The assessment book includes item analysis for the standards assessment for each chapter.	**(Reviewer only.)** **___X___ Yes** **_____ No**

8. Materials a[illegible]ss student proficiency using methods that [illegible]e accessible and unbiased, including the use of course-level language in student prompts.	**Evidence-** Yes, assessments are consistent with unit instructions.	**(Reviewer only.)** **___X___ Yes** **_____ No**
9. Materials are carefully evaluated by qualified individuals, whose names are listed, in an effort to ensure freedom from mathematical errors and course-level appropriateness.	**Evidence-** Developed by a team of educators with years of experience.	**(Reviewer only.)** **___X___ Yes** **_____ No**
10. The visual design supports students in engaging thoughtfully with the subject. Navigation through the text is clear.	**Evidence-** The text is visually interesting and easy to follow.	**(Reviewer only.)** **___X___ Yes** **_____ No**
11. The materials engage parents in appropriate ways. For example, homework assignments in elementary grades, consist of routine problems, practice with getting answers, and fluency-building exercises that parents can easily support.	**Evidence-** Lessons are easy for parents to follow as well as online tutorials in multiple languages. Each chapter includes a parent letter describing the upcoming content in the Resources.	**(Reviewer only.)** **___X___ Yes** **_____ No**

Reviewer IMET Evaluation Summary **Title/Level: _7th Grade_____**

Publisher: _Big Ideas Learning_____ Copyright: __2014_____ ISBN:_978-1-60840-~~505-3~~ 450-6____

Reviewer ID # __MN___DA_____Date Review Completed:__7 March 2016_____

Non-Negotiable Criteria- Each Non-Negotiable must be met in order for the Non-Negotiable Alignment Criteria to be met overall.	
Non-Negotiable 1: Freedom from Obstacles to Focus **___X____ Meets** **_____ Does Not Meet**	**Non- Negotiable 2: Focus and Coherence** **__X___ Meets** **_____ Does Not Meet**
Non-Negotiable Overall: **___X__ Meets _____ Does Not Meet**	

Alignment Criteria- Each Alignment Criterion must be met with a sufficient number of points in order for Alignment Criteria to be labeled as "Meets" overall. The more points the materials receive on the Alignment Criteria, the better they are aligned.

Alignment Criterion 1: Rigor and Balance	**Alignment Criterion 2: Standards of Mathematical Practice**	**Alignment Criterion 3: Access to Standards for All Learners**
Points: __6___ of 6 possible. **(Materials must receive at least 5 of 6 points to align.)**	**Points: ___6__ of 6 possible.** **(Materials must receive at least 5 of 6 points to align.)**	**Points: ___6__ of 6 possible.** **(Materials must receive at least 5 of 6 points to align.)**
_____X__ Meets	**____X___ Meets**	**___X____ Meets**
_____ Does Not Meet	**_____ Does Not Meet**	**_____ Does Not Meet**

Alignment Criteria Overall:

___X__ Meets **_____ Does Not Meet**

If the materials meet both Non-Negotiables and relevant Alignment Criterion, they are aligned to the Shifts and major features of the Core Standards. **Do the materials meet every Non-Negotiable and Alignment Criterion? __X___ Yes _____ No**

What are the specific areas of strength and weakness based on this evaluation? Publishers or others modifying or developing assessments can use this information to make improvements and/or to remedy gaps in the alignment of assessment materials.

Strengths

-Lots of resources for students, teacher, and parents.

-Laurie's Notes are a great resource for teachers

-Progression is great across all grades.

-Different paths for regular and accelerated.

Weaknesses

-Can't think of any, keep up the great work!

2015-16 Mathematics Interim Review Recommendation & Summary

Publisher Name:	Big Ideas Learning
Title:	Big Ideas Math (Blue): A Common Core Curriculum
ISBN #	978-1-60840-461-3
Grade Level(s) or Course:	8th
Reviewer ID:	Time PB

RECOMMENDED AS:

__X__ **Core Mathematics Program-** a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials. Substantial evidence clearly supports the designation of this program as Core.

_____ **Other Mathematics Program-** a program that substantially, but partially, meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for supplemental materials. Substantial evidence clearly supports the designation of this program as Other.

_____ **Component Mathematics Program-** a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs. Substantial evidence clearly supports the designation of this program as Component.

_____ **Intervention Program-** a program designed and intended to target and support students' specific needs. Substantial evidence clearly supports the designation of this program as Intervention.

_____ **Does not meet criteria** for recommendation as a Curricular Material or Online Resource for Mathematics.

EVIDENCE SUMMARY:

FOCUS- The major Works of the curriculum are met at 84% of the time. Standards are taught on grade level and are not introduced before they should be.

COHERENCE- The chapters help "remind" students of previous learning through warm-ups & activities throughout the entire text.

RIGOR- materials support the development of higher-order thinking through error analysis and multiple representations of problems.

CONCEPTUAL UNDERSTANDING- Problems throughout the curriculum ask students to explain and reason through words & multiple representations.

MATHEMATICAL PRACTICES- The mathematical practices are very noticable throughout the entire text. The vocabulary used in the lessons is directly drawn from the MP.

ACCESSIBILITY OF STANDARDS TO ALL STUDENTS- The Teachers Edition, online resources, digital resources, & ancillary materials are devoted to aiding in ELL help, differentiating lessons, and making learning available to all learners.

OTHER:

The materials and curriculum are complete as packaged.

2015-16 Interim Mathematics Review

Mathematics Evaluation Tool Grades K-8

Publisher: Big Ideas Learning

Title of Material: Big Ideas Math (Blue): A Common Core Curriculum.

Author: Ron Larson and Laurie Boswell

ISBN #: 978-1-60840-451-3 **Copyright** 2014

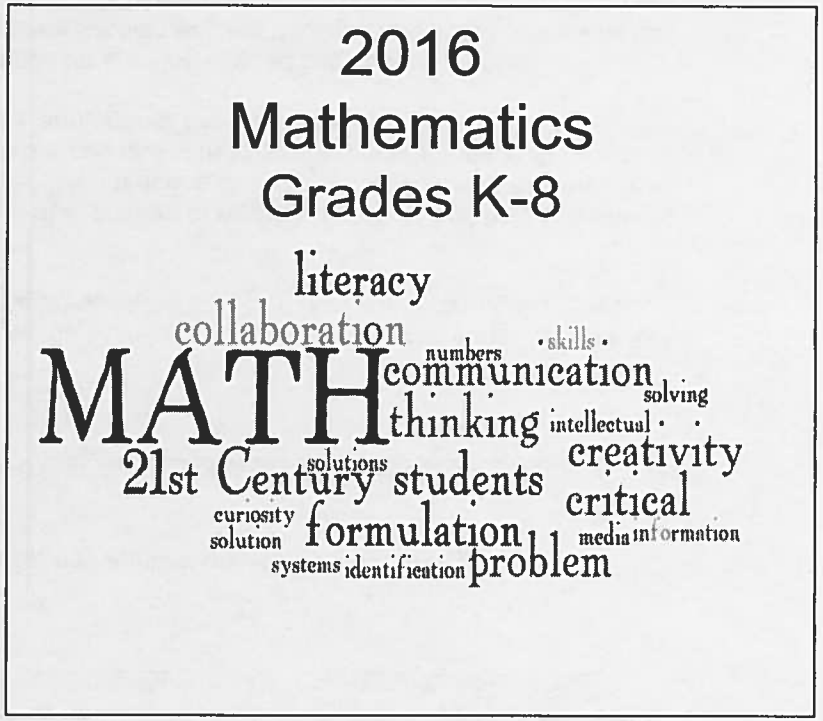
Reviewer ID: TMC PCB

Core Mathematics Program- a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Core.

Other Mathematics Program- a program that substantially, but partially, meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Other.

Component Mathematics Program- a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs.
Substantial evidence clearly supports the designation of this program as Component.

Intervention Program- a program designed and intended to target and support students' specific needs.
Substantial evidence clearly supports the designation of this program as Intervention.



- Evaluation Form adapted from Instructional Materials Evaluation Toolkit (IMET).

The IMET was developed by Student Achievement Partners. Educators may use or adapt. http://creativecommons.org/licenses/by/3.0/ Download this tool at http://achievethecore.org/IMET

Instructional Materials Evaluation Tool

Mathematics, Grades K-8

What Are the Purposes of the IMET?

This Math IMET is designed to help educators determine whether instructional materials are aligned to the Shifts and major features of the Common Core State Standards (CCSS). The substantial instructional Shifts (http://www.corestandards.org/other-resources/key-shifts-inmathematics/) at the heart of the Common Core State Standards are:

- **Focus** strongly where the Standards focus
- **Coherence**: Think across grades and link to major topics within the grade
- **Rigor**: In major topics, pursue conceptual understanding, procedural skill and fluency, and application with equal intensity.

The IMET draws directly from the following documents:

- Common Core State Standards for Mathematics (www.corestandards.org/Math)
- Publishers' Criteria for the Common Core State Standards in Mathematics grade K-8 (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)

When to use the IMET

1. Purchasing materials: Many factors go into local purchasing decisions. Alignment to the Standards is a critical factor to consider. This tool is designed to evaluate alignment of instructional materials to the Shifts and the major features of the CCSS. It also provides suggestions of additional indicators to consider in the materials evaluation and purchasing process.

2. Evaluating materials currently in use: The IMET can be used to analyze the degree of alignment of existing materials and help to highlight specific, concrete flaws in alignment. Even where materials and tools currently in use fail to meet one or more of these criteria, the pattern of failure is likely to be informative. States and districts can use the evaluation to create a thoughtful plan to modify or combine existing resources in such a way that students' actual learning experiences approach the focus, coherence, and rigor of the Standards.

3. Developing programs: Those developing new programs can use this tool as guidance for creating aligned curricula.
Please note this tool was designed for evaluating comprehensive curricula (including any supplemental or ancillary materials), but it was not designed for the evaluation of standalone supplemental materials.

Who Uses the IMET?

Evaluating instructional materials requires both subject-matter and pedagogical expertise. Evaluators should be well versed in the Standards (www.corestandards.org/Math) for all grades in which materials are being evaluated. This includes understanding the Major Work of the grade (www.achievethecore/focus), the Supporting and Additional work, how the content fits into the progressions in the Standards (www.achievethecore.org/progressions), and the expectations of the Standards with respect to conceptual understanding, procedural skill and fluency, and application. Evaluators also should be familiar with the substantial instructional Shifts (http:// www.corestandards.org/other-resources/key-shifts-in-mathematics/) of Focus, Coherence and Rigor that are listed above.

Getting Started

Prior to Evaluation

Assemble all of the materials necessary for the evaluation. It is essential for evaluators to have materials for all grades covered by the program, as some criteria cannot be rated without having access to each grade. In addition, each evaluator should have a reference copy of the Common Core State Standards for Mathematics (CCSSM) and the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013).

Before conducting the evaluation itself, it is important to develop a protocol for the evaluation process. The protocol should include having evaluators study the Publishers' Criteria and the IMET. It will also be helpful for evaluators to get a sense of each program overall before beginning the process. At a minimum, this would include reading the front matter of the text, looking at the table of contents and paging through multiple chapters.

Sections 1-3 below should be completed to produce a comprehensive picture of the strengths and weaknesses of the materials under evaluation. Information about areas in need of improvement or supplementation should be shared with internal and external stakeholders.

Navigating the Tool

Begin with Section 1: Non-Negotiable Alignment Criteria

- The Non-Negotiable Alignment Criteria must each be met in full for materials to be considered aligned to the Shifts and the major features of the Common Core State Standards. Each Non-Negotiable Alignment Criterion has one or more metrics associated with it; every one of these metrics must be met in order for the criterion as a whole to be met.

- Examine the relevant materials and use evidence to rate the materials against each criterion and its associated metric(s).

- Record and explain the evidence upon which the rating is based.

Continue to Section 2: Alignment Criteria

- The Alignment Criteria must each be met for materials to be considered aligned to the Shifts and the major features of the Common Core State Standards. Each Alignment Criterion has one or more metric associated with it; a specific number of these metrics must be met or partially met in order for the criterion as a whole to be met.

- Examine the materials in relation to these criteria, assigning each metric a point value. Rate the criterion as "Meets" or "Does Note Meet" based on the number of points assigned. The more points the materials receive on the alignment Criteria, the better they are aligned.

- Record and explain the evidence upon which the rating is based.

Proceed to Section 4: Indicators of Quality

- Indicators of Quality are important considerations that will help evaluators better understand the overall quality of instructional materials. These considerations are not criteria for alignment to the CCSS, but they provide valuable information about additional program characteristics. Evaluators may want to add their own indicators to the examples provided.

Directions for Non-Negotiable 1

Freedom from Obstacles to Focus

Criterion	Evidence- Give specific examples.	Rating: (Reviewer only.)
Non-Negotiable 1: **Freedom from Obstacles to Focus** **Materials must reflect the content architecture of the Standards by not assessing the topics named before the grade level where they first appear in the Standards.** The Standards foster students' progress to algebra by focusing strongly on arithmetic. Consistent with this focus, certain topics from outside of arithmetic appear only in later grades. Thus, to be aligned, materials must reflect the content architecture of the Standards by not assessing the topics named before the grade level where they first appear in the Standards. In this criterion, "topics named" means the topics that are explicitly named in Metric 1A. No other topics should be added to the list in Metric 1A. (Note that other topics in the standards are addressed in criterion NN2.)	**Required Materials** • Common Core State Standards for Mathematics (www.corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf) • From the materials being evaluated: teacher guides and all assessment components	**Rating this Criterion:** Non-Negotiable 1 is rated as Meets or Does Not Meet. To rate Non-Negotiable 1, begin by rating Metric 1A. Since Metric 1A is the only metric for Non-Negotiable 1, the rating for Non-Negotiable 1 is the same as the rating for Metric 1A. If Metric 1A is rated as Does Not Meet, include evidence of when the named topic(s) is/are assessed. If the metric is rated as Meets, list the grade(s) examined in the evaluation.

Metric NN1A: **Materials re[illegible] the basic architecture of the Standards by not assessing the listed topics before the grade level indicated.** • Probability, including chance, likely outcomes, probability models. (Introduced in the CCSSM in grade 7) • Statistical distributions, including center, variation, clumping, outliers, mean, median, mode, range, quartiles; and statistical association or trends, including two-way tables, bivariate measurement data, scatter plots, trend line, line of best fit, correlation. (Introduced in the CCSSM in grade 6) • Similarity, congruence, or geometric transformations. (Introduced in the CCSSM in grade 8) • Symmetry of shapes, including line/ reflection symmetry, rotational symmetry. (Introduced in the CCSSM in grade 4) **How to Find the Evidence:** Evaluate the table of contents, all chapter tests, all unit tests, and other such assessment components (including rubrics). For context, read Criterion #2 from the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013). NOTE: Grade alignments of other topics are addressed in Non-Negotiable 2, Focus and Coherence.) In this criterion, "topics named" means the topics that are explicitly named in Metric 1A. No other topics should be added to the list in Metric 1A. (Note that other topics in the standards are addressed in criterion NN2.)	**Evidence-** Similarity & Congruence & transformations are covered in chapter 2. These concepts are not introduced in grades 6 or 7.	(Reviewer only.) X Meets ____Does Not Meet
Non-Negotiable 1: Materials must reflect the content architecture of the Standards by not assessing the topics named* before the grade level where they first appear in the Standards. **NN 1** If Metric 1A was rated as Meets, then rate Non-Negotiable 1 as Meets. If Metric 1A was rated as Does Not Meet, then rate Non- Negotiable 1 as Does Not Meet. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion.**(Reviewer only.)** **Before moving to Non-Negotiable 2, record the final Meets or Does Not Meet rating in the Evaluation Summary.**		(Reviewer only.) X Meets ____Does Not Meet **Strengths/Weaknesses:**

Directions for Non-Negotiable 2

Focus and Coherence

Non-Negotiable 2:

Focus and Coherence

Materials must focus coherently on the Major Work of the grade in a way that is consistent with the progressions in the Standards.

Focus and coherence are the two major evidence-based design principles of the Common Core State Standards for Mathematics (CCSSM, p. 3). Focus is necessary in order to fulfill the ambitious promise the states have made to their students by adopting the Standards: greater achievement at the college and career ready level; greater depth of understanding of mathematics; and a rich classroom environment in which reasoning, sense-making, applications, and a range of mathematical practices flourish. In simpler terms, a mile-wide, inch-deep curriculum translates to less time per topic. Less time means less depth and moving on without many students. Thus, materials must focus coherently on the Major Work of the grade in a way that is consistent with the progressions in the Standards.

Required Materials

- Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf)
- Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)
- Focus by Grade Level for the grade being evaluated (www.achievethecore.org/focus)
- From the materials being evaluated: teacher guides, student texts and workbooks

Rating this Criterion:

Non-Negotiable 2 is rated as Meets or Does Not Meet.

To rate Non-Negotiable 2, first rate metrics 2A–2H. Each of these eight metrics must be rated as Meets in order for Non-Negotiable 2 to be rated as Meets. Rate each metric 2A-2H as Meets or Does Not Meet/Insufficient Evidence. If the evidence examined shows that the Criterion is met, then mark the Criterion Meets. If the evidence examined shows that the Criterion is not met—or if there is insufficient evidence to make a determination—then mark the Criterion as Does Not Meet/Insufficient Evidence. Support all ratings with evidence.

Metric NN2A:

In each grade K–8, students and teachers using the materials as designed devote the large majority of time to the Major Work of the grade.

How to Find the Evidence:

Familiarize yourself with the Major Work of the grade being evaluated (see the Focus by Grade Level documents.)

Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, lessons, homework assignments, and assessments. (Evaluate both student and teacher materials.)

Consider time spent on the Major Work of the grade and judge qualitatively whether students and teachers using the materials as designed will devote the large majority of time to the Major Work of the grade.

For context, read Criterion #1 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013)

Evidence-

Chapters One through Seven devoted a majority (84%) to the major work time. Chapters eight thru ten went into more accelerated materias.

(Reviewer only.)

X **Meets**

____ **Does Not Meet/**

Insufficient Evidence

Metric NN2B: **Supporting [illegible]k, where present, enhances focus and coherence simultaneously by also engaging students in the Major Work of the grade.** **How to Find the Evidence:** Familiarize yourself with the Major Work and Supporting Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate chapters and lessons that focus on Supporting Work. NOTE: Example of evaluating this Criterion might include looking at whether materials for K–5 generally treat data displays as an occasion for solving grade-level word problems using the four operations (e.g., see 3.MD.B.3); or whether materials for grade 7 take advantage of opportunities to use probability to support ratios, proportions, and percentages. For context, read Criterion #3 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Concepts are introduced an revisited thraught the Scope & sequence.	(Reviewer only.) X Meets ____Does Not Meet/ Insufficient Evidence
Metric NN2C: **Materials base content progressions on the grade-by-grade progressions in the Standards. Content from previous or future grades does not unduly interfere with or displace on-grade-level content.** **How to Find the Evidence:** Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, and lessons in both student and teacher materials. NOTE: In some cases it may be possible that aligned materials might address some aspects of a topic in a strategic way before or after the grade level in which the topic is central in the Standards' progressions; for example, a curriculum author might purposefully choose to explore adding fractions with unlike denominators in a way appropriate to grade four, recognizing that this work is not really required until the next grade. However, any such purposeful discrepancies in content progressions should enhance the required learning in each grade; not unduly interfere with or displace grade-level content; and be clearly aimed at helping students meet the Standards as written rather than effectively rewriting the progressions in the Standards. And in all cases, note that Non-Negotiable 1 must be met for materials to be aligned. For context, read Criterion #5a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Progression of grade-by-grade standards are followed and grade level appropriate. Ex: Division with expoents is taught before negative exponents are introduced.	(Reviewer only.) X Meets ____Does Not Meet/ Insufficient Evidence

Metric NN2D: **Materials give all students extensive work with on-grade-level problems.** **How to Find the Evidence:** Evaluate both student and teacher materials. If the materials provide resources for differentiated learning, consider whether lower-performing students have opportunities to engage with grade-level problems. Also consider whether higher-performing students are given opportunities to learn current grade-level content in greater depth. For context, read Criterion #5b in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Many tiered resources are available. There are three workbooks (also digital) that had materials for struggling learners as well as enrichment.	(Reviewer only.) X Meets ____Does Not Meet/ Insufficient Evidence
Metric NN2E: **Materials relate on-grade-level concepts explicitly to prior knowledge from earlier grades.** **How to Find the Evidence:** Evaluate both student and teacher materials. NOTE: Examples of evaluating this Criterion might include looking at the way the materials extend basic ideas of place value across the decimal point; or the role that properties of operations play when the materials extend arithmetic beyond whole numbers to fractions, variables, and expressions. More generally, cluster headings in the Standards sometimes signal key moments where reorganizing and extending previous knowledge is important in order to accommodate new knowledge (e.g., see cluster headings that use the phrase "Apply and extend previous understanding"). For context, read Criterion #5c in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Each chapter included a "What you Learned Before" page that brings in review. There are also "warm up" activities & questions thruout the chapters that help "remind" students of previous learning.	(Reviewer only.) X Meets ____Does Not Meet/ Insufficient Evidence
Metric NN2F: **Review of material from previous grades is clearly identified as such to the teacher, and teacher and students can see what their specific responsibility is for the current year.** **How to Find the Evidence:** Evaluate the table of contents, but do not stop there; also evaluate units, chapters, lessons, homework assignments and assessments. (Evaluate both student and teacher materials.) Identify any content from previous grades and check whether it is identified as such. For context, read Criterion #5a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Previous grade learning and standards are met through the "What I Learned Before" pages in each chapter.	(Reviewer only.) X Meets ____Does Not Meet/ Insufficient Evidence

Metric NN2G: **Materials in[illegible]e learning objectives that are visibly shaped by CCSSM cluster headings.** **How to Find the Evidence:** Select several clusters from the Major Work in the grade being evaluated. Evaluate teacher and student materials in relation to these clusters. For context, read Criterion #6a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** The objectives are directly tied to the CCSS. Standards covered are directly stated in the teacher's edition and objectives are clearly given CCSS activities can also be found	**(Reviewer only.)** X **Meets** ____ **Does Not Meet/** ~~**Insufficient Evidence**~~ in "Left Corner Activities."
Metric NN2H: **Materials include problems and activities that serve to connect two or more clusters in a domain, or two or more domains in a grade, in cases where these connections are natural and important.** **How to Find the Evidence:** In the grade being evaluated, choose two or more clusters or two or more domains for which connections are natural and important. Evaluate the units, chapters, and lessons that deal with the chosen topics, looking for problems and activities that serve to connect the chosen clusters or domains. NOTE: An example of evaluating this Criterion might include looking at whether problems in grade 4 sometimes or often involve students applying their developing computation skills (detailed in domain NBT) in the context of solving word problems (detailed in domain OA). For context, read Criterion #6b in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Once topics are introduced and taught they are revisited again & again throught the book.	**(Reviewer only.)** X **Meets** ____ **Does Not Meet/** **Insufficient Evidence**
Non-Negotiable 2: **Focus and Coherence** **Materials must focus coherently on the Major Work of the grade in a way that is consistent with the progressions in the Standards.** **NN 2** If all Metrics 2A – 2H were rated as Meets, then rate Non-Negotiable 2 as Meets. If one or more Metric was rated Does Not Meet/Insufficient Evidence, then rate Non-Negotiable 2 as Does Not Meet. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)** **Before moving to Alignment Criterion 1, record the final Meets or Does Not Meet rating in the Evaluation Summary.**		**(Reviewer only.)** X **Meets** ____ **Does Not Meet** **Strengths/Weaknesses:** Very well put together program with lots of resources.

Now continue by evaluating the Alignment Criterion 1 for Rigor and Balance.

Directions for Alignment Criterion 1

Rigor and Balance

Alignment Criterion 1: Rigor and Balance

Materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.

The Standards set expectations for attention to all three aspects of rigor: conceptual understanding, procedural skill and fluency, and applications. Thus, materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.

Required Materials

- Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf)
- Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)
- Focus by Grade Level for the grade being evaluated (achievethecore.org/focus)
- Situation Types for the Operations in Word Problems (achievethecore.org/situation-types)
- From the materials being evaluated: teacher guides, student texts and workbooks

Rating this Criterion:

Alignment Criterion 1 is rated as Meets or Does Not Meet.

To rate Alignment Criterion 1, first rate metrics 1A, 1B, and 1C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). For each metric, guiding questions are provided to aid in gathering evidence.
Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 1 if the materials rate 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as rigor and balance, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.

Metric AC1A:
The materials support the development of students' conceptual understanding of key mathematical concepts, especially where called for in specific content Standards or cluster headings.

How to Find the Evidence:

Select one or more cluster(s) or Standard(s) from the Major Work for the grade being evaluated that relate specifically conceptual understanding to use throughout the questions associated with this metric. NOTE: Some examples of clusters or Standards that call for conceptual understanding include: K.OA.A.1, (1.NBT.B, 1.NBT.C), (2.NBT.A, 2.NBT.B), (3.OA.A.1, 3.OA.A.2), 4.NF.A, (4.NBT.A, 4.NBT.B), 5.NF.B, (5.NBT.A, 5.NBT.B), 6.RP.A, 6.EE.A.3, 7.NS.A, 7.EE.A, 8.EE.B, 8.F.A, 8.G.A

Clusters or Standards grouped by parentheses are closely connected and could be analyzed together.

For context, read Criterion #4a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).

-Choose a cluster/Standard from the Major Work that is aligned to each aspect of rigor and use it to evaluate these metrics. It is most helpful if the same clusters/Standards are chosen for all of the programs being evaluated. (Guidance in choosing clusters/Standards is included in "How to Find the Evidence".)

The content emphasis chosen to evaluate was Statistics and Probability (as well as all others were visited)

Use the questions for AC Metric 1A to evaluate Metric 1A. Record evidence for each question and rate Metric 1A.

X **Meets (2)**

____ **Partially Meets (1)**

____ **Does Not Meet (0)**

Is conceptual understanding attended to thoroughly where the Standards set e[illegible] expectations for understanding or interpreting? Evaluate lessons, chapter/unit assessments and homework assignments, paying attention to work aligned to Standards that explicitly call for understanding or interpreting. NOTE: Examples of evaluating this Criterion might include looking at how well the multi-digit addition and subtraction algorithms are developed and explained on the basis of place value and properties of operations; or how well the multi-digit multiplication and division algorithms are developed and explained on the basis of place value and properties of operations; or how well solving equations is presented and explained as a process of reasoning.	**Evidence-** Materials support the development of higher-order thinking through error analysis and multiple representations of problems.	
Do the materials feature high-quality conceptual problems and conceptual discussion questions? Evaluate lessons, chapter/unit assessments, and homework assignments. NOTE: Example of conceptual problems might include such questions as "Find a number greater than 1/5 and less than 1/4," or "If the divisor does not change and the dividend increases, what happens to the quotient?"	**Evidence-** Throughout the lessons are included very good problems that ask students to explain and interpret.	
Do the materials feature opportunities to identify correspondences across mathematical representations? Evaluate lessons, chapter/unit assessments and homework assignments. NOTE: Examples of evaluating this Criterion might include looking at whether students are supported in identifying correspondences among: the verbal description of a situation, the diagrams that distill its mathematical features, and the equations that model it; or equivalent forms of numbers (e.g., 3 and 6/2) and the number line; or rational number operations and representations of them via models such as the vector model; or the expression that defines a function and the graph that shows the relationship.	**Evidence-** Multiple Representations ~~are~~ problems are asked for throughout the curriculum.	
Metric AC1B: **The materials are designed so that students attain the fluencies and procedural skills required by the Standards.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Major Work for the grade being evaluated that relate specifically to fluency and procedural skill to use throughout the questions associated with this metric. NOTE: Some examples of Standards that call for procedural skill and fluency include: K.OA.A.5, 1.OA.C.6, 2.OA.B.2, 2.NBT.B.5, 3.OA.C.7, 3.NBT.A.2, 4.NBT.B.4, 5.NBT.B.5, 6.NS.B.2, and 6.NS.B.3, 6.EE.A, 7.NS.A, 7.EE.A.1,7.EE.B.4a, 8.EE.C.7, 8.EE.C.8b For context, read Criterion #4b in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).		**Use the questions for Metric 1B to evaluate Metric 1 B. Record evidence for each question and rate Metric 1B.** **(Reviewer only.)** X **Meets (2)** ____ **Partially Meets (1)** ____ **Does Not Meet (0)**

Is progress toward fluency and procedural skill interwoven with students' developing conceptual understanding of the operations in question? Evaluate lessons, chapter/unit assessments, daily routines, and homework assignments for evidence that the development of fluency and procedural skill is supported by conceptual understanding.	**Evidence-** Lessons give good examples of doing problems procedurally as well as practice for students doing so as well.	
Are purely procedural problems and exercises present that include cases in which opportunistic strategies are valuable and generic cases that require efficient algorithms present? Evaluate lessons, chapter/unit assessments, daily routines, and homework assignments. NOTE: Examples of problems in which opportunistic strategies are valuable might include the sum 698 + 240 or the system x + y = 1, 2x + 2y = 3. Examples of generic cases that require efficient algorithms might include the sum 8767+2286 or the system 6y + x = x + 3, – x = 1 + 2y.	**Evidence-** There multiple resources in the text book and online that can aid students and parents through procedural problems.	
Do the materials in grades K–6 provide repeated practice toward attainment of fluency Standards? Evaluate lessons, daily routines, and homework assignments for evidence of repeated practice toward attainment of the following K–6 Standards that set an explicit expectation of fluent (accurate and reasonably fast) computation: K.OA.A.5, 1.OA.C.6, 2.OA.B.2, 2.NBT.B.5, 3.OA.C.7, 3.NBT.A.2, 4.NBT.B.4, 5.NBT.B.5, 6.NS.B.2, 6.NS.B.3.	**Evidence-** Does not apply to apply to 8th grade	
Metric AC1C: **The materials are designed so that teachers and students spend sufficient time working with engaging applications, without losing focus on the Major Work of each grade.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Major Work for the grade being evaluated that relate specifically application to use throughout the questions associated with this metric. NOTE: Some examples of clusters or Standards that call for application include: K.OA.A.2, 1.OA.A, 2.OA.A, 3.OA.A.3, 3.OA.D.8, 4.OA.A.3, 4.NF.B.3d, 4.NF.B.4c, 5.NF.B.6, 5.NF.B.7c, 6.RP.A.3, 6.NS.A.1, 6.EE.B.7, 6.EE.C.9, 7.RP.A, 7.NS.A.3, 7.EE.B.3, 8.EE.C.8c, 8.F.B For context, read Criterion #4c in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Multi-step & word problems are given throughout each chapter and stay focused on the major work of each grade.	**Use the questions for Metric 1C to evaluate Metric 1C. Record evidence for each question and rate Metric 1C.** **(Reviewer only.)** **X Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Are there are single- and multi-step contextual problems, including non-routine problems, that develop the mathematics of the grade, afford opportunities for practice, and engage students in problem solving? Do the problems attend thoroughly to those places in the content Standards where expectations for multi-step and real-world problems are explicit? Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** Clearly meets the practice of each Standard.	

Do application problems particularly stress applying the Major Work of the grade? Evaluate lessons, chapter/unit assessments, and homework assignments. NOTE: Examples of evaluating this Criterion might include looking at: how well, by the end of grade 2, students using the materials as designed can represent and solve a full range of one-step addition and subtraction word problems; or how well, by the end of grade 3, students using the materials as designed can represent and solve a full range of one-step multiplication and division word problems; or how well these basic situation types for each operation are carried coherently across the grades, (e.g., with fractions and algebraic expressions); or, in all grades, whether the problems connect concepts, Standards, and domains in ways that are natural and important. For a list of situation types for one-step addition, subtraction, multiplication, and division problems, see Situation Types for the Operations in Word Problems	**Evidence-** Word Problems apply directly to the chapter & CCSS concepts. Problems are grade level and age appropriate.	
Does modeling build slowly across K–8, with applications that are relatively simple in earlier grades and when students are encountering new content? In grades 6–8, do the problems begin to provide opportunities for students to make their own assumptions or simplifications in order to model a situation mathematically? Read Standard for Mathematical Practice 4, Model with Mathematics. Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** Modeling is evident in problems throughout the text that require students to apply mathematical practices including practice.	

Alignment Criterion 1: Rigor and Balance

Materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.

AC1 Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 out of 6 points, the Criterion has not been met. Check the final rating.
Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)**

Before moving to Alignment Criterion 2, record the final Meets or Does Not Meet rating in the Evaluation Summary.

(Reviewer only.)

_X_ **Meets** 6 of 6

____ **Does Not Meet**

Strengths/Weaknesses:
This program carefully addresses the standards throughout each chapter and gives appropriate practice as well as rigor.

Directions for Alignment Criterion 2

Standards for Mathematical Practice

Alignment Criterion 2: Standards for Mathematical Practice

Materials must demonstrate authentic connections between content Standards and practice Standards.

The Standards require that designers of instructional materials connect the mathematical practices to mathematical content in instruction. Thus, materials must demonstrate authentic connections between content Standards and practice Standards.

Required Materials:

- Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf)
- Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)
- Focus by Grade Level for the grade being evaluated (www.achievethecore.org/focus)
- From the materials being evaluated: teacher guides, student texts and workbooks

Rating this Criterion

Alignment Criterion 2 is rated as Meets or Does Not Meet.

To rate Alignment Criterion 2, first rate metrics 2A, 2B, and 2C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). For each metric, guiding questions are provided to aid in gathering evidence.

Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 2 if the materials earn 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as mathematical practices, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.

Metric AC2A:

Materials address the practice Standards in such a way as to enrich the Major Work of the grade; practices strengthen the focus on Major Work instead of detracting from it, in both teacher and student materials.

How to Find the Evidence:

Familiarize yourself with the Major Work of the grade being evaluated (see the Focus by Grade Level documents.)

Evaluate teacher and student materials for evidence that the mathematical practices support and connect to the focus of the grade.

NOTE: Examples of evaluating this Criterion might include looking at whether, in grades K–5, students using the materials are supported to look for and express regularity in repeated reasoning about the addition table, the multiplication table, the properties of operations, the relationship between addition and subtraction or multiplication and division, and the place value system; or whether, in grades 6–8, students using the materials are supported to look for and express regularity in repeated reasoning about proportional relationships and linear functions.

For context, read Criterion #8 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013).

Evidence-

The Mathematical Practices are very noticable through the entire text. The vocabulary used in the lessons and problems ~~are~~ is directly taken from the Mathematical practices.

(Reviewer only.)

X **Meets (2)**

____ **Partially Meets (1)**

____ **Does Not Meet (0)**

Metric AC2B: **Materials at[illegible] to the full meaning of each practice Standard.** **How to Find the Evidence:** For context, read Criterion #7 and Criterion #9 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).		**Use the questions for Metric 2B to evaluate Metric 2B. Record evidence for each q[illegible]on and rate Metric 2B.** **(Reviewer only.)** X **Meets (2)** ____ **Partially Meets (1)** ____ **Does Not Meet (0)**
Over the course of any given year of instruction, is each mathematical practice Standard meaningfully present in the form of assignments, activities, or problems that stimulate students to develop the habits of mind described in the practice Standard? Evaluate lessons, chapter/ unit assessments, and homework assignments for evidence of each mathematical practice being meaningfully present in instruction.	**Evidence-** Questions and applications clearly address the MPs. Activities where students are "partnered" & asked to express reasoning.	
Do the materials treat the practice Standards as developing across grades or grade bands? Are the practice Standards in early grades appropriately simple? Do they display an arc of growing sophistication across the grades?	**Evidence-** Scope & Sequence in the teachers edition addresses the mathematical practices for earlier levels.	
Are there teacher-directed materials that explain the role of the practice Standards in the classroom and in students' mathematical development? Are alignments to practice Standards accurate?	**Evidence-** Through the chapters "Jaun's Notes" are given and explain how to incorporate the MP Standards	
Metric AC2C: **Materials support the Standards' emphasis on mathematical reasoning.** **How to Find the Evidence:** For context, read Criterion #10 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).		**Use the questions for Metric 2C to evaluate Metric 2C. Record evidence for each question and rate Metric 2C.** **(Reviewer only.)** X **Meets (2)** ____ **Partially Meets (1)** ____ **Does Not Meet (0)**
Do the materials support students in constructing viable arguments and critiquing the arguments of others concerning grade-level mathematics that is detailed in the content Standards? Read Standard for Mathematical Practice 3. Evaluate teacher and student materials to ensure that students are given opportunities to reason with grade-level mathematics.	**Evidence-** Multiple activities & problems that address error analysis ask students to construct viable agruments and explain other's views.	
Do the materials support students in producing not only answers and solutions, but also, in a grade-appropriate way, arguments, explanations, diagrams, mathematical models, etc., especially in the Major Work of the grade? Familiarize yourself with the Major Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate teacher and student materials, to understand the types of work students are expected to produce.	**Evidence-** Students have to explain, reason, & represent problems in multiple ways.	

Do materials explicitly attend to the specialized language of mathematics? Is the language of argument, problem solving, and mathematical explanations taught rather than assumed? Evaluate teacher and student materials, paying attention to how mathematical language is taught. NOTE: Examples of evaluating this Criterion might include looking at whether students are supported in: basing arguments on definitions; using the method of providing a counterexample; or recognizing that examples alone do not establish a general statement.	**Evidence-** Vocabulary is grade level and age appropriate. Language is pulled directly from Standards.	

Alignment Criterion 2:
Standards for Mathematical Practice

Materials must demonstrate authentic connections between content Standards and practice Standards.

AC2 Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 out of 6 points, the Criterion has not been met. Check the final rating.
Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion.
(Reviewer only.)

(Reviewer only.)

X **Meets** 6 of 6

____ **Does Not Meet**

Strengths/Weaknesses:

Before moving to Alignment Criterion 3, record the final Meets or Does Not Meet rating in the Evaluation Summary.

Alignment Criterion 3:
Access to the Standards for All Students

Materials must provide supports for English Language Learners and other special populations.

Because Standards are for all students, alignment requires thoughtful support to ensure all students are able to meet the Standards. Thus, aligned materials must provide supports for English Language Learners and other special populations.

Required Materials:

- Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf)
- Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)
- From the materials being evaluated: teacher guides, student texts and workbooks

Rating this Criterion:
Alignment Criterion 3 is rated as Meets or Does Not Meet.

To rate Alignment Criterion 3, first rate metrics 3A, 3B, and 3C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points).

Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 3 if the materials earn 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as support for special population, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.

Metric AC3A: **Support for English Language Learners and other special populations is thoughtful and helps those students meet the same Standards as all other students. The language in which problems are posed is carefully considered.** **How to Find the Evidence:** Evaluate teacher and student materials, paying attention to supports offered for special populations.	**Evidence-** Within the text book there are ELL tips and a Spanish/ English glossary. Online & digital resources for ELL resources are also available.	**Reviewer only.)** X **Meets (2)** ____**Partially Meets (1)** ____**Does Not Meet (0)**
Metric AC3B: **Materials provide appropriate level and type of scaffolding, differentiation, intervention, and support for a broad range of learners with gradual removal of supports, when needed, to allow students to demonstrate their mathematical understanding independently.** **How to Find the Evidence:** Evaluate teacher and student materials, paying attention to whether materials provide differentiation that will lead all learners to engage with on-grade-level content.	**Evidence-** The "Dynamic Teaching Resources" CD includes many tools including skills and review handbook as well as basic skills & differentiating the lesson.	**Reviewer only.)** X **Meets (2)** ____**Partially Meets (1)** ____**Does Not Meet (0)**
Metric AC3C: **Design of lessons recommends and facilitates a mix of instructional approaches for a variety of learners such as using multiple representations (e.g., including models, using a range of questions, checking for understanding, flexible grouping, pair-share).** **How to Find the Evidence:** Evaluate teacher materials, noting instructional approaches suggested for whole class and differentiated lessons and activities.	**Evidence-** Within the teacher's edition, Laura's notes gives ways to differentiate instruction and motivational tips.	**Reviewer only.)** X **Meets (2)** ____**Partially Meets (1)** ____**Does Not Meet (0)**

Alignment Criterion 3: **Access to the Standards for All Students** **Materials must provide supports for English Language Learners and other special populations.** **AC3** Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 points, the Criterion has not been met. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion.**(Reviewer only.)** **Move to the Evaluation Summary and record the final Meets or Does Not Meet rating .**	**(Reviewer only.)** _X_ **Meets** 6 of 6 ____ **Does Not Meet** **Strengths/Weaknesses:**

Once an evaluation for alignment to the Shifts and major features of the CCSS has been conducted using Sections 1-3, it's important to evaluate for overall quality and best practices. A starting list of Indicators of Quality are suggested below. States, districts and others evaluating instructional materials are encouraged to add to this list to ensure materials reflect local contexts. For background information on some of the Indicators of Quality in this section, refer to pp.18–21 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).

Indicators of Quality	**Evidence- Give specific examples.**	**Rating: (Reviewers only.)**
1. Lessons are thoughtfully structured and support the teacher in leading the class through the learning paths at hand, with active participation by all students in their own learning and in the learning of their classmates.	**Evidence-** Lessons are structured carefully through the pacing guide. Strong teacher's edition with multiple teaching strategies.	**(Reviewer only.)** _X_ **Yes** _____ **No**
2. The underlying design of the materials includes both problems and exercises. (In solving problems, students learn new mathematics, whereas in working exercises, students apply what they have already learned to build mastery.) Each problem or exercise has a purpose. **NOTE: This Criterion does not require that the problems and exercises be labeled as such.**	**Evidence-** Problems are well-rounded with warm-ups and multiple practice activities and levels.	**(Reviewer only.)** _X_ **Yes** _____ **No**

3. Design of assignments is not haphazard: exercises are given in intentional sequences in order to strengthen students' mathematical understanding.	**Evidence-** Lessons and problems are scaffolded & build on each other.	**(Reviewer only.)** X **Yes** ____ **No**
4. There are separate teacher materials that support and reward teacher study including, but not limited to: discussion of the mathematics of the units and the mathematical point of each lesson as it relates to the organizing concepts of the unit, discussion on student ways of thinking and anticipating a variety of students responses, guidance on lesson flow, guidance on questions that prompt students thinking, and discussion of desired mathematical behaviors being elicited among students.	**Evidence-** The teacher's edition is ~~extremely~~ helpful with teaching ideas that support each lesson. Discussion topics & prompts are given to aid the teacher.	**(Reviewer only.)** X **Yes** ____ **No**
5. Manipulatives suggested in the materials are faithful representations of the mathematical objects they represent and are connected to written methods.	**Evidence-** Although there are no physical manipulatives that come with the curriculum, the suggested & online manipulatives/activities are connected to the lessons	**(Reviewer only.)** X **Yes** ____ **No**
6. Materials include a variety of curriculum-embedded assessments. Examples include pre-, formative, summative, and self-assessment resources.	**Evidence-** There is an assessment book that includes pre, post, quizzes, formative, and alternative assessments.	**(Reviewer only.)** X **Yes** ____ **No**
7. Assessments contain aligned rubrics, answer keys, and scoring guidelines that provide sufficient guidance for interpreting student performance.	**Evidence-** Rubrics and answer keys are included in the curriculum	**(Reviewer only.)** X **Yes** ____ **No**
8. Materials assess student proficiency using methods that are accessible and unbiased, including the use of course-level language in student prompts.	**Evidence-** Assessments reflect lessons and vocabulary.	**(Reviewer only.)** X **Yes** ____ **No**

9. Materials are carefully evaluated by qualified individuals, whose names are listed, in an effort to ensure freedom from mathematical errors and course-level appropriateness.	**Evidence-** Comprehensive List of teacher and student reviewers is given on page IV & V.	**(Reviewer only.)** X **Yes** ____ **No**
10. The visual design supports students in engaging thoughtfully with the subject. Navigation through the text is clear.	**Evidence-** The design is easy to navigate and is appealing to the students.	**(Reviewer only.)** X **Yes** ____ **No**
11. The materials engage parents in appropriate ways. For example, homework assignments in elementary grades, consist of routine problems, practice with getting answers, and fluency-building exercises that parents can easily support.	**Evidence-** Parents will be able to follow the examples very easily. Parents have access to the online materials as well.	**(Reviewer only.)** X **Yes** ____ **No**

Reviewer IMET Evaluation Summary **Title/Level:** Big Ideas Math/A common Core approach 8th

Publisher: Big Ideas Learning **Copyright:** 2014 **ISBN:** 978-1-60840-451-3

Reviewer ID # TWE PLB **Date Review Completed:** March 7, 2016

Non-Negotiable Criteria- Each Non-Negotiable must be met in order for the Non-Negotiable Alignment Criteria to be met overall.

Non-Negotiable 1: Freedom from Obstacles to Focus	Non- Negotiable 2: Focus and Coherence
X Meets	X Meets
_____ Does Not Meet	_____ Does Not Meet

Non-Negotiable Overall:

X **Meets** _____ **Does Not Meet**

Alignment Criteria- Each Alignment Criterion must be met with a sufficient number of points in order for Alignment Criteria to be labeled as "Meets" overall. The more points the materials receive on the Alignment Criteria, the better they are aligned.

Alignment Criterion 1: Rigor and Balance	Alignment Criterion 2: Standards of Mathematical Practice	Alignment Criterion 3: Access to Standards for All Learners
Points: 6 of 6 possible. (Materials must receive at least 5 of 6 points to align.)	Points: 6 of 6 possible. (Materials must receive at least 5 of 6 points to align.)	Points: 6 of 6 possible. (Materials must receive at least 5 of 6 points to align.)
X Meets	X Meets	X Meets
_____ Does Not Meet	_____ Does Not Meet	_____ Does Not Meet

Alignment Criteria Overall:

X **Meets** _____ **Does Not Meet**

If the materials meet both Non-Negotiables and relevant Alignment Criterion, they are aligned to the Shifts and major features of the Core Standards. **Do the materials meet every Non-Negotiable and Alignment Criterion?** _X_ **Yes** _____ **No**

What are the specific areas of strength and weakness based on this evaluation? Publishers or others modifying or developing assessments can use this information to make improvements and/or to remedy gaps in the alignment of assessment materials.

Strengths-

This book is much "smaller" in comparison to many other text books. This is due to the coherence to the CCSS with basic review instead of comprehensive review of previous grades.

The Teacher's Edition is an invaluable resource that gives multiple lesson strategies, representations of learning and motivational strategies.

The curriculum is CCSS aligned with strict obedience to the Mathematical pratices and grade level vocabulary.

Hardback student text will hold up better than other books.

Weakness - None.

EVIDENCE SUMMARY:

FOCUS-

The majority of time spent in major works. There are 52 sections of the book in 10 chapters. Thirty-one of the sections are devoted to the major work of the grade, this represents 60% of the material, given that the major work of the grade reflects 44% of the standards, this seems adequate, although on the low end.

COHERENCE-

Each lesson ties to previous concepts. Each chapter begins with a section titled "What You Learned Before". Additionally, each lesson includes a "Previous Learning" statement addressing the specifics for the given lesson.

RIGOR-

There is multiple practice forms to bring in procedural fluency. The student book has ample practice but when needed Record and Practice Journal and resources by chapter workbooks are available.

CONCEPTUAL UNDERSTANDING-

Students are asked to represent understanding multiple ways (tables, diagrams, models, pictures, drawings, and graphs).

MATHEMATICAL PRACTICES-

All mathematical practice standards are evident throughout the text. They are shown throughout Laurie's notes in every section. Each lesson is based on a concept then reaches out and expects the student to reason and explain through a variety of methods.

ACCESSIBILITY OF STANDARDS TO ALL STUDENTS-

Text supports all levels of learners from interventions (Review), online tutorials to activities for the advanced self-learner. Online resources to translate vocabulary in other languages to help students of English Language Learners.

OTHER:

The TE section labeled Laurie's Notes state there are times where one specific method is said to be the only way to solve a problem (pg. T-100) when in fact, mathematically there are multiple ways one can arrive at the correct answer.

20[illegible]-16 Interim Mathematics Review

Mathematics Evaluation Tool Grades K-8

Publisher: Big Ideas Learning

Title of Material: Big Ideas Math 7th Accelerated (Red) A Common Core Curriculum

Author: Ron Larson and Laurie Boswell

ISBN #: 978-1-60840-505-3 **Copyright** 2014

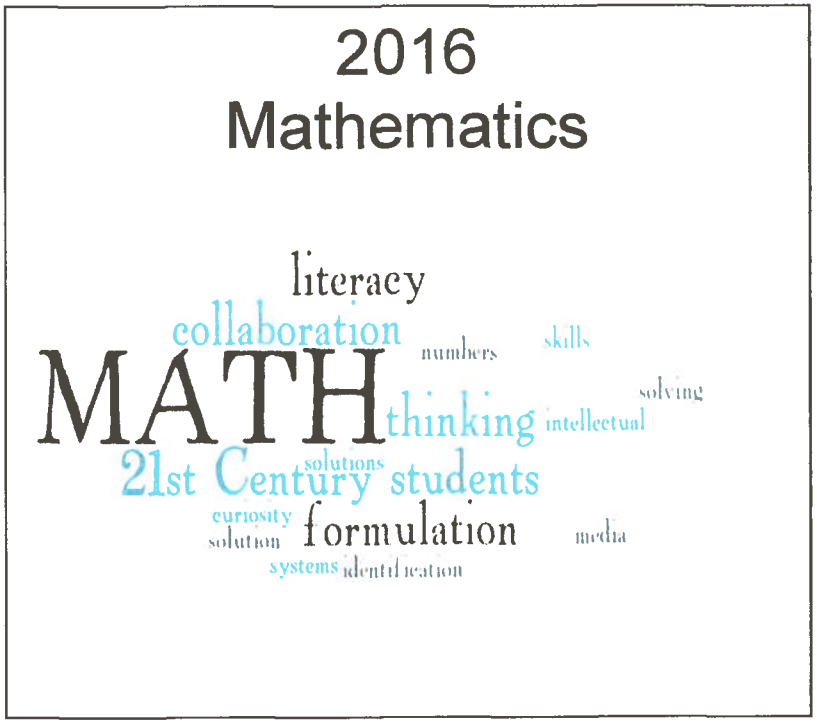
Reviewer ID: MN TR

Core Mathematics Program- a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Core.

Other Mathematics Program- a program that substantially, but partially, meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Other.

Component Mathematics Program- a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs.
Substantial evidence clearly supports the designation of this program as Component.

Intervention Program- a program designed and intended to target and support students' specific needs.
Substantial evidence clearly supports the designation of this program as Intervention.



- Evaluation Form adapted from Instructional Materials Evaluation Toolkit (IMET).

reference copy of the Common Core State Standards for Mathematics (CCSSM) and the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013).

Before conducting the evaluation itself, it is important to develop a protocol for the evaluation process. The protocol should include having evaluators study the Publishers' Criteria and the IMET. It will also be helpful for evaluators to get a sense of each program overall before beginning the process. At a minimum, this would include reading the front matter of the text, looking at the table of contents and paging through multiple chapters.

Sections 1-3 below should be completed to produce a comprehensive picture of the strengths and weaknesses of the materials under evaluation. Information about areas in need of improvement or supplementation should be shared with internal and external stakeholders.

Navigating the Tool

Begin with Section 1: Non-Negotiable Alignment Criteria

- The Non-Negotiable Alignment Criteria must each be met in full for materials to be considered aligned to the Shifts and the major features of the Common Core State Standards. Each Non-Negotiable Alignment Criterion has one or more metrics associated with it; every one of these metrics must be met in order for the criterion as a whole to be met.

- Examine the relevant materials and use evidence to rate the materials against each criterion and its associated metric(s).

- Record and explain the evidence upon which the rating is based.

Continue to Section 2: Alignment Criteria

- The Alignment Criteria must each be met for materials to be considered aligned to the Shifts and the major features of the Common Core State Standards. Each Alignment Criterion has one or more metric associated with it; a specific number of these metrics must be met or partially met in order for the criterion as a whole to be met.

- Examine the materials in relation to these criteria, assigning each metric a point value. Rate the criterion as "Meets" or "Does Note Meet" based on the number of points assigned. The more points the materials receive on the alignment Criteria, the better they are aligned.

The [illegible] was developed by Student Achievement Partners. Educators may use or adapt. http://creativecommons.org/l[illegible]/by/3.0/ Download this tool at http://achievethecore.org/IMET

Instructional Materials Evaluation Tool

Mathematics, Grades K-8

What Are the Purposes of the IMET?

This Math IMET is designed to help educators determine whether instructional materials are aligned to the Shifts and major features of the Common Core State Standards (CCSS). The substantial instructional Shifts (http://www.corestandards.org/other-resources/key-shifts-inmathematics/) at the heart of the Common Core State Standards are:

- **Focus** strongly where the Standards focus
- **Coherence**: Think across grades and link to major topics within the grade
- **Rigor**: In major topics, pursue conceptual understanding, procedural skill and fluency, and application with equal intensity.

The IMET draws directly from the following documents:

- Common Core State Standards for Mathematics (www.corestandards.org/Math)
- Publishers' Criteria for the Common Core State Standards in Mathematics grade K-8 (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)

When to use the IMET

1. Purchasing materials: Many factors go into local purchasing decisions. Alignment to the Standards is a critical factor to consider. This tool is designed to evaluate alignment of instructional materials to the Shifts and the major features of the CCSS. It also provides suggestions of additional indicators to consider in the materials evaluation and purchasing process.

2. Evaluating materials currently in use: The IMET can be used to analyze the degree of alignment of existing materials and help to highlight specific, concrete flaws in alignment. Even where materials and tools currently in use fail to meet one or more of these criteria, the pattern of failure is likely to be informative. States and districts can use the evaluation to create a thoughtful plan to modify or combine existing resources in such a way that students' actual learning experiences approach the focus, coherence, and rigor of the Standards.

3. Developing programs: Those developing new programs can use this tool as guidance for creating aligned curricula.
Please note this tool was designed for evaluating comprehensive curricula (including any supplemental or ancillary materials), but it was not designed for the evaluation of standalone supplemental materials.

Who Uses the IMET?

Evaluating instructional materials requires both subject-matter and pedagogical expertise. Evaluators should be well versed in the Standards (www.corestandards.org/Math) for all grades in which materials are being evaluated. This includes understanding the Major Work of the grade (www.achievethecore/focus), the Supporting and Additional work, how the content fits into the progressions in the Standards (www.achievethecore.org/progressions), and the expectations of the Standards with respect to conceptual understanding, procedural skill and fluency, and application. Evaluators also should be familiar with the substantial instructional Shifts (http:// www.corestandards.org/other-resources/key-shifts-in-mathematics/) of Focus, Coherence and Rigor that are listed above.

Getting Started

Prior to Evaluation

Assemble all of the materials necessary for the evaluation. It is essential for evaluators to have materials for all grades covered by the program, as some criteria cannot be rated without having access to each grade. In addition, each evaluator should have a

- Record and explain the evidence upon which the rating is based.

Proceed to Section 4: Indicators of Quality

- Indicators of Quality are important considerations that will help evaluators better understand the overall quality of instructional materials. These considerations are not criteria for alignment to the CCSS, but they provide valuable information about additional program characteristics. Evaluators may want to add their own indicators to the examples provided.

Directions for Non-Negotiable 1

Freedom from Obstacles to Focus

Criterion	Evidence- Give specific examples.	Rating: (Reviewer only.)
Non-Negotiable 1: **Freedom from Obstacles to Focus** **Materials must reflect the content architecture of the Standards by not assessing the topics named before the grade level where they first appear in the Standards.** The Standards foster students' progress to algebra by focusing strongly on arithmetic. Consistent with this focus, certain topics from outside of arithmetic appear only in later grades. Thus, to be aligned, materials must reflect the content architecture of the Standards by not assessing the topics named before the grade level where they first appear in the Standards. In this criterion, "topics named" means the topics that are explicitly named in Metric 1A. No other topics should be added to the list in Metric 1A. (Note that other topics in the standards are addressed in criterion NN2.)	**Required Materials** • Common Core State Standards for Mathematics (www.corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf) • From the materials being evaluated: teacher guides and all assessment components	**Rating this Criterion**: Non-Negotiable 1 is rated as Meets or Does Not Meet. To rate Non-Negotiable 1, begin by rating Metric 1A. Since Metric 1A is the only metric for Non-Negotiable 1, the rating for Non-Negotiable 1 is the same as the rating for Metric 1A. If Metric 1A is rated as Does Not Meet, include evidence of when the named topic(s) is/are assessed. If the metric is rated as Meets, list the grade(s) examined in the evaluation.

Metric NN1A: **Materials reflect the basic architecture of the Standards by not assessing the listed topics before the grade level indicated.** • Probability, including chance, likely outcomes, probability models. (Introduced in the CCSSM in grade 7) • Statistical distributions, including center, variation, clumping, outliers, mean, median, mode, range, quartiles; and statistical association or trends, including two-way tables, bivariate measurement data, scatter plots, trend line, line of best fit, correlation. (Introduced in the CCSSM in grade 6) • Similarity, congruence, or geometric transformations. (Introduced in the CCSSM in grade 8) • Symmetry of shapes, including line/ reflection symmetry, rotational symmetry. (Introduced in the CCSSM in grade 4) **How to Find the Evidence:** Evaluate the table of contents, all chapter tests, all unit tests, and other such assessment components (including rubrics). For context, read Criterion #2 from the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013). NOTE: Grade alignments of other topics are addressed in Non-Negotiable 2, Focus and Coherence.) In this criterion, "topics named" means the topics that are explicitly named in Metric 1A. No other topics should be added to the list in Metric 1A. (Note that other topics in the standards are addressed in criterion NN2.)	**Evidence-** All materials meet grade level content.	**(Reviewer only.)** **__X__Meets** **____Does Not Meet**
Non-Negotiable 1: Materials must reflect the content architecture of the Standards by not assessing the topics named* before the grade level where they first appear in the Standards. **NN 1** If Metric 1A was rated as Meets, then rate Non-Negotiable 1 as Meets. If Metric 1A was rated as Does Not Meet, then rate Non- Negotiable 1 as Does Not Meet. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion.**(Reviewer only.)** **Before moving to Non-Negotiable 2, record the final Meets or Does Not Meet rating in the Evaluation Summary.**		**(Reviewer only.)** **__X__Meets** **____Does Not Meet** **Strengths/Weaknesses:**

Directions for Non-Negotiable 2

Focus and Coherence

Non-Negotiable 2: **Focus and Coherence** **Materials must focus coherently on the Major Work of the grade in a way that is consistent with the progressions in the Standards.** Focus and coherence are the two major evidence-based design principles of the Common Core State Standards for Mathematics (CCSSM, p. 3). Focus is necessary in order to fulfill the ambitious promise the states have made to their students by adopting the Standards: greater achievement at the college and career ready level; greater depth of understanding of mathematics; and a rich classroom environment in which reasoning, sense-making, applications, and a range of mathematical practices flourish. In simpler terms, a mile-wide, inch-deep curriculum translates to less time per topic. Less time means less depth and moving on without many students. Thus, materials must focus coherently on the Major Work of the grade in a way that is consistent with the progressions in the Standards.	**Required Materials** • Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf) • Focus by Grade Level for the grade being evaluated (www.achievethecore.org/focus) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion:** Non-Negotiable 2 is rated as Meets or Does Not Meet. To rate Non-Negotiable 2, first rate metrics 2A–2H. Each of these eight metrics must be rated as Meets in order for Non-Negotiable 2 to be rated as Meets. Rate each metric 2A-2H as Meets or Does Not Meet/Insufficient Evidence. If the evidence examined shows that the Criterion is met, then mark the Criterion Meets. If the evidence examined shows that the Criterion is not met—or if there is insufficient evidence to make a determination—then mark the Criterion as Does Not Meet/Insufficient Evidence. Support all ratings with evidence.
Metric NN2A: **In each grade K–8, students and teachers using the materials as designed devote the large majority of time to the Major Work of the grade.** **How to Find the Evidence:** Familiarize yourself with the Major Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, lessons, homework assignments, and assessments. (Evaluate both student and teacher materials.) Consider time spent on the Major Work of the grade and judge qualitatively whether students and teachers using the materials as designed will devote the large majority of time to the Major Work of the grade. For context, read Criterion #1 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013)	**Evidence-** The majority of time spent in major works. There are 52 sections of the book in 10 chapters. Thirty-one of the sections are devoted to the major work of the grade, this represents 60% of the material, given that the major work of the grade reflects 44% of the standards, this seems adequate, although on the low end.	**(Reviewer only.)** **__X__Meets** **____Does Not Meet/** **Insufficient Evidence**

Metric NN2B: **Supporting W[illegible]k, where present, enhances focus and coherence simultaneously by also engaging students in the Major Work of the grade.** **How to Find the Evidence:** Familiarize yourself with the Major Work and Supporting Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate chapters and lessons that focus on Supporting Work. NOTE: Example of evaluating this Criterion might include looking at whether materials for K–5 generally treat data displays as an occasion for solving grade-level word problems using the four operations (e.g., see 3.MD.B.3); or whether materials for grade 7 take advantage of opportunities to use probability to support ratios, proportions, and percentages. For context, read Criterion #3 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** After topics are introduced they are brought back into practice with other activities. Essential Questions for each chapter. Lesson 7.1-7.4 all incorporate the use of expressions and equations (Major work of the grade) to find angle measures or missing angles.	**(Reviewer only.)** **__X__Meets** **____Does Not Meet/ Insufficient Evidence**
Metric NN2C: **Materials base content progressions on the grade-by-grade progressions in the Standards. Content from previous or future grades does not unduly interfere with or displace on-grade-level content.** **How to Find the Evidence:** Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, and lessons in both student and teacher materials. NOTE: In some cases it may be possible that aligned materials might address some aspects of a topic in a strategic way before or after the grade level in which the topic is central in the Standards' progressions; for example, a curriculum author might purposefully choose to explore adding fractions with unlike denominators in a way appropriate to grade four, recognizing that this work is not really required until the next grade. However, any such purposeful discrepancies in content progressions should enhance the required learning in each grade; not unduly interfere with or displace grade-level content; and be clearly aimed at helping students meet the Standards as written rather than effectively rewriting the progressions in the Standards. And in all cases, note that Non-Negotiable 1 must be met for materials to be aligned. For context, read Criterion #5a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Content progresses throughout the program allowing for building on previous knowledge. Scope and Sequence and Pacing Guide with all concepts linked to Common Core.	**(Reviewer only.)** **__X__Meets** **____Does Not Meet/ Insufficient Evidence**

Metric NN2D: **Materials give[illegible] students extensive work with on-grade-level problems.** **How to Find the Evidence:** Evaluate both student and teacher materials. If the materials provide resources for differentiated learning, consider whether lower-performing students have opportunities to engage with grade-level problems. Also consider whether higher-performing students are given opportunities to learn current grade-level content in greater depth. For context, read Criterion #5b in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Not only the book lessons but there is additional lessons within the record and practice journals and enrichment and extension lessons. Laurie's Notes are also beneficial.	**(Reviewer only.)** **__X__Meets** **____Does Not Meet/ Insufficient Evidence**
Metric NN2E: **Materials relate on-grade-level concepts explicitly to prior knowledge from earlier grades.** **How to Find the Evidence:** Evaluate both student and teacher materials. NOTE: Examples of evaluating this Criterion might include looking at the way the materials extend basic ideas of place value across the decimal point; or the role that properties of operations play when the materials extend arithmetic beyond whole numbers to fractions, variables, and expressions. More generally, cluster headings in the Standards sometimes signal key moments where reorganizing and extending previous knowledge is important in order to accommodate new knowledge (e.g., see cluster headings that use the phrase "Apply and extend previous understanding"). For context, read Criterion #5c in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Each lesson ties to previous concepts. Each chapter begins with a section titled "What You Learned Before". Additionally, each lesson includes a "Previous Learning" statement addressing the specifics for the given lesson.	**(Reviewer only.)** **__X__Meets** **____Does Not Meet/ Insufficient Evidence**
Metric NN2F: **Review of material from previous grades is clearly identified as such to the teacher, and teacher and students can see what their specific responsibility is for the current year.** **How to Find the Evidence:** Evaluate the table of contents, but do not stop there; also evaluate units, chapters, lessons, homework assignments and assessments. (Evaluate both student and teacher materials.) Identify any content from previous grades and check whether it is identified as such. For context, read Criterion #5a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** There is "A What You Learned Before" page at the beginning of each chapter but a handbook is also available covering skills review and basic skills. There is also a Fair Game Review in the record and practice journal.	**(Reviewer only.)** **__X__Meets** **____Does Not Meet/ Insufficient Evidence**

Metric NN2G: **Materials include learning objectives that are visibly shaped by CCSSM cluster headings.** **How to Find the Evidence:** Select several clusters from the Major Work in the grade being evaluated. Evaluate teacher and student materials in relation to these clusters. For context, read Criterion #6a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Learning objectives are located at the beginning of each lesson for easy access to students. Table of contents has all information.	**(Reviewer only.)** **__X__Meets** **____Does Not Meet/ Insufficient Evidence**
Metric NN2H: **Materials include problems and activities that serve to connect two or more clusters in a domain, or two or more domains in a grade, in cases where these connections are natural and important.** **How to Find the Evidence:** In the grade being evaluated, choose two or more clusters or two or more domains for which connections are natural and important. Evaluate the units, chapters, and lessons that deal with the chosen topics, looking for problems and activities that serve to connect the chosen clusters or domains. NOTE: An example of evaluating this Criterion might include looking at whether problems in grade 4 sometimes or often involve students applying their developing computation skills (detailed in domain NBT) in the context of solving word problems (detailed in domain OA). For context, read Criterion #6b in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Connections are made throughout the book bringing previous concepts importance into additional activities. Laurie's notes has connections layout and in her introduction.	**(Reviewer only.)** **__X__Meets** **____Does Not Meet/ Insufficient Evidence**
Non-Negotiable 2: **Focus and Coherence** **Materials must focus coherently on the Major Work of the grade in a way that is consistent with the progressions in the Standards.** **NN 2** If all Metrics 2A – 2H were rated as Meets, then rate Non-Negotiable 2 as Meets. If one or more Metric was rated Does Not Meet/Insufficient Evidence, then rate Non-Negotiable 2 as Does Not Meet. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)** **Before moving to Alignment Criterion 1, record the final Meets or Does Not Meet rating in the Evaluation Summary.**		**(Reviewer only.)** **__X__Meets** **____Does Not Meet** **Strengths/Weaknesses:**

Now continue by evaluating the Alignment Criterion 1 for Rigor and Balance.

Directions for Alignment Criterion 1

Rigor and Balance

Alignment Criterion 1: Rigor and Balance **Materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.** The Standards set expectations for attention to all three aspects of rigor: conceptual understanding, procedural skill and fluency, and applications. Thus, materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.	**Required Materials** • Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf) • Focus by Grade Level for the grade being evaluated (achievethecore.org/focus) • Situation Types for the Operations in Word Problems (achievethecore.org/situation-types) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion:** Alignment Criterion 1 is rated as Meets or Does Not Meet. To rate Alignment Criterion 1, first rate metrics 1A, 1B, and 1C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). For each metric, guiding questions are provided to aid in gathering evidence. Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 1 if the materials rate 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as rigor and balance, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.
Metric AC1A: **The materials support the development of students' conceptual understanding of key mathematical concepts, especially where called for in specific content Standards or cluster headings.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Major Work for the grade being evaluated that relate specifically conceptual understanding to use throughout the questions associated with this metric. NOTE: Some examples of clusters or Standards that call for conceptual understanding include: K.OA.A.1, (1.NBT.B, 1.NBT.C), (2.NBT.A, 2.NBT.B), (3.OA.A.1, 3.OA.A.2), 4.NF.A, (4.NBT.A, 4.NBT.B), 5.NF.B, (5.NBT.A, 5.NBT.B), 6.RP.A, 6.EE.A.3, 7.NS.A, 7.EE.A, 8.EE.B, 8.F.A, 8.G.A Clusters or Standards grouped by parentheses are closely connected and could be analyzed together. For context, read Criterion #4a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	-Choose a cluster/Standard from the Major Work that is aligned to each aspect of rigor and use it to evaluate these metrics. It is most helpful if the same clusters/Standards are chosen for all of the programs being evaluated. (Guidance in choosing clusters/Standards is included in "How to Find the Evidence".)	**Use the questions for AC Metric 1A to evaluate Metric 1A. Record evidence for each question and rate Metric 1A.** **__X__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**

Is conceptual understanding attended to thoroughly where the Standards set explicit expectations for understanding or interpreting? Evaluate lessons, chapter/unit assessments and homework assignments, paying attention to work aligned to Standards that explicitly call for understanding or interpreting. NOTE: Examples of evaluating this Criterion might include looking at how well the multi-digit addition and subtraction algorithms are developed and explained on the basis of place value and properties of operations; or how well the multi-digit multiplication and division algorithms are developed and explained on the basis of place value and properties of operations; or how well solving equations is presented and explained as a process of reasoning.	**Evidence-** Lessons give great ideas for teachers, and thought provoking questions. Lessons 1.1-1.5 use a number line and positive/negative counter to build a conceptual understanding around the operations with integers. This works well, but the subtraction component directs students to use "Add the Opposite" method and spends no time modeling subtraction as a difference of two points on the number line. Huge missed opportunity.	
Do the materials feature high-quality conceptual problems and conceptual discussion questions? Evaluate lessons, chapter/unit assessments, and homework assignments. NOTE: Example of conceptual problems might include such questions as "Find a number greater than 1/5 and less than 1/4," or "If the divisor does not change and the dividend increases, what happens to the quotient?"	**Evidence-** Different types of questions are asked throughout to encourage higher level thinking. 1.2 Asks students to create a Magic Square with specific sums. This is not totally open ended, but does have multiple entry points.	
Do the materials feature opportunities to identify correspondences across mathematical representations? Evaluate lessons, chapter/unit assessments and homework assignments. NOTE: Examples of evaluating this Criterion might include looking at whether students are supported in identifying correspondences among: the verbal description of a situation, the diagrams that distill its mathematical features, and the equations that model it; or equivalent forms of numbers (e.g., 3 and 6/2) and the number line; or rational number operations and representations of them via models such as the vector model; or the expression that defines a function and the graph that shows the relationship.	**Evidence-** Students are asked to represent understanding multiple ways (tables, diagrams, models, pictures, drawings, and graphs).	

Metric AC1B: **The materials are designed so that students attain the fluencies and procedural skills required by the Standards.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Major Work for the grade being evaluated that relate specifically to fluency and procedural skill to use throughout the questions associated with this metric. NOTE: Some examples of Standards that call for procedural skill and fluency include: K.OA.A.5, 1.OA.C.6, 2.OA.B.2, 2.NBT.B.5, 3.OA.C.7, 3.NBT.A.2, 4.NBT.B.4, 5.NBT.B.5, 6.NS.B.2, and 6.NS.B.3, 6.EE.A, 7.NS.A, 7.EE.A.1,7.EE.B.4a, 8.EE.C.7, 8.EE.C.8b For context, read Criterion #4b in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).		**Use the questions for Metric 1B to evaluate Metric 1 B. Record evidence for each question and rate Metric 1B.** **(Reviewer only.)** **__X__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Is progress toward fluency and procedural skill interwoven with students' developing conceptual understanding of the operations in question? Evaluate lessons, chapter/unit assessments, daily routines, and homework assignments for evidence that the development of fluency and procedural skill is supported by conceptual understanding.	**Evidence-** There is multiple practice forms to bring in procedural fluency. The student book has ample practice but when needed Record and Practice Journal and resources by chapter workbooks are available.	
Are purely procedural problems and exercises present that include cases in which opportunistic strategies are valuable and generic cases that require efficient algorithms present? Evaluate lessons, chapter/unit assessments, daily routines, and homework assignments. NOTE: Examples of problems in which opportunistic strategies are valuable might include the sum 698 + 240 or the system $x + y = 1$, $2x + 2y = 3$. Examples of generic cases that require efficient algorithms might include the sum 8767+2286 or the system $6y + x = x + 3$, $– x = 1 + 2y$.	**Evidence-** Each lesson has plenty of practices contained within.	
Do the materials in grades K–6 provide repeated practice toward attainment of fluency Standards? Evaluate lessons, daily routines, and homework assignments for evidence of repeated practice toward attainment of the following K–6 Standards that set an explicit expectation of fluent (accurate and reasonably fast) computation: K.OA.A.5, 1.OA.C.6, 2.OA.B.2, 2.NBT.B.5, 3.OA.C.7, 3.NBT.A.2, 4.NBT.B.4, 5.NBT.B.5, 6.NS.B.2, 6.NS.B.3.	**Evidence-** Not applicable.	

Metric AC1C: **The materials are designed so that teachers and students spend sufficient time working with engaging applications, without losing focus on the Major Work of each grade.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Major Work for the grade being evaluated that relate specifically application to use throughout the questions associated with this metric. NOTE: Some examples of clusters or Standards that call for application include: K.OA.A.2, 1.OA.A, 2.OA.A, 3.OA.A.3, 3.OA.D.8, 4.OA.A.3, 4.NF.B.3d, 4.NF.B.4c, 5.NF.B.6, 5.NF.B.7c, 6.RP.A.3, 6.NS.A.1, 6.EE.B.7, 6.EE.C.9, 7.RP.A, 7.NS.A.3, 7.EE.B.3, 8.EE.C.8c, 8.F.B For context, read Criterion #4c in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).		**Use the questions for Metric 1C to evaluate Metric 1C. Record evidence for each question and rate Metric 1C.** **(Reviewer only.)** **__X__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Are there are single- and multi-step contextual problems, including non-routine problems, that develop the mathematics of the grade, afford opportunities for practice, and engage students in problem solving? Do the problems attend thoroughly to those places in the content Standards where expectations for multi-step and real-world problems are explicit? Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** Every section has problems from basic practice to real life application, and age appropriate. The Critical Thinking questions such as the one in Lesson 5.2 have multi-step aspects.	
Do application problems particularly stress applying the Major Work of the grade? Evaluate lessons, chapter/unit assessments, and homework assignments. NOTE: Examples of evaluating this Criterion might include looking at: how well, by the end of grade 2, students using the materials as designed can represent and solve a full range of one-step addition and subtraction word problems; or how well, by the end of grade 3, students using the materials as designed can represent and solve a full range of one-step multiplication and division word problems; or how well these basic situation types for each operation are carried coherently across the grades, (e.g., with fractions and algebraic expressions); or, in all grades, whether the problems connect concepts, Standards, and domains in ways that are natural and important. For a list of situation types for one-step addition, subtraction, multiplication, and division problems, see Situation Types for the Operations in Word Problems	**Evidence-** There are application and real world problems in every section.	

Does modeling b[illegible]lowly across K–8, with applications that are relatively simple i[illegible]lier grades and when students are encountering new content? In grades 6–8, do the problems begin to provide opportunities for students to make their own assumptions or simplifications in order to model a situation mathematically? Read Standard for Mathematical Practice 4, Model with Mathematics. Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** Students are given opportunity to think for themselves. Modeling is primarily number lines and algebra tiles.	

Alignment Criterion 1: Rigor and Balance

Materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.

AC1 Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 out of 6 points, the Criterion has not been met. Check the final rating.
Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)**

Suggestions in the teacher's notes stating what students "have to do" to find solutions. This is an example of students losing conceptual understanding by focusing on a procedural skill.

Before moving to Alignment Criterion 2, record the final Meets or Does Not Meet rating in the Evaluation Summary.

(Reviewer only.)

__X__Meets

____Does Not Meet

Strengths/Weaknesses:

Directions for Alignment Criterion 2

Standards for Mathematical Practice

Alignment Criterion 2: Standards for Mathematical Practice

Materials must demonstrate authentic connections between content Standards and practice Standards.

The Standards require that designers of instructional materials connect the mathematical practices to mathematical content in instruction. Thus, materials must demonstrate authentic connections between content Standards and practice Standards.

Required Materials:

- Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf)
- Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)
- Focus by Grade Level for the grade being evaluated (www.achievethecore.org/focus)
- From the materials being evaluated: teacher guides, student texts and workbooks

Rating this Criterion

Alignment Criterion 2 is rated as Meets or Does Not Meet.

To rate Alignment Criterion 2, first rate metrics 2A, 2B, and 2C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). For each metric, guiding questions are provided to aid in gathering evidence.

Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 2 if the materials earn 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as mathematical practices, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.

Metric AC2A: **Materials address the practice Standards in such a way as to enrich the Major Work of the grade; practices strengthen the focus on Major Work instead of detracting from it, in both teacher and student materials.** **How to Find the Evidence:** Familiarize yourself with the Major Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate teacher and student materials for evidence that the mathematical practices support and connect to the focus of the grade. NOTE: Examples of evaluating this Criterion might include looking at whether, in grades K–5, students using the materials are supported to look for and express regularity in repeated reasoning about the addition table, the multiplication table, the properties of operations, the relationship between addition and subtraction or multiplication and division, and the place value system; or whether, in grades 6–8, students using the materials are supported to look for and express regularity in repeated reasoning about proportional relationships and linear functions. For context, read Criterion #8 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013).	**Evidence-** All mathematical practice standards are evident throughout the text. They are shown throughout Laurie's notes in every section. Each lesson is based on a concept then reaches out and expects the student to reason and explain through a variety of methods. Multiple SMPs are present in every lesson. Lesson 5.2 highlights SMP 7, 4, and 3.	**(Reviewer only.)** **__X__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Metric AC2B: **Materials attend to the full meaning of each practice Standard.** **How to Find the Evidence:** For context, read Criterion #7 and Criterion #9 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).		**Use the questions for Metric 2B to evaluate Metric 2B. Record evidence for each question and rate Metric 2B.** **(Reviewer only.)** **__X__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Over the course of any given year of instruction, is each mathematical practice Standard meaningfully present in the form of assignments, activities, or problems that stimulate students to develop the habits of mind described in the practice Standard? Evaluate lessons, chapter/ unit assessments, and homework assignments for evidence of each mathematical practice being meaningfully present in instruction.	**Evidence-** Each mathematical practice can be used throughout the year.	
Do the materials treat the practice Standards as developing across grades or grade bands? Are the practice Standards in early grades appropriately simple? Do they display an arc of growing sophistication across the grades?	**Evidence-** More explanation required as the course progresses.	

Are there teacher-directed materials that explain the role of the practice Standards in the classroom and in students' mathematical development? Are alignments to practice Standards accurate?	**Evidence-** Laurie's Notes As the student progresses through the year the content becomes more sophisticated and expects the student to do more explaining.	
Metric AC2C: **Materials support the Standards' emphasis on mathematical reasoning.** **How to Find the Evidence:** For context, read Criterion #10 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).		**Use the questions for Metric 2C to evaluate Metric 2C. Record evidence for each question and rate Metric 2C.** **(Reviewer only.)** **__X__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Do the materials support students in constructing viable arguments and critiquing the arguments of others concerning grade-level mathematics that is detailed in the content Standards? Read Standard for Mathematical Practice 3. Evaluate teacher and student materials to ensure that students are given opportunities to reason with grade-level mathematics.	**Evidence-** The program expects the student to explain, justify, and reason especially in the Error Analysis exercises. Every unit embeds and highlights SMPs and in particular the questions titled "What is Your Answer?"	
Do the materials support students in producing not only answers and solutions, but also, in a grade-appropriate way, arguments, explanations, diagrams, mathematical models, etc., especially in the Major Work of the grade? Familiarize yourself with the Major Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate teacher and student materials, to understand the types of work students are expected to produce.	**Evidence-** Content is designed at a level appropriate to the student's interest. It is visually appealing to the student. In each lesson there is a prompt titled "Math Practice" that is related to specific practice standards.	
Do materials explicitly attend to the specialized language of mathematics? Is the language of argument, problem solving, and mathematical explanations taught rather than assumed? Evaluate teacher and student materials, paying attention to how mathematical language is taught. NOTE: Examples of evaluating this Criterion might include looking at whether students are supported in: basing arguments on definitions; using the method of providing a counterexample; or recognizing that examples alone do not establish a general statement.	**Evidence-** Key Ideas and Vocabulary Sections of each lesson teach the language of math.	

Alignment Criterion 2:
Standards for Mathematical Practice

Materials must demonstrate authentic connections between content Standards and practice Standards.

AC2 Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 out of 6 points, the Criterion has not been met. Check the final rating.
Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion.
(Reviewer only.)

Shortage of SMP 1.

Before moving to Alignment Criterion 3, record the final Meets or Does Not Meet rating in the Evaluation Summary.

(Reviewer only.)

__X__Meets

____Does Not Meet

Strengths/Weaknesses:

Alignment Criterion 3:
Access to the Standards for All Students

Materials must provide supports for English Language Learners and other special populations.

Because Standards are for all students, alignment requires thoughtful support to ensure all students are able to meet the Standards. Thus, aligned materials must provide supports for English Language Learners and other special populations.

Required Materials:

- Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf)
- Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)
- From the materials being evaluated: teacher guides, student texts and workbooks

Rating this Criterion:
Alignment Criterion 3 is rated as Meets or Does Not Meet.

To rate Alignment Criterion 3, first rate metrics 3A, 3B, and 3C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points).

Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 3 if the materials earn 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as support for special population, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.

Metric AC3A:
Support for English Language Learners and other special populations is thoughtful and helps those students meet the same Standards as all other students. The language in which problems are posed is carefully considered.

How to Find the Evidence:
Evaluate teacher and student materials, paying attention to supports offered for special populations.

Evidence-

Online resources to translate vocabulary in other languages to help students of English Language Learners.

They include suggestions like providing a template (Lesson 5.3) a table of symbols and their meanings (Lesson 4.1).

Reviewer only.)

__X__Meets (2)

____Partially Meets (1)

____Does Not Meet (0)

Metric AC3B: **Materials provide appropriate level and type of scaffolding, differentiation, intervention, and support for a broad range of learners with gradual removal of supports, when needed, to allow students to demonstrate their mathematical understanding independently.** **How to Find the Evidence:** Evaluate teacher and student materials, paying attention to whether materials provide differentiation that will lead all learners to engage with on-grade-level content.	**Evidence-** Text supports all levels of learners from interventions (Review), online tutorials to activities for the advanced self learner. Lesson 4.1 suggests tips for auditory learners, Lesson 5.4 for visual learners, and Lesson 6.1 for kinesthetic learners.	**Reviewer only.)** **__X__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Metric AC3C: **Design of lessons recommends and facilitates a mix of instructional approaches for a variety of learners such as using multiple representations (e.g., including models, using a range of questions, checking for understanding, flexible grouping, pair-share).** **How to Find the Evidence:** Evaluate teacher materials, noting instructional approaches suggested for whole class and differentiated lessons and activities.	**Evidence-** Desmos applications, Geogebra applications, and Think. Pair. Share. Ideas.	**Reviewer only.)** **__X__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Alignment Criterion 3: **Access to the Standards for All Students** **Materials must provide supports for English Language Learners and other special populations.** **AC3** Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 points, the Criterion has not been met. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion.**(Reviewer only.)** A lack of real items or suggestions of images to make connections to the content vocabulary. Also, there is weakness in writing suggestions and sentence starters to encourage ELL students to use vocabulary to build language. **Move to the Evaluation Summary and record the final Meets or Does Not Meet rating .**		**(Reviewer only.)** **___X_Meets** **____Does Not Meet** **Strengths/Weaknesses:**

Once an evaluation for alignment to the Shifts and major features of the CCSS has been conducted using Sections 1-3, it's important to evaluate for overall quality and best practices. A starting list of Indicators of Quality are suggested below. States, districts and others evaluating instructional materials are encouraged to add to this list to ensure materials reflect local contexts. For background information on some of the Indicators of

Qu[illegible]y in this section, refer to pp.18–21 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 20[illegible])

Indicators of Quality	Evidence- Give specific examples.	Rating: (Reviewers only.)
1. Lessons are thoughtfully structured and support the teacher in leading the class through the learning paths at hand, with active participation by all students in their own learning and in the learning of their classmates.	**Evidence-** Tips in Laurie's Notes to motivate the students and work together.	**(Reviewer only.)** **___X___ Yes** **_____ No**
2. The underlying design of the materials includes both problems and exercises. (In solving problems, students learn new mathematics, whereas in working exercises, students apply what they have already learned to build mastery.) Each problem or exercise has a purpose. **NOTE: This Criterion does not require that the problems and exercises be labeled as such.**	**Evidence-** Each lesson has a variety of methods and progressions. From self-guided sections to teacher instructions there is multiple approaches within each lesson.	**(Reviewer only.)** **___X___ Yes** **_____ No**
3. Design of assignments is not haphazard: exercises are given in intentional sequences in order to strengthen students' mathematical understanding.	**Evidence-** Progression is systematic to help the student gain confidence as they approach more difficult problems.	**(Reviewer only.)** **___X___ Yes** **_____ No**
4. There are separate teacher materials that support and **reward teacher study including, but not limited to: discussion of the mathematics of the units and the mathematical point of each lesson as it relates to the organizing concepts of the unit, discussion on student ways of thinking and anticipating a variety of students responses, guidance on lesson flow, guidance on questions that prompt students thinking, and discussion of desired mathematical behaviors being elicited among students.**	**Evidence-** Laurie's Notes are an excellent resource for teachers to help students.	**(Reviewer only.)** **___X___ Yes** **_____ No**
5. Manipulatives suggested in the materials are faithful representations of the mathematical objects they represent and are connected to written methods.	**Evidence-** Models of area used correctly. Manipulatives include positive and negative counters, algebra tiles, and a partition circle.	**(Reviewer only.)** **____X__ Yes** **_____ No**

6. Materials include a variety of curriculum-embedded assessments. Examples include pre-, formative, summative, and self-assessment resources.	**Evidence-** Pre-tests, post-tests, mini assessments, quizzes, and online testing tools are all summative assessments available. Formative assessments are imbedded within Laurie's Notes.	**(Reviewer only.)** **___X___ Yes** **_____ No**
7. Assessments contain aligned rubrics, answer keys, and scoring guidelines that provide sufficient guidance for interpreting student performance.	**Evidence-** All assessments have detailed keys and scoring rubrics. Online tests are automatically corrected. The assessment book includes item analysis for the standards assessment for each chapter.	**(Reviewer only.)** **___X___ Yes** **_____ No**
8. Materials assess student proficiency using methods that are accessible and unbiased, including the use of course-level language in student prompts.	**Evidence-** Yes, assessments are consistent with unit instructions. Almost all problems are designed to include the student as the subject (eg. Pg. 85 "You apply gold foil…" pg. 107 "Your family drives…") or a generic subject pg. 265 "A movie theater…	**(Reviewer only.)** **___X___ Yes** **_____ No**
9. Materials are carefully evaluated by qualified individuals, whose names are listed, in an effort to ensure freedom from mathematical errors and course-level appropriateness.	**Evidence-** Developed by a team of educators with years of experience. Eleven teacher reviews and 7 consultants.	**(Reviewer only.)** **___X___ Yes** **_____ No**
10. The visual design supports students in engaging thoughtfully with the subject. Navigation through the text is clear.	**Evidence-** The text is visually interesting and easy to follow.	**(Reviewer only.)** **___X___ Yes** **_____ No**
11. The materials engage parents in appropriate ways. For example, homework assignments in elementary grades, consist of routine problems, practice with getting answers, and fluency-building exercises that parents can easily support.	**Evidence-** Lessons are easy for parents to follow as well as online tutorials in multiple languages. Each chapter includes a parent letter describing the upcoming content in the Resources.	**(Reviewer only.)** **___X___ Yes** **_____ No**

Reviewer IMET Evaluation Summary **Title/Level: 7th Grade Accelerated**

Publisher: Big Ideas Learning **Copyright: 2014** **ISBN: 978-1-60840-505-3**

Reviewer ID # MN TR **Date Review Completed: 7 March 2016**

Non-Negotiable Criteria- Each Non-Negotiable must be met in order for the Non-Negotiable Alignment Criteria to be met overall.	
Non-Negotiable 1: Freedom from Obstacles to Focus **___X____ Meets** **_____ Does Not Meet**	**Non- Negotiable 2: Focus and Coherence** **__X___ Meets** **_____ Does Not Meet**
Non-Negotiable Overall: **___X__ Meets** **_____ Does Not Meet**	
Alignment Criteria- Each Alignment Criterion must be met with a sufficient number of points in order for Alignment Criteria to be labeled as "Meets" overall. The more points the materials receive on the Alignment Criteria, the better they are aligned.	

Alignment Criterion 1: Rigor and Balance	Alignment Criterion 2: Standards of Mathematical Practice	Alignment Criterion 3: Access to Standards for All Learners
Points: __6___ of 6 possible. (Materials must receive at least 5 of 6 points to align.) _____X__ Meets _____ Does Not Meet	Points: ___6__ of 6 possible. (Materials must receive at least 5 of 6 points to align.) ____X___ Meets _____ Does Not Meet	Points: ___6__ of 6 possible. (Materials must receive at least 5 of 6 points to align.) ___X____ Meets _____ Does Not Meet

Alignment Criteria Overall:

___X__ Meets _____ Does Not Meet

If the materials meet both Non-Negotiables and relevant Alignment Criterion, they are aligned to the Shifts and major features of the Core Standards. **Do the materials meet every Non-Negotiable and Alignment Criterion? __X___ Yes _____ No**

What are the specific areas of strength and weakness based on this evaluation? Publishers or others modifying or developing assessments can use this information to make improvements and/or to remedy gaps in the alignment of assessment materials.

Strengths

-Lots of resources for students, teacher, and parents.

-Laurie's Notes are a great resource for teachers

-Progression is great across all grades.

-Different paths for regular and accelerated.

Weaknesses

-ELL suggestions don't include writing prompts or realia.

-Laurie's Notes there are times where one specific method is said to be the only way to solve a problem (pg. T-100) when in fact, mathematically there are multiple ways one can arrive at the correct answer.

2015-16 Mathematics Interim Review Recommendation & Summary

Publisher Name:	Big Ideas Learning
Title:	Big Ideas Math Algebra 1: A Common Core Curriculum
ISBN #	978-1-60840-452-0
Grade Level(s) or Course:	8th Grade
Reviewer ID:	TC PB

RECOMMENDED AS:

____X___**Core Mathematics Program-** a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials. Substantial evidence clearly supports the designation of this program as Core.

_____**Other Mathematics Program-** a program that substantially, but partially, meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for supplemental materials. Substantial evidence clearly supports the designation of this program as Other.

_____**Component Mathematics Program-** a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs. Substantial evidence clearly supports the designation of this program as Component.

_____**Intervention Program-** a program designed and intended to target and support students' specific needs. Substantial evidence clearly supports the designation of this program as Intervention.

_____ **Does not meet criteria** for recommendation as a Curricular Material or Online Resource for Mathematics.

EVIDENCE SUMMARY:

FOCUS-

Found 91 % of the material in this book to be spent on the widely applicable standards.

COHERENCE-

At the beginning of every unit, there is a common core progression in the Laurie's Notes of the teacher's edition.

RIGOR-

The students are asked to "model", "problem solve" and "make an argument" throughout the lessons in the text.

CONCEPTUAL UNDERSTANDING-

Problems throughout the curriculum ask students to explain and reason through problems using words and multiple representations.

MATHEMATICAL PRACTICES-

The mathematical practices are very noticeable throughout the entire text. The vocabulary used in the lesson is directly drawn from the mathematical practices.

ACCESSIBILITY OF STANDARDS TO ALL STUDENTS-

The Teachers edition, online resources, digital resources, and ancillary material are devoted to aiding in the ELL, Help, Differentiating lessons and making learning available to all learners.

OTHER:

This book follows the Accelerated Traditional Pathway as found in Appendix A of the Mathematics CCSS. The book covers every standard in the 8th Grade Algebra 1 Accelerated Traditional Pathway. The standards covered in this book align directly with the Overview of the Accelerated Traditional Pathway for the CCSS as found on pages 82-91 of Appendix A.

2015-1 nterim Mathematics Review

Mathematics Evaluation Tool – High School

Publisher: BIG IDEAS LEARNING

Title of Material: BIG IDEAS MATH ALGEBRA 1: A COMMON CORE CURRICULUM

Author: RON LARSON & LAURIE BOSWELL

ISBN #: 978-1-60840-452-0 **Copyright** 2014

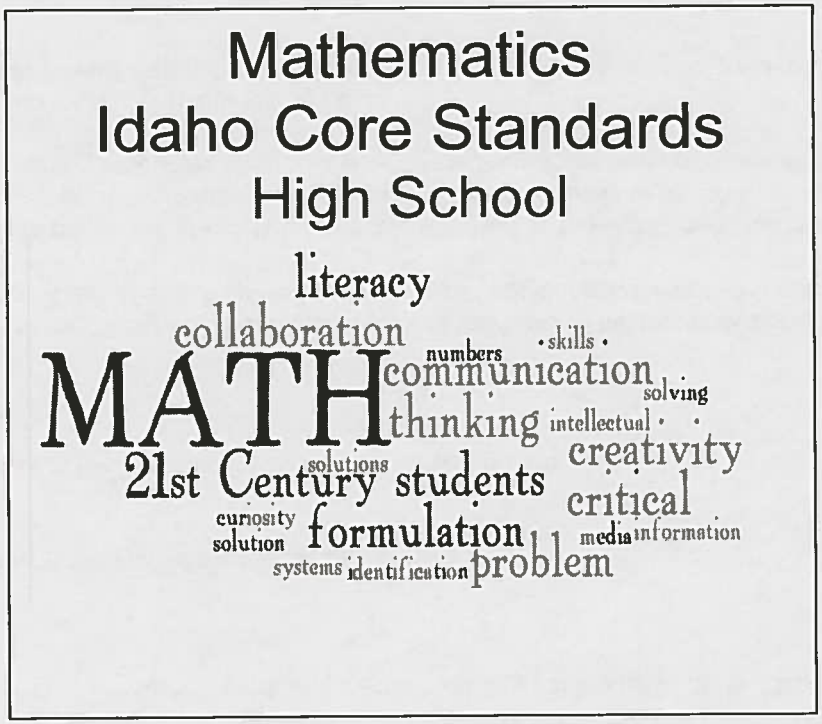
Reviewer ID: TMC

Core Mathematics Program- a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Core.

Other Mathematics Program- a program that substantially, but partially, meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Other.

Component Mathematics Program- a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs.
Substantial evidence clearly supports the designation of this program as Component.

Intervention Program- a program designed and intended to target and support students' specific needs.
Substantial evidence clearly supports the designation of this program as Intervention.



- Evaluation Form adapted from Instructional Materials Evaluation Toolkit (IMET).

The IMET was developed by Student Achievement Partners. Educators may use or adapt. http://creativecommons.org/licenses/by/3.0/ Download this tool at http://achievethecore.org/IMET

Instructional Materials Evaluation Tool

Mathematics, High School

What Are the Purposes of the IMET?

This Math IMET is designed to help educators determine whether instructional materials are aligned to the Shifts and major features of the Common Core State Standards (CCSS). The substantial instructional Shifts (http://www.corestandards.org/other-resources/key-shifts-in-mathematics/) at the heart of the Common Core State Standards are:

- **Focus** strongly where the Standards focus
- **Coherence**: Think across grades and link to major topics within the grade
- **Rigor**: In major topics, pursue conceptual understanding, procedural skill and fluency, and application with equal intensity.

The IMET draws directly from the following documents:

- Common Core State Standards for Mathematics (www.corestandards.org/Math)
- Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013) (http://www. corestandards.org/wp-content/uploads/Math_Publishers_Criteria_ HS_Spring_2013_FINAL1.pdf)

When to use the IMET

1. Purchasing materials: Many factors go into local purchasing decisions. Alignment to the Standards is a critical factor to consider. This tool is designed to evaluate alignment of instructional materials to the Shifts and the major features of the CCSS. It also provides suggestions of additional indicators to consider in the materials evaluation and purchasing process
2. Evaluating materials currently in use: The IMET can be used to analyze the degree of alignment of existing materials and help to highlight specific, concrete flaws in alignment. Even where materials and tools currently in use fail to meet one or more of these criteria, the pattern of failure is likely to be informative. States and districts can use the evaluation to create a thoughtful plan to modify or combine existing resources in such a way that students' actual learning experiences approach the focus, coherence, and rigor of the Standards.
3. Developing programs: Those developing new programs can use this tool as guidance for creating aligned curricula.

Please note this tool was designed for evaluating comprehensive curricula (including any supplemental or ancillary materials), but it was not designed for the evaluation of standalone supplemental materials.

Who Uses the IMET?

Evaluating instructional materials requires both subject-matter and pedagogical expertise. Evaluators should be well versed in the Standards (www.corestandards.org/Math) for all grades in which materials are being evaluated. This includes understanding the Widely Applicable Prerequisites (www.achievethecore.org/prerequisites), how the content fits into the progressions in the Standards (www. achievethecore.org/progressions), and the expectations of the Standards with respect to conceptual understanding, procedural skill and fluency, and application. Evaluators also should be familiar with the substantial instructional Shifts (http://www.corestandards.org/other-resources/key-shifts-in-mathematics/) of Focus, Coherence and Rigor that are listed above.

Getting Started

Prior to Evaluation

Assemble all of the materials necessary for the evaluation. It is essential for evaluators to have materials for all grades covered by the program, as some criteria cannot be rated without having access to each grade. In addition, each evaluator should have a reference copy of the Common Core State Standards for Mathematics (CCSSM) and the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).

Before conducting the evaluation itself, it is important to develop a protocol for the evaluation process. The protocol should include having evaluators study the Publishers' Criteria and the IMET. It will also be helpful for evaluators to get a sense of each program overall before beginning the process. At a minimum, this would include reading the front matter of the text, looking at the table of contents and paging through multiple chapters.

Sections 1-3 below should be completed to produce a comprehensive picture of the strengths and weaknesses of the materials under evaluation. Information about areas in need of improvement or supplementation should be shared with internal and external stakeholders.

Navigating the Tool

Begin with Section 1: Non-Negotiable Alignment Criteria

- The Non-Negotiable Alignment Criteria must each be met in full for materials to be considered aligned to the Shifts and the major features of the Common Core State Standards. Each Non-Negotiable Alignment Criterion has one or more metrics associated with it; every one of these metrics must be met in order for the criterion as a whole to be met.

- Examine the relevant materials and use evidence to rate the materials against each criterion and its associated metric(s).

- Record and explain the evidence upon which the rating is based.

Continue to Section 2: Alignment Criteria

- The Alignment Criteria must each be met for materials to be considered aligned to the Shifts and the major features of the Common Core State Standards. Each Alignment Criterion has one or more metric associated with it; a specific number of these metrics must be met or partially met in order for the criterion as a whole to be met.

- Examine the materials in relation to these criteria, assigning each metric a point value. Rate the criterion as "Meets" or "Does Note Meet" based on the number of points assigned. The more points the materials receive on the alignment Criteria, the better they are aligned.

- Record and explain the evidence upon which the rating is based.

Proceed to Section 4: Indicators of Quality

- Indicators of Quality are important considerations that will help evaluators better understand the overall quality of instructional materials. These considerations are not criteria for alignment to the CCSS, but they provide valuable information about additional program characteristics. Evaluators may want to add their own indicators to the examples provided.

Directions for Non-Negotiable 1 **Focus and Coherence**		
Criterion	**Evidence- Give specific examples.**	**Rating: (Reviewer only.)**
Non-Negotiable 1: Focus and Coherence- Materials must focus coherently on the Widely Applicable Prerequisites in a way that is consistent with the progressions in the Standards. Focus and coherence are the two major evidence-based design principles of the Common Core State Standards for Mathematics (CCSSM, p. 3). Focus is necessary in order to fulfill the ambitious promise the states have made to their students by adopting the Standards: greater achievement at the college and career-ready level; greater depth of understanding of mathematics; and a rich classroom environment in which reasoning, sense-making, applications, and a range of mathematical practices flourish. In high school courses, narrowing and deepening the curriculum creates a structure that ties topics together. Thus, materials must focus coherently on the Widely Applicable Prerequisites in a way that is consistent with the progressions in the Standards.	Focus and coherence are the two major evidence-based design principles of the Common Core State Standards for Mathematics (CCSSM, p. 3). Focus is necessary in order to fulfill the ambitious promise the states have made to their students by adopting the Standards: greater achievement at the college and career-ready level; greater depth of understanding of mathematics; and a rich classroom environment in which reasoning, sense-making, applications, and a range of mathematical practices flourish. In high school courses, narrowing and deepening the curriculum creates a structure that ties topics together. Thus, materials must focus coherently on the Widely Applicable Prerequisites in a way that is consistent with the progressions in the Standards. **Required Materials:** • Common Core State Standards for Mathematics (www.corestandards.org/wpcontent/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_HS_Spring_2013_FINAL1.pdf) • Widely Applicable Prerequisites for College and Careers (http://achievethecore.org/prerequisites) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion:** Non-Negotiable 1 is rated as Meets or Does Not Meet. To rate Non-Negotiable 1, first rate Metrics 1A–1H. Each of these eight metrics must be rated as Meets in order for Non-Negotiable 1 to be rated as Meets. Rate each metric 1A–1H as Meets or Does Not Meet/Insufficient Evidence. If the evidence examined shows that the Criterion is met, then mark the Criterion as Meets. If the evidence examined shows that the Criterion is not met—or if there is insufficient evidence to make a determination—then mark the Criterion as Does Not Meet/Insufficient Evidence. Support all ratings with evidence.

Metric NN1A: **In any single course, students spend at least 50% of their time on Widely Applicable Prerequisites.** **How to Find the Evidence:** Familiarize yourself with the Widely Applicable Prerequisites. Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, lessons, homework assignments, and assessments. (Evaluate both student and teacher materials.) Consider time spent on the Widely Applicable Prerequisites and judge qualitatively whether students and teachers using the materials as designed will devote the majority of time to the Widely Applicable Prerequisites For context, read Criterion #1 in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** I Found 91% of the material in this book to be spent on Widely Applicable Standards as found in the Teachers Edition	**__X__Meets** **____Does Not Meet Insufficient Evidence**
Metric NN1B: **Student work in Geometry involves significant work with applications/modeling and problems that use algebra skills.** **How to Find the Evidence:** Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, lessons, homework assignments, and assessments. (Evaluate both student and teacher materials. NOTE: Since Geometry contains relatively fewer Widely Applicable Prerequisites, this Criterion is important to help foster students' college and career readiness. Problems that use algebra skills might include, for example, algebraic geometry problems in a coordinate setting, or problems of measurement involving unknown quantities.	**Evidence-** Not Applicable for Algebra	**____Meets** **____Does Not Meet Insufficient Evidence**

Metric NN1C: **There are problems at a level of sophistication appropriate to high school (beyond mere review of middle school topics) that involve the application of knowledge and skills from grades 6-8.** **How to Find the Evidence:** Evaluate lessons, chapter/unit assessments, and homework assignments. NOTE: Problems should include application of the following topics from grades 6-8: • Ratios and proportional relationships. • Percentage and unit conversions, e.g., in the context of complex measurement problems involving quantities with derived or compound units (such as mg/mL, kg/ m3, acre-feet, etc.). • Basic function concepts, e.g., by interpreting the features of a graph in the context of an applied problem. • Concepts and skills of geometric measurement e.g., when analyzing a diagram or schematic. • Concepts and skills of basic statistics and probability (see grades 6–8.SP) • Performing rational number arithmetic fluently. For context, read Table 1 on Page 8 of the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** At the beginning of every unit, there is a common core progression in the Laurie's Notes of the Teachers Edition The Teachers Edition explains the progression of what to teach in middle school and what will be taught in Algebra 1.	**__x__Meets** **____Does Not Meet Insufficient Evidence**
Metric NN1D: **Materials base courses on the content specified in the Standards.** **How to Find the Evidence:** Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, and lessons in both student and teacher materials. For context, read Criterion #3a in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** The material in the course is CCSS Aligned.	**__x__Meets** **____Does Not Meet Insufficient Evidence**
Metric NN1E: **Materials give all students extensive work with course-level problems.** **How to Find the Evidence:** Evaluate both student and teacher materials. If the materials provide resources for differentiated learning, consider whether lower-performing students have opportunities to engage with course-level problems. Also consider whether higher-performing students are given opportunities to learn current course-level content in greater depth. For context, read Criterion #3b in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** The textbook itself has a number of problems to support students in their learning of the material. There are also great resources in the Student Journal, Resource Book and Worksheets. There is an Enrichment and Extension Worksheets for the advanced student.	**__x__Meets** **____Does Not Meet Insufficient Evidence**

Metric NN1F: **Materials relate course-level concepts explicitly to prior knowledge from earlier grades or courses. The materials are designed so that prior knowledge becomes reorganized and extended to accommodate the new knowledge.** **How to Find the Evidence:** Evaluate student and teacher materials, looking for problems that involve extending the knowledge learned in earlier grades and courses. NOTE: An example of evaluating this Criterion might be to look at whether materials connect the equation of a circle with the distance formula and the Pythagorean theorem. For context, read Criterion #3c in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** At the beginning of each chapter there is a page called "Maintaining Mathematical Proficiencies" which reviews skills learned earlier and needed for the upcoming chapter.	**_x___Meets** **____Does Not Meet Insufficient Evidence**
Metric NN1G: **Materials include learning objectives that are visibly shaped by CCSSM cluster and domain headings.** **How to Find the Evidence:** Select several clusters from the course being evaluated. Evaluate teacher and student materials in relation to these clusters. For context, read Criterion #4a in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** The objectives tie directly to the CCSS. The Teachers Edition list which Standards are covered and in which sections they are covered in. This evidence is on pages xxii - xxxiii.	**__x__Meets** **____Does Not Meet Insufficient Evidence**
Metric NN1H: **Materials include problems and activities that serve to connect two or more clusters in a domain, or two or more domains in a category, or two or more categories, in cases where these connections are natural and important.** **How to Find the Evidence:** In the course being evaluated, choose two or more clusters, two or more domains, or two or more categories for which connections are natural and important. Evaluate the units, chapters, and lessons that deal with the chosen topics, looking for problems and activities that serve to connect the chosen clusters or domains. NOTE: An example of evaluating this Criterion might be to look at whether materials include problems in which students analyze a situation by building a function, graphing it, and using it to create and solve an equation. For context, read Criterion #4b in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** There are a number of sections in the text that connect two or more clusters in a domain. Evidence on pages xxxii & xxxiii	**_x___Meets** **____Does Not Meet Insufficient Evidence**

Non-Negotiable 1: Focus and Coherence- Materials must focus coherently on the Widely Applicable Prerequisites in a way that is consistent with the progressions in the Standards. **Metric NN 1:** If all metrics 1A–1H were rated as Meets, then rate Non-Negotiable 1 as Meets. If one or more metrics were rated as Does Not Meet/Insufficient Evidence, then rate Non-Negotiable 1 as Does Not Meet. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)** **Before moving to Alignment Criterion 1, record the final Meets or Does Not Meet rating in the Evaluation Summary.**	**__x__Meets** **____Does Not Meet** **Strengths/Weaknesses** Lots of resources and a very well written text.

Now continue by evaluating Alignment Criterion 1 for Rigor and Balance.

Directions for Alignment Criterion 1

Rigor and Balance

Alignment Criterion 1: **Rigor and Balance- Materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.** The Standards set expectations for attention to all three aspects of rigor: conceptual understanding, procedural skill and fluency, and applications. Thus, materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.	The Standards set expectations for attention to all three aspects of rigor: conceptual understanding, procedural skill and fluency, and applications. Thus, materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations. • Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_HS_Spring_2013_FINAL1.pdf) • Widely Applicable Prerequisites for College and Careers (http://achievethecore.org/prerequisites) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion:** Alignment Criterion 1 is rated as Meets or Does Not Meet. To rate Alignment Criterion 1, first rate metrics 1A, 1B, and 1C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). For each metric, guiding questions are provided to aid in gathering evidence. Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 1 if the materials rate 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as rigor and balance, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.

AC Metric 1A: **The materials support the development of students' conceptual understanding of key mathematical concepts, especially where called for in specific content Standards or cluster headings.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Widely Applicable Prerequisites that relate specifically to conceptual understanding to use throughout the questions associated with this metric. NOTE: Some examples of clusters or Standards that call for conceptual understanding include: N-RN.A.1, A-APR.B, A-REI.A.1, A-REI.D.10, A.REI.D.11, F.IF.A.1, F-LE.A.1, G.SRT.A.2, G-SRT.C.6, S-ID.C.7 For context, read Criterion #2a in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	• Choose a cluster/Standard from the Widely Applicable Prerequisites that is aligned to each aspect of rigor and use it to evaluate these metrics. It is most helpful if the same clusters and Standards are chosen for all of the programs being evaluated. (Guidance in choosing clusters/Standards is included in "How to Find the Evidence" below.)	**Use the questions for AC Metric 1A to evaluate Metric 1A. Record evidence for each question and rate Metric 1A.** **__x__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Is conceptual understanding attended to thoroughly where the Standards set explicit expectations for understanding or interpreting? Evaluate lessons, chapter/unit assessments and homework assignments, paying attention to work aligned to Standards that explicitly call for understanding or interpreting.	**Evidence-** The widely applicable Standard I choose was A.REI.3 under Algebra Very good conceptual problems, especially in the area of inequality problems.	
Do the materials feature high-quality conceptual problems and conceptual discussion questions? Evaluate lessons, chapter/unit assessments, and homework assignments. NOTE: Examples of conceptual problems might include such questions as "What is the maximum value of the function f(t) = 5 – t2 ?" or "Is √2 a polynomial? How about ½(x + √2)+ ½ (-x + √2)?"	**Evidence-** Yes, They are asked to "Model", "Problem Solve" and "Make an Argument"	
Do the materials feature opportunities to identify correspondences across mathematical representations? Evaluate lessons, chapter/unit assessments and homework assignments. NOTE: An example of evaluating this metric might include looking at whether materials support students in identifying correspondences among the expression that defines a function, the graph that shows the relationship, and the behavior of the phenomenon being modeled (if any).	**Evidence-** The standard I looked at is abstract in nature but the curriculum does ask students to draw polygons, model equations, and also write and graph equations.	

AC Metric 1B: **The materials are designed so that students attain the fluencies and procedural skills required by the Standards.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Widely Applicable Prerequisites that relate specifically to fluency and procedural skill to use throughout the questions associated with this metric. NOTE: Some examples of Standards that call for procedural skill and fluency include: A-SSE.A.1b, A-SSE.2, A-APR.A.1, A-APR.C.6, F-BF.B.3, G-GPE.B.4, G-GPE.B.5, G-GPE.B.7, G-CO.A.1, G-SRT.B.5 For context, read Criterion #2b in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).		**Use the questions for AC Metric 1B to evaluate Metric 1B. Record evidence for each question and rate Metric 1B.** **__x__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Is progress toward fluency and procedural skill interwoven with the student's developing conceptual understanding of the skills in question? Evaluate lessons, chapter/unit assessments, daily routines, and homework assignments for evidence that the development of fluency and procedural skill is supported by conceptual understanding.	**Evidence-** The lessons give many examples in the "lesson" portion of each section. Also numerous problems in the "exercise" portion as well.	
Are purely procedural problems and exercises present that include cases in which opportunistic strategies are valuable and generic cases that require efficient and general procedures present? Evaluate lessons, chapter/unit assessments, daily routines, and homework assignments. NOTE: Problems in which opportunistic strategies are valuable might include such examples as solving x2 + 5 = 49 + 5 or (3x – 2)2 = 6x – 4. Generic cases that require efficient and general procedures might include such problems as solving c + 8 – c2 = 3(c – 1)2 – 5).	**Evidence-** Good problems mapping out the steps to help the students learn the procedures needed.	
AC Metric 1C: **The materials are designed so that teachers and students spend sufficient time working with engaging applications, without losing focus on the Widely Applicable Prerequisites.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Widely Applicable Prerequisites that relate specifically to application to use throughout the questions associated with this metric. NOTE: Some examples of clusters or Standards that call for application include: N-Q.A, A-SSE.B.3, A-REI.D.11, F-IF.B, F-IF.C.7, F-BF.A.1, G-SRT.C.8, S-ID.A.2, S-IC.A.1 For context, read Criterion #2c in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).		**Use the questions for AC Metric 1C to evaluate Metric 1C. Record evidence for each question and rate Metric 1C.** **__x__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**

Are there single- and multi-step contextual problems, including non-routine problems, that develop the mathematics of the course, afford opportunities for practice, and engage students in problem solving? Do the problems attend thoroughly to those places in the content Standards where expectations for multi-step and real-world problems are explicit? Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** Found many real world problems throughout the text.	
Do application problems particularly stress applying the Widely Applicable Prerequisites? Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** The "Real-Life Application" problems apply directly to the widely applicable standards.	
Are there ample opportunities for students to engage with modeling problems? Do materials require students to use both individual parts of the modeling cycle as well as the full modeling cycle? Read the pages on High School—Modeling in the Standards for Mathematics (pp. 72 and 73). Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** This was evident. The text uses actual vocabulary like "Modeling" in its problem sets.	
Alignment Criterion 1: Materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations. **AC 1:** Materials must earn at least 5 of 6 points to meet this Alignment Criterion. If materials earn less than 5 points, the Criterion has not been met. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)** **Before moving to Alignment Criterion 2, record the final Meets or Does Not Meet rating in the Evaluation Summary.**		**_x___Meets** **____Does Not Meet** **Strengths/Weaknesses:**

Alignment Criterion 2: **Standards for Mathematical Practice- Materials must demonstrate authentic connections between content Standards and practice Standards.** The Standards require that designers of instructional materials connect the mathematical practices to mathematical content in instruction. Thus, materials must demonstrate authentic connections between content Standards and practice Standards.	The Standards require that designers of instructional materials connect the mathematical practices to mathematical content in instruction. Thus, materials must demonstrate authentic connections between content Standards and practice Standards. **Required Materials**: • Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_HS_Spring_2013_FINAL1.pdf) • Widely Applicable Prerequisites for College and Careers (http://achievethecore.org/prerequisites) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion:** Alignment Criterion 2 is rated as Meets or Does Not Meet. To rate Alignment Criterion 2, first rate metrics 2A, 2B, and 2C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). For each metric, guiding questions are provided to aid in gathering evidence. Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 2 if the materials rate 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as mathematical practices, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.
AC Metric 2A: **Materials address the practice Standards in such a way as to enrich the Widely Applicable Prerequisites; practices strengthen the focus of the course instead of detracting from it, in both teacher and student materials.** **How to Find the Evidence:** Familiarize yourself with the Widely Applicable Prerequisites. Evaluate teacher and student materials for evidence that the mathematical practices support and connect to the focus of the course. NOTE: An example of evaluating this Criterion might include looking at whether materials use regularity in repeated reasoning to illuminate formal algebra as well as functions, particularly recursive definitions of functions. For context, read Criterion #6 in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** The Mathematical Practices are very noticeable throughout the teacher and student editions At the beginning of the teachers edition and student edition there is a full page explaining how to use the mathematical practices and how they are applied throughout the book. This is page xliii.	**__x__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
AC Metric 2B: **Materials attend to the full meaning of each practice Standard.** **How to Find the Evidence:** For context, read Criterion #7 in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).		**Use the questions for AC Metric 2B to evaluate Metric 2B. Record evidence for each question and rate Metric 2B.** **__x__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**

Over the course of any given year of instruction, is each mathematical practice Standard meaningfully present in the form of assignments, activities, or problems that stimulate students to develop the habits of mind described in the practice Standard? Evaluate lessons, chapter/ unit assessments, and homework assignments for evidence of each mathematical practice being meaningfully present in instruction.	**Evidence-** The 8 Mathematical Practices are used multiple times through each chapter. I really like the vocabulary that is used throughout the book.	
Are teacher-directed materials that explain the role of the practice Standards in the classroom and in students' mathematical development included? Are alignments to practice Standards accurate? Evaluate teacher materials, paying attention to explanations of the role of the practice Standards in the classroom and in students' mathematical development. Evaluate documents aligning lessons to practice Standards for accuracy. NOTE: Examples to look for when evaluating this metric might include the following: a highly scaffolded problem should not be aligned to MP.1; or a problem that directs a student to use a calculator should not be aligned to MP.5; or a problem about merely extending a pattern should not be aligned to MP.8.	**Evidence-** The Teachers Edition includes multiple pages called "Laurie's Notes" where the author gives tips addressing "Common Errors" and giving guided questions. Very good resource.	
AC Metric 2C: **Materials support the Standards' emphasis on mathematical reasoning.** **How to Find the Evidence:** For context, read Criterion #8 in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).		**Use the questions for AC Metric 2C to evaluate Metric 2C. Record evidence for each question and rate Metric 2C.** **__x__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Do the materials support students in constructing viable arguments and critiquing the arguments of others concerning course-level mathematics that is detailed in the content Standards? Read Standard for Mathematical Practice 3. Evaluate teacher and student materials to ensure that students are given opportunities to reason with grade-level mathematics.	**Evidence-** Multiple activities and problems that address error analysis, asking students to construct viable arguments and explain their views.	
Do the materials support students in producing not only answers and solutions, but also, in a course-appropriate way, arguments, explanations, diagrams, mathematical models, etc., especially in the Widely Applicable Prerequisites? Familiarize yourself with the Widely Applicable Prerequisites. Evaluate teacher and student materials to understand the types of work students are expected to produce.	**Evidence-** Students have to explain, reason, and represent problems in multiple ways.	
Do materials explicitly attend to the specialized language of mathematics? Is the language of argument, problem solving, and mathematical explanations taught rather than assumed? Evaluate teacher and student materials, paying attention to how mathematical language is taught. NOTE: An example of evaluating this Criterion might include looking at whether students are supported in: basing arguments on definitions; using the method of providing a counter example; or recognizing that examples alone do not establish a general statement.	**Evidence-** Vocabulary is grade level and age appropriate. Language is pulled directly from the CCSS.	

Alignment Criterion 2: Materials must demonstrate authentic connections between content Standards and practice Standards. **AC 2:** Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 points, the Criterion has not been met. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewers only.)** **Before moving to Alignment Criterion 3, record the final Meets or Does Not Meet rating in the Evaluation Summary.**		**__x__Meets** **____Does Not Meet** **Strengths/Weaknesses:**
Alignment Criterion 3: **Access to the Standards for All Students- Materials must provide supports for English Language Learners and other special populations.** Because Standards are for all students, alignment requires thoughtful support to ensure all students are able to meet the Standards. Thus, aligned materials must provide supports for English Language Learners and other special populations.	Because Standards are for all students, alignment requires thoughtful support to ensure all students are able to meet the Standards. Thus, aligned materials must provide supports for English Language Learners and other special populations. **Required Materials:** • Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math Publishers_Criteria_HS_Spring_2013_FINAL1.pdf) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion:** Alignment Criterion 3 is rated as Meets or Does Not Meet. To rate Alignment Criterion 3, first rate metrics 3A, 3B, and 3C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 3 if the materials rate 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as support for special population, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.
AC Metric 3A: **Support for English Language Learners and other special populations is thoughtful and helps those students meet the same Standards as all other students. The language in which problems are posed is carefully considered.** **How to Find the Evidence:** Evaluate teacher and student materials, paying attention to supports offered for special populations.	**Evidence-** Within the text there are ELL tips and a Spanish/English glossary. Online and Digital resources are also available.	**__x__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**

AC Metric 3B: **Materials provide appropriate level and type of scaffolding, differentiation, intervention, and support for a broad range of learners with gradual removal of supports, when needed, to allow students to demonstrate their mathematical understanding independently.** **How to Find the Evidence:** Evaluate teacher and student materials, paying attention to whether materials provide differentiation that will lead all learners to engage with on-grade-level content.	**Evidence-** The "Dynamic Teaching Resources" CD includes many tools including skills review handbook as well as basic skills and differentiating the lesson.	**__x__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
AC Metric 3C: **Design of lessons recommends and facilitates a mix of instructional approaches for a variety of learners such as using multiple representations (e.g., including models, using a range of questions, checking for understanding, flexible grouping, pair-share).** **How to Find the Evidence:** Evaluate teacher materials, noting instructional approaches suggested for whole class and differentiated lessons and activities.	**Evidence-** In the Teachers edition, Laurie's notes give ways to differentiate instruction and also give different motivational tips	**_x___Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Alignment Criterion 3: Materials must provide supports for English Language Learners and other special populations. **AC 3** Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 points, the Criterion has not been met. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewers only.)** **Move to the Evaluation Summary and record the final Meets or Does Not Meet rating .**		**__x__Meets** **____Does Not Meet** **Strengths/Weaknesses:**

Once an evaluation for alignment to the Shifts and major features of the CCSS has been conducted using Sections 1-3, it's important to evaluate for overall quality and best practices. A starting list of Indicators of Quality are suggested below. States, districts and others evaluating instructional materials are encouraged to add to this list to ensure materials reflect local contexts. For background information on some of the Indicators of Quality in this section, refer to pp.16–18 in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).

Indicators of Quality	Evidence- Give specific examples.	Rating: (Reviewer only.)
1. Lessons are thoughtfully structured and support the teacher in leading the class through the learning paths at hand, with active participation by all students in their own learning and in the learning of their classmates.	**Evidence-** Pacing guide on page xl & xli of the Teachers Edition. Strong Teachers Edition with multiple teaching strategies.	**(Reviewer only.)** **__x____ Yes** **_____ No**
2. The underlying design of the materials includes both problems and exercises. (In solving problems, students learn new mathematics, whereas in working exercises, students apply what they have already learned to build mastery.) Each problem or exercise has a purpose. **NOTE: This Criterion does not require that the problems and exercises be labeled as such.**	**Evidence-** Well rounded problems. Multiple practice activities and levels of problems for the students to master.	**(Reviewer only.)** **__x____ Yes** **_____ No**
3. Design of assignments is not haphazard: exercises are given in intentional sequences in order to strengthen students' mathematical understanding.	**Evidence-** The lessons scaffold and build on each other.	**(Reviewer only.)** **____x__ Yes** **_____ No**
4. There are separate teacher materials that support and reward teacher study including, but not limited to: discussion of the mathematics of the units and the mathematical point of each lesson as it relates to the organizing concepts of the unit, discussion on student ways of thinking and anticipating a variety of students responses, guidance on lesson flow, guidance on questions that prompt students thinking, and discussion of desired mathematical behaviors being elicited among students.	**Evidence-** The Teachers Edition is very well put together. Many helpful tips and ideas giving activities, questions to ask, and common errors the students might make throughout the curriculum.	**(Reviewer only.)** **___x___ Yes** **_____ No**
5. Manipulatives suggested in the materials are faithful representations of the mathematical objects they represent and are connected to written methods.	**Evidence-** Although there are no physical manipulative that come with the curriculum, the suggested activities are very good.	**(Reviewer only.)** **__x____ Yes** **_____ No**

6. Materials include a variety of curriculum-embedded assessments. Examples include pre-, formative, summative, and self-assessment resources.	**Evidence-** There is an assessment book that includes pretest, posttest, quizzes, formative assessments and also alternate assessments.	**(Reviewer only.)** **___x___ Yes** **_____ No**
7. Assessments contain aligned rubrics, answer keys, and scoring guidelines that provide sufficient guidance for interpreting student performance.	**Evidence-** Rubrics and answer keys are included.	**(Reviewer only.)** **___x___ Yes** **_____ No**
8. Materials assess student proficiency using methods that are accessible and unbiased, including the use of course-level language in student prompts.	**Evidence-** Yes, What you see in the lessons are also on the assignments.	**(Reviewer only.)** **___x___ Yes** **_____ No**
9. Materials are carefully evaluated by qualified individuals, whose names are listed, in an effort to ensure freedom from mathematical errors and course-level appropriateness.	**Evidence-** A list of reviewers are on pages iv & v of the teachers edition.	**(Reviewer only.)** **___x___ Yes** **_____ No**
10. The visual design supports students in engaging thoughtfully with the subject. Navigation through the text is clear.	**Evidence-** The visual design is a little elementary. Otherwise a very well designed textbook. Might just depend on the maturity level of the advanced 8th grade student.	**(Reviewer only.)** **___x___ Yes** **_____ No**

Reviewer IMET Evaluation Summary **Title/Level:** _____

Publisher: _____ **Copyright:** _____ **ISBN:**_____

Reviewer ID # _____ **Date Review Completed:**_____

Non-Negotiable Criteria-The Non-Negotiable must be met in order for the Non-Negotiable Alignment Criteria to be met overall.		
Non- Negotiable 1: Focus and Coherence **__x___ Meets** **_____ Does Not Meet**		
Non-Negotiable Overall: **__x___ Meets** **_____ Does Not Meet**		
Alignment Criteria- Each Alignment Criterion must be met with a sufficient number of points in order for Alignment Criteria to be labeled as "Meets" overall. The more points the materials receive on the Alignment Criteria, the better they are aligned.		
Alignment Criterion 1: Rigor and Balance **Points: ___6__ of 6 possible.** **(Materials must receive at least 5 of 6 points to align.)** **___x____ Meets** **_____ Does Not Meet**	**Alignment Criterion 2: Standards of Mathematical Practice** **Points: __6___ of 6 possible.** **(Materials must receive at least 5 of 6 points to align.)** **____x___ Meets** **_____ Does Not Meet**	**Alignment Criterion 3: Access to Standards for All Learners** **Points: __6___ of 6 possible.** **(Materials must receive at least 5 of 6 points to align.)** **___x____ Meets** **_____ Does Not Meet**
Alignment Criteria Overall: **__x___ Meets** **_____ Does Not Meet**		

If the materials meet the Non-Negotiable Criterion and each Alignment Criterion, they are aligned to the Shifts and major features of the Core Standards. **Do the materials meet every Non-Negotiable and Alignment Criterion? __x___ Yes _____ No**

What are the specific areas of strength and weakness based on this evaluation? Publishers or others modifying or developing assessments can use this information to make improvements and/or to remedy gaps in the alignment of assessment materials.

Strengths
-This book is "smaller" in comparison to other math text books. This is due to the coherence to the CCSS with basic review instead of comprehensive review throughout text.
- Many resource to help support the teacher and also the students learning at different ability levels.
- Hard back text which would hold up to multiple year use.
- The curriculum is CCSS aligned with strict adherence to the mathematical practices and grade level vocabulary.
- This book follows the Accelerated Traditional Pathway as found in Appendix A of the Mathematics CCSS. The Standards covered in this book align directly with the Overview of the Accelerated Traditional Pathway for the CCSS as found on pages 82-91 of Appendix A. Every Standard is covered.
Weakness
-The visual design is a little elementary. Otherwise a very well designed textbook. Might just depend on the maturity level of the advanced 8th grade student.

2015-16 Mathematics Interim Review Recommendation & Summary

Publisher Name:	Big Ideas Learning
Title:	Big Ideas Math 6th Advanced (orange)
ISBN #	**978-1-60840-526-8**
Grade Level(s) or Course:	7th (Orange)
Reviewer ID:	MN DA

RECOMMENDED AS:

____X___**Core Mathematics Program-** a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials. Substantial evidence clearly supports the designation of this program as Core.

_____**Other Mathematics Program-** a program that substantially, but partially, meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for supplemental materials. Substantial evidence clearly supports the designation of this program as Other.

_____**Component Mathematics Program-** a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs. Substantial evidence clearly supports the designation of this program as Component.

_____**Intervention Program-** a program designed and intended to target and support students' specific needs. Substantial evidence clearly supports the designation of this program as Intervention.

_____ **Does not meet criteria** for recommendation as a Curricular Material or Online Resource for Mathematics.

EVIDENCE SUMMARY:

FOCUS-

The majority of time spent in major works. Students spend 103 days (67%) in major clusters.

COHERENCE-

After topics are introduced they are brought back into practice with other activities. Content progresses throughout the program allowing for building on previous knowledge.

RIGOR-

There is multiple practice forms to bring in procedural fluency. The student book has ample practice but when needed Record and Practice Journal and resources by chapter workbooks are available.

CONCEPTUAL UNDERSTANDING-

There is multiple practice forms to bring in procedural fluency. The student book has ample practice but when needed Record and Practice Journal and resources by chapter workbooks are available.

MATHEMATICAL PRACTICES-

All mathematical practice standards are evident throughout the text. They are shown throughout Laurie's notes in every section. Each lesson is based on a concept then reaches out and expects the student to reason and explain through a variety of methods.

ACCESSIBILITY OF STANDARDS TO ALL STUDENTS-

Text supports all levels of learners from interventions (Review), online tutorials to activities for the advanced self-learner.

OTHER:

[redacted]s of resources for students, teacher, and parents. Laurie's Notes are a great resource for teachers. Progression is great across all grades.

2015-16 Interim Mathematics Review

Mathematics Evaluation Tool Grades K-8

Publisher: Big Ideas Learning_____

Title of Material: Big Ideas Math 6th Advanced (Orange) A Common Core Curriculum

Author: Ron Larson and Laurie Boswell_____

ISBN #: _978-1-60840-526-8_____ Copyright___2014_____

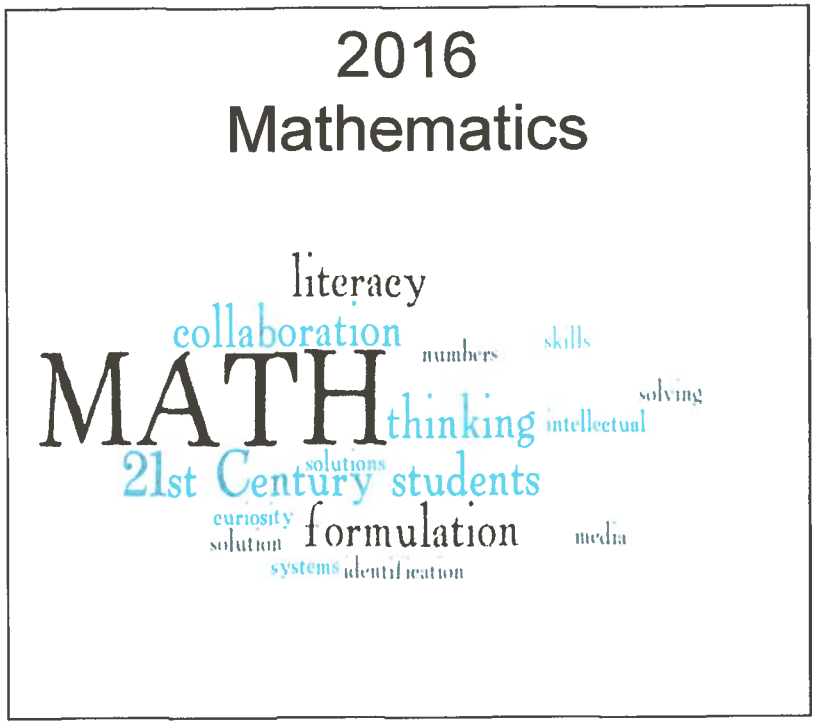
Reviewer ID: _MN___DA_____

Core Mathematics Program- a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Core.

Other Mathematics Program- a program that substantially, but partially, meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Other.

Component Mathematics Program- a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs.
Substantial evidence clearly supports the designation of this program as Component.

Intervention Program- a program designed and intended to target and support students' specific needs.
Substantial evidence clearly supports the designation of this program as Intervention.



- Evaluation Form adapted from Instructional Materials Evaluation Toolkit (IMET).

The IMET was developed by Student Achievement Partners. Educators may use or adapt. http://creativecommons.org/licenses/by/3.0/ Download this tool at http://achievethecore.org/IMET

Instructional Materials Evaluation Tool
Mathematics, Grades K-8

What Are the Purposes of the IMET?
This Math IMET is designed to help educators determine whether instructional materials are aligned to the Shifts and major features of the Common Core State Standards (CCSS). The substantial instructional Shifts (http://www.corestandards.org/other-resources/key-shifts-inmathematics/) at the heart of the Common Core State Standards are:
- **Focus** strongly where the Standards focus
- **Coherence**: Think across grades and link to major topics within the grade
- **Rigor**: In major topics, pursue conceptual understanding, procedural skill and fluency, and application with equal intensity.

The IMET draws directly from the following documents:
- Common Core State Standards for Mathematics (www.corestandards.org/Math)
- Publishers' Criteria for the Common Core State Standards in Mathematics grade K-8 (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)

When to use the IMET
1. Purchasing materials: Many factors go into local purchasing decisions. Alignment to the Standards is a critical factor to consider. This tool is designed to evaluate alignment of instructional materials to the Shifts and the major features of the CCSS. It also provides suggestions of additional indicators to consider in the materials evaluation and purchasing process.

2. Evaluating materials currently in use: The IMET can be used to analyze the degree of alignment of existing materials and help to highlight specific, concrete flaws in alignment. Even where materials and tools currently in use fail to meet one or more of these criteria, the pattern of failure is likely to be informative. States and districts can use the evaluation to create a thoughtful plan to modify or combine existing resources in such a way that students' actual learning experiences approach the focus, coherence, and rigor of the Standards.

3. Developing programs: Those developing new programs can use this tool as guidance for creating aligned curricula.
Please note this tool was designed for evaluating comprehensive curricula (including any supplemental or ancillary materials), but it was not designed for the evaluation of standalone supplemental materials.

Who Uses the IMET?
Evaluating instructional materials requires both subject-matter and pedagogical expertise. Evaluators should be well versed in the Standards (www.corestandards.org/Math) for all grades in which materials are being evaluated. This includes understanding the Major Work of the grade (www.achievethecore/focus), the Supporting and Additional work, how the content fits into the progressions in the Standards (www.achievethecore.org/progressions), and the expectations of the Standards with respect to conceptual understanding, procedural skill and fluency, and application. Evaluators also should be familiar with the substantial instructional Shifts (http:// www.corestandards.org/other-resources/key-shifts-in-mathematics/) of Focus, Coherence and Rigor that are listed above.

Getting Started
Prior to Evaluation

Assemble all of the materials necessary for the evaluation. It is essential for evaluators to have materials for all grades covered by the program, as some criteria cannot be rated without having access to each grade. In addition, each evaluator should have a reference copy of the Common Core State Standards for Mathematics (CCSSM) and the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013).

Before conducting the evaluation itself, it is important to develop a protocol for the evaluation process. The protocol should include having evaluators study the Publishers' Criteria and the IMET. It will also be helpful for evaluators to get a sense of each program overall before beginning the process. At a minimum, this would include reading the front matter of the text, looking at the table of contents and paging through multiple chapters.

Sections 1-3 below should be completed to produce a comprehensive picture of the strengths and weaknesses of the materials under evaluation. Information about areas in need of improvement or supplementation should be shared with internal and external stakeholders.

Navigating the Tool

Begin with Section 1: Non-Negotiable Alignment Criteria

- The Non-Negotiable Alignment Criteria must each be met in full for materials to be considered aligned to the Shifts and the major features of the Common Core State Standards. Each Non-Negotiable Alignment Criterion has one or more metrics associated with it; every one of these metrics must be met in order for the criterion as a whole to be met.

- Examine the relevant materials and use evidence to rate the materials against each criterion and its associated metric(s).

- Record and explain the evidence upon which the rating is based.

Continue to Section 2: Alignment Criteria

- The Alignment Criteria must each be met for materials to be considered aligned to the Shifts and the major features of the Common Core State Standards. Each Alignment Criterion has one or more metric associated with it; a specific number of these metrics must be met or partially met in order for the criterion as a whole to be met.

- Examine the materials in relation to these criteria, assigning each metric a point value. Rate the criterion as "Meets" or "Does Note Meet" based on the number of points assigned. The more points the materials receive on the alignment Criteria, the better they are aligned.

- Record and explain the evidence upon which the rating is based.

Proceed to Section 4: Indicators of Quality

- Indicators of Quality are important considerations that will help evaluators better understand the overall quality of instructional materials. These considerations are not criteria for alignment to the CCSS, but they provide valuable information about additional program characteristics. Evaluators may want to add their own indicators to the examples provided.

Directions for Non-Negotiable 1

Freedom from Obstacles to Focus

Criterion	Evidence- Give specific examples.	Rating: (Reviewer only.)
Non-Negotiable 1: **Freedom from Obstacles to Focus** **Materials must reflect the content architecture of the Standards by not assessing the topics named before the grade level where they first appear in the Standards.** The Standards foster students' progress to algebra by focusing strongly on arithmetic. Consistent with this focus, certain topics from outside of arithmetic appear only in later grades. Thus, to be aligned, materials must reflect the content architecture of the Standards by not assessing the topics named before the grade level where they first appear in the Standards. In this criterion, "topics named" means the topics that are explicitly named in Metric 1A. No other topics should be added to the list in Metric 1A. (Note that other topics in the standards are addressed in criterion NN2.)	**Required Materials** • Common Core State Standards for Mathematics (www.corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf) • From the materials being evaluated: teacher guides and all assessment components	**Rating this Criterion**: Non-Negotiable 1 is rated as Meets or Does Not Meet. To rate Non-Negotiable 1, begin by rating Metric 1A. Since Metric 1A is the only metric for Non-Negotiable 1, the rating for Non-Negotiable 1 is the same as the rating for Metric 1A. If Metric 1A is rated as Does Not Meet, include evidence of when the named topic(s) is/are assessed. If the metric is rated as Meets, list the grade(s) examined in the evaluation.

Metric NN1A: **Materials re[illegible]t the basic architecture of the Standards by not assessing the listed topics before the grade level indicated.** • Probability, including chance, likely outcomes, probability models. (Introduced in the CCSSM in grade 7) • Statistical distributions, including center, variation, clumping, outliers, mean, median, mode, range, quartiles; and statistical association or trends, including two-way tables, bivariate measurement data, scatter plots, trend line, line of best fit, correlation. (Introduced in the CCSSM in grade 6) • Similarity, congruence, or geometric transformations. (Introduced in the CCSSM in grade 8) • Symmetry of shapes, including line/ reflection symmetry, rotational symmetry. (Introduced in the CCSSM in grade 4) **How to Find the Evidence:** Evaluate the table of contents, all chapter tests, all unit tests, and other such assessment components (including rubrics). For context, read Criterion #2 from the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013). NOTE: Grade alignments of other topics are addressed in Non-Negotiable 2, Focus and Coherence.) In this criterion, "topics named" means the topics that are explicitly named in Metric 1A. No other topics should be added to the list in Metric 1A. (Note that other topics in the standards are addressed in criterion NN2.)	**Evidence-** All materials meet grade level content.	**(Reviewer only.)** **__X__Meets** **____Does Not Meet**
Non-Negotiable 1: Materials must reflect the content architecture of the Standards by not assessing the topics named* before the grade level where they first appear in the Standards. **NN 1** If Metric 1A was rated as Meets, then rate Non-Negotiable 1 as Meets. If Metric 1A was rated as Does Not Meet, then rate Non- Negotiable 1 as Does Not Meet. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion.**(Reviewer only.)** **Before moving to Non-Negotiable 2, record the final Meets or Does Not Meet rating in the Evaluation Summary.**		**(Reviewer only.)** **__X__Meets** **____Does Not Meet** **Strengths/Weaknesses:**

Directions for Non-Negotiable 2

Focus and Coherence

Non-Negotiable 2: **Focus and Coherence** **Materials must focus coherently on the Major Work of the grade in a way that is consistent with the progressions in the Standards.** Focus and coherence are the two major evidence-based design principles of the Common Core State Standards for Mathematics (CCSSM, p. 3). Focus is necessary in order to fulfill the ambitious promise the states have made to their students by adopting the Standards: greater achievement at the college and career ready level; greater depth of understanding of mathematics; and a rich classroom environment in which reasoning, sense-making, applications, and a range of mathematical practices flourish. In simpler terms, a mile-wide, inch-deep curriculum translates to less time per topic. Less time means less depth and moving on without many students. Thus, materials must focus coherently on the Major Work of the grade in a way that is consistent with the progressions in the Standards.	**Required Materials** • Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf) • Focus by Grade Level for the grade being evaluated (www.achievethecore.org/focus) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion:** Non-Negotiable 2 is rated as Meets or Does Not Meet. To rate Non-Negotiable 2, first rate metrics 2A–2H. Each of these eight metrics must be rated as Meets in order for Non-Negotiable 2 to be rated as Meets. Rate each metric 2A-2H as Meets or Does Not Meet/Insufficient Evidence. If the evidence examined shows that the Criterion is met, then mark the Criterion Meets. If the evidence examined shows that the Criterion is not met—or if there is insufficient evidence to make a determination—then mark the Criterion as Does Not Meet/Insufficient Evidence. Support all ratings with evidence.
Metric NN2A: **In each grade K–8, students and teachers using the materials as designed devote the large majority of time to the Major Work of the grade.** **How to Find the Evidence:** Familiarize yourself with the Major Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, lessons, homework assignments, and assessments. (Evaluate both student and teacher materials.) Consider time spent on the Major Work of the grade and judge qualitatively whether students and teachers using the materials as designed will devote the large majority of time to the Major Work of the grade. For context, read Criterion #1 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013)	**Evidence-** The majority of time spent in major works. Students spend 103 days (67%) in major clusters.	**(Reviewer only.)** **__X__Meets** **____Does Not Meet/** **Insufficient Evidence**

Metric NN2B: **Supporting Work, where present, enhances focus and coherence simultaneously by also engaging students in the Major Work of the grade.** **How to Find the Evidence:** Familiarize yourself with the Major Work and Supporting Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate chapters and lessons that focus on Supporting Work. NOTE: Example of evaluating this Criterion might include looking at whether materials for K–5 generally treat data displays as an occasion for solving grade-level word problems using the four operations (e.g., see 3.MD.B.3); or whether materials for grade 7 take advantage of opportunities to use probability to support ratios, proportions, and percentages. For context, read Criterion #3 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** After topics are introduced they are brought back into practice with other activities. Essential Questions for each chapter.	**(Reviewer only.)** **__X__Meets** **____Does Not Meet/ Insufficient Evidence**
Metric NN2C: **Materials base content progressions on the grade-by-grade progressions in the Standards. Content from previous or future grades does not unduly interfere with or displace on-grade-level content.** **How to Find the Evidence:** Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, and lessons in both student and teacher materials. NOTE: In some cases it may be possible that aligned materials might address some aspects of a topic in a strategic way before or after the grade level in which the topic is central in the Standards' progressions; for example, a curriculum author might purposefully choose to explore adding fractions with unlike denominators in a way appropriate to grade four, recognizing that this work is not really required until the next grade. However, any such purposeful discrepancies in content progressions should enhance the required learning in each grade; not unduly interfere with or displace grade-level content; and be clearly aimed at helping students meet the Standards as written rather than effectively rewriting the progressions in the Standards. And in all cases, note that Non-Negotiable 1 must be met for materials to be aligned. For context, read Criterion #5a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Content progresses throughout the program allowing for building on previous knowledge. Scope and Sequence and Pacing Guide with all concepts linked to Common Core.	**(Reviewer only.)** **__X__Meets** **____Does Not Meet/ Insufficient Evidence**

Metric NN2D: **Materials gi[illegible]ll students extensive work with on-grade-level problems.** **How to Find the Evidence:** Evaluate both student and teacher materials. If the materials provide resources for differentiated learning, consider whether lower-performing students have opportunities to engage with grade-level problems. Also consider whether higher-performing students are given opportunities to learn current grade-level content in greater depth. For context, read Criterion #5b in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Not only the book lessons but there is additional lessons within the record and practice journals and enrichment and extension lessons. Laurie's Notes are also beneficial.	**(Reviewer only.)** **__X__Meets** **____Does Not Meet/** **Insufficient Evidence**
Metric NN2E: **Materials relate on-grade-level concepts explicitly to prior knowledge from earlier grades.** **How to Find the Evidence:** Evaluate both student and teacher materials. NOTE: Examples of evaluating this Criterion might include looking at the way the materials extend basic ideas of place value across the decimal point; or the role that properties of operations play when the materials extend arithmetic beyond whole numbers to fractions, variables, and expressions. More generally, cluster headings in the Standards sometimes signal key moments where reorganizing and extending previous knowledge is important in order to accommodate new knowledge (e.g., see cluster headings that use the phrase "Apply and extend previous understanding"). For context, read Criterion #5c in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Each lesson ties to previous concepts. Each chapter begins with a section titled "What You Learned Before". Additionally, each lesson includes a "Previous Learning" statement addressing the specifics for the given lesson.	**(Reviewer only.)** **__X__Meets** **____Does Not Meet/** **Insufficient Evidence**
Metric NN2F: **Review of material from previous grades is clearly identified as such to the teacher, and teacher and students can see what their specific responsibility is for the current year.** **How to Find the Evidence:** Evaluate the table of contents, but do not stop there; also evaluate units, chapters, lessons, homework assignments and assessments. (Evaluate both student and teacher materials.) Identify any content from previous grades and check whether it is identified as such. For context, read Criterion #5a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** There is a what you learned before page at the beginning of each chapter but a handbook is also available covering skills review and basic skills. There is also a Fair Game Review in the record and practice journal.	**(Reviewer only.)** **__X__Meets** **____Does Not Meet/** **Insufficient Evidence**

Metric NN2G: **Materials include learning objectives that are visibly shaped by CCSSM cluster headings.** **How to Find the Evidence:** Select several clusters from the Major Work in the grade being evaluated. Evaluate teacher and student materials in relation to these clusters. For context, read Criterion #6a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Learning objectives are located at the beginning of each lesson for easy access to students. Table of contents has all information.	**(Reviewer only.)** **__X__Meets** **____Does Not Meet/ Insufficient Evidence**
Metric NN2H: **Materials include problems and activities that serve to connect two or more clusters in a domain, or two or more domains in a grade, in cases where these connections are natural and important.** **How to Find the Evidence:** In the grade being evaluated, choose two or more clusters or two or more domains for which connections are natural and important. Evaluate the units, chapters, and lessons that deal with the chosen topics, looking for problems and activities that serve to connect the chosen clusters or domains. NOTE: An example of evaluating this Criterion might include looking at whether problems in grade 4 sometimes or often involve students applying their developing computation skills (detailed in domain NBT) in the context of solving word problems (detailed in domain OA). For context, read Criterion #6b in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Connections are made throughout the book bringing previous concepts importance into additional activities. Laurie's notes has connections layout and in her introduction.	**(Reviewer only.)** **__X__Meets** **____Does Not Meet/ Insufficient Evidence**
Non-Negotiable 2: **Focus and Coherence** **Materials must focus coherently on the Major Work of the grade in a way that is consistent with the progressions in the Standards.** NN 2 If all Metrics 2A – 2H were rated as Meets, then rate Non-Negotiable 2 as Meets. If one or more Metric was rated Does Not Meet/Insufficient Evidence, then rate Non-Negotiable 2 as Does Not Meet. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)** **Before moving to Alignment Criterion 1, record the final Meets or Does Not Meet rating in the Evaluation Summary.**		**(Reviewer only.)** **__X__Meets** **____Does Not Meet** **Strengths/Weaknesses:**

Now continue by evaluating the Alignment Criterion 1 for Rigor and Balance.

Directions for Alignment Criterion 1

Rigor and Balance

Alignment Criterion 1: Rigor and Balance **Materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.** The Standards set expectations for attention to all three aspects of rigor: conceptual understanding, procedural skill and fluency, and applications. Thus, materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.	**Required Materials** • Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf) • Focus by Grade Level for the grade being evaluated (achievethecore.org/focus) • Situation Types for the Operations in Word Problems (achievethecore.org/situation-types) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion:** Alignment Criterion 1 is rated as Meets or Does Not Meet. To rate Alignment Criterion 1, first rate metrics 1A, 1B, and 1C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). For each metric, guiding questions are provided to aid in gathering evidence. Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 1 if the materials rate 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as rigor and balance, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.
Metric AC1A: **The materials support the development of students' conceptual understanding of key mathematical concepts, especially where called for in specific content Standards or cluster headings.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Major Work for the grade being evaluated that relate specifically conceptual understanding to use throughout the questions associated with this metric. NOTE: Some examples of clusters or Standards that call for conceptual understanding include: K.OA.A.1, (1.NBT.B, 1.NBT.C), (2.NBT.A, 2.NBT.B), (3.OA.A.1, 3.OA.A.2), 4.NF.A, (4.NBT.A, 4.NBT.B), 5.NF.B, (5.NBT.A, 5.NBT.B), 6.RP.A, 6.EE.A.3, 7.NS.A, 7.EE.A, 8.EE.B, 8.F.A, 8.G.A Clusters or Standards grouped by parentheses are closely connected and could be analyzed together. For context, read Criterion #4a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	-Choose a cluster/Standard from the Major Work that is aligned to each aspect of rigor and use it to evaluate these metrics. It is most helpful if the same clusters/Standards are chosen for all of the programs being evaluated. (Guidance in choosing clusters/Standards is included in "How to Find the Evidence".)	**Use the questions for AC Metric 1A to evaluate Metric 1A. Record evidence for each question and rate Metric 1A.** **__X__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**

Is conceptual understanding attended to thoroughly where the Standards set explicit expectations for understanding or interpreting? Evaluate lessons, chapter/unit assessments and homework assignments, paying attention to work aligned to Standards that explicitly call for understanding or interpreting. NOTE: Examples of evaluating this Criterion might include looking at how well the multi-digit addition and subtraction algorithms are developed and explained on the basis of place value and properties of operations; or how well the multi-digit multiplication and division algorithms are developed and explained on the basis of place value and properties of operations; or how well solving equations is presented and explained as a process of reasoning.	**Evidence-** Lessons give great ideas for teachers, and thought provoking questions.	
Do the materials feature high-quality conceptual problems and conceptual discussion questions? Evaluate lessons, chapter/unit assessments, and homework assignments. NOTE: Example of conceptual problems might include such questions as "Find a number greater than 1/5 and less than 1/4," or "If the divisor does not change and the dividend increases, what happens to the quotient?"	**Evidence-** Different types of questions are asked throughout to encourage higher level thinking.	
Do the materials feature opportunities to identify correspondences across mathematical representations? Evaluate lessons, chapter/unit assessments and homework assignments. NOTE: Examples of evaluating this Criterion might include looking at whether students are supported in identifying correspondences among: the verbal description of a situation, the diagrams that distill its mathematical features, and the equations that model it; or equivalent forms of numbers (e.g., 3 and 6/2) and the number line; or rational number operations and representations of them via models such as the vector model; or the expression that defines a function and the graph that shows the relationship.	**Evidence-** Students are asked to represent understanding multiple ways (tables, diagrams, models, pictures, drawings, and graphs).	
Metric AC1B: **The materials are designed so that students attain the fluencies and procedural skills required by the Standards.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Major Work for the grade being evaluated that relate specifically to fluency and procedural skill to use throughout the questions associated with this metric. NOTE: Some examples of Standards that call for procedural skill and fluency include: K.OA.A.5, 1.OA.C.6, 2.OA.B.2, 2.NBT.B.5, 3.OA.C.7, 3.NBT.A.2, 4.NBT.B.4, 5.NBT.B.5, 6.NS.B.2, and 6.NS.B.3, 6.EE.A, 7.NS.A, 7.EE.A.1,7.EE.B.4a, 8.EE.C.7, 8.EE.C.8b For context, read Criterion #4b in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).		**Use the questions for Metric 1B to evaluate Metric 1 B. Record evidence for each question and rate Metric 1B.** **(Reviewer only.)** **__X__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**

Is progress toward fluency and procedural skill interwoven with students' develop conceptual understanding of the operations in question? Evaluate lessons, chapter/unit assessments, daily routines, and homework assignments for evidence that the development of fluency and procedural skill is supported by conceptual understanding.	**Evidence-** There is multiple pra ce forms to bring in procedural fluency. The student book has ample practice but when needed Record and Practice Journal and resources by chapter workbooks are available.	
Are purely procedural problems and exercises present that include cases in which opportunistic strategies are valuable and generic cases that require efficient algorithms present? Evaluate lessons, chapter/unit assessments, daily routines, and homework assignments. NOTE: Examples of problems in which opportunistic strategies are valuable might include the sum 698 + 240 or the system x + y = 1, 2x + 2y = 3. Examples of generic cases that require efficient algorithms might include the sum 8767+2286 or the system 6y + x = x + 3, – x = 1 + 2y.	**Evidence-** Each lesson has plenty of practices contained within.	
Do the materials in grades K–6 provide repeated practice toward attainment of fluency Standards? Evaluate lessons, daily routines, and homework assignments for evidence of repeated practice toward attainment of the following K–6 Standards that set an explicit expectation of fluent (accurate and reasonably fast) computation: K.OA.A.5, 1.OA.C.6, 2.OA.B.2, 2.NBT.B.5, 3.OA.C.7, 3.NBT.A.2, 4.NBT.B.4, 5.NBT.B.5, 6.NS.B.2, 6.NS.B.3.	**Evidence-** Repeated practice is evident in each lesson.	
Metric AC1C: **The materials are designed so that teachers and students spend sufficient time working with engaging applications, without losing focus on the Major Work of each grade.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Major Work for the grade being evaluated that relate specifically application to use throughout the questions associated with this metric. NOTE: Some examples of clusters or Standards that call for application include: K.OA.A.2, 1.OA.A, 2.OA.A, 3.OA.A.3, 3.OA.D.8, 4.OA.A.3, 4.NF.B.3d, 4.NF.B.4c, 5.NF.B.6, 5.NF.B.7c, 6.RP.A.3, 6.NS.A.1, 6.EE.B.7, 6.EE.C.9, 7.RP.A, 7.NS.A.3, 7.EE.B.3, 8.EE.C.8c, 8.F.B For context, read Criterion #4c in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).		**Use the questions for Metric 1C to evaluate Metric 1C. Record evidence for each question and rate Metric 1C.** **(Reviewer only.)** **__X__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Are there are single- and multi-step contextual problems, including non-routine problems, that develop the mathematics of the grade, afford opportunities for practice, and engage students in problem solving? Do the problems attend thoroughly to those places in the content Standards where expectations for multi-step and real-world problems are explicit? Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** Every section has problems from basic practice to real life application, and age appropriate.	

Do application problems particularly stress applying the Major Work of the grade? Evaluate lessons, chapter/unit assessments, and homework assignments. NOTE: Examples of evaluating this Criterion might include looking at: how well, by the end of grade 2, students using the materials as designed can represent and solve a full range of one-step addition and subtraction word problems; or how well, by the end of grade 3, students using the materials as designed can represent and solve a full range of one-step multiplication and division word problems; or how well these basic situation types for each operation are carried coherently across the grades, (e.g., with fractions and algebraic expressions); or, in all grades, whether the problems connect concepts, Standards, and domains in ways that are natural and important. For a list of situation types for one-step addition, subtraction, multiplication, and division problems, see Situation Types for the Operations in Word Problems	**Evidence-** There are application and real world problems in every section.	
Does modeling build slowly across K–8, with applications that are relatively simple in earlier grades and when students are encountering new content? In grades 6–8, do the problems begin to provide opportunities for students to make their own assumptions or simplifications in order to model a situation mathematically? Read Standard for Mathematical Practice 4, Model with Mathematics. Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** Students are given opportunity to think for themselves.	
Alignment Criterion 1: **Rigor and Balance** **Materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.** AC1 Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 out of 6 points, the Criterion has not been met. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)** **Before moving to Alignment Criterion 2, record the final Meets or Does Not Meet rating in the Evaluation Summary.**		**(Reviewer only.)** **__X__Meets** **____Does Not Meet** **Strengths/Weaknesses:**

Directions for Alignment Criterion 2

Standards for Mathematical Practice

Alignment Criterion 2: Standards for Mathematical Practice **Materials must demonstrate authentic connections between content Standards and practice Standards.** The Standards require that designers of instructional materials connect the mathematical practices to mathematical content in instruction. Thus, materials must demonstrate authentic connections between content Standards and practice Standards.	**Required Materials:** • Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf) • Focus by Grade Level for the grade being evaluated (www.achievethecore.org/focus) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion** Alignment Criterion 2 is rated as Meets or Does Not Meet. To rate Alignment Criterion 2, first rate metrics 2A, 2B, and 2C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). For each metric, guiding questions are provided to aid in gathering evidence. Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 2 if the materials earn 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as mathematical practices, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.
Metric AC2A: **Materials address the practice Standards in such a way as to enrich the Major Work of the grade; practices strengthen the focus on Major Work instead of detracting from it, in both teacher and student materials.** **How to Find the Evidence:** Familiarize yourself with the Major Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate teacher and student materials for evidence that the mathematical practices support and connect to the focus of the grade. NOTE: Examples of evaluating this Criterion might include looking at whether, in grades K–5, students using the materials are supported to look for and express regularity in repeated reasoning about the addition table, the multiplication table, the properties of operations, the relationship between addition and subtraction or multiplication and division, and the place value system; or whether, in grades 6–8, students using the materials are supported to look for and express regularity in repeated reasoning about proportional relationships and linear functions. For context, read Criterion #8 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013).	**Evidence-** All mathematical practice standards are evident throughout the text. They are shown throughout Laurie's notes in every section. Each lesson is based on a concept then reaches out and expects the student to reason and explain through a variety of methods.	**(Reviewer only.)** **__X__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**

Metric AC2B: **Materials att[illegible] to the full meaning of each practice Standard.** **How to Find the Evidence:** For context, read Criterion #7 and Criterion #9 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).		**Use the questions for Metric 2B to evaluate Metric 2B. Record evidence for each ques[illegible] and rate Metric 2B.** **(Reviewer only.)** **__X__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Over the course of any given year of instruction, is each mathematical practice Standard meaningfully present in the form of assignments, activities, or problems that stimulate students to develop the habits of mind described in the practice Standard? Evaluate lessons, chapter/ unit assessments, and homework assignments for evidence of each mathematical practice being meaningfully present in instruction.	**Evidence-** Each mathematical practice can be used throughout the year.	
Do the materials treat the practice Standards as developing across grades or grade bands? Are the practice Standards in early grades appropriately simple? Do they display an arc of growing sophistication across the grades?	**Evidence-** More explanation required as the course progresses.	
Are there teacher-directed materials that explain the role of the practice Standards in the classroom and in students' mathematical development? Are alignments to practice Standards accurate?	**Evidence-** Laurie's Notes As the student progresses through the year the content becomes more sophisticated and expects the student to do more explaining.	
Metric AC2C: **Materials support the Standards' emphasis on mathematical reasoning.** **How to Find the Evidence:** For context, read Criterion #10 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).		**Use the questions for Metric 2C to evaluate Metric 2C. Record evidence for each question and rate Metric 2C.** **(Reviewer only.)** **__X__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Do the materials support students in constructing viable arguments and critiquing the arguments of others concerning grade-level mathematics that is detailed in the content Standards? Read Standard for Mathematical Practice 3. Evaluate teacher and student materials to ensure that students are given opportunities to reason with grade-level mathematics.	**Evidence-** The program expects the student to explain, justify, and reason especially in the Error Analysis exercises.	
Do the materials support students in producing not only answers and solutions, but also, in a grade-appropriate way, arguments, explanations, diagrams, mathematical models, etc., especially in the Major Work of the grade? Familiarize yourself with the Major Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate teacher and student materials, to understand the types of work students are expected to produce.	**Evidence-** Content is designed at a level appropriate to the student's interest. It is visually appealing to the student.	

Do materials explicitly attend to the specialized language of mathematics? Is language of argument, problem solving, and mathematical explanations taught rather than assumed? Evaluate teacher and student materials, paying attention to how mathematical language is taught. NOTE: Examples of evaluating this Criterion might include looking at whether students are supported in: basing arguments on definitions; using the method of providing a counterexample; or recognizing that examples alone do not establish a general statement.	**Evidence-** Key Ideas and Vocabulary Sections of each lesson teach the language of math.	

Alignment Criterion 2:
Standards for Mathematical Practice

Materials must demonstrate authentic connections between content Standards and practice Standards.

AC2 Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 out of 6 points, the Criterion has not been met. Check the final rating.
Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion.
(Reviewer only.)

Before moving to Alignment Criterion 3, record the final Meets or Does Not Meet rating in the Evaluation Summary.

(Reviewer only.)

__X__Meets

____Does Not Meet

Strengths/Weaknesses:

Alignment Criterion 3:
Access to the Standards for All Students

Materials must provide supports for English Language Learners and other special populations.

Because Standards are for all students, alignment requires thoughtful support to ensure all students are able to meet the Standards. Thus, aligned materials must provide supports for English Language Learners and other special populations.

Required Materials:

- Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf)
- Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)
- From the materials being evaluated: teacher guides, student texts and workbooks

Rating this Criterion:
Alignment Criterion 3 is rated as Meets or Does Not Meet.

To rate Alignment Criterion 3, first rate metrics 3A, 3B, and 3C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points).

Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 3 if the materials earn 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as support for special population, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.

Metric AC3A: **Support for English Language Learners and other special populations is thoughtful and helps those students meet the same Standards as all other students. The language in which problems are posed is carefully considered.** **How to Find the Evidence:** Evaluate teacher and student materials, paying attention to supports offered for special populations.	**Evidence-** Online resources to translate vocabulary in other languages to help students of English language learners.	**Reviewer only.)** **__X__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Metric AC3B: **Materials provide appropriate level and type of scaffolding, differentiation, intervention, and support for a broad range of learners with gradual removal of supports, when needed, to allow students to demonstrate their mathematical understanding independently.** **How to Find the Evidence:** Evaluate teacher and student materials, paying attention to whether materials provide differentiation that will lead all learners to engage with on-grade-level content.	**Evidence-** Text supports all levels of learners from interventions (Review), online tutorials to activities for the advanced self learner.	**Reviewer only.)** **__X__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Metric AC3C: **Design of lessons recommends and facilitates a mix of instructional approaches for a variety of learners such as using multiple representations (e.g., including models, using a range of questions, checking for understanding, flexible grouping, pair-share).** **How to Find the Evidence:** Evaluate teacher materials, noting instructional approaches suggested for whole class and differentiated lessons and activities.	**Evidence-** Desmos applications, Geogebra applications, and Think. Pair. Share. Ideas.	**Reviewer only.)** **__X__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**

Alignment Criterion 3: Access to the Standards for All Students **Materials must provide supports for English Language Learners and other special populations.** **AC3** Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 points, the Criterion has not been met. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion.**(Reviewer only.)** **Move to the Evaluation Summary and record the final Meets or Does Not Meet rating .**	**(Reviewer only.)** **___X_Meets** **____Does Not Meet** **Strengths/Weaknesses:**

Once an evaluation for alignment to the Shifts and major features of the CCSS has been conducted using Sections 1-3, it's important to evaluate for overall quality and best practices. A starting list of Indicators of Quality are suggested below. States, districts and others evaluating instructional materials are encouraged to add to this list to ensure materials reflect local contexts. For background information on some of the Indicators of Quality in this section, refer to pp.18–21 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).

Indicators of Quality	Evidence- Give specific examples.	Rating: (Reviewers only.)
1. Lessons are thoughtfully structured and support the teacher in leading the class through the learning paths at hand, with active participation by all students in their own learning and in the learning of their classmates.	**Evidence-** Tips in Laurie's Notes to motivate the students and work together.	**(Reviewer only.)** **___X___ Yes** **_____ No**
2. The underlying design of the materials includes both problems and exercises. (In solving problems, students learn new mathematics, whereas in working exercises, students apply what they have already learned to build mastery.) Each problem or exercise has a purpose. **NOTE: This Criterion does not require that the problems and exercises be labeled as such.**	**Evidence-** Each lesson has a variety of methods and progressions. From self-guided sections to teacher instructions there is multiple approaches within each lesson.	**(Reviewer only.)** **___X___ Yes** **_____ No**

3. Design of assignments is not haphazard: exercises are given in intentional sequences in order to strengthen students' mathematical understanding.	**Evidence-** Progression is systematic to help the student gain confidence as they approach more difficult problems.	**(Reviewer only.)** **___X___ Yes** **_____ No**
4. There are separate teacher materials that support and reward teacher study including, but not limited to: discussion of the mathematics of the units and the mathematical point of each lesson as it relates to the organizing concepts of the unit, discussion on student ways of thinking and anticipating a variety of students responses, guidance on lesson flow, guidance on questions that prompt students thinking, and discussion of desired mathematical behaviors being elicited among students.	**Evidence-** Laurie's Notes are an excellent resource for teachers to help students.	**(Reviewer only.)** **___X___ Yes** **_____ No**
5. Manipulatives suggested in the materials are faithful representations of the mathematical objects they represent and are connected to written methods.	**Evidence-** Models of area used correctly.	**(Reviewer only.)** **____X__ Yes** **_____ No**
6. Materials include a variety of curriculum-embedded assessments. Examples include pre-, formative, summative, and self-assessment resources.	**Evidence-** Pre-tests, post tests, mini assessments, quizzes, and online testing tools are all summative assessments available. Formative assessments are imbedded within Laurie's Notes.	**(Reviewer only.)** **___X___ Yes** **_____ No**
7. Assessments contain aligned rubrics, answer keys, and scoring guidelines that provide sufficient guidance for interpreting student performance.	**Evidence-** All assessments have detailed keys and scoring rubrics. Online tests are automatically corrected.	**(Reviewer only.)** **___X___ Yes** **_____ No**
8. Materials assess student proficiency using methods that are accessible and unbiased, including the use of course-level language in student prompts.	**Evidence-** Yes, assessments are consistent with unit instructions.	**(Reviewer only.)** **___X___ Yes** **_____ No**

9. Materials are carefully evaluated by qualified individuals, whose names are listed, in an effort to ensure freedom from mathematical errors and course-level appropriateness.	**Evidence-** Developed by a team of educators with years of experience.	**(Reviewer only.)** **___X___ Yes** **_____ No**
10. The visual design supports students in engaging thoughtfully with the subject. Navigation through the text is clear.	**Evidence-** The text is visually interesting and easy to follow.	**(Reviewer only.)** **___X___ Yes** **_____ No**
11. The materials engage parents in appropriate ways. For example, homework assignments in elementary grades, consist of routine problems, practice with getting answers, and fluency-building exercises that parents can easily support.	**Evidence-** Lessons are easy for parents to follow as well as online tutorials in multiple languages.	**(Reviewer only.)** **___X___ Yes** **_____ No**

Reviewer IMET Evaluation Summary **Title/Level: _6th Grade Advanced_____**

Publisher: _Big Ideas Learning_____ Copyright: __2014_____ ISBN:_978-1-60840-526-8____

Reviewer ID # __MN___DA_____Date Review Completed:__7 March 2016_____

Non-Negotiable Criteria- Each Non-Negotiable must be met in order for the Non-Negotiable Alignment Criteria to be met overall.

Non-Negotiable 1: Freedom from Obstacles to Focus	Non- Negotiable 2: Focus and Coherence
___X____ Meets _____ Does Not Meet	__X___ Meets _____ Does Not Meet

Non-Negotiable Overall:

___X__ Meets _____ Does Not Meet

Alignment Criteria- Each Alignment Criterion must be met with a sufficient number of points in order for Alignment Criteria to be labeled as "Meets" overall. The more points the materials receive on the Alignment Criteria, the better they are aligned.

Alignment Criterion 1: Rigor and Balance	Alignment Criterion 2: Standards of Mathematical Practice	Alignment Criterion 3: Access to Standards for All Learners
Points: __6___ of 6 possible. (Materials must receive at least 5 of 6 points to align.) _____X__ Meets _____ Does Not Meet	Points: ___6__ of 6 possible. (Materials must receive at least 5 of 6 points to align.) ____X___ Meets _____ Does Not Meet	Points: ___6__ of 6 possible. (Materials must receive at least 5 of 6 points to align.) ___X____ Meets _____ Does Not Meet

Alignment Criteria Overall:

___X__ Meets _____ Does Not Meet

If the materials meet both Non-Negotiables and relevant Alignment Criterion, they are aligned to the Shifts and major features of the Core Standards. **Do the materials meet every Non-Negotiable and Alignment Criterion? __X___ Yes _____ No**

What are the specific areas of strength and weakness based on this evaluation? Publishers or others modifying or developing assessments can use this information to make improvements and/or to remedy gaps in the alignment of assessment materials.

Strengths

-Lots of resources for students, teacher, and parents.

-Laurie's Notes are a great resource for teachers

-Progression is great across all grades.

-Different paths for regular and accelerated.

Weaknesses

-Can't think of any, keep up the great work!

2015-16 Mathematics Interim Review Recommendation & Summary

Publisher Name:	Big Ideas Learning
Title:	Big Ideas Math (Advanced 2)
ISBN #	978-1-60840-527-5
Grade Level(s) or Course:	7th grade (8th grade content)
Reviewer ID:	TR + KC

RECOMMENDED AS:

__X__ **Core Mathematics Program-** a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials. Substantial evidence clearly supports the designation of this program as Core.

_____ **Other Mathematics Program-** a program that substantially, but partially, meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for supplemental materials. Substantial evidence clearly supports the designation of this program as Other.

_____ **Component Mathematics Program-** a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs. Substantial evidence clearly supports the designation of this program as Component.

_____ **Intervention Program-** a program designed and intended to target and support students' specific needs. Substantial evidence clearly supports the designation of this program as Intervention.

_____ **Does not meet criteria** for recommendation as a Curricular Material or Online Resource for Mathematics.

EVIDENCE SUMMARY:

FOCUS- All assessed content is 8th grade standards. 82% of material focuses on the major work of the grade.

COHERENCE- Lessons build on one another (as well as previous grade work). Each topic includes "what you learned Before" and review sections.

RIGOR- Each lesson includes an essential question and mathematical Practice standards. The procedural practice is rigorous, but practice of mathematical practice standards is limited.

CONCEPTUAL UNDERSTANDING- Students have many opportunities to practice procedural knowledge, and limited opportunities for application of concept. Due to the advanced nature of the course, perhaps minimal supplementing may be required.

MATHEMATICAL PRACTICES- This is the main area of weakness for this program. The practice standards are addressed. However, the text is procedure heavy which limits student reasoning and justification and choice of tools + strategies.

ACCESSIBILITY OF STANDARDS TO ALL STUDENTS-

This course is designed for advanced students. There are limited supports in the form of vocabulary instruction, visual models, and examples for language learners. There are Spanish resources in the glossary, parent letters, + teacher manual.

OTHER:

This program adequately addresses the content. Teachers will need to push students to think critically, reason + justify, and choose appropriate tools + strategies by supplementing or initiating conversation in their classroom.

2015-16 Interim Mathematics Review

Mathematics Evaluation Tool Grades K-8

Publisher: Big Ideas Learning

Title of Material: Big Ideas Math Advanced 2 Blue Book- Grade 7

Author: Ron Larson & Laurie Boswell

ISBN #: 978-1-60840-527-5 **Copyright** 2014

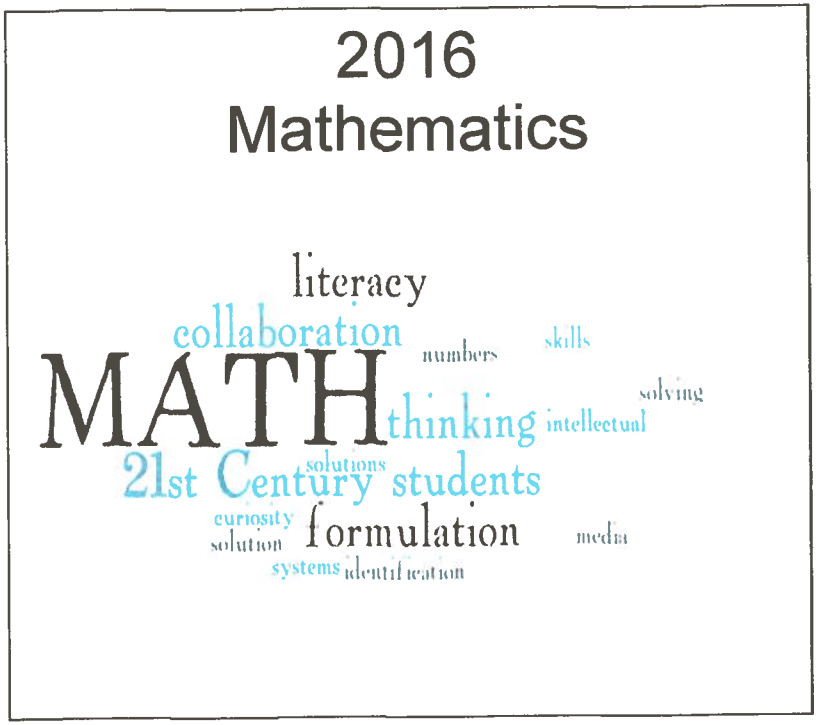
Reviewer ID: TR & KC

Core Mathematics Program- a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Core.

Other Mathematics Program- a program that substantially, but partially, meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Other.

Component Mathematics Program- a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs.
Substantial evidence clearly supports the designation of this program as Component.

Intervention Program- a program designed and intended to target and support students' specific needs.
Substantial evidence clearly supports the designation of this program as Intervention.



- Evaluation Form adapted from Instructional Materials Evaluation Toolkit (IMET).

The IMET was developed by Student Achievement Partners. Educators may use or adapt. http://creativecommons.org/licenses/by/3.0/ Download this tool at http://achievethecore.org/IMET

Instructional Materials Evaluation Tool
Mathematics, Grades K-8

What Are the Purposes of the IMET?
This Math IMET is designed to help educators determine whether instructional materials are aligned to the Shifts and major features of the Common Core State Standards (CCSS). The substantial instructional Shifts (http://www.corestandards.org/other-resources/key-shifts-inmathematics/) at the heart of the Common Core State Standards are:
- **Focus** strongly where the Standards focus
- **Coherence**: Think across grades and link to major topics within the grade
- **Rigor**: In major topics, pursue conceptual understanding, procedural skill and fluency, and application with equal intensity.

The IMET draws directly from the following documents:
- Common Core State Standards for Mathematics (www.corestandards.org/Math)
- Publishers' Criteria for the Common Core State Standards in Mathematics grade K-8 (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)

When to use the IMET
1. Purchasing materials: Many factors go into local purchasing decisions. Alignment to the Standards is a critical factor to consider. This tool is designed to evaluate alignment of instructional materials to the Shifts and the major features of the CCSS. It also provides suggestions of additional indicators to consider in the materials evaluation and purchasing process.

2. Evaluating materials currently in use: The IMET can be used to analyze the degree of alignment of existing materials and help to highlight specific, concrete flaws in alignment. Even where materials and tools currently in use fail to meet one or more of these criteria, the pattern of failure is likely to be informative. States and districts can use the evaluation to create a thoughtful plan to modify or combine existing resources in such a way that students' actual learning experiences approach the focus, coherence, and rigor of the Standards.

3. Developing programs: Those developing new programs can use this tool as guidance for creating aligned curricula.
Please note this tool was designed for evaluating comprehensive curricula (including any supplemental or ancillary materials), but it was not designed for the evaluation of standalone supplemental materials.

Who Uses the IMET?
Evaluating instructional materials requires both subject-matter and pedagogical expertise. Evaluators should be well versed in the Standards (www.corestandards.org/Math) for all grades in which materials are being evaluated. This includes understanding the Major Work of the grade (www.achievethecore/focus), the Supporting and Additional work, how the content fits into the progressions in the Standards (www.achievethecore.org/progressions), and the expectations of the Standards with respect to conceptual understanding, procedural skill and fluency, and application. Evaluators also should be familiar with the substantial instructional Shifts (http:// www.corestandards.org/other-resources/key-shifts-in-mathematics/) of Focus, Coherence and Rigor that are listed above.

Getting Started
Prior to Evaluation

Assemble all of the materials necessary for the evaluation. It is essential for evaluators to have materials for all grades covered by the program, as some criteria cannot be rated without having access to each grade. In addition, each evaluator should have a reference copy of the Common Core State Standards for Mathematics (CCSSM) and the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013).

Before conducting the evaluation itself, it is important to develop a protocol for the evaluation process. The protocol should include having evaluators study the Publishers' Criteria and the IMET. It will also be helpful for evaluators to get a sense of each program overall before beginning the process. At a minimum, this would include reading the front matter of the text, looking at the table of contents and paging through multiple chapters.

Sections 1-3 below should be completed to produce a comprehensive picture of the strengths and weaknesses of the materials under evaluation. Information about areas in need of improvement or supplementation should be shared with internal and external stakeholders.

Navigating the Tool

Begin with Section 1: Non-Negotiable Alignment Criteria

- The Non-Negotiable Alignment Criteria must each be met in full for materials to be considered aligned to the Shifts and the major features of the Common Core State Standards. Each Non-Negotiable Alignment Criterion has one or more metrics associated with it; every one of these metrics must be met in order for the criterion as a whole to be met.

- Examine the relevant materials and use evidence to rate the materials against each criterion and its associated metric(s).

- Record and explain the evidence upon which the rating is based.

Continue to Section 2: Alignment Criteria

- The Alignment Criteria must each be met for materials to be considered aligned to the Shifts and the major features of the Common Core State Standards. Each Alignment Criterion has one or more metric associated with it; a specific number of these metrics must be met or partially met in order for the criterion as a whole to be met.

- Examine the materials in relation to these criteria, assigning each metric a point value. Rate the criterion as "Meets" or "Does Note Meet" based on the number of points assigned. The more points the materials receive on the alignment Criteria, the better they are aligned.

Record and explain the evidence upon which the rating is based.

Proceed to Section 4: Indicators of Quality

- Indicators of Quality are important considerations that will help evaluators better understand the overall quality of instructional materials. These considerations are not criteria for alignment to the CCSS, but they provide valuable information about additional program characteristics. Evaluators may want to add their own indicators to the examples provided.

Directions for Non-Negotiable 1

Freedom from Obstacles to Focus

Criterion	Evidence- Give specific examples.	Rating: (Reviewer only.)
Non-Negotiable 1: **Freedom from Obstacles to Focus** **Materials must reflect the content architecture of the Standards by not assessing the topics named before the grade level where they first appear in the Standards.** The Standards foster students' progress to algebra by focusing strongly on arithmetic. Consistent with this focus, certain topics from outside of arithmetic appear only in later grades. Thus, to be aligned, materials must reflect the content architecture of the Standards by not assessing the topics named before the grade level where they first appear in the Standards. In this criterion, "topics named" means the topics that are explicitly named in Metric 1A. No other topics should be added to the list in Metric 1A. (Note that other topics in the standards are addressed in criterion NN2.)	**Required Materials** • Common Core State Standards for Mathematics (www.corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf) • From the materials being evaluated: teacher guides and all assessment components	**Rating this Criterion**: Non-Negotiable 1 is rated as Meets or Does Not Meet. To rate Non-Negotiable 1, begin by rating Metric 1A. Since Metric 1A is the only metric for Non-Negotiable 1, the rating for Non-Negotiable 1 is the same as the rating for Metric 1A. If Metric 1A is rated as Does Not Meet, include evidence of when the named topic(s) is/are assessed. If the metric is rated as Meets, list the grade(s) examined in the evaluation.

Metric NN1A: **Materials re[illegible]t the basic architecture of the Standards by not assessing the listed topics before the grade level indicated.** • Probability, including chance, likely outcomes, probability models. (Introduced in the CCSSM in grade 7) • Statistical distributions, including center, variation, clumping, outliers, mean, median, mode, range, quartiles; and statistical association or trends, including two-way tables, bivariate measurement data, scatter plots, trend line, line of best fit, correlation. (Introduced in the CCSSM in grade 6) • Similarity, congruence, or geometric transformations. (Introduced in the CCSSM in grade 8) • Symmetry of shapes, including line/ reflection symmetry, rotational symmetry. (Introduced in the CCSSM in grade 4) **How to Find the Evidence:** Evaluate the table of contents, all chapter tests, all unit tests, and other such assessment components (including rubrics). For context, read Criterion #2 from the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013). NOTE: Grade alignments of other topics are addressed in Non- Negotiable 2, Focus and Coherence.) In this criterion, "topics named" means the topics that are explicitly named in Metric 1A. No other topics should be added to the list in Metric 1A. (Note that other topics in the standards are addressed in criterion NN2.)	**Evidence-** All assess[illegible]nts are on the grade level standards. The 8th grade content on similarity, congruence, and transformations are present and assessed in chapter 2. Standards are tested by topic, rather than grade. Therefore, some assessments are combination of grade level standards. Most standards are 8th grade with 7.EE.4, 7.G.1-7.G.6, and 7.SP.1-7.SP.8	**(Reviewer only.)** __X__ **Meets** ____**Does Not Meet**
Non-Negotiable 1: Materials must reflect the content architecture of the Standards by not assessing the topics named* before the grade level where they first appear in the Standards. **NN 1** If Metric 1A was rated as Meets, then rate Non-Negotiable 1 as Meets. If Metric 1A was rated as Does Not Meet, then rate Non- Negotiable 1 as Does Not Meet. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion.**(Reviewer only.)** The assessments provided include multiple versions of chapter tests, cumulative reviews, standards assessments, and alternative assessments. Each of these is accompanied by an item analysis (except for the alternative assessment) that describes student errors and offers possible reasons for the errors. There is a scoring rubric that accompanies the alternative assessment. Common Core progression is listed at the beginning of each new skill chapter. It can be a little difficult to delineate between 7th vs. 8th grade skills in overlapping skills. **Before moving to Non-Negotiable 2, record the final Meets or Does Not Meet rating in the Evaluation Summary.**		**(Reviewer only.)** __X__ **Meets** ____**Does Not Meet** **Strengths/Weaknesses:**

Directions for Non-Negotiable 2

Focus and Coherence

Non-Negotiable 2: **Focus and Coherence** **Materials must focus coherently on the Major Work of the grade in a way that is consistent with the progressions in the Standards.** Focus and coherence are the two major evidence-based design principles of the Common Core State Standards for Mathematics (CCSSM, p. 3). Focus is necessary in order to fulfill the ambitious promise the states have made to their students by adopting the Standards: greater achievement at the college and career ready level; greater depth of understanding of mathematics; and a rich classroom environment in which reasoning, sense-making, applications, and a range of mathematical practices flourish. In simpler terms, a mile-wide, inch-deep curriculum translates to less time per topic. Less time means less depth and moving on without many students. Thus, materials must focus coherently on the Major Work of the grade in a way that is consistent with the progressions in the Standards.	**Required Materials** • Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf) • Focus by Grade Level for the grade being evaluated (www.achievethecore.org/focus) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion:** Non-Negotiable 2 is rated as Meets or Does Not Meet. To rate Non-Negotiable 2, first rate metrics 2A–2H. Each of these eight metrics must be rated as Meets in order for Non-Negotiable 2 to be rated as Meets. Rate each metric 2A-2H as Meets or Does Not Meet/Insufficient Evidence. If the evidence examined shows that the Criterion is met, then mark the Criterion Meets. If the evidence examined shows that the Criterion is not met—or if there is insufficient evidence to make a determination—then mark the Criterion as Does Not Meet/Insufficient Evidence. Support all ratings with evidence.
Metric NN2A: **In each grade K–8, students and teachers using the materials as designed devote the large majority of time to the Major Work of the grade.** **How to Find the Evidence:** Familiarize yourself with the Major Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, lessons, homework assignments, and assessments. (Evaluate both student and teacher materials.) Consider time spent on the Major Work of the grade and judge qualitatively whether students and teachers using the materials as designed will devote the large majority of time to the Major Work of the grade. For context, read Criterion #1 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013)	**Evidence-** There are 50 sections of the book in 10 chapters (units). 41 of the sections are devoted to the major work of the grade; this represents 82% of the material. This is definitely adequate for 8th grade content. There are only 2 lessons for irrational numbers.	**(Reviewer only.)** __X__ **Meets** ____**Does Not Meet/** **Insufficient Evidence**

Metric NN2B: **Supporting work, where present, enhances focus and coherence simultaneously by also engaging students in the Major Work of the grade.** **How to Find the Evidence:** Familiarize yourself with the Major Work and Supporting Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate chapters and lessons that focus on Supporting Work. NOTE: Example of evaluating this Criterion might include looking at whether materials for K–5 generally treat data displays as an occasion for solving grade-level word problems using the four operations (e.g., see 3.MD.B.3); or whether materials for grade 7 take advantage of opportunities to use probability to support ratios, proportions, and percentages. For context, read Criterion #3 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** The few places that are not Major Work areas are generally incorporating the Expressions and Equations standards. For example, in Chapter 8 students are asked to find volumes of cylinders and cones. This is utilizing student's understanding of expressions and equations and manipulating algebraic expressions. Also, in Lesson 8.2, students are asked about sand falling out of a cone at a constant rate. This is one of the Major Work clusters suggesting both functions and equations. In Chapter 9, students are asked to construct lines of best fit and write equations for them. This is a Major Work of the grade level.	**(Reviewer only.)** __X__ **Meets** ____**Does Not Meet/** **Insufficient Evidence**
Metric NN2C: **Materials base content progressions on the grade-by-grade progressions in the Standards. Content from previous or future grades does not unduly interfere with or displace on-grade-level content.** **How to Find the Evidence:** Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, and lessons in both student and teacher materials. NOTE: In some cases it may be possible that aligned materials might address some aspects of a topic in a strategic way before or after the grade level in which the topic is central in the Standards' progressions; for example, a curriculum author might purposefully choose to explore adding fractions with unlike denominators in a way appropriate to grade four, recognizing that this work is not really required until the next grade. However, any such purposeful discrepancies in content progressions should enhance the required learning in each grade; not unduly interfere with or displace grade-level content; and be clearly aimed at helping students meet the Standards as written rather than effectively rewriting the progressions in the Standards. And in all cases, note that Non-Negotiable 1 must be met for materials to be aligned. For context, read Criterion #5a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** The content in the materials do list at the beginning of each chapter the progression of content standards leading up to and including the standards in the chapter. Grades 6 and 7 standards are noted, standard by standard, which ones support and lead up to the current standards. The lessons do not teach lessons for long-term retention. They give a great deal of review and examples which limit the need to recall previous grade material.	**(Reviewer only.)** __X__ **Meets** ____**Does Not Meet/** **Insufficient Evidence**

Metric NN2D **Materials g[illegible]ll students extensive work with on-grade-level problems.** **How to Find the Evidence:** Evaluate both student and teacher materials. If the materials provide resources for differentiated learning, consider whether lower-performing students have opportunities to engage with grade-level problems. Also consider whether higher-performing students are given opportunities to learn current grade-level content in greater depth. For context, read Criterion #5b in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** The mate[illegible]s include problems and exercises that are extensive in quantity, and each lesson includes a "Taking Math Deeper" problem. The Resources by Chapter book includes practice set A and Practice set B, Enrichment, and puzzles. The Record and Practice Journal also includes review exercises and activities. The program is limited in problems for depth and real-world application.	**(Reviewer only.)** __X__ **Meets** ____**Does Not Meet/** **Insufficient Evidence**
Metric NN2E: **Materials relate on-grade-level concepts explicitly to prior knowledge from earlier grades.** **How to Find the Evidence:** Evaluate both student and teacher materials. NOTE: Examples of evaluating this Criterion might include looking at the way the materials extend basic ideas of place value across the decimal point; or the role that properties of operations play when the materials extend arithmetic beyond whole numbers to fractions, variables, and expressions. More generally, cluster headings in the Standards sometimes signal key moments where reorganizing and extending previous knowledge is important in order to accommodate new knowledge (e.g., see cluster headings that use the phrase "Apply and extend previous understanding"). For context, read Criterion #5c in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Each chapter begins with the section titled "What You Learned Before." This covers the previous grade level content. Additionally, each lesson includes a "Previous Learning" statement addressing the specifics for the given lesson. It also lists strategies for reteaching if students are struggling with the on grade level content by suggesting Fair Game reviews, Skills Handbook, and Lesson Tutorials.	**(Reviewer only.)** __X__ **Meets** ____**Does Not Meet/** **Insufficient Evidence**
Metric NN2F: **Review of material from previous grades is clearly identified as such to the teacher, and teacher and students can see what their specific responsibility is for the current year.** **How to Find the Evidence:** Evaluate the table of contents, but do not stop there; also evaluate units, chapters, lessons, homework assignments and assessments. (Evaluate both student and teacher materials.) Identify any content from previous grades and check whether it is identified as such. For context, read Criterion #5a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** The sections labeled "What You Learned Before" and "Fair Game Review" are clearly labeled and not specifically related to the 8th grade standards. Also the Skills Review Handbook works with material from previous grades, however, it is not clearly labeled the grade level content or content standards.	**(Reviewer only.)** __X__ **Meets** ____**Does Not Meet/** **Insufficient Evidence**

Metric NN2G: **Materials include learning objectives that are visibly shaped by CCSSM cluster headings.** **How to Find the Evidence:** Select several clusters from the Major Work in the grade being evaluated. Evaluate teacher and student materials in relation to these clusters. For context, read Criterion #6a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Each lesson both student and teacher edition list the goals for the lesson. For example in Lesson 4.4, the goal of the lesson is clearly about graphing and finding slopes. In the teacher materials, the same is listed in the same place but the standard reference is also included (8.EE.6). It is also listed among the "Laurie's Notes" section.	(Reviewer only.) __X__ **Meets** ____**Does Not Meet/** **Insufficient Evidence**
Metric NN2H: **Materials include problems and activities that serve to connect two or more clusters in a domain, or two or more domains in a grade, in cases where these connections are natural and important.** **How to Find the Evidence:** In the grade being evaluated, choose two or more clusters or two or more domains for which connections are natural and important. Evaluate the units, chapters, and lessons that deal with the chosen topics, looking for problems and activities that serve to connect the chosen clusters or domains. NOTE: An example of evaluating this Criterion might include looking at whether problems in grade 4 sometimes or often involve students applying their developing computation skills (detailed in domain NBT) in the context of solving word problems (detailed in domain OA). For context, read Criterion #6b in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** There are a few examples where multiple Domains or Clusters meet. There is a clear and natural connection between rational numbers and working with square roots. This is in Lesson 7.4. Lessons 7.3 and 7.5 also include the Expressions and Equations standard of using square roots alongside the Geometry standard of Pythagorean Theorem. Many lessons feel isolated, as each lesson focuses on a particular piece of a skill. There are limited opportunities to connect ideas between the lessons.	(Reviewer only.) __X__ **Meets** ____**Does Not Meet/** **Insufficient Evidence**

Non-Negotiable 2:

Focus and Coherence

Materials must focus coherently on the Major Work of the grade in a way that is consistent with the progressions in the Standards.

NN 2 If all Metrics 2A – 2H were rated as Meets, then rate Non-Negotiable 2 as Meets. If one or more Metric was rated Does Not Meet/Insufficient Evidence, then rate Non-Negotiable 2 as Does Not Meet. Check the final rating.
Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)**

The Major Work of the grade is clearly a focus in the text. The progression from previous to current grade level standards is present. The Record and Practice Journal and Resources by Chapter provide a great deal of practice for students.
The weakness is that some of the multiple Domains and Clusters connections are not obvious nor are they frequent.

Before moving to Alignment Criterion 1, record the final Meets or Does Not Meet rating in the Evaluation Summary.

(Reviewer only.)

__X__ Meets

____Does Not Meet

Strengths/Weaknesses:

Now continue by evaluating the Alignment Criterion 1 for Rigor and Balance.

Directions for Alignment Criterion 1

Rigor and Balance

Alignment Criterion 1: Rigor and Balance

Materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.

The Standards set expectations for attention to all three aspects of rigor: conceptual understanding, procedural skill and fluency, and applications. Thus, materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.

Required Materials

- Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf)
- Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)
- Focus by Grade Level for the grade being evaluated (achievethecore.org/focus)
- Situation Types for the Operations in Word Problems (achievethecore.org/situation-types)
- From the materials being evaluated: teacher guides, student texts and workbooks

Rating this Criterion:

Alignment Criterion 1 is rated as Meets or Does Not Meet.

To rate Alignment Criterion 1, first rate metrics 1A, 1B, and 1C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). For each metric, guiding questions are provided to aid in gathering evidence.
Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 1 if the materials rate 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as rigor and balance, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.

Metric AC1A: **The materials support the development of students' conceptual understanding of key mathematical concepts, especially where called for in specific content Standards or cluster headings.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Major Work for the grade being evaluated that relate specifically conceptual understanding to use throughout the questions associated with this metric. NOTE: Some examples of clusters or Standards that call for conceptual understanding include: K.OA.A.1, (1.NBT.B, 1.NBT.C), (2.NBT.A, 2.NBT.B), (3.OA.A.1, 3.OA.A.2), 4.NF.A, (4.NBT.A, 4.NBT.B), 5.NF.B, (5.NBT.A, 5.NBT.B), 6.RP.A, 6.EE.A.3, 7.NS.A, 7.EE.A, 8.EE.B, 8.F.A, 8.G.A Clusters or Standards grouped by parentheses are closely connected and could be analyzed together. For context, read Criterion #4a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	-Choose a cluster/Standard from the Major Work that is aligned to each aspect of rigor and use to evaluate these metrics. It is most helpful if the same clusters/Standards are chosen for all of the programs being evaluated. (Guidance in choosing clusters/Standards is included in "How to Find the Evidence".)	**Use the questions for AC Metric 1A to evaluate Metric 1A. Record evidence for each question and rate Metric 1A.** _____ **Meets (2)** __X__ **Partially Meets (1)** ____**Does Not Meet (0)**
Is conceptual understanding attended to thoroughly where the Standards set explicit expectations for understanding or interpreting? Evaluate lessons, chapter/unit assessments and homework assignments, paying attention to work aligned to Standards that explicitly call for understanding or interpreting. NOTE: Examples of evaluating this Criterion might include looking at how well the multi-digit addition and subtraction algorithms are developed and explained on the basis of place value and properties of operations; or how well the multi-digit multiplication and division algorithms are developed and explained on the basis of place value and properties of operations; or how well solving equations is presented and explained as a process of reasoning.	**Evidence-** There is an emphasis on the use of Mapping diagrams in the early stages of the unit on Functions. This supports the concept of one output for every input. It is a visual representation of an abstract idea but ties to other models that come up later such as tables and graphs and equations. There are only limited opportunities within the lessons to develop deep understanding, develop algorithms through experience, and interpret thinking. The algorithms are given and practiced in rote ways.	

Do the materials feature high-quality conceptual problems and conceptual discussion questions? Evaluate lessons, chapter/unit assessments, and homework assignments. NOTE: Example of conceptual problems might include such questions as "Find a number greater than 1/5 and less than 1/4," or "If the divisor does not change and the dividend increases, what happens to the quotient?"	**Evidence-** Each lesson includes the Essential Question and Activities sections at the beginning. These tend to be more conceptual, exploratory, and investigative in nature. Within each of these sections are prompts tied to specific practice Standards. These are called Math Practice followed by the Standard they are focusing on. For example, Lesson 6.4 asks students to explain how they can recognize when a situation in real life is linear or nonlinear. It goes on to ask students to provide an example of each.	
Do the materials feature opportunities to identify correspondences across mathematical representations? Evaluate lessons, chapter/unit assessments and homework assignments. NOTE: Examples of evaluating this Criterion might include looking at whether students are supported in identifying correspondences among: the verbal description of a situation, the diagrams that distill its mathematical features, and the equations that model it; or equivalent forms of numbers (e.g., 3 and 6/2) and the number line; or rational number operations and representations of them via models such as the vector model; or the expression that defines a function and the graph that shows the relationship.	**Evidence-** Throughout the Functions units, tables, mapping diagrams, and graphs are all related to each other. Students are finding those correspondences between the different forms of each. There are also contextual situations associated with many models that provide a reality for students as they work through the content. Most visual models are often provided for students, and are not used as a means to solve problems.	
Metric AC1B: **The materials are designed so that students attain the fluencies and procedural skills required by the Standards.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Major Work for the grade being evaluated that relate specifically to fluency and procedural skill to use throughout the questions associated with this metric. NOTE: Some examples of Standards that call for procedural skill and fluency include: K.OA.A.5, 1.OA.C.6, 2.OA.B.2, 2.NBT.B.5, 3.OA.C.7, 3.NBT.A.2, 4.NBT.B.4, 5.NBT.B.5, 6.NS.B.2, and 6.NS.B.3, 6.EE.A, 7.NS.A, 7.EE.A.1,7.EE.B.4a, 8.EE.C.7, 8.EE.C.8b For context, read Criterion #4b in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).		**Use the questions for Metric 1B to evaluate Metric 1 B. Record evidence for each question and rate Metric 1B.** **(Reviewer only.)** **__X__ Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**

Is progress toward fluency and procedural skill interwoven with students' development of conceptual understanding of the operations in question? Evaluate lessons, chapter/unit assessments, daily routines, and homework assignments for evidence that the development of fluency and procedural skill is supported by conceptual understanding.	**Evidence-** Throughout the materials the practice and exercises develop the procedural fluency necessary to meet the Standards. There is a good deal of extra practice in the Record and Practice Journal and also the Resources by Chapter books. These are primarily procedural practice (the Journal does include the Activities which tend to be more application or concept driven).	
Are purely procedural problems and exercises present that include cases in which opportunistic strategies are valuable and generic cases that require efficient algorithms present? Evaluate lessons, chapter/unit assessments, daily routines, and homework assignments. NOTE: Examples of problems in which opportunistic strategies are valuable might include the sum 698 + 240 or the system $x + y = 1$, $2x + 2y = 3$. Examples of generic cases that require efficient algorithms might include the sum 8767+2286 or the system $6y + x = x + 3$, $-x = 1 + 2y$.	**Evidence-** There are plenty of procedural problems including extra practice problems sets that are largely procedural in the Resources by Chapter book and the Record and Practice Journal. Lesson 1.3 is a good example of a variety of procedural problems and contextual problems that are essentially procedure driven.	
Do the materials in grades K–6 provide repeated practice toward attainment of fluency Standards? Evaluate lessons, daily routines, and homework assignments for evidence of repeated practice toward attainment of the following K–6 Standards that set an explicit expectation of fluent (accurate and reasonably fast) computation: K.OA.A.5, 1.OA.C.6, 2.OA.B.2, 2.NBT.B.5, 3.OA.C.7, 3.NBT.A.2, 4.NBT.B.4, 5.NBT.B.5, 6.NS.B.2, 6.NS.B.3.	**Evidence-** **N/A**	
Metric AC1C: **The materials are designed so that teachers and students spend sufficient time working with engaging applications, without losing focus on the Major Work of each grade.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Major Work for the grade being evaluated that relate specifically application to use throughout the questions associated with this metric. NOTE: Some examples of clusters or Standards that call for application include: K.OA.A.2, 1.OA.A, 2.OA.A, 3.OA.A.3, 3.OA.D.8, 4.OA.A.3, 4.NF.B.3d, 4.NF.B.4c, 5.NF.B.6, 5.NF.B.7c, 6.RP.A.3, 6.NS.A.1, 6.EE.B.7, 6.EE.C.9, 7.RP.A, 7.NS.A.3, 7.EE.B.3, 8.EE.C.8c, 8.F.B For context, read Criterion #4c in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** The beginning of every lesson starts with an Essential Question and multiple activities, usually to be completed in partners. This is followed by other examples and several contextual problems to apply the math. Unit 4 on Graphing and Writing Linear Equations includes mostly contextual problems. The contextual and real-world applications are spelled out for the student. They do not have to consider which operation(s) are best to use to solve. Rather, they are still following steps to solve.	**Use the questions for Metric 1C to evaluate Metric 1C. Record evidence for each question and rate Metric 1C.** **(Reviewer only.)** **__X__ Meets (2)** **____ Partially Meets (1)** **____Does Not Meet (0)**

Are there are single- and multi-step contextual problems, including non-routine problems, that develop the mathematics of the grade, afford opportunities for practice, and engage students in problem solving? Do the problems attend thoroughly to those places in the content Standards where expectations for multi-step and real-world problems are explicit? Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** There are plenty of single-step contextual problems in each lesson. The multi-step are rarer (in general, I am not considering a part A and part B as multi-step; multi-step build each part to the next and part A and B questions are standalone). The Critical Thinking questions such as the one in Lesson 4.3 do have multi-step aspects to them. Each part requires and explanation and a graph and then the final question asks students to consider a specific situation and explain their choice.	
Do application problems particularly stress applying the Major Work of the grade? Evaluate lessons, chapter/unit assessments, and homework assignments. NOTE: Examples of evaluating this Criterion might include looking at: how well, by the end of grade 2, students using the materials as designed can represent and solve a full range of one-step addition and subtraction word problems; or how well, by the end of grade 3, students using the materials as designed can represent and solve a full range of one-step multiplication and division word problems; or how well these basic situation types for each operation are carried coherently across the grades, (e.g., with fractions and algebraic expressions); or, in all grades, whether the problems connect concepts, Standards, and domains in ways that are natural and important. For a list of situation types for one-step addition, subtraction, multiplication, and division problems, see Situation Types for the Operations in Word Problems	**Evidence-** Each lesson has a focus on the standards and stays with that standard(s). Since 80% of the content is Major Work, almost everything supports the Major Work. The Essential Questions and subsequent Activities that open each lesson focus on application of the Standards and by association the Major Work of the grade. Only chapters 8 and 9 are not part of the Major work but they are supported with Standards from the Major Work, in particular Expressions and Equations and Number Systems.	
Does modeling build slowly across K–8, with applications that are relatively simple in earlier grades and when students are encountering new content? In grades 6–8, do the problems begin to provide opportunities for students to make their own assumptions or simplifications in order to model a situation mathematically? Read Standard for Mathematical Practice 4, Model with Mathematics. Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** Modeling that supports building understanding and connecting conceptual and procedural work is weak. Throughout the materials most of the models tend to be abstract with a few representations. Situations are modeled primarily through the use of tables, graphs on coordinate planes and equations. This is a precursor to the modeling that students will encounter beyond 8th grade.	

Alignment Criterion 1: Rigor and Balance

Materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.

(Reviewer only.)

__X__ Meets

____Does Not Meet

Strengths/Weaknesses:

AC1 Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 out of 6 points, the Criterion has not been met. Check the final rating.
Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)**

Strengths of the materials are that each Lesson begins with an Essential Question and subsequent activities. The activities are designed to be completed in partners encouraging group work and lowering anxiety of students with a bit less confidence. The Record and Practice Journal provides a space for students to record work on the partner and group activities.

The weakness in the materials is there seems to be a push to be procedural. For example the bulk of the exercises are procedural skills, this includes the Resources by Chapter materials and extra work in the Practice Journal. Encouraging modeling especially in ways that are visual (not tables for example) is a weakness.

Before moving to Alignment Criterion 2, record the final Meets or Does Not Meet rating in the Evaluation Summary.

Directions for Alignment Criterion 2

Standards for Mathematical Practice

Alignment Criterion 2: Standards for Mathematical Practice

Materials must demonstrate authentic connections between content Standards and practice Standards.

The Standards require that designers of instructional materials connect the mathematical practices to mathematical content in instruction. Thus, materials must demonstrate authentic connections between content Standards and practice Standards.

Required Materials:

- Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf)
- Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)
- Focus by Grade Level for the grade being evaluated (www.achievethecore.org/focus)
- From the materials being evaluated: teacher guides, student texts and workbooks

Rating this Criterion

Alignment Criterion 2 is rated as Meets or Does Not Meet.

To rate Alignment Criterion 2, first rate metrics 2A, 2B, and 2C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). For each metric, guiding questions are provided to aid in gathering evidence.

Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 2 if the materials earn 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as mathematical practices, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.

Metric AC2A:

Materials address the practice Standards in such a way as to enrich the Major Work of the grade; practices strengthen the focus on Major Work instead of detracting from it, in both teacher and student materials.

How to Find the Evidence:

Familiarize yourself with the Major Work of the grade being evaluated (see the Focus by Grade Level documents.)

Evaluate teacher and student materials for evidence that the mathematical practices support and connect to the focus of the grade.

NOTE: Examples of evaluating this Criterion might include looking at whether, in grades K–5, students using the materials are supported to look for and express regularity in repeated reasoning about the addition table, the multiplication table, the properties of operations, the relationship between addition and subtraction or multiplication and division, and the place value system; or whether, in grades 6–8, students using the materials are supported to look for and express regularity in repeated reasoning about proportional relationships and linear functions.

For context, read Criterion #8 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013).

Evidence-

Multiple SMPs are present in every lesson. For Example Lesson 6.2 highlights SMP1, 3, 4, and 5. The unit on Linear Functions which is part of the Major Work of the grade does see SMP8 highlighted specifically in 2 out of the 5 lessons. All of the practice Standards are addressed throughout the chapter including SMP5. The chapter does include many tables which supports the ideas of repeated reasoning and looking for pattern or structure (SMP7 & 8).

Students have only limited opportunities to make sense of problems and construct arguments (SMP1 & 3) Models are taught as step by step algorithms and do not ask students to reason through problems using models or tools of their choice. (SMP4 & 5) Patterns and structures are spelled out in the the text, and do not come from the students. (SMP 7 & 8)

(Reviewer only.)

__X__ Meets (2)

_____Partially Meets (1)

____Does Not Meet (0)

Metric AC2B: **Materials attend to the full meaning of each practice Standard.** **How to Find the Evidence:** For context, read Criterion #7 and Criterion #9 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).		**Use the questions for Metric 2B to evaluate Metric 2B. Record evidence for each question and rate Metric 2B.** **(Reviewer only.)** **__X__ Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Over the course of any given year of instruction, is each mathematical practice Standard meaningfully present in the form of assignments, activities, or problems that stimulate students to develop the habits of mind described in the practice Standard? Evaluate lessons, chapter/ unit assessments, and homework assignments for evidence of each mathematical practice being meaningfully present in instruction.	**Evidence-** The SMPs are largely present in the Essential Questions and Activities as they ask students to work through application questions. The problems and exercises are more geared toward precision (SMP6), however some open-ended response questions are present (Lesson 3.1).	
Do the materials treat the practice Standards as developing across grades or grade bands? Are the practice Standards in early grades appropriately simple? Do they display an arc of growing sophistication across the grades?	**Evidence-** The practice Standards are sufficiently complex for the grade level. Students are asked frequently to construct viable arguments. In Lesson 3.2, students are asked to use repeated reasoning to find and describe relationships among triangles. In Lesson 7.5, students are asked to provide counterexamples to justify the claim that a statement is false.	
Are there teacher-directed materials that explain the role of the practice Standards in the classroom and in students' mathematical development? Are alignments to practice Standards accurate?	**Evidence-** Each lesson highlights the SMPs in "Laurie's Notes" that are the focus and discusses the role they play in the lesson. In the introduction to each lesson (the Essential Question and Activities), the SMP(s) are highlighted. For example, lesson 6.2 practice Standards 3 and 4 are a focus and the teacher materials explain that student's models, like tables, and also equations can represent functions in various ways. The other activities include the suggestion to use square tiles as a manipulative (SMP5).	

Metric AC2C: Materials support the Standards' emphasis on mathematical reasoning. **How to Find the Evidence:** For context, read Criterion #10 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).		**Use the questions for Metric 2C to evaluate Metric 2C. Record evidence for each question and rate Metric 2C.** **(Reviewer only.)** **_____ Meets (2)** **__X__ Partially Meets (1)** **____ Does Not Meet (0)**
Do the materials support students in constructing viable arguments and critiquing the arguments of others concerning grade-level mathematics that is detailed in the content Standards? Read Standard for Mathematical Practice 3. Evaluate teacher and student materials to ensure that students are given opportunities to reason with grade-level mathematics.	**Evidence-** Every unit embeds and highlights SMPs and in particular each lesson includes a question titled "What is Your Answer?" where students are asked to explain their thinking on a given topic. The critique the reasoning of others is not a strength in the materials but there are frequent questions asking students to analyze errors. This meets the goals of SMP3 but it is not an in depth question (Lesson 6.2).	
Do the materials support students in producing not only answers and solutions, but also, in a grade-appropriate way, arguments, explanations, diagrams, mathematical models, etc., especially in the Major Work of the grade? Familiarize yourself with the Major Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate teacher and student materials, to understand the types of work students are expected to produce.	**Evidence-** "What is Your Answer?" in each section helps to tease out student thinking by asking questions that require some thought and consideration. In addition to this, there are in each lesson a prompt titled Math Practice where students are asked to consider certain situations. For example, in Lesson 6.4 students are asked about constant speed and increasing speed. This hits SMP4 and encourages creating some sort of model (table or graph).	
Do materials explicitly attend to the specialized language of mathematics? Is the language of argument, problem solving, and mathematical explanations taught rather than assumed? Evaluate teacher and student materials, paying attention to how mathematical language is taught. NOTE: Examples of evaluating this Criterion might include looking at whether students are supported in: basing arguments on definitions; using the method of providing a counterexample; or recognizing that examples alone do not establish a general statement.	**Evidence-** Each lesson is written in language that utilizes the appropriate mathematical language for the topic and grade level. The Essential Questions and Activities are accessible by all students and use language that is not a deterrent from the math. There is an example where the specialized way of writing an expression may be problematic. Lesson 6.3 Activity 2 uses an output of 2π, 4π, 6π, etc. Leaving values in terms of π might seem odd for students and may be a bit outside the expectation of 8th grade standards.	

Alignment Criterion 2:
Standards for Mathematical Practice

Materials must demonstrate authentic connections between content Standards and practice Standards.

AC2 Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 out of 6 points, the Criterion has not been met. Check the final rating.
Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion.
(Reviewer only.)

The SMPs are present and highlighted throughout the material. Each lesson includes suggestions and tips for maximizing the efficacy of the practice Standards. Each lesson includes a practice Standard that is highlighted for students to consider and there are opportunities in each lesson for students to think and respond on their own to more open-ended questions.
The SMPs are not as present in the practice and exercises (they are included, however). They tend to be primarily included in the activities at the beginning of each lesson. All of the practice standards are addressed in the text, but are very weak in reasoning and justification. Students will need to be pushed by their teacher to move to deeper levels of thinking.

(Reviewer only.)

__X__ Meets

____Does Not Meet

Strengths/Weaknesses:

Before moving to Alignment Criterion 3, record the final Meets or Does Not Meet rating in the Evaluation Summary.

Alignment Criterion 3:
Access to the Standards for All Students

Materials must provide supports for English Language Learners and other special populations.

Because Standards are for all students, alignment requires thoughtful support to ensure all students are able to meet the Standards. Thus, aligned materials must provide supports for English Language Learners and other special populations.

Required Materials:

- Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf)
- Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)
- From the materials being evaluated: teacher guides, student texts and workbooks

Rating this Criterion:
Alignment Criterion 3 is rated as Meets or Does Not Meet.

To rate Alignment Criterion 3, first rate metrics 3A, 3B, and 3C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points).

Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 3 if the materials earn 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as support for special population, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.

Metric AC3A: **Support for [illegible]lish Language Learners and other special populations is thoughtful and helps those students meet the same Standards as all other students. The language in which problems are posed is carefully considered.** **How to Find the Evidence:** Evaluate teacher and student materials, paying attention to supports offered for special populations.	**Evidence-** Each lesson includ[illegible]pecific support and suggestions for working with ELL students. They include suggestions like ensuring that the geometry symbols are understood (Lesson 2.1). There are also good suggestions such as creating sentence frames or a cloze paragraph that includes a word bank (Lesson 7.3). These help reduce anxiety and provide access to the content for ELL students. Specifically, the letter to families at the beginning of each chapter in the Resources by Chapter has a Spanish version of the letter.	**Reviewer only.)** __X__ **Meets (2)** ____**Partially Meets (1)** ____**Does Not Meet (0)**
Metric AC3B: **Materials provide appropriate level and type of scaffolding, differentiation, intervention, and support for a broad range of learners with gradual removal of supports, when needed, to allow students to demonstrate their mathematical understanding independently.** **How to Find the Evidence:** Evaluate teacher and student materials, paying attention to whether materials provide differentiation that will lead all learners to engage with on-grade-level content.	**Evidence-** The lessons include support for differentiating lessons. Each lesson includes specific suggestions and strategies to reach learners with various learning styles. For example, Lesson 8.1 suggests bringing in actual coins to use as a manipulative for exploring volume, which is supports those kinesthetic learners. Lesson 2.5 suggests tips for visual learners by providing triangles that are the same and similar. Lesson 5.2 has suggestions for a partner activity that includes verbal components. There is an abundance of kinesthetic suggestions throughout the material. These are all a benefit to ELL students. Each lesson moves through a series of partner work, activities, and applications gradually releasing students to work independently on problems and exercises.	**Reviewer only.)** __X__ **Meets (2)** ____**Partially Meets (1)** ____**Does Not Meet (0)**
Metric AC3C: **Design of lessons recommends and facilitates a mix of instructional approaches for a variety of learners such as using multiple representations (e.g., including models, using a range of questions, checking for understanding, flexible grouping, pair-share).** **How to Find the Evidence:** Evaluate teacher materials, noting instructional approaches suggested for whole class and differentiated lessons and activities.	**Evidence-** Each lesson does utilize partner work at the beginning. These include using a variety of methods and models to get students thinking. There is a part of the teacher notes called Motivate where suggestions for small group work (matching in partners Lesson 6.3), context for the lesson (who was Pythagoras, Lesson 7.3), and whole class Venn diagrams on the floor with string or yarn (Lesson 7.4).	**Reviewer only.)** __X__ **Meets (2)** ____**Partially Meets (1)** ____**Does Not Meet (0)**

Alignment Criterion 3: Access to the Standards for All Students	(Reviewer only.) __X__ Meets ____Does Not Meet **Strengths/Weaknesses:**
Materials must provide supports for English Language Learners and other special populations. **AC3** Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 points, the Criterion has not been met. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion.**(Reviewer only.)** **The strengths are in the consistent approach to and suggestions to meet the needs of ELL students. Each unit includes a variety of ways to try and meet those students' needs.** **A weakness is the lack of real items or suggestions for images of things to make connections to the content vocabulary. There is a weakness in writing suggestions and starters to encourage ELL students to use vocabulary to build language.** **Move to the Evaluation Summary and record the final Meets or Does Not Meet rating .**	

Once an evaluation for alignment to the Shifts and major features of the CCSS has been conducted using Sections 1-3, it's important to evaluate for overall quality and best practices. A starting list of Indicators of Quality are suggested below. States, districts and others evaluating instructional materials are encouraged to add to this list to ensure materials reflect local contexts. For background information on some of the Indicators of Quality in this section, refer to pp.18–21 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).

Indicators of Quality	Evidence- Give specific examples.	Rating: (Reviewers only.)

1. Lessons are thoughtfully structured and support the teacher in leading the class through the learning paths at hand, with active participation by all students in their own learning and in the learning of their classmates.	**Evidence-** Each lesson includes a lot of support by providing what the materials refer to as "Laurie's Notes." These are suggestions for questions that elicit responses focused around the math topic. Each lesson includes a partner activity. The teacher materials provide suggested questions and direction on how to maximize the effectiveness of the activities (pT-202 & T-203). There are reteaching and enrichment suggestions in each lesson (pT-207).	**(Reviewer only.)** __X__ **Yes** _____ **No**
2. The underlying design of the materials includes both problems and exercises. (In solving problems, students learn new mathematics, whereas in working exercises, students apply what they have already learned to build mastery.) Each problem or exercise has a purpose. **NOTE: This Criterion does not require that the problems and exercises be labeled as such.**	**Evidence-** Each lesson is structured the same way where there is an essential question and a partner activity (an exploration of the topic). The problems come next in the section called "On Your Own" where students try to apply the new concept. Sometimes the On Your Own section is bare problems (p104) and other times it refers back to examples (p45). Following this are exercises that students work through. Some of these are contextual and some are bare problems, most are procedural. The Resources by Chapter book include more exercises.	**(Reviewer only.)** __X__ **Yes** _____ **No**
3. Design of assignments is not haphazard: exercises are given in intentional sequences in order to strengthen students' mathematical understanding.	**Evidence-** Assignments are structured in a very sequential order. The previous lessons tend to build on subsequent lessons. Each lessons includes a section where there is an explicit connection made to previous material and learning. The order of the table of contents makes sense as one leads into another. For example, although it may not seem obvious, Equations leads into Transformations nicely as much of the Equations unit uses geometric figures as contexts for solving equations.	**(Reviewer only.)** __X__ **Yes** _____ **No**

4. There are separate teacher materials that support and reward teacher study including, but not limited to: discussion of the mathematics of the units and the mathematical point of each lesson as it relates to the organizing concepts of the unit, discussion on student ways of thinking and anticipating a variety of students responses, guidance on lesson flow, guidance on questions that prompt students thinking, and discussion of desired mathematical behaviors being elicited among students.	**Evidence-** The teacher materials do not include in depth discussion (for the sake of the teacher) on the standards or the topic. There seems to be an assumption that the teacher must already have a deep understanding of the content. The majority of the teacher materials is devoted to other areas like organization of the unit in Connect (pT-274), setting the stage for student work in Motivate (pT-274), discussion ideas/questions in Lesson Notes (pT-274), giving guidance and posing questions in each of the explicit examples (pT-274→275), and identifying what common errors teachers might expect to see along with suggestions for addressing the misconceptions (pT-276).	**(Reviewer only.)** __X__ **Yes** _____ **No**
5. Manipulatives suggested in the materials are faithful representations of the mathematical objects they represent and are connected to written methods.	**Evidence-** There are few instances in 8th grade where manipulatives beyond models that can be constructed are used. However, the Algebra tiles are faithful representations and are connected to written methods. There is also a partitioned circle used to derive the formula for the area of a circle and this is also connected to the written method and what it represents.	**(Reviewer only.)** __X__ **Yes** _____ **No**

6. Materials include a variety of curriculum-embedded assessments. Examples include pre-, formative, summative, and self-assessment resources.	**Evidence-** Each chapter describes the progression of standards leading up to the current lesson. There is a section highlighting ideas students should already know ("What You Learned Before"). Each chapter includes mid-chapter quizzes (p 165, p190) chapter tests (p196), standards assessments (p197-198) that include item analysis, and spiral review called Fair Game Review (p189). The Assessment book includes item analysis for the standards assessment for each chapter. The item analysis describes misconceptions and common errors for each of the distractors as well as common errors for free response questions. There is a pre-course test included in the ancillary materials.	**(Reviewer only.)** __X__ **Yes** _____ **No**
7. Assessments contain aligned rubrics, answer keys, and scoring guidelines that provide sufficient guidance for interpreting student performance.	**Evidence-** All components of the book include an answer key. Some of the activities have solutions in the TE other assessments are included at the back of the book. The text includes possible or sample answers to more open-ended questions (pT-264). The text includes examples of common student errors and suggestions for addressing the errors (pT-108, pT-262). The Assessment book includes item analysis for the standards assessment for each chapter. The item analysis describes misconceptions and common errors for each of the distractors as well as common errors for free response questions.	**(Reviewer only.)** __X__ **Yes** _____ **No**
8. Materials assess student proficiency using methods that are accessible and unbiased, including the use of course-level language in student prompts.	**Evidence-** The materials use methods and language that is unbiased and largely accessible. The specific mathematics language is relevant to each lesson and the student prompts are appropriate for 8th graders. Almost all problems are designed to include the student as the subject (e.g. p278 you gradually increase speed, p313 you cut a picture, etc.) or a generic subject (e.g. p305 a tennis player, p323 your teacher, etc.).	**(Reviewer only.)** __X__ **Yes** _____ **No**

9. Materials are carefully evaluated by qualified individuals, whose names are listed, in an effort to ensure freedom from mathematical errors and course-level appropriateness.	**Evidence-** Page iv and v list 1 teacher reviewers and 7 consultants including mathematics consultants, mathematics assessment consultants, special education advisor, project-based instruction specialist, interdisciplinary advisor, and differentiated instruction consultant.	**(Reviewer only.)** **__X__ Yes** **_____ No**
10. The visual design supports students in engaging thoughtfully with the subject. Navigation through the text is clear.	**Evidence-** The text is easy to navigate although the pages seem very busy and full of images and bright colors. Each chapter is follows the same structure throughout creating a routine for students to find specific aspects that are useful like vocabulary or study tips. Students may appreciate the puzzles in the Resources book. There are a wide variety of real-life and animated images to support the context of a problem (p 155 boat launch, p121 cloud system on Saturn) but in many cases do not actually shed light upon the math (p162 kayaker, p228 a pig race).	**(Reviewer only.)** **__X__ Yes** **_____ No**
11. The materials engage parents in appropriate ways. For example, homework assignments in elementary grades, consist of routine problems, practice with getting answers, and fluency-building exercises that parents can easily support.	**Evidence-** In the Resources by Chapter book, each chapter begins with a letter to parents explaining the big ideas of the chapter along with examples (and answers) from the chapter. The text itself is familiar in structure to what many parents have experience with including different levels of practice and exercises (in the Record and Practice Journal, Practice set A is slightly less difficult than Practice set B), highlighted key vocabulary, and selected answers in the back of the book.	**(Reviewer only.)** **__X__ Yes** **_____ No**

Reviewer IMET Evaluation Summary **Title/Level: Big Ideas Math Advanced 2 Blue Book- Grade 8**

Publisher: _____ **Copyright:** _____ **ISBN:** _____

Reviewer ID # Trent Reynolds **Date Review Completed:** _____

Non-Negotiable Criteria- Each Non-Negotiable must be met in order for the Non-Negotiable Alignment Criteria to be met overall.

Non-Negotiable 1: Freedom from Obstacles to Focus	Non- Negotiable 2: Focus and Coherence
X Meets _____ Does Not Meet	X Meets _____ Does Not Meet

Non-Negotiable Overall:

X Meets **_____ Does Not Meet**

Alignment Criteria- Each Alignment Criterion must be met with a sufficient number of points in order for Alignment Criteria to be labeled as "Meets" overall. The more points the materials receive on the Alignment Criteria, the better they are aligned.

Alignment Criterion 1: Rigor and Balance	Alignment Criterion 2: Standards of Mathematical Practice	Alignment Criterion 3: Access to Standards for All Learners
Points: 5 of 6 possible. (Materials must receive at least 5 of 6 points to align.) X Meets _____ Does Not Meet	Points: 5 of 6 possible. (Materials must receive at least 5 of 6 points to align.) X Meets _____ Does Not Meet	Points: 6 of 6 possible. (Materials must receive at least 5 of 6 points to align.) X Meets _____ Does Not Meet

Alignment Criteria Overall:

X Meets **_____ Does Not Meet**

If the materials meet both Non-Negotiables and relevant Alignment Criterion, they are aligned to the Shifts and major features of the Core Standards. **Do the materials meet every Non-Negotiable and Alignment Criterion? X Yes _____ No**

What are the specific areas of strength and weakness based on this evaluation? Publishers or others modifying or developing assessments can use this information to make improvements and/or to remedy gaps in the alignment of assessment materials.

Overall the material aims to meet the needs of all learners. There many attempts at building conceptual understanding that work and some that ultimately end up being procedural in nature. There are plenty of support materials and suggestions for teachers. The student's Record and Practice Journal is a great tool for recording work on the group/partner activities utilized throughout the materials. There are a variety of assessment materials to choose from and including alternative assessments. Each of the assessment items include either an item analysis or a scoring rubric (alternative assessment only). There are plenty of online resources for students to access and a Skills Review and Basic Skills Handbook. This does not however indicate grade level or content standard aligned to the skills. The pacing allows adequate time for students to work through the concepts including many group and partner tasks.

Visually, the book is busy and seems jam-packed. Teachers will need to be selective in what they choose to ask students to work on.

Teachers will need to push students to higher levels of instruction on mathematical practice standards. This is an area of weakness of this text. The standards are present and addressed, but are not pushing students to think critically or apply their own strategies and models to solve.

2015-16 Mathematics Interim Review Recommendation & Summary

Publisher Name:	Big Ideas Math
Title:	Big Ideas Math (ALG I) A Common Core Curriculum
ISBN #	978-1-60840-838-2 2015
Grade Level(s) or Course:	9-12
Reviewer ID:	KB MK

RECOMMENDED AS:

__X__ **Core Mathematics Program-** a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials. Substantial evidence clearly supports the designation of this program as Core.

_____ **Other Mathematics Program-** a program that substantially, but partially, meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for supplemental materials. Substantial evidence clearly supports the designation of this program as Other.

_____ **Component Mathematics Program-** a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs. Substantial evidence clearly supports the designation of this program as Component.

_____ **Intervention Program-** a program designed and intended to target and support students' specific needs. Substantial evidence clearly supports the designation of this program as Intervention.

_____ **Does not meet criteria** for recommendation as a Curricular Material or Online Resource for Mathematics.

EVIDENCE SUMMARY:

FOCUS- Strong Connections across Alg I - Functions
NN1 Number Sense well-Addressed (chp 6)

COHERENCE- - Met the "more than 50%" of WAP.
NN1 - Designed for coherence throughout
* "What you learned before"
* Maintain proficiency
* "~~What you learned~~" Connections to prior learning.

RIGOR-
AC1 "Analyze your work"
"How do you see it"
Lauries Notes : Enrichment
* Higher Level items each section.

CONCEPTUAL UNDERSTANDING-
AC1 Read w/vocab to tie concepts used.
"How you see it"
"What you learned before"
Little attention to developing ability to look for and use opportunistic strategies

MATHEMATICAL PRACTICES- Attention to Practice - Clear and guided in teacher Notes
AC2 * Each CCSSM Practice sections in each section

ACCESSIBILITY OF STANDARDS TO ALL STUDENTS-
AC3 * Students Journal
* ELL Supports
* Online Glossary (different languages)
* Lauries Notes: clear guided diff/enrichment

OTHER:
Strength: Clear Communication and visible connections across clusters/concepts throughout text.

Weakness: little explicit attention to comparing various strategies to develop ability to apply opportunistic strategies - leads to perhaps weaker conceptual understanding of procedures

2015-1 nterim Mathematics Review

Mathematics Evaluation Tool – High School

Publisher: HMH - Big Ideas Math

Title of Material: Big Ideas Math (Alg I)

Author: Ron Larson & Laurie Boswell

ISBN #: 978-1-60840-~~452-0~~ 838-2 **Copyright** 201~~5~~

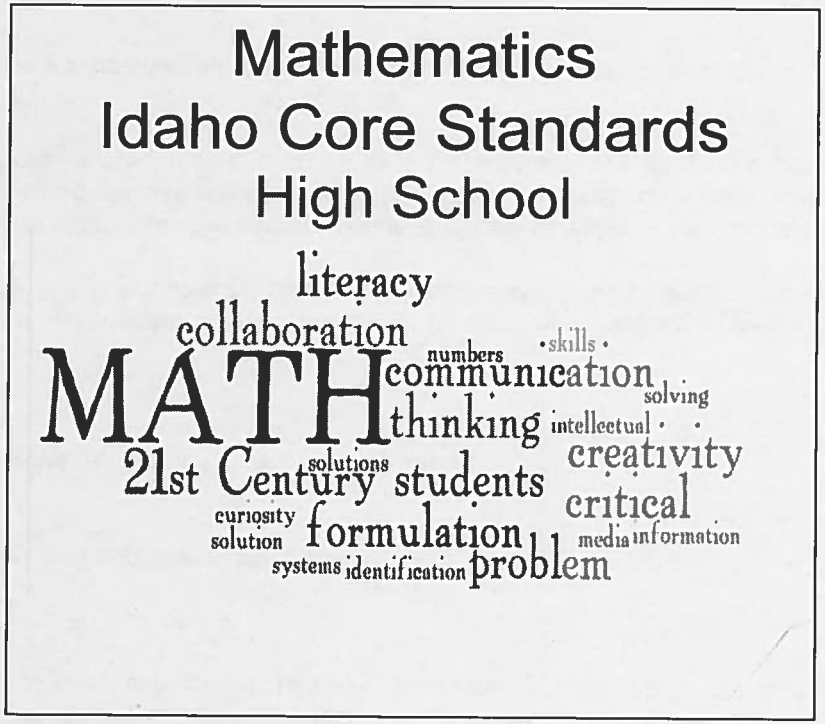
Reviewer ID: KB & MK

Core Mathematics Program- a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Core.

Other Mathematics Program- a program that substantially, but partially, meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Other.

Component Mathematics Program- a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs.
Substantial evidence clearly supports the designation of this program as Component.

Intervention Program- a program designed and intended to target and support students' specific needs.
Substantial evidence clearly supports the designation of this program as Intervention.



- Evaluation Form adapted from Instructional Materials Evaluation Toolkit (IMET).

The IMET was developed by Student Achievement Partners. Educators may use or adapt. http://creativecommons.org/licenses/by/3.0/ Download this tool at http://achievethecore.org/IMET

Instructional Materials Evaluation Tool

Mathematics, High School

What Are the Purposes of the IMET?

This Math IMET is designed to help educators determine whether instructional materials are aligned to the Shifts and major features of the Common Core State Standards (CCSS). The substantial instructional Shifts (http://www.corestandards.org/other-resources/key-shifts-in-mathematics/) at the heart of the Common Core State Standards are:

- **Focus** strongly where the Standards focus
- **Coherence**: Think across grades and link to major topics within the grade
- **Rigor**: In major topics, pursue conceptual understanding, procedural skill and fluency, and application with equal intensity.

The IMET draws directly from the following documents:

- Common Core State Standards for Mathematics (www.corestandards.org/Math)
- Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013) (http://www. corestandards.org/wp-content/uploads/Math_Publishers_Criteria_ HS_Spring_2013_FINAL1.pdf)

When to use the IMET

1. Purchasing materials: Many factors go into local purchasing decisions. Alignment to the Standards is a critical factor to consider. This tool is designed to evaluate alignment of instructional materials to the Shifts and the major features of the CCSS. It also provides suggestions of additional indicators to consider in the materials evaluation and purchasing process
2. Evaluating materials currently in use: The IMET can be used to analyze the degree of alignment of existing materials and help to highlight specific, concrete flaws in alignment. Even where materials and tools currently in use fail to meet one or more of these criteria, the pattern of failure is likely to be informative. States and districts can use the evaluation to create a thoughtful plan to modify or combine existing resources in such a way that students' actual learning experiences approach the focus, coherence, and rigor of the Standards.
3. Developing programs: Those developing new programs can use this tool as guidance for creating aligned curricula.

Please note this tool was designed for evaluating comprehensive curricula (including any supplemental or ancillary materials), but it was not designed for the evaluation of standalone supplemental materials.

Who Uses the IMET?

Evaluating instructional materials requires both subject-matter and pedagogical expertise. Evaluators should be well versed in the Standards (www.corestandards.org/Math) for all grades in which materials are being evaluated. This includes understanding the Widely Applicable Prerequisites (www.achievethecore.org/prerequisites), how the content fits into the progressions in the Standards (www. achievethecore.org/progressions), and the expectations of the Standards with respect to conceptual understanding, procedural skill and fluency, and application. Evaluators also should be familiar with the substantial instructional Shifts (http://www.corestandards.org/other-resources/key-shifts-in-mathematics/) of Focus, Coherence and Rigor that are listed above.

Getting Started

Prior to Evaluation

Assemble all of the materials necessary for the evaluation. It is essential for evaluators to have materials for all grades covered by the program, as some criteria cannot be rated without having access to each grade. In addition, each evaluator should have a reference copy of the Common Core State Standards for Mathematics (CCSSM) and the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).

Before conducting the evaluation itself, it is important to develop a protocol for the evaluation process. The protocol should include having evaluators study the Publishers' Criteria and the IMET. It will also be helpful for evaluators to get a sense of each program overall before beginning the process. At a minimum, this would include reading the front matter of the text, looking at the table of contents and paging through multiple chapters.

Sections 1-3 below should be completed to produce a comprehensive picture of the strengths and weaknesses of the materials under evaluation. Information about areas in need of improvement or supplementation should be shared with internal and external stakeholders.

Navigating the Tool

Begin with Section 1: Non-Negotiable Alignment Criteria

- The Non-Negotiable Alignment Criteria must each be met in full for materials to be considered aligned to the Shifts and the major features of the Common Core State Standards. Each Non-Negotiable Alignment Criterion has one or more metrics associated with it; every one of these metrics must be met in order for the criterion as a whole to be met.

- Examine the relevant materials and use evidence to rate the materials against each criterion and its associated metric(s).

- Record and explain the evidence upon which the rating is based.

Continue to Section 2: Alignment Criteria

- The Alignment Criteria must each be met for materials to be considered aligned to the Shifts and the major features of the Common Core State Standards. Each Alignment Criterion has one or more metric associated with it; a specific number of these metrics must be met or partially met in order for the criterion as a whole to be met.

- Examine the materials in relation to these criteria, assigning each metric a point value. Rate the criterion as "Meets" or "Does Note Meet" based on the number of points assigned. The more points the materials receive on the alignment Criteria, the better they are aligned.

- Record and explain the evidence upon which the rating is based.

Proceed to Section 4: Indicators of Quality

- Indicators of Quality are important considerations that will help evaluators better understand the overall quality of instructional materials. These considerations are not criteria for alignment to the CCSS, but they provide valuable information about additional program characteristics. Evaluators may want to add their own indicators to the examples provided.

Directions for Non-Negotiable 1

Focus and Coherence

Criterion	Evidence- Give specific examples.	Rating: (Reviewer only.)
Non-Negotiable 1: Focus and Coherence- Materials must focus coherently on the Widely Applicable Prerequisites in a way that is consistent with the progressions in the Standards. Focus and coherence are the two major evidence-based design principles of the Common Core State Standards for Mathematics (CCSSM, p. 3). Focus is necessary in order to fulfill the ambitious promise the states have made to their students by adopting the Standards: greater achievement at the college and career-ready level; greater depth of understanding of mathematics; and a rich classroom environment in which reasoning, sense-making, applications, and a range of mathematical practices flourish. In high school courses, narrowing and deepening the curriculum creates a structure that ties topics together. Thus, materials must focus coherently on the Widely Applicable Prerequisites in a way that is consistent with the progressions in the Standards.	Focus and coherence are the two major evidence-based design principles of the Common Core State Standards for Mathematics (CCSSM, p. 3). Focus is necessary in order to fulfill the ambitious promise the states have made to their students by adopting the Standards: greater achievement at the college and career-ready level; greater depth of understanding of mathematics; and a rich classroom environment in which reasoning, sense-making, applications, and a range of mathematical practices flourish. In high school courses, narrowing and deepening the curriculum creates a structure that ties topics together. Thus, materials must focus coherently on the Widely Applicable Prerequisites in a way that is consistent with the progressions in the Standards. **Required Materials:** • Common Core State Standards for Mathematics (www.corestandards.org/wpcontent/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_HS_Spring_2013_FINAL1.pdf) • Widely Applicable Prerequisites for College and Careers (http://achievethecore.org/prerequisites) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion:** Non-Negotiable 1 is rated as Meets or Does Not Meet. To rate Non-Negotiable 1, first rate Metrics 1A–1H. Each of these eight metrics must be rated as Meets in order for Non-Negotiable 1 to be rated as Meets. Rate each metric 1A–1H as Meets or Does Not Meet/Insufficient Evidence. If the evidence examined shows that the Criterion is met, then mark the Criterion as Meets. If the evidence examined shows that the Criterion is not met—or if there is insufficient evidence to make a determination—then mark the Criterion as Does Not Meet/Insufficient Evidence. Support all ratings with evidence.

Metric NN1A: **In any single course, students spend at least 50% of their time on Widely Applicable Prerequisites.** **How to Find the Evidence:** Familiarize yourself with the Widely Applicable Prerequisites. Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, lessons, homework assignments, and assessments. (Evaluate both student and teacher materials.) Consider time spent on the Widely Applicable Prerequisites and judge qualitatively whether students and teachers using the materials as designed will devote the majority of time to the Widely Applicable Prerequisites For context, read Criterion #1 in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** Particularly in terms of algebra and functions. (Chs 6 – 11) Number Sense well addressed (Ch. 6)	✓ **Meets** ____ **Does Not Meet Insufficient Evidence**
Metric NN1B: **Student work in Geometry involves significant work with applications/modeling and problems that use algebra skills.** **How to Find the Evidence:** Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, lessons, homework assignments, and assessments. (Evaluate both student and teacher materials. NOTE: Since Geometry contains relatively fewer Widely Applicable Prerequisites, this Criterion is important to help foster students' college and career readiness. Problems that use algebra skills might include, for example, algebraic geometry problems in a coordinate setting, or problems of measurement involving unknown quantities.	**Evidence-** Some geometric shape, coordinate grid, in most every section. Examples of using algebra in geometric ideas are sums of angles of polygons, area, perimeter, coordinate graph analyses.	✓ **Meets** ____ **Does Not Meet Insufficient Evidence**

Metric NN1C: **There are problems at a level of sophistication appropriate to high school (beyond mere review of middle school topics) that involve the application of knowledge and skills from grades 6-8.** **How to Find the Evidence:** Evaluate lessons, chapter/unit assessments, and homework assignments. NOTE: Problems should include application of the following topics from grades 6-8: • Ratios and proportional relationships. • Percentage and unit conversions, e.g., in the context of complex measurement problems involving quantities with derived or compound units (such as mg/mL, kg/ m3, acre-feet, etc.). • Basic function concepts, e.g., by interpreting the features of a graph in the context of an applied problem. • Concepts and skills of geometric measurement e.g., when analyzing a diagram or schematic. • Concepts and skills of basic statistics and probability (see grades 6–8.SP) • Performing rational number arithmetic fluently. For context, read Table 1 on Page 8 of the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** Common Core progressions at the beginning of each chapter connect across MS & HS. Preassessments good for student readiness Particular Examples Mixture problems 4, 3 Atmospheric Pressure 5.4 "Taking Math Deeper" focus good.	✓ **Meets** **____Does Not Meet Insufficient Evidence**
Metric NN1D: **Materials base courses on the content specified in the Standards.** **How to Find the Evidence:** Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, and lessons in both student and teacher materials. For context, read Criterion #3a in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** Correlation chart & Table of Contents helpful & appropriate. "Connections to Previous Learning" support teachers.	✓ **Meets** **____Does Not Meet Insufficient Evidence**
Metric NN1E: **Materials give all students extensive work with course-level problems.** **How to Find the Evidence:** Evaluate both student and teacher materials. If the materials provide resources for differentiated learning, consider whether lower-performing students have opportunities to engage with course-level problems. Also consider whether higher-performing students are given opportunities to learn current course-level content in greater depth. For context, read Criterion #3b in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** Digital resources to support what is in each lesson. "Need help" & "Got it" suggestions (eg p154) good.	✓ **Meets** **____Does Not Meet Insufficient Evidence**

Metric NN1F: **Materials relate course-level concepts explicitly to prior knowledge from earlier grades or courses. The materials are designed so that prior knowledge becomes reorganized and extended to accommodate the new knowledge.** **How to Find the Evidence:** Evaluate student and teacher materials, looking for problems that involve extending the knowledge learned in earlier grades and courses. NOTE: An example of evaluating this Criterion might be to look at whether materials connect the equation of a circle with the distance formula and the Pythagorean theorem. For context, read Criterion #3c in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** "What you learned Before" component in each section; with "Maintaining ~~Procedural~~ Proficiency" sets help to address vertical alignment. "Game Closet" could also support additional skills practice.	✓ Meets ____Does Not Meet Insufficient Evidence
Metric NN1G: **Materials include learning objectives that are visibly shaped by CCSSM cluster and domain headings.** **How to Find the Evidence:** Select several clusters from the course being evaluated. Evaluate teacher and student materials in relation to these clusters. For context, read Criterion #4a in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** Algebra & Functions clusters strongly represented. Visible in each section through "Laurie's Notes"	✓ Meets ____Does Not Meet Insufficient Evidence
Metric NN1H: **Materials include problems and activities that serve to connect two or more clusters in a domain, or two or more domains in a category, or two or more categories, in cases where these connections are natural and important.** **How to Find the Evidence:** In the course being evaluated, choose two or more clusters, two or more domains, or two or more categories for which connections are natural and important. Evaluate the units, chapters, and lessons that deal with the chosen topics, looking for problems and activities that serve to connect the chosen clusters or domains. NOTE: An example of evaluating this Criterion might be to look at whether materials include problems in which students analyze a situation by building a function, graphing it, and using it to create and solve an equation. For context, read Criterion #4b in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** Particularly across algebra & functions clusters. (CED & REI) Correlation charts in front matter helpful to see connections	✓ Meets ____Does Not Meet Insufficient Evidence

Non-Negotiable 1: Focus and Coherence- Materials must focus coherently on the Widely Applicable Prerequisites in a way that is consistent with the progressions in the Standards.

Metric NN 1: If all metrics 1A–1H were rated as Meets, then rate Non-Negotiable 1 as Meets. If one or more metrics were rated as Does Not Meet/Insufficient Evidence, then rate Non-Negotiable 1 as Does Not Meet. Check the final rating.
Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)**

Before moving to Alignment Criterion 1, record the final Meets or Does Not Meet rating in the Evaluation Summary.

✓ **Meets**

Does Not Meet

Strengths/Weaknesses

Fairly traditional Presentation with some adaptation moving towards engaging instruction. "Essential Questions" good structure.

Mostly coordinate across algebra and functions clusters with minimal connection to Geometry

Now continue by evaluating Alignment Criterion 1 for Rigor and Balance.

Directions for Alignment Criterion 1

Rigor and Balance

Alignment Criterion 1:
Rigor and Balance- Materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.

The Standards set expectations for attention to all three aspects of rigor: conceptual understanding, procedural skill and fluency, and applications. Thus, materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.

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- Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf)
- Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_HS_Spring_2013_FINAL1.pdf)
- Widely Applicable Prerequisites for College and Careers (http://achievethecore.org/prerequisites)
- From the materials being evaluated: teacher guides, student texts and workbooks

Rating this Criterion:

Alignment Criterion 1 is rated as Meets or Does Not Meet.

To rate Alignment Criterion 1, first rate metrics 1A, 1B, and 1C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). For each metric, guiding questions are provided to aid in gathering evidence.

Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 1 if the materials rate 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as rigor and balance, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.

AC Metric 1A: **The materials support the development of students' conceptual understanding of key mathematical concepts, especially where called for in specific content Standards or cluster headings.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Widely Applicable Prerequisites that relate specifically to conceptual understanding to use throughout the questions associated with this metric. NOTE: Some examples of clusters or Standards that call for conceptual understanding include: N-RN.A.1, A-APR.B, A-REI.A.1, A-REI.D.10, A.REI.D.11, F.IF.A.1, F-LE.A.1, G.SRT.A.2, G-SRT.C.6, S-ID.C.7 For context, read Criterion #2a in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	• Choose a cluster/Standard from the Widely Applicable Prerequisites that is aligned to each aspect of rigor and use it to evaluate these metrics. It is most helpful if the same clusters and Standards are chosen for all of the programs being evaluated. (Guidance in choosing clusters/Standards is included in "How to Find the Evidence" below.)	**Use the questions for AC Metric 1A to evaluate Metric 1A. Record evidence for each question and rate Metric 1A.** ✓ **Meets (2)** ____ **Partially Meets (1)** ____ **Does Not Meet (0)**
Is conceptual understanding attended to thoroughly where the Standards set explicit expectations for understanding or interpreting? Evaluate lessons, chapter/unit assessments and homework assignments, paying attention to work aligned to Standards that explicitly call for understanding or interpreting.	**Evidence-** Some consistent attention to why things make sense (rather than just procedural) Essential Qns good. Multiple activities (eg. p 154)	
Do the materials feature high-quality conceptual problems and conceptual discussion questions? Evaluate lessons, chapter/unit assessments, and homework assignments. NOTE: Examples of conceptual problems might include such questions as "What is the maximum value of the function f(t) = 5 – t2 ?" or "Is √2 a polynomial? How about ½(x + √2)+ ½ (-x + √2)?"	**Evidence-** Some higher-level items in each section; Assignment Guides, even at Basic Level, include higher-level items. "How You See It" & "Thought Provoking" categories good.	
Do the materials feature opportunities to identify correspondences across mathematical representations? Evaluate lessons, chapter/unit assessments and homework assignments. NOTE: An example of evaluating this metric might include looking at whether materials support students in identifying correspondences among the expression that defines a function, the graph that shows the relationship, and the behavior of the phenomenon being modeled (if any).	**Evidence-** Correspondences between equations and graphs particularly evident. Creating equations as opposed to simply graphing – apply information. Enough practice for both types pp 173-175	

AC Metric 1B: **The materials are designed so that students attain the fluencies and procedural skills required by the Standards.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Widely Applicable Prerequisites that relate specifically to fluency and procedural skill to use throughout the questions associated with this metric. NOTE: Some examples of Standards that call for procedural skill and fluency include: A-SSE.A.1b, A-SSE.2, A-APR.A.1, A-APR.C.6, F-BF.B.3, G-GPE.B.4, G-GPE.B.5, G-GPE.B.7, G-CO.A.1, G-SRT.B.5 For context, read Criterion #2b in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).		**Use the questions for AC Metric 1B to evaluate Metric 1B. Record evidence for each question and rate Metric 1B.** ____**Meets (2)** _1_**Partially Meets (1)** ____**Does Not Meet (0)** "opportunistic strategies"
Is progress toward fluency and procedural skill interwoven with the student's developing conceptual understanding of the skills in question? Evaluate lessons, chapter/unit assessments, daily routines, and homework assignments for evidence that the development of fluency and procedural skill is supported by conceptual understanding.	**Evidence-** Teacher Notes, higher-level problem types in exercises.	
Are purely procedural problems and exercises present that include cases in which opportunistic strategies are valuable and generic cases that require efficient and general procedures present? Evaluate lessons, chapter/unit assessments, daily routines, and homework assignments. NOTE: Problems in which opportunistic strategies are valuable might include such examples as solving x2 + 5 = 49 + 5 or (3x − 2)2 = 6x − 4. Generic cases that require efficient and general procedures might include such problems as solving c + 8 – c2 = 3(c – 1)2 − 5).	**Evidence-** Less attention to helping students develop skill in selecting efficient strategies. Example: missed opportunities in factoring sections.	
AC Metric 1C: **The materials are designed so that teachers and students spend sufficient time working with engaging applications, without losing focus on the Widely Applicable Prerequisites.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Widely Applicable Prerequisites that relate specifically to application to use throughout the questions associated with this metric. NOTE: Some examples of clusters or Standards that call for application include: N-Q.A, A-SSE.B.3, A-REI.D.11, F-IF.B, F-IF.C.7, F-BF.A.1, G-SRT.C.8, S-ID.A.2, S-IC.A.1 For context, read Criterion #2c in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).		**Use the questions for AC Metric 1C to evaluate Metric 1C. Record evidence for each question and rate Metric 1C.** _2_**Meets (2)** ____**Partially Meets (1)** ____**Does Not Meet (0)**
Are there single- and multi-step contextual problems, including non-routine problems, that develop the mathematics of the course, afford opportunities for practice, and engage students in problem solving? Do the problems attend thoroughly to those places in the content Standards where expectations for multi-step and real-world problems are explicit? Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** Mostly ~~scaffolded~~ scaffolded, so few truly open-ended tasks. But materials do go beyond skills into problem solving	

Do application problems particularly stress applying the Widely Applicable Prerequisites? Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** WAPs evident throughout	
Are there ample opportunities for students to engage with modeling problems? Do materials require students to use both individual parts of the modeling cycle as well as the full modeling cycle? Read the pages on High School—Modeling in the Standards for Mathematics (pp. 72 and 73). Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** Mainly given a model & asked to evaluate / solve (as opposed to creating a model).	
Alignment Criterion 1: Materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations. **AC 1:** Materials must earn at least 5 of 6 points to meet this Alignment Criterion. If materials earn less than 5 points, the Criterion has not been met. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)** **Before moving to Alignment Criterion 2, record the final Meets or Does Not Meet rating in the Evaluation Summary.**		✓ **Meets** 5/6 **Does Not Meet** **Strengths/Weaknesses:** Procedural focus could outweigh conceptual. Organization good. Good use of applications.
Alignment Criterion 2: **Standards for Mathematical Practice- Materials must demonstrate authentic connections between content Standards and practice Standards.** The Standards require that designers of instructional materials connect the mathematical practices to mathematical content in instruction. Thus, materials must demonstrate authentic connections between content Standards and practice Standards.	The Standards require that designers of instructional materials connect the mathematical practices to mathematical content in instruction. Thus, materials must demonstrate authentic connections between content Standards and practice Standards. **Required Materials**: • Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_HS_Spring_2013_FINAL1.pdf) • Widely Applicable Prerequisites for College and Careers (http://achievethecore.org/prerequisites) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion:** Alignment Criterion 2 is rated as Meets or Does Not Meet. To rate Alignment Criterion 2, first rate metrics 2A, 2B, and 2C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). For each metric, guiding questions are provided to aid in gathering evidence. Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 2 if the materials rate 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as mathematical practices, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.

AC Metric 2A: **Materials address the practice Standards in such a way as to enrich the Widely Applicable Prerequisites; practices strengthen the focus of the course instead of detracting from it, in both teacher and student materials.** **How to Find the Evidence:** Familiarize yourself with the Widely Applicable Prerequisites. Evaluate teacher and student materials for evidence that the mathematical practices support and connect to the focus of the course. NOTE: An example of evaluating this Criterion might include looking at whether materials use regularity in repeated reasoning to illuminate formal algebra as well as functions, particularly recursive definitions of functions. For context, read Criterion #6 in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** Consistent attention to communicating thinking. ("How Do You See It?" and "Using Structure" problem types) Teacher notes draw attention to practices.	✓ **Meets (2)** **Partially Meets (1)** **Does Not Meet (0)**
AC Metric 2B: **Materials attend to the full meaning of each practice Standard.** **How to Find the Evidence:** For context, read Criterion #7 in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	In ~~teacher notes; perhaps~~	**Use the questions for AC Metric 2B to evaluate Metric 2B. Record evidence for each question and rate Metric 2B.** ✓ **Meets (2)** **Partially Meets (1)** **Does Not Meet (0)**
Over the course of any given year of instruction, is each mathematical practice Standard meaningfully present in the form of assignments, activities, or problems that stimulate students to develop the habits of mind described in the practice Standard? Evaluate lessons, chapter/ unit assessments, and homework assignments for evidence of each mathematical practice being meaningfully present in instruction.	**Evidence-** In teacher notes; perhaps some danger of not developing habits of mind.	
Are teacher-directed materials that explain the role of the practice Standards in the classroom and in students' mathematical development included? Are alignments to practice Standards accurate? Evaluate teacher materials, paying attention to explanations of the role of the practice Standards in the classroom and in students' mathematical development. Evaluate documents aligning lessons to practice Standards for accuracy. NOTE: Examples to look for when evaluating this metric might include the following: a highly scaffolded problem should not be aligned to MP.1; or a problem that directs a student to use a calculator should not be aligned to MP.5; or a problem about merely extending a pattern should not be aligned to MP.8.	**Evidence-** Yes.	

AC Metric 2C: **Materia[illegible]upport the Standards' emphasis on mathematical reasoning.** **How to Find the Evidence:** For context, read Criterion #8 in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).		**Use the questions for AC Metric 2C to evaluate Metric 2C. Record [illegible]nce for each question and rate Meti[illegible].** ✓ **Meets (2)** **Partially Meets (1)** **Does Not Meet (0)**
Do the materials support students in constructing viable arguments and critiquing the arguments of others concerning course-level mathematics that is detailed in the content Standards? Read Standard for Mathematical Practice 3. Evaluate teacher and student materials to ensure that students are given opportunities to reason with grade-level mathematics.	**Evidence-** Error Analysis & Making an Argument problem types.	
Do the materials support students in producing not only answers and solutions, but also, in a course-appropriate way, arguments, explanations, diagrams, mathematical models, etc., especially in the Widely Applicable Prerequisites? Familiarize yourself with the Widely Applicable Prerequisites. Evaluate teacher and student materials to understand the types of work students are expected to produce.	**Evidence-** Might be able to emphasize procedural over conceptual, but most sections include conceptual development.	
Do materials explicitly attend to the specialized language of mathematics? Is the language of argument, problem solving, and mathematical explanations taught rather than assumed? Evaluate teacher and student materials, paying attention to how mathematical language is taught. NOTE: An example of evaluating this Criterion might include looking at whether students are supported in: basing arguments on definitions; using the method of providing a counter example; or recognizing that examples alone do not establish a general statement.	**Evidence-** Use of vocabulary good.	
Alignment Criterion 2: Materials must demonstrate authentic connections between content Standards and practice Standards. **AC 2:** Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 points, the Criterion has not been met. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewers only.)** **Before moving to Alignment Criterion 3, record the final Meets or Does Not Meet rating in the Evaluation Summary.**		✓ **Meets** 6/6 **Does Not Meet** **Strengths/Weaknesses:** Attention to practices in teacher notes – very visible. Can maintain focus on higher-level tasks. Could be vulnerable to a procedural focus.

Alignment Criterion 3: **Access to the Standards for All Students- Materials must provide supports for English Language Learners and other special populations.** Because Standards are for all students, alignment requires thoughtful support to ensure all students are able to meet the Standards. Thus, aligned materials must provide supports for English Language Learners and other special populations.	Because Standards are for all students, alignment requires thoughtful support to ensure all students are able to meet the Standards. Thus, aligned materials must provide supports for English Language Learners and other special populations. **Required Materials:** • Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math Publishers_Criteria_HS_Spring_2013_FINAL1.pdf) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion:** Alignment Criterion 3 is rated as Meets or Does Not Meet. To rate Alignment Criterion 3, first rate metrics 3A, 3B, and 3C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 3 if the materials rate 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as support for special population, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.
AC Metric 3A: **Support for English Language Learners and other special populations is thoughtful and helps those students meet the same Standards as all other students. The language in which problems are posed is carefully considered.** **How to Find the Evidence:** Evaluate teacher and student materials, paying attention to supports offered for special populations.	**Evidence-** English / Spanish print versions available. Multi language support online ELL notes throughout (eg p 314)	✓ **Meets (2)** **Partially Meets (1)** **Does Not Meet (0)**
AC Metric 3B: **Materials provide appropriate level and type of scaffolding, differentiation, intervention, and support for a broad range of learners with gradual removal of supports, when needed, to allow students to demonstrate their mathematical understanding independently.** **How to Find the Evidence:** Evaluate teacher and student materials, paying attention to whether materials provide differentiation that will lead all learners to engage with on-grade-level content.	**Evidence-** Student journals & other supports helpful. Overall attention to communication would help all students	✓ **Meets (2)** **Partially Meets (1)** **Does Not Meet (0)**
AC Metric 3C: **Design of lessons recommends and facilitates a mix of instructional approaches for a variety of learners such as using multiple representations (e.g., including models, using a range of questions, checking for understanding, flexible grouping, pair-share).** **How to Find the Evidence:** Evaluate teacher materials, noting instructional approaches suggested for whole class and differentiated lessons and activities.	**Evidence-** "Teacher Action Notes" good Desmos (online dynamic graphing tool) activities support exploration	✓ **Meets (2)** **Partially Meets (1)** **Does Not Meet (0)**

Alignment Criterion 3: Materials must provide supports for English Language Learners and other special populations.	✓ Meets 6/6 ____ Does Not Meet
AC 3 Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 points, the Criterion has not been met. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewers only.)** **Move to the Evaluation Summary and record the final Meets or Does Not Meet rating .**	**Strengths/Weaknesses:** References to resources very visible in teacher materials.

Once an evaluation for alignment to the Shifts and major features of the CCSS has been conducted using Sections 1-3, it's important to evaluate for overall quality and best practices. A starting list of Indicators of Quality are suggested below. States, districts and others evaluating instructional materials are encouraged to add to this list to ensure materials reflect local contexts. For background information on some of the Indicators of Quality in this section, refer to pp.16–18 in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).

Indicators of Quality	Evidence- Give specific examples.	Rating: (Reviewer only.)
1. Lessons are thoughtfully structured and support the teacher in leading the class through the learning paths at hand, with active participation by all students in their own learning and in the learning of their classmates.	**Evidence-** T 152-155 Connections to Previous Learning Background Notes Laurie's Notes	**(Reviewer only.)** ✓ **Yes** ____ **No**
2. The underlying design of the materials includes both problems and exercises. (In solving problems, students learn new mathematics, whereas in working exercises, students apply what they have already learned to build mastery.) Each problem or exercise has a purpose. **NOTE: This Criterion does not require that the problems and exercises be labeled as such.**	**Evidence-** Categories of items in each section "Communicate Your Answer" "Error Analysis" "Modeling with Mathematics"	**(Reviewer only.)** ✓ **Yes** ____ **No**

3. Design of assignments is not haphazard: exercises are given in intentional sequences in order to strengthen students' mathematical understanding.	**Evidence-** Exercise sets build from skills to higher-level. (p 158-159 as example)	**(Reviewer only.)** ✓ Yes ____ No
4. There are separate teacher materials that support and reward teacher study including, but not limited to: discussion of the mathematics of the units and the mathematical point of each lesson as it relates to the organizing concepts of the unit, discussion on student ways of thinking and anticipating a variety of students responses, guidance on lesson flow, guidance on questions that prompt students thinking, and discussion of desired mathematical behaviors being elicited among students.	**Evidence-** Laurie's Notes Previous Connections Teacher Actions	**(Reviewer only.)** ✓ Yes ____ No
5. Manipulatives suggested in the materials are faithful representations of the mathematical objects they represent and are connected to written methods.	**Evidence-** Spaghetti for lines & slope Algebra Tiles	**(Reviewer only.)** ✓ Yes ____ No
6. Materials include a variety of curriculum-embedded assessments. Examples include pre-, formative, summative, and self-assessment resources.	**Evidence-** Assessment Book / Resources Digital resources good Pre-Assessments for each chapter "Need Help?" & "Got It?" Suggestions	**(Reviewer only.)** ✓ Yes ____ No
7. Assessments contain aligned rubrics, answer keys, and scoring guidelines that provide sufficient guidance for interpreting student performance.	**Evidence-** Yes - easy to use	**(Reviewer only.)** ✓ Yes ____ No
8. Materials assess student proficiency using methods that are accessible and unbiased, including the use of course-level language in student prompts.	**Evidence-** Assessments use language used in teaching materials.	**(Reviewer only.)** ✓ Yes ____ No

9. Materials are carefully evaluated by qualified individuals whose names are listed, in an effort to ensure freedom from mathematical errors and course-level appropriateness.	**Evidence-** Consultants & reviewers are listed.	**(Reviewer only.)** ✓ **Yes** ____ **No**
10. The visual design supports students in engaging thoughtfully with the subject. Navigation through the text is clear.	**Evidence-** Yes. Front matter "How to use your book" x/r Scavenger Hunt	**(Reviewer only.)** ✓ **Yes** ____ **No**

Reviewer IMET Evaluation Summary **Title/Level:** Big Ideas Algebra 1

Publisher: Big Ideas Math **Copyright:** 2015 **ISBN:** 978-1-60840-~~452~~858-2

Reviewer ID # KB & MK **Date Review Completed:** 3/7/2016

Non-Negotiable Criteria-The Non-Negotiable must be met in order for the Non-Negotiable Alignment Criteria to be met overall.

Non- Negotiable 1: Focus and Coherence

✓ **Meets**

____ **Does Not Meet**

Non-Negotiable Overall:

✓ **Meets** _____ **Does Not Meet**

Alignment Criteria- Each Alignment Criterion must be met with a sufficient number of points in order for Alignment Criteria to be labeled as "Meets" overall. The more points the materials receive on the Alignment Criteria, the better they are aligned.

Alignment Criterion 1: Rigor and Balance	Alignment Criterion 2: Standards of Mathematical Practice	Alignment Criterion 3: Access to Standards for All Learners
Points: 6 **of 6 possible.** (Materials must receive at least 5 of 6 points to align.)	**Points:** 5 **of 6 possible.** (Materials must receive at least 5 of 6 points to align.)	**Points:** 6 **of 6 possible.** (Materials must receive at least 5 of 6 points to align.)
✓ **Meets**	✓ **Meets**	✓ **Meets**
_____ **Does Not Meet**	_____ **Does Not Meet**	_____ **Does Not Meet**

Alignment Criteria Overall:

✓ **Meets** _____ **Does Not Meet**

If the materials meet the Non-Negotiable Criterion and each Alignment Criterion, they are aligned to the Shifts and major features of the Co[redacted]tandards. **Do the materials meet every Non-Negoti[redacted] and Alignment Criterion?** ___✓___ **Yes** _____ **N[redacted]**

What are the specific areas of strength and weakness based on this evaluation? Publishers or others modifying or developing assessments can use this information to make improvements and/or to remedy gaps in the alignment of assessment materials.

2015-16 Mathematics Interim Review Recommendation & Summary

Publisher Name:	Big Ideas Learning, LLC
Title:	Big Ideas Math Geometry
ISBN #	978-1-60840-839-9
Grade Level(s) or Course:	9-12 (Geometry)
Reviewer ID:	CM & DG

RECOMMENDED AS:

__X__ **Core Mathematics Program-** a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials. Substantial evidence clearly supports the designation of this program as Core.

_____ **Other Mathematics Program-** a program that substantially, but partially, meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for supplemental materials. Substantial evidence clearly supports the designation of this program as Other.

_____ **Component Mathematics Program-** a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs. Substantial evidence clearly supports the designation of this program as Component.

_____ **Intervention Program-** a program designed and intended to target and support students' specific needs. Substantial evidence clearly supports the designation of this program as Intervention.

_____ **Does not meet criteria** for recommendation as a Curricular Material or Online Resource for Mathematics.

EVIDENCE SUMMARY:

FOCUS-
NNI Good pacing guides and correlation pages
Real life applications throughout
TE pages show correlation to Common Core

COHERENCE-
NNI All WAP covered throughout
Maintaining mathematical proficiency chapter openers are directly related to the standards
Focused, coherent w/ pacing guide of rigorous coursework

RIGOR-
AC1 Quality higher order thinking problems after skills/knowledge developed
Unit/lessons directly related to Common Core
Cumulative assessment @ end of each chapter spirals back.

CONCEPTUAL UNDERSTANDING-
AC1 "How do you see it" questions in every lesson
Drawing pictures, tables, models, writing etc.
"Mathematical Practices" ex p.327 throughout

MATHEMATICAL PRACTICES-
AC2 Vocabulary and core concepts throughout.
Laurie's notes at beginning and end of each lesson are quite helpful
Modeling with Mathematics in Real-life in every lesson

ACCESSIBILITY OF STANDARDS TO ALL STUDENTS-
AC3 Online glossary in different languages
Spanish/English glossary in SE.
"If students need help" or "If students got it after each lesson.

OTHER:
List of postulates and theorems @ end of text. ← Very awesome
Scaffolding of problems in each lesson.
Dynamic real word applications.
Each chapter begins with a Common Core progression ex T-298
Well developed, particularly if teacher use Laurie's Notes.

No examples or diagrams in glossary

2015-1 Interim Mathematics Review

Mathematics Evaluation Tool – High School

Publisher: Big Ideas Learning, LLC

Title of Material: Big Ideas Math Geometry

Author: Larsen and Boswell

ISBN #: 978-1-60840-839-9 **Copyright** 2015

Reviewer ID: CM and DG

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Substantial evidence clearly supports the designation of this program as Core.

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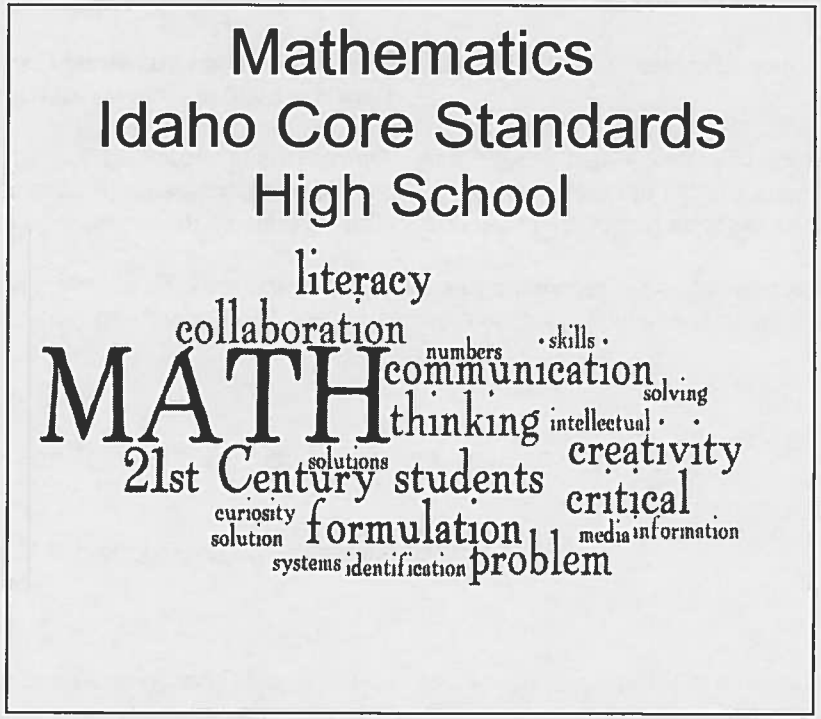

- Evaluation Form adapted from Instructional Materials Evaluation Toolkit (IMET).

The IMET was developed by Student Achievement Partners. Educators may use or adapt. http://creativecommons.org/licenses/by/3.0/ Download this tool at http://achievethecore.org/IMET

Instructional Materials Evaluation Tool

Mathematics, High School

What Are the Purposes of the IMET?

This Math IMET is designed to help educators determine whether instructional materials are aligned to the Shifts and major features of the Common Core State Standards (CCSS). The substantial instructional Shifts (http://www.corestandards.org/other-resources/key-shifts-in-mathematics/) at the heart of the Common Core State Standards are:

- **Focus** strongly where the Standards focus
- **Coherence**: Think across grades and link to major topics within the grade
- **Rigor**: In major topics, pursue conceptual understanding, procedural skill and fluency, and application with equal intensity.

The IMET draws directly from the following documents:

- Common Core State Standards for Mathematics (www.corestandards.org/Math)
- Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013) (http://www. corestandards.org/wp-content/uploads/Math_Publishers_Criteria_ HS_Spring_2013_FINAL1.pdf)

When to use the IMET

1. Purchasing materials: Many factors go into local purchasing decisions. Alignment to the Standards is a critical factor to consider. This tool is designed to evaluate alignment of instructional materials to the Shifts and the major features of the CCSS. It also provides suggestions of additional indicators to consider in the materials evaluation and purchasing process
2. Evaluating materials currently in use: The IMET can be used to analyze the degree of alignment of existing materials and help to highlight specific, concrete flaws in alignment. Even where materials and tools currently in use fail to meet one or more of these criteria, the pattern of failure is likely to be informative. States and districts can use the evaluation to create a thoughtful plan to modify or combine existing resources in such a way that students' actual learning experiences approach the focus, coherence, and rigor of the Standards.
3. Developing programs: Those developing new programs can use this tool as guidance for creating aligned curricula.

Please note this tool was designed for evaluating comprehensive curricula (including any supplemental or ancillary materials), but it was not designed for the evaluation of standalone supplemental materials.

Who Uses the IMET?

Evaluating instructional materials requires both subject-matter and pedagogical expertise. Evaluators should be well versed in the Standards (www.corestandards.org/Math) for all grades in which materials are being evaluated. This includes understanding the Widely Applicable Prerequisites (www.achievethecore.org/prerequisites), how the content fits into the progressions in the Standards (www. achievethecore.org/progressions), and the expectations of the Standards with respect to conceptual understanding, procedural skill and fluency, and application. Evaluators also should be familiar with the substantial instructional Shifts (http://www.corestandards.org/other-resources/key-shifts-in-mathematics/) of Focus, Coherence and Rigor that are listed above.

Getting Started

Prior to Evaluation

Assemble all of the materials necessary for the evaluation. It is essential for evaluators to have materials for all grades covered by the program, as some criteria cannot be rated without having access to each grade. In addition, each evaluator should have a reference copy of the Common Core State Standards for Mathematics (CCSSM) and the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).

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Getting Started
Prior to Evaluation

Assemble all of the materials necessary for the evaluation. It is essential for evaluators to have materials for all grades covered by the program, as some criteria cannot be rated without having access to each grade. In addition, each evaluator should have a reference copy of the Common Core State Standards for Mathematics (CCSSM) and the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).

Before conducting the evaluation itself, it is important to develop a protocol for the evaluation process. The protocol should include having evaluators study the Publishers' Criteria and the IMET. It will also be helpful for evaluators to get a sense of each program overall before beginning the process. At a minimum, this would include reading the front matter of the text, looking at the table of contents and paging through multiple chapters.

Sections 1-3 below should be completed to produce a comprehensive picture of the strengths and weaknesses of the materials under evaluation. Information about areas in need of improvement or supplementation should be shared with internal and external stakeholders.

Navigating the Tool

Begin with Section 1: Non-Negotiable Alignment Criteria

- The Non-Negotiable Alignment Criteria must each be met in full for materials to be considered aligned to the Shifts and the major features of the Common Core State Standards. Each Non-Negotiable Alignment Criterion has one or more metrics associated with it; every one of these metrics must be met in order for the criterion as a whole to be met.

- Examine the relevant materials and use evidence to rate the materials against each criterion and its associated metric(s).

- Record and explain the evidence upon which the rating is based.

Continue to Section 2: Alignment Criteria

- The Alignment Criteria must each be met for materials to be considered aligned to the Shifts and the major features of the Common Core State Standards. Each Alignment Criterion has one or more metric associated with it; a specific number of these metrics must be met or partially met in order for the criterion as a whole to be met.

- Examine the materials in relation to these criteria, assigning each metric a point value. Rate the criterion as "Meets" or "Does Note Meet" based on the number of points assigned. The more points the materials receive on the alignment Criteria, the better they are aligned.

- Record and explain the evidence upon which the rating is based.

- Indicators of Quality are important considerations that will help evaluators better understand the overall quality of instructional materials. These considerations are not criteria for alignment to the CCSS, but they provide valuable information about additional program characteristics. Evaluators may want to add their own indicators to the examples provided.

Directions for Non-Negotiable 1

Focus and Coherence

Criterion	Evidence- Give specific examples.	Rating: (Reviewer only.)
Non-Negotiable 1: Focus and Coherence- Materials must focus coherently on the Widely Applicable Prerequisites in a way that is consistent with the progressions in the Standards. Focus and coherence are the two major evidence-based design principles of the Common Core State Standards for Mathematics (CCSSM, p. 3). Focus is necessary in order to fulfill the ambitious promise the states have made to their students by adopting the Standards: greater achievement at the college and career-ready level; greater depth of understanding of mathematics; and a rich classroom environment in which reasoning, sense-making, applications, and a range of mathematical practices flourish. In high school courses, narrowing and deepening the curriculum creates a structure that ties topics together. Thus, materials must focus coherently on the Widely Applicable Prerequisites in a way that is consistent with the progressions in the Standards.	Focus and coherence are the two major evidence-based design principles of the Common Core State Standards for Mathematics (CCSSM, p. 3). Focus is necessary in order to fulfill the ambitious promise the states have made to their students by adopting the Standards: greater achievement at the college and career-ready level; greater depth of understanding of mathematics; and a rich classroom environment in which reasoning, sense-making, applications, and a range of mathematical practices flourish. In high school courses, narrowing and deepening the curriculum creates a structure that ties topics together. Thus, materials must focus coherently on the Widely Applicable Prerequisites in a way that is consistent with the progressions in the Standards. **Required Materials:** • Common Core State Standards for Mathematics (www.corestandards.org/wpcontent/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_HS_Spring_2013_FINAL1.pdf) • Widely Applicable Prerequisites for College and Careers (http://achievethecore.org/prerequisites) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion**: Non-Negotiable 1 is rated as Meets or Does Not Meet. To rate Non-Negotiable 1, first rate Metrics 1A–1H. Each of these eight metrics must be rated as Meets in order for Non-Negotiable 1 to be rated as Meets. Rate each metric 1A–1H as Meets or Does Not Meet/Insufficient Evidence. If the evidence examined shows that the Criterion is met, then mark the Criterion as Meets. If the evidence examined shows that the Criterion is not met—or if there is insufficient evidence to make a determination—then mark the Criterion as Does Not Meet/Insufficient Evidence. Support all ratings with evidence.

Metric NN1A: **In any single course, students spend at least 50% of their time on Widely Applicable Prerequisites.** **How to Find the Evidence:** Familiarize yourself with the Widely Applicable Prerequisites. Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, lessons, homework assignments, and assessments. (Evaluate both student and teacher materials.) Consider time spent on the Widely Applicable Prerequisites and judge qualitatively whether students and teachers using the materials as designed will devote the majority of time to the Widely Applicable Prerequisites For context, read Criterion #1 in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** • ***Pacing Guide* and *Correlation pages* demonstrate that students spend significant amounts of time on the WAP.**	**X Meets** **____Does Not Meet Insufficient Evidence**
Metric NN1B: **Student work in Geometry involves significant work with applications/modeling and problems that use algebra skills.** **How to Find the Evidence:** Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, lessons, homework assignments, and assessments. (Evaluate both student and teacher materials. NOTE: Since Geometry contains relatively fewer Widely Applicable Prerequisites, this Criterion is important to help foster students' college and career readiness. Problems that use algebra skills might include, for example, algebraic geometry problems in a coordinate setting, or problems of measurement involving unknown quantities.	**Evidence-** • Lesson 1.4 – Perimeter and Area in the Coordinate Plane • 2.4 – Algebraic Reasoning • 5.8 – Coordinate Proofs • 6.5 – Triangle Inequality Theorem (finding possible values of the third side of a triangle given the length of the other two) • 9.1 – Pythagorean Theorem • 9.5-9.7 – Using Trigonometric equations to solve triangles • 10.7 – Circles in the Coordinate Plane • Chapter 11 – Circumference, Area, and Volume formulas • Real life applications throughout	**__X__Meets** **____Does Not Meet Insufficient Evidence**

Metric NN1C: **There are problems at a level of sophistication appropriate to high school (beyond mere review of middle school topics) that involve the application of knowledge and skills from grades 6-8.** **How to Find the Evidence:** Evaluate lessons, chapter/unit assessments, and homework assignments. NOTE: Problems should include application of the following topics from grades 6-8: • Ratios and proportional relationships. • Percentage and unit conversions, e.g., in the context of complex measurement problems involving quantities with derived or compound units (such as mg/mL, kg/ m3, acre-feet, etc.). • Basic function concepts, e.g., by interpreting the features of a graph in the context of an applied problem. • Concepts and skills of geometric measurement e.g., when analyzing a diagram or schematic. • Concepts and skills of basic statistics and probability (see grades 6–8.SP) • Performing rational number arithmetic fluently. For context, read Table 1 on Page 8 of the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** • Propo nality Chapter 8 – Similarity • TE pg. 666 – Modeling exploration not only reviews basic probability but also hits Mathematical Practice • 10.5 Angles in Circles	**__X__Meets** **____Does Not Meet Insufficient Evidence**
Metric NN1D: **Materials base courses on the content specified in the Standards.** **How to Find the Evidence:** Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, and lessons in both student and teacher materials. For context, read Criterion #3a in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** • **TE pages xxx-xlvii clearly show how the text is based on the Common Core Standards for Mathematics.**	**_X___Meets** **____Does Not Meet Insufficient Evidence**

Metric NN1E:
Materials give all students extensive work with course-level problems.
How to Find the Evidence:
Evaluate both student and teacher materials.
If the materials provide resources for differentiated learning, consider whether lower-performing students have opportunities to engage with course-level problems. Also consider whether higher-performing students are given opportunities to learn current course-level content in greater depth.
For context, read Criterion #3b in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).
	Evidence-
	• Resources for both struggling and advanced students:
	  ○ *Resources by Chapter* contain extra practice, a student journal, and a *Differentiating the Lesson* handbook for students needing help.
	  ○ *Resources by Chapter* also contain enrichment and extension work for students needing more of a challenge.
	Warm – ups
	End of each unit "If students need help or if students get it"
		_X__Meets
		
		____Does Not Meet Insufficient Evidence

Metric NN1F: **Materials relate course-level concepts explicitly to prior knowledge from earlier grades or courses. The materials are designed so that prior knowledge becomes reorganized and extended to accommodate the new knowledge.** **How to Find the Evidence:** Evaluate student and teacher materials, looking for problems that involve extending the knowledge learned in earlier grades and courses. NOTE: An example of evaluating this Criterion might be to look at whether materials connect the equation of a circle with the distance formula and the Pythagorean theorem. For context, read Criterion #3c in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** • *Maintaining Mathematical Proficiency* chapter openers relate previously learned content to what students will learn in the next chapter. TE Pg. 299 as example. • Problems at the end of each lesson also refer back to the *Maintaining Mathematical Proficiency* model.	**__X__Meets** **____Does Not Meet Insufficient Evidence**
Metric NN1G: **Materials include learning objectives that are visibly shaped by CCSSM cluster and domain headings.** **How to Find the Evidence:** Select several clusters from the course being evaluated. Evaluate teacher and student materials in relation to these clusters. For context, read Criterion #4a in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** • *Maintaining Mathematical Proficiency* chapter openers are directly related to the Standards for Mathematical Practice and have the particular standard at the top of the page. • Objectives are written from the standards (example: TE pg. 100 "Name and prove properties of congruence).	**__X__Meets** **____Does Not Meet Insufficient Evidence**

Metric NN4H: **Materials include problems and activities that serve to connect two or more clusters in a domain, or two or more domains in a category, or two or more categories, in cases where these connections are natural and important.** **How to Find the Evidence:** In the course being evaluated, choose two or more clusters, two or more domains, or two or more categories for which connections are natural and important. Evaluate the units, chapters, and lessons that deal with the chosen topics, looking for problems and activities that serve to connect the chosen clusters or domains. NOTE: An example of evaluating this Criterion might be to look at whether materials include problems in which students analyze a situation by building a function, graphing it, and using it to create and solve an equation. For context, read Criterion #4b in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** • It is clear from the *Correlation from Geometry to CCSS for Mathematical Content* pages that most sections of the text address multiple domains within the Geometry standards (pgs. XXX-xxxii)	**__X__Meets** **____Does Not Meet Insufficient Evidence**
Non-Negotiable 1: Focus and Coherence- Materials must focus coherently on the Widely Applicable Prerequisites in a way that is consistent with the progressions in the Standards. **Metric NN 1:** If all metrics 1A–1H were rated as Meets, then rate Non-Negotiable 1 as Meets. If one or more metrics were rated as Does Not Meet/Insufficient Evidence, then rate Non-Negotiable 1 as Does Not Meet. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)** **Before moving to Alignment Criterion 1, record the final Meets or Does Not Meet rating in the Evaluation Summary.**		**__X__Meets** **____Does Not Meet** **Strengths/Weaknesses** • Strong adherence to CCSS for Mathematics and the Standards for Mathematical Practice • Explicitly states where standards are met throughout the text.

Now continue by evaluating Alignment Criterion 1 for Rigor and Balance.

Directions for Alignment Criterion 1

Rigor and Balance

Alignment Criterion 1: **Rigor & Balance- Materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.** The Standards set expectations for attention to all three aspects of rigor: conceptual understanding, procedural skill and fluency, and applications. Thus, materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.	The Standards set expectations for attention to all three aspects of rigor: conceptual understanding, procedural skill and fluency, and applications. Thus, materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations. • Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_HS_Spring_2013_FINAL1.pdf) • Widely Applicable Prerequisites for College and Careers (http://achievethecore.org/prerequisites) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion:** Alignment Criterion 1 is rated as Meets or Does Not Meet. To rate Alignment Criterion 1, first rate metrics 1A, 1B, and 1C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). For each metric, guiding questions are provided to aid in gathering evidence. Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 1 if the materials rate 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as rigor and balance, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.
AC Metric 1A: **The materials support the development of students' conceptual understanding of key mathematical concepts, especially where called for in specific content Standards or cluster headings.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Widely Applicable Prerequisites that relate specifically to conceptual understanding to use throughout the questions associated with this metric. NOTE: Some examples of clusters or Standards that call for conceptual understanding include: N-RN.A.1, A-APR.B, A-REI.A.1, A-REI.D.10, A.REI.D.11, F.IF.A.1, F-LE.A.1, G.SRT.A.2, G-SRT.C.6, S-ID.C.7 For context, read Criterion #2a in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	• Choose a cluster/Standard from the Widely Applicable Prerequisites that is aligned to each aspect of rigor and use it to evaluate these metrics. It is most helpful if the same clusters and Standards are chosen for all of the programs being evaluated. (Guidance in choosing clusters/Standards is included in "How to Find the Evidence" below.)	**Use the questions for AC Metric 1A to evaluate Metric 1A. Record evidence for each question and rate Metric 1A.** **__2__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Is conceptual understanding attended to thoroughly where the Standards set explicit expectations for understanding or interpreting? Evaluate lessons, chapter/unit assessments and homework assignments, paying attention to work aligned to Standards that explicitly call for understanding or interpreting.	**Evidence-** • Lessons begin with 1-2 *Explorations* that begin to frame the topic conceptually. Students are given a frame of reference by these explorations, helping them to understand the concept before going into the details of it. • TE has overview to start sections	

Do the materials feature high-quality conceptual problems and conceptual discussion questions? Evaluate lessons, chapter/unit assessments, and homework assignments. NOTE: Examples of conceptual problems might include such questions as "What is the maximum value of the function f(t) = 5 – t2 ?" or "Is √2 a polynomial? How about ½(x + √2)+ ½ (-x + √2)?"	**Evidence-** • In addition to traditional algorithm practice, students extend their learning to specific situations and must explain their thinking. Exercises include questions titled Error *Analysis*, *Drawing Conclusions*, *Reasoning*, and Making an Argument. These questions require that students explain the "how" and "why" of problems. • Problem types are differentiated	
Do the materials feature opportunities to identify correspondences across mathematical representations? Evaluate lessons, chapter/unit assessments and homework assignments. NOTE: An example of evaluating this metric might include looking at whether materials support students in identifying correspondences among the expression that defines a function, the graph that shows the relationship, and the behavior of the phenomenon being modeled (if any).	**Evidence-** • TE pg. 98 #55 – solve formula, create input-output table, use the table to graph. • TE pg. 104 #16 – use the diagram to prove distances. • TE pg. 235 Example 4 – modeling with a diagram before solving algebraically. • Every exercise section contains a *Modeling with Mathematics* problem that requires students to use the 4-step problem-solving technique.	
AC Metric 1B: **The materials are designed so that students attain the fluencies and procedural skills required by the Standards.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Widely Applicable Prerequisites that relate specifically to fluency and procedural skill to use throughout the questions associated with this metric. NOTE: Some examples of Standards that call for procedural skill and fluency include: A-SSE.A.1b, A-SSE.2, A-APR.A.1, A-APR.C.6, F-BF.B.3, G-GPE.B.4, G-GPE.B.5, G-GPE.B.7, G-CO.A.1, G-SRT.B.5 For context, read Criterion #2b in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).		**Use the questions for AC Metric 1B to evaluate Metric 1B. Record evidence for each question and rate Metric 1B.** **_2__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**

Is progress[illegible]rd fluency and procedural skill interwoven with the student's [illegible]ping conceptual understanding of the skills in question? Evaluate lessons, chapter/unit assessments, daily routines, and homework assignments for evidence that the development of fluency and procedural skill is supported by conceptual understanding.	**Evidence-** • TE Le[illegible] 9.3: In the exercises students practice identifying similar triangles, use similarity to find missing parts of triangles, apply similarity to geometric mean, then move into application and conceptual questions based on their previous practice. The vast majority of exercise sections are set up this way.	
Are purely procedural problems and exercises present that include cases in which opportunistic strategies are valuable and generic cases that require efficient and general procedures present? Evaluate lessons, chapter/unit assessments, daily routines, and homework assignments. NOTE: Problems in which opportunistic strategies are valuable might include such examples as solving x2 + 5 = 49 + 5 or (3x – 2)2 = 6x – 4. Generic cases that require efficient and general procedures might include such problems as solving c + 8 – c2 = 3(c – 1)2 – 5).	**Evidence-** • HSA.SSE.B.3 – Lesson 3.5 requires that students transform a linear equation in standard form to slope-intercept form in order to find lines with parallel and perpendicular slopes. o Also using point-slope form to slope-intercept form.	
AC Metric 1C: **The materials are designed so that teachers and students spend sufficient time working with engaging applications, without losing focus on the Widely Applicable Prerequisites.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Widely Applicable Prerequisites that relate specifically to application to use throughout the questions associated with this metric. NOTE: Some examples of clusters or Standards that call for application include: N-Q.A, A-SSE.B.3, A-REI.D.11, F-IF.B, F-IF.C.7, F-BF.A.1, G-SRT.C.8, S-ID.A.2, S-IC.A.1 For context, read Criterion #2c in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).		**Use the questions for AC Metric 1C to evaluate Metric 1C. Record evidence for each question and rate Metric 1C.** **____Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Are there single- and multi-step contextual problems, including non-routine problems, that develop the mathematics of the course, afford opportunities for practice, and engage students in problem solving? Do the problems attend thoroughly to those places in the content Standards where expectations for multi-step and real-world problems are explicit? Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** • The vast majority of sections contain single-step problems for beginning practice. Then the problems increase in complexity as the exercises move on.	
Do application problems particularly stress applying the Widely Applicable Prerequisites? Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** • HSN.Q – Using units is used in Chapter 11 area and volumes • HSS.IC.1 Chapter 12 Probability – making inferences based on probabilities	

Are there ample opportunities for students to engage with modeling problem[illegible] aterials require students to use both individual parts of the modeling cycle as well as the full modeling cycle? Read the pages on High School—Modeling in the Standards for Mathematics (pp. 72 and 73). Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** • Every [illegible]ercise set contains *Modeling with Mathematics* and/or *Problem Solving* questions, which give students the opportunity to apply the concepts of the lesson to a real-world application. Some of these are single-step problems but the majority of them are multi-step problems requiring students to apply the Mathematical Practice standards. o i.e. TE pg. 567 #23, 24	
Alignment Criterion 1: Materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations. **AC 1:** Materials must earn at least 5 of 6 points to meet this Alignment Criterion. If materials earn less than 5 points, the Criterion has not been met. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)** **Before moving to Alignment Criterion 2, record the final Meets or Does Not Meet rating in the Evaluation Summary.**	**____Meets** **____Does Not Meet** **Strengths/Weaknesses:**	

Alignment Criterion 2:
Stand[illegible]or Mathematical Practice- Materials must demonstrate authentic connections between content Standards and practice Standards.

The Standards require that designers of instructional materials connect the mathematical practices to mathematical content in instruction. Thus, materials must demonstrate authentic connections between content Standards and practice Standards.

The Standards require that designers of instructional materials connect the mathematical [illegible]tices to mathematical content in instruction. Thus, materials must de[illegible]strate authentic connections between content Standards and practice Standards.

Required Materials:

- Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf)
- Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_HS_Spring_2013_FINAL1.pdf)
- Widely Applicable Prerequisites for College and Careers (http://achievethecore.org/prerequisites)
- From the materials being evaluated: teacher guides, student texts and workbooks

Rating this Criterion:

Alignment Criterion 2 is rated [illegible] or Does Not Meet.

To rate Alignment Criterion 2, first rate metrics 2A, 2B, and 2C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). For each metric, guiding questions are provided to aid in gathering evidence.

Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 2 if the materials rate 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as mathematical practices, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.

AC Metric 2A:
Materials address the practice Standards in such a way as to enrich the Widely Applicable Prerequisites; practices strengthen the focus of the course instead of detracting from it, in both teacher and student materials.

How to Find the Evidence:

Familiarize yourself with the Widely Applicable Prerequisites.

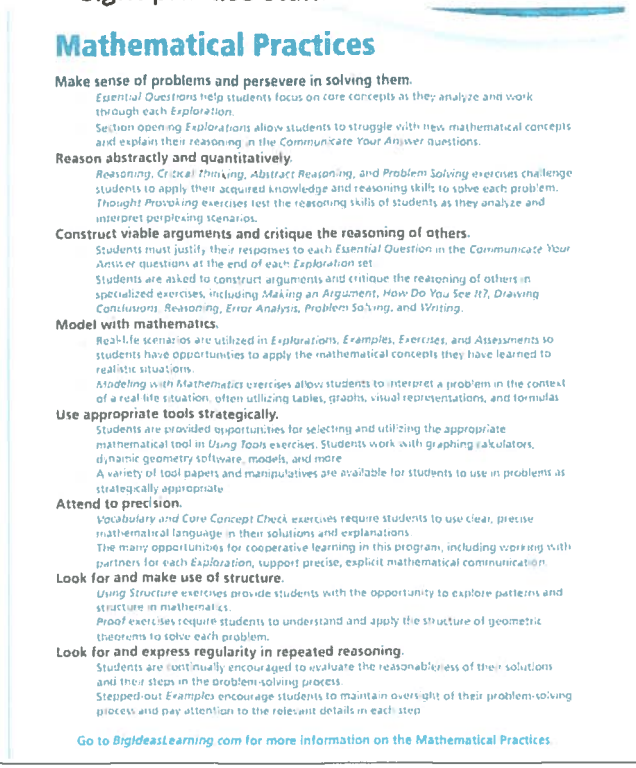
Evaluate teacher and student materials for evidence that the mathematical practices support and connect to the focus of the course.

NOTE: An example of evaluating this Criterion might include looking at whether materials use regularity in repeated reasoning to illuminate formal algebra as well as functions, particularly recursive definitions of functions.

For context, read Criterion #6 in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).

Evidence-

- Page vi of the TE specifically tells which sections of the textbook address each of the eight practice standards.



Mathematical Practices

Make sense of problems and persevere in solving them.
Essential Questions help students focus on core concepts as they analyze and work through each *Exploration*.
Section opening *Explorations* allow students to struggle with new mathematical concepts and explain their reasoning in the *Communicate Your Answer* questions.

Reason abstractly and quantitatively.
Reasoning, Critical Thinking, Abstract Reasoning, and *Problem Solving* exercises challenge students to apply their acquired knowledge and reasoning skills to solve each problem.
Thought Provoking exercises test the reasoning skills of students as they analyze and interpret perplexing scenarios.

Construct viable arguments and critique the reasoning of others.
Students must justify their responses to each *Essential Question* in the *Communicate Your Answer* questions at the end of each *Exploration* set.
Students are asked to construct arguments and critique the reasoning of others in specialized exercises, including *Making an Argument, How Do You See It?, Drawing Conclusions, Reasoning, Error Analysis, Problem Solving,* and *Writing*.

Model with mathematics.
Real-life scenarios are utilized in *Explorations, Examples, Exercises,* and *Assessments* so students have opportunities to apply the mathematical concepts they have learned to realistic situations.
Modeling with Mathematics exercises allow students to interpret a problem in the context of a real-life situation, often utilizing tables, graphs, visual representations, and formulas.

Use appropriate tools strategically.
Students are provided opportunities for selecting and utilizing the appropriate mathematical tool in *Using Tools* exercises. Students work with graphing calculators, dynamic geometry software, models, and more.
A variety of tool papers and manipulatives are available for students to use in problems as strategically appropriate.

Attend to precision.
Vocabulary and Core Concept Check exercises require students to use clear, precise mathematical language in their solutions and explanations.
The many opportunities for cooperative learning in this program, including working with partners for each *Exploration*, support precise, explicit mathematical communication.

Look for and make use of structure.
Using Structure exercises provide students with the opportunity to explore patterns and structure in mathematics.
Proof exercises require students to understand and apply the structure of geometric theorems to solve each problem.

Look for and express regularity in repeated reasoning.
Students are continually encouraged to evaluate the reasonableness of their solutions and their steps in the problem-solving process.
Stepped-out *Examples* encourage students to maintain oversight of their problem-solving process and pay attention to the relevant details in each step.

Go to *BigIdeasLearning.com* for more information on the Mathematical Practices.

_2__Meets (2)

____Partially Meets (1)

____Does Not Meet (0)

AC Metric 2B: **Materials attend to the full meaning of each practice Standard.** **How to Find the Evidence:** For context, read Criterion #7 in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).		**Use the questions for AC Metric 2B to evaluate Metric 2B. Record evidence for each question and rate Metric.** **____Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Over the course of any given year of instruction, is each mathematical practice Standard meaningfully present in the form of assignments, activities, or problems that stimulate students to develop the habits of mind described in the practice Standard? Evaluate lessons, chapter/ unit assessments, and homework assignments for evidence of each mathematical practice being meaningfully present in instruction.	**Evidence-** • Mathematical practice standards are addressed throughout the entire text, in particular in *Mathematical Practices* sections in each chapter. • See AC Metric 2A. • "What you will learn"	
Are teacher-directed materials that explain the role of the practice Standards in the classroom and in students' mathematical development included? Are alignments to practice Standards accurate? Evaluate teacher materials, paying attention to explanations of the role of the practice Standards in the classroom and in students' mathematical development. Evaluate documents aligning lessons to practice Standards for accuracy. NOTE: Examples to look for when evaluating this metric might include the following: a highly scaffolded problem should not be aligned to MP.1; or a problem that directs a student to use a calculator should not be aligned to MP.5; or a problem about merely extending a pattern should not be aligned to MP.8.	**Evidence-** • *Laurie's Notes* specifically and explicitly address this requirement. (example TE pg. T-63. These begin and end each section.	
AC Metric 2C: **Materials support the Standards' emphasis on mathematical reasoning.** **How to Find the Evidence:** For context, read Criterion #8 in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).		**Use the questions for AC Metric 2C to evaluate Metric 2C. Record evidence for each question and rate Metric 2C.** **__2__Meets (2)** **____Partially Meets (1)**

Do the materials support students in constructing viable arguments and critiquing arguments of others concerning course-level mathematics that is detailed in the content Standards? Read Standard for Mathematical Practice 3. Evaluate teacher and student materials to ensure that students are given opportunities to reason with grade-level mathematics.	**Evidence-** • Two types of problems: *Error Analysis* and *Making an Argument* give students the chance to not only make their own arguments about an exercise but to critique the work of others. • In *Laurie's Notes*, the teacher is encouraged to open a dialogue with students about the approaches taken to solve problems. The implication is that if teachers follow these directions students have ample opportunity to share and critique each others' arguments. • Teacher ideas (p 570, 571)	____Does Not Meet (0)
Do the materials support students in producing not only answers and solutions, but also, in a course-appropriate way, arguments, explanations, diagrams, mathematical models, etc., especially in the Widely Applicable Prerequisites? Familiarize yourself with the Widely Applicable Prerequisites. Evaluate teacher and student materials to understand the types of work students are expected to produce.	**Evidence-** • *Modeling with Mathematics, Real-Life Applications* exercises give students opportunity to use modeling, diagrams, and pictures in support of their solutions. • Embedded throughout	
Do materials explicitly attend to the specialized language of mathematics? Is the language of argument, problem solving, and mathematical explanations taught rather than assumed? Evaluate teacher and student materials, paying attention to how mathematical language is taught. NOTE: An example of evaluating this Criterion might include looking at whether students are supported in: basing arguments on definitions; using the method of providing a counter example; or recognizing that examples alone do not establish a general statement.	**Evidence-** • Every lesson begins with a *Vocabulary and Core Concept* check in which students are asked questions about the main ideas of the lesson, paying particular attention to the vocabulary that is tied to these ideas.	

Alignment Criterion 2: Materials must demonstrate authentic connections between content Standards and practice Standards.

AC 2: Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 points, the Criterion has not been met. Check the final rating.
Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewers only.)**

Before moving to Alignment Criterion 3, record the final Meets or Does Not Meet rating in the Evaluation Summary.

__X_Meets

____Does Not Meet

Strengths/Weaknesses:

Alignment Criterion 3: **Acces[illegible]he Standards for All Students- Materials must provide supports for English Language Learners and other special populations.** Because Standards are for all students, alignment requires thoughtful support to ensure all students are able to meet the Standards. Thus, aligned materials must provide supports for English Language Learners and other special populations.	Because Standards are for all students, alignment requires thoughtful support to ensure [illegible]tudents are able to meet the Standards. Thus, aligned materials [illegible] provide supports for English Language Learners and other special populations. **Required Materials:** • Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math Publishers_Criteria_HS_Spring_2013_FINAL1.pdf) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion:** Alignment Criterion 3 is rated [illegible]s or Does Not Meet. To rate Alignment Criterion 3, first rate metrics 3A, 3B, and 3C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 3 if the materials rate 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as support for special population, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.
AC Metric 3A: **Support for English Language Learners and other special populations is thoughtful and helps those students meet the same Standards as all other students. The language in which problems are posed is carefully considered.** **How to Find the Evidence:** Evaluate teacher and student materials, paying attention to supports offered for special populations.	**Evidence-** • Online glossary in different languages (www.bigideasmath.com) • Vocabulary flashcards • *English Language Learners* support in • the wrap-around area of the TE (example pg. 78, 263) • Book glossary in English and Spanish The absolute value of the difference of a number x and a given value $$\text{absolute deviation} = |x - \text{given value}|$$ Listen Translate from English to Spanish **desviación absoluta** El valor absoluto de la diferencia de un número x y un valor dado Listen	**_2___Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**

AC Metric 3B: **Materials provide appropriate level and type of scaffolding, differentiation, intervention, and support for a broad range of learners with gradual removal of supports, when needed, to allow students to demonstrate their mathematical understanding independently.** **How to Find the Evidence:** Evaluate teacher and student materials, paying attention to whether materials provide differentiation that will lead all learners to engage with on-grade-level content.	**Evidence-** • Laurie's notes at the beginning of each section guide the teacher with step-by-step instructions on how to introduce a lesson and engage students in the material at hand. These include explorations, notes about the explorations, prompts for the beginning teacher who may need coaching, and a connection to what will come next. • Laurie's notes continue along the bottom of each page of every lesson to guide the teacher as he/she presents the material. The teacher is also given ideas to support and foster learning growth throughout the presentation of the lesson in a variety of formats. • There is also an overview at the end of each chapter	**_2___Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
AC Metric 3C: **Design of lessons recommends and facilitates a mix of instructional approaches for a variety of learners such as using multiple representations (e.g., including models, using a range of questions, checking for understanding, flexible grouping, pair-share).** **How to Find the Evidence:** Evaluate teacher materials, noting instructional approaches suggested for whole class and differentiated lessons and activities.	**Evidence-** • Laurie's notes at the beginning of each section guide the teacher with step-by-step instructions on how to introduce a lesson and engage students in the material at hand. These include explorations, notes about the explorations, prompts for the beginning teacher who may need coaching, and a connection to what will come next. • Laurie's notes continue along the bottom of each page of every lesson to guide the teacher as he/she presents the material. The teacher is also given ideas to support and foster learning growth throughout the presentation of the lesson in a variety of formats. • There are homework checks (ex: p. 178)	**_2___Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**

Alignment Criterion 3: Materials must provide supports for English Language Learners and other special populations. **AC 3** Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 points, the Criterion has not been met. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewers only.)** **Move to the Evaluation Summary and record the final Meets or Does Not Meet rating .**	**_X___Meets** **____Does Not Meet** **Strengths/Weaknesses:**

Once an evaluation for alignment to the Shifts and major features of the CCSS has been conducted using Sections 1-3, it's important to evaluate for overall quality and best practices. A starting list of Indicators of Quality are suggested below. States, districts and others evaluating instructional materials are encouraged to add to this list to ensure materials reflect local contexts. For background information on some of the Indicators of Quality in this section, refer to pp.16–18 in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).

Indicators of Quality	**Evidence- Give specific examples.**	**Rating: (Reviewer only.)**
1. Lessons are thoughtfully structured and support the teacher in leading the class through the learning paths at hand, with active participation by all students in their own learning and in the learning of their classmates.	**Evidence-** • *Laurie's Notes* throughout the entire text.	**(Reviewer only.)** **__X___ Yes** **_____ No**
2. The underlying design of the materials includes both problems and exercises. (In solving problems, students learn new mathematics, whereas in working exercises, students apply what they have already learned to build mastery.) Each problem or exercise has a purpose. **NOTE: This Criterion does not require that the problems and exercises be labeled as such.**	**Evidence-** • Students are given more difficult problems • Each section begins with exploration	**(Reviewer only.)** **__x___ Yes** **_____ No**

3. Design of assignments is not haphazard: exercises are given in intentional sequences in order to strengthen students' mathematical understanding.	**Evidence-** • Sequence *Vocabulary and Core Concepts* --> *Monitoring Progress and Modeling with Mathematics* --> Proofs, more advanced modeling, and more difficult problems. • There is a very logical progression in every lesson of core exercises focusing on fluency to problem-solving that requires both new and previously learned mathematics.	**(Reviewer only.)** **__X___ Yes** **_____ No**
4. There are separate teacher materials that support and reward teacher study including, but not limited to: discussion of the mathematics of the units and the mathematical point of each lesson as it relates to the organizing concepts of the unit, discussion on student ways of thinking and anticipating a variety of students responses, guidance on lesson flow, guidance on questions that prompt students thinking, and discussion of desired mathematical behaviors being elicited among students.	**Evidence-** • *Laurie's Notes* o *Motivate:* notes give the teacher tips on how to begin student engagement with the upcoming lesson.	**(Reviewer only.)** **__X___ Yes** **_____ No**
5. Manipulatives suggested in the materials are faithful representations of the mathematical objects they represent and are connected to written methods.	**Evidence-** • *Games Closet* on BigIdeasMath.com are clearly labeled as to which concepts they allow students to review and study. • T-641 net of a cone	**(Reviewer only.)** **__X___ Yes** **_____ No**
6. Materials include a variety of curriculum-embedded assessments. Examples include pre-, formative, summative, and self-assessment resources.	**Evidence-** • Pre-, post-assessments provided online in the *Assessment Book*. • Interactives in the online *Dynamic Classroom* student textbook are linked to the explorations in the standard textbook, with clearly defined objectives for each *Exploration*.	**(Reviewer only.)** **__X___ Yes** **_____ No**
7. Assessments contain aligned rubrics, answer keys, and scoring guidelines that provide sufficient guidance for interpreting student performance.	**Evidence-** Answer keys provided to properly aligned assessments. Lacks guidelines for interpretation of student performance.	**(Reviewer only.)** **__X___ Yes** **_____ No**
8. Materials assess student proficiency using methods that are accessible and unbiased, including the use of course-level language in student prompts.	**Evidence-** Confirmed with appropriate language.	**(Reviewer only.)** **___x___ Yes** **_____ No**

9. Materials are carefully evaluated by qualified individuals whose names are listed, in an effort to ensure freedom from mathematical errors and course-level appropriateness.	**Evidence-** See page V	**(Reviewer only.)** **___x___ Yes** **_____ No**
10. The visual design supports students in engaging thoughtfully with the subject. Navigation through the text is clear.	**Evidence-** • Uniform setup with a guide in the front of the book detailing the structure of the text.	**(Reviewer only.)** **__X___ Yes** **_____ No**

Reviewer IMET Evaluation Summary **Title/Level: __Big Ideas Math Geometry 9-12_____**

Publisher: _Big Ideas Learning, LLC_____ Copyright: ___2015_____

ISBN:_978-1-60840-839-9_____

Reviewer ID # __CM and DG_____ Date Review Completed:___3/8/16_____

Non-Negotiable Criteria-The Non-Negotiable must be met in order for the Non-Negotiable Alignment Criteria to be met overall.
Non- Negotiable 1: Focus and Coherence **__x___ Meets** **_____ Does Not Meet**

Non-Negotiable Overall:

__x___ Meets _____ Does Not Meet

Alignment Criteria- Each Alignment Criterion must be met with a sufficient number of points in order for Alignment Criteria to be labeled as "Meets" overall. The more points the materials receive on the Alignment Criteria, the better they are aligned.

Alignment Criterion 1: Rigor and Balance	Alignment Criterion 2: Standards of Mathematical Practice	Alignment Criterion 3: Access to Standards for All Learners
Points: __6___ of 6 possible. **(Materials must receive at least 5 of 6 points to align.)** **___x____ Meets** **_____ Does Not Meet**	**Points: __6___ of 6 possible.** **(Materials must receive at least 5 of 6 points to align.)** **__x___ Meets** **_____ Does Not Meet**	**Points: __6___ of 6 possible.** **(Materials must receive at least 5 of 6 points to align.)** **__x_____ Meets** **_____ Does Not Meet**

Alignment Criteria Overall:

__x___ Meets _____ Does Not Meet

If the materials meet the Non-Negotiable Criterion and each Alignment Criterion, they are aligned to the Shifts and major features of the Standards. **Do the materials meet every Non-Negotiable and Alignment Criterion? __x___ Yes _____ No**

What are the specific areas of strength and weakness based on this evaluation? Publishers or others modifying or developing assessments can use this information to make improvements and/or to remedy gaps in the alignment of assessment materials.

Strengths

Problems with scaffolding and with differentiation.

Laurie's Notes for beginning and advanced teachers

Spiraling curriculum

Lots of explorations

Weaknesses

- Connection between the written textbook and the online components is not readily apparent within the lessons.

2015-16 Mathematics Interim Review Recommendation & Summary

Publisher Name:	Big Ideas Learning, LLC
Title:	Big-Ideas Algebra 2
ISBN #	978-1-60840-840-5 Copyright 2015
Grade Level(s) or Course:	9-12
Reviewer ID:	KB DG

RECOMMENDED AS:

✓ **Core Mathematics Program-** a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials. Substantial evidence clearly supports the designation of this program as Core.

_____ **Other Mathematics Program-** a program that substantially, but partially, meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for supplemental materials. Substantial evidence clearly supports the designation of this program as Other.

_____ **Component Mathematics Program-** a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs. Substantial evidence clearly supports the designation of this program as Component.

_____ **Intervention Program-** a program designed and intended to target and support students' specific needs. Substantial evidence clearly supports the designation of this program as Intervention.

_____ **Does not meet criteria** for recommendation as a Curricular Material or Online Resource for Mathematics.

EVIDENCE SUMMARY:

FOCUS- 72% WAP Covered

NNI Functions - Related to real world

Standards Met (Geometry Not Needed to be met)

COHERENCE- Standards Met

NNI Pacing Guide: Concepts well-developed/paced throughout text

Well organized T.O.C.

Clear, easy-to-find objectives.

RIGOR-

- Exploration
- Analyze Problems
- Real World

AC1 - Questions lead to deeper problem solving.

CONCEPTUAL UNDERSTANDING- Ample modeling w/tables/Graphs/Diagrams & writing equations

AC1 Error Analysis embedded throughout.

MATHEMATICAL PRACTICES- Laurie's Notes: Guidance to Teacher

AC2

* Differentiation/Enrichment
* Essential Questions
* Cumulative Assessments each chapter.

ACCESSIBILITY OF STANDARDS TO ALL STUDENTS-

AC3

- Remediation/Enrichment support each section.
- Student Journal
- Online Glossary/activities

OTHER:

Leads w/vocab tying lessons/chapters nicely together.

Appropriate Formatting (i.e. text size)

Well developed

Lots of guidance for teachers w/ Laurie's Notes

Lessons are differentiated for all learners.

No obvious weaknesses

2015-1 nterim Mathematics Review

Mathematics Evaluation Tool – High School

Publisher: Big Ideas Learning, LLC

Title of Material: Big-Ideas Algebra 2

Author: Ron Larson/Laurie Boswell

ISBN #: 978-1-60840-840-5 **Copyright** 2015

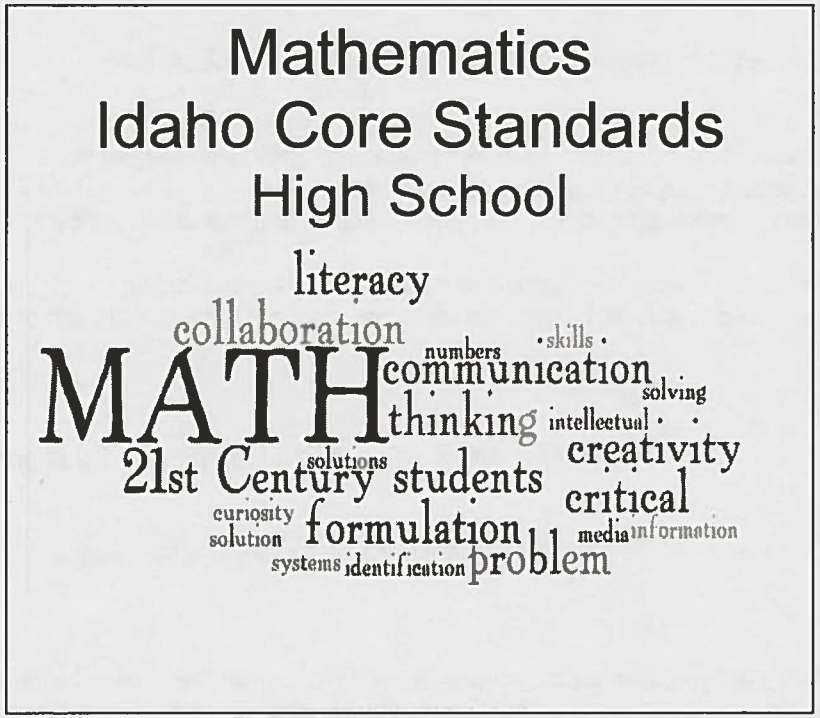
Reviewer ID: KB DG

Core Mathematics Program- a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Core.

Other Mathematics Program- a program that substantially, but partially, meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Other.

Component Mathematics Program- a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs.
Substantial evidence clearly supports the designation of this program as Component.

Intervention Program- a program designed and intended to target and support students' specific needs.
Substantial evidence clearly supports the designation of this program as Intervention.



- Evaluation Form adapted from Instructional Materials Evaluation Toolkit (IMET).

The IMET was developed by Student Achievement Partners. Educators may use or adapt. http://creativecommons.org/licenses/by/3.0/ Download this tool at http://achievethecore.org/IMET

Instructional Materials Evaluation Tool

Mathematics, High School

What Are the Purposes of the IMET?

This Math IMET is designed to help educators determine whether instructional materials are aligned to the Shifts and major features of the Common Core State Standards (CCSS). The substantial instructional Shifts (http://www.corestandards.org/other-resources/key-shifts-in-mathematics/) at the heart of the Common Core State Standards are:

- **Focus** strongly where the Standards focus
- **Coherence**: Think across grades and link to major topics within the grade
- **Rigor**: In major topics, pursue conceptual understanding, procedural skill and fluency, and application with equal intensity.

The IMET draws directly from the following documents:

- Common Core State Standards for Mathematics (www.corestandards.org/Math)
- Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013) (http://www. corestandards.org/wp-content/uploads/Math_Publishers_Criteria_ HS_Spring_2013_FINAL1.pdf)

When to use the IMET

1. Purchasing materials: Many factors go into local purchasing decisions. Alignment to the Standards is a critical factor to consider. This tool is designed to evaluate alignment of instructional materials to the Shifts and the major features of the CCSS. It also provides suggestions of additional indicators to consider in the materials evaluation and purchasing process
2. Evaluating materials currently in use: The IMET can be used to analyze the degree of alignment of existing materials and help to highlight specific, concrete flaws in alignment. Even where materials and tools currently in use fail to meet one or more of these criteria, the pattern of failure is likely to be informative. States and districts can use the evaluation to create a thoughtful plan to modify or combine existing resources in such a way that students' actual learning experiences approach the focus, coherence, and rigor of the Standards.
3. Developing programs: Those developing new programs can use this tool as guidance for creating aligned curricula.

Please note this tool was designed for evaluating comprehensive curricula (including any supplemental or ancillary materials), but it was not designed for the evaluation of standalone supplemental materials.

Who Uses the IMET?

Evaluating instructional materials requires both subject-matter and pedagogical expertise. Evaluators should be well versed in the Standards (www.corestandards.org/Math) for all grades in which materials are being evaluated. This includes understanding the Widely Applicable Prerequisites (www.achievethecore.org/prerequisites), how the content fits into the progressions in the Standards (www. achievethecore.org/progressions), and the expectations of the Standards with respect to conceptual understanding, procedural skill and fluency, and application. Evaluators also should be familiar with the substantial instructional Shifts (http://www.corestandards.org/other-resources/key-shifts-in-mathematics/) of Focus, Coherence and Rigor that are listed above.

Getting Started

Prior to Evaluation

Assemble all of the materials necessary for the evaluation. It is essential for evaluators to have materials for all grades covered by the program, as some criteria cannot be rated without having access to each grade. In addition, each evaluator should have a reference copy of the Common Core State Standards for Mathematics (CCSSM) and the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).

Before conducting the evaluation itself, it is important to develop a protocol for the evaluation process. The protocol should include having evaluators study the Publishers' Criteria and the IMET. It will also be helpful for evaluators to get a sense of each program overall before beginning the process. At a minimum, this would include reading the front matter of the text, looking at the table of contents and paging through multiple chapters.

Sections 1-3 below should be completed to produce a comprehensive picture of the strengths and weaknesses of the materials under evaluation. Information about areas in need of improvement or supplementation should be shared with internal and external stakeholders.

Navigating the Tool

Begin with Section 1: Non-Negotiable Alignment Criteria

- The Non-Negotiable Alignment Criteria must each be met in full for materials to be considered aligned to the Shifts and the major features of the Common Core State Standards. Each Non-Negotiable Alignment Criterion has one or more metrics associated with it; every one of these metrics must be met in order for the criterion as a whole to be met.

- Examine the relevant materials and use evidence to rate the materials against each criterion and its associated metric(s).

- Record and explain the evidence upon which the rating is based.

Continue to Section 2: Alignment Criteria

- The Alignment Criteria must each be met for materials to be considered aligned to the Shifts and the major features of the Common Core State Standards. Each Alignment Criterion has one or more metric associated with it; a specific number of these metrics must be met or partially met in order for the criterion as a whole to be met.

- Examine the materials in relation to these criteria, assigning each metric a point value. Rate the criterion as "Meets" or "Does Note Meet" based on the number of points assigned. The more points the materials receive on the alignment Criteria, the better they are aligned.

- Record and explain the evidence upon which the rating is based.

Proceed to Section 4: Indicators of Quality

- Indicators of Quality are important considerations that will help evaluators better understand the overall quality of instructional materials. These considerations are not criteria for alignment to the CCSS, but they provide valuable information about additional program characteristics. Evaluators may want to add their own indicators to the examples provided.

Directions for Non-Negotiable 1 **Focus and Coherence**		
Criterion	**Evidence- Give specific examples.**	**Rating: (Reviewer only.)**
Non-Negotiable 1: Focus and Coherence- Materials must focus coherently on the Widely Applicable Prerequisites in a way that is consistent with the progressions in the Standards. Focus and coherence are the two major evidence-based design principles of the Common Core State Standards for Mathematics (CCSSM, p. 3). Focus is necessary in order to fulfill the ambitious promise the states have made to their students by adopting the Standards: greater achievement at the college and career-ready level; greater depth of understanding of mathematics; and a rich classroom environment in which reasoning, sense-making, applications, and a range of mathematical practices flourish. In high school courses, narrowing and deepening the curriculum creates a structure that ties topics together. Thus, materials must focus coherently on the Widely Applicable Prerequisites in a way that is consistent with the progressions in the Standards.	Focus and coherence are the two major evidence-based design principles of the Common Core State Standards for Mathematics (CCSSM, p. 3). Focus is necessary in order to fulfill the ambitious promise the states have made to their students by adopting the Standards: greater achievement at the college and career-ready level; greater depth of understanding of mathematics; and a rich classroom environment in which reasoning, sense-making, applications, and a range of mathematical practices flourish. In high school courses, narrowing and deepening the curriculum creates a structure that ties topics together. Thus, materials must focus coherently on the Widely Applicable Prerequisites in a way that is consistent with the progressions in the Standards. **Required Materials:** • Common Core State Standards for Mathematics (www.corestandards.org/wpcontent/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_HS_Spring_2013_FINAL1.pdf) • Widely Applicable Prerequisites for College and Careers (http://achievethecore.org/prerequisites) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion:** Non-Negotiable 1 is rated as Meets or Does Not Meet. To rate Non-Negotiable 1, first rate Metrics 1A–1H. Each of these eight metrics must be rated as Meets in order for Non-Negotiable 1 to be rated as Meets. Rate each metric 1A–1H as Meets or Does Not Meet/Insufficient Evidence. If the evidence examined shows that the Criterion is met, then mark the Criterion as Meets. If the evidence examined shows that the Criterion is not met—or if there is insufficient evidence to make a determination—then mark the Criterion as Does Not Meet/Insufficient Evidence. Support all ratings with evidence.

Metric NN1A: **In any single course, students spend at least 50% of their time on Widely Applicable Prerequisites.** **How to Find the Evidence:** Familiarize yourself with the Widely Applicable Prerequisites. Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, lessons, homework assignments, and assessments. (Evaluate both student and teacher materials.) Consider time spent on the Widely Applicable Prerequisites and judge qualitatively whether students and teachers using the materials as designed will devote the majority of time to the Widely Applicable Prerequisites For context, read Criterion #1 in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** - Found that students spend more than 50% of time on WAP. - Pacing Guide helped w/ directing pre-requisite opportunities - "What you learned before" sections - Pre-readiness assessment. 55-64 425~~32~~	✓ **Meets** **___Does Not Meet Insufficient Evidence**
Metric NN1B: **Student work in Geometry involves significant work with applications/modeling and problems that use algebra skills.** **How to Find the Evidence:** Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, lessons, homework assignments, and assessments. (Evaluate both student and teacher materials. NOTE: Since Geometry contains relatively fewer Widely Applicable Prerequisites, this Criterion is important to help foster students' college and career readiness. Problems that use algebra skills might include, for example, algebraic geometry problems in a coordinate setting, or problems of measurement involving unknown quantities.	**Evidence-** Geometry standards not addressed/mandated in Alg I	✓ **Meets** NA **___Does Not Meet Insufficient Evidence**

Metric NN1C: **There are problems at a level of sophistication appropriate to high school (beyond mere review of middle school topics) that involve the application of knowledge and skills from grades 6-8.** **How to Find the Evidence:** Evaluate lessons, chapter/unit assessments, and homework assignments. NOTE: Problems should include application of the following topics from grades 6-8: • Ratios and proportional relationships. • Percentage and unit conversions, e.g., in the context of complex measurement problems involving quantities with derived or compound units (such as mg/mL, kg/ m3, acre-feet, etc.). • Basic function concepts, e.g., by interpreting the features of a graph in the context of an applied problem. • Concepts and skills of geometric measurement e.g., when analyzing a diagram or schematic. • Concepts and skills of basic statistics and probability (see grades 6–8.SP) • Performing rational number arithmetic fluently. For context, read Table 1 on Page 8 of the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** Concepts are well-developed throughout text. Concepts build to levels difficulty. - Organized: Pre learning to support new ideas (1) 435-440 Chp 1-2 219-225 Chapter 10-11	✓ Meets ___Does Not Meet Insufficient Evidence
Metric NN1D: **Materials base courses on the content specified in the Standards.** **How to Find the Evidence:** Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, and lessons in both student and teacher materials. For context, read Criterion #3a in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** Pacing Guide provide clear direction to build courses. Cited-Standards Table of Contents well organized	✓ Meets ___Does Not Meet Insufficient Evidence
Metric NN1E: **Materials give all students extensive work with course-level problems.** **How to Find the Evidence:** Evaluate both student and teacher materials. If the materials provide resources for differentiated learning, consider whether lower-performing students have opportunities to engage with course-level problems. Also consider whether higher-performing students are given opportunities to learn current course-level content in greater depth. For context, read Criterion #3b in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** - Enrichment/Remediation sections for each lesson. (Good suggestions). - Student Journal provide students w/ practice and notes for deeper problems	✓ Meets ___Does Not Meet Insufficient Evidence

Metric NN1F: **Materials relate course-level concepts explicitly to prior knowledge from earlier grades or courses. The materials are designed so that prior knowledge becomes reorganized and extended to accommodate the new knowledge.** **How to Find the Evidence:** Evaluate student and teacher materials, looking for problems that involve extending the knowledge learned in earlier grades and courses. NOTE: An example of evaluating this Criterion might be to look at whether materials connect the equation of a circle with the distance formula and the Pythagorean theorem. For context, read Criterion #3c in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** - Mountain Math Proficiency Sections. - Skills Review - Section Assessments/Rev - Cumulative Assess/Rev - Online Practice Opportunities	✓ **Meets** ___ **Does Not Meet Insufficient Evidence**
Metric NN1G: **Materials include learning objectives that are visibly shaped by CCSSM cluster and domain headings.** **How to Find the Evidence:** Select several clusters from the course being evaluated. Evaluate teacher and student materials in relation to these clusters. For context, read Criterion #4a in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** Clear Objectives/Easy to find - Objectives for each lesson - Standards/Clusters listed w/ page numbers TE 93-102, 435-440	✓ **Meets** ___ **Does Not Meet Insufficient Evidence**
Metric NN1H: **Materials include problems and activities that serve to connect two or more clusters in a domain, or two or more domains in a category, or two or more categories, in cases where these connections are natural and important.** **How to Find the Evidence:** In the course being evaluated, choose two or more clusters, two or more domains, or two or more categories for which connections are natural and important. Evaluate the units, chapters, and lessons that deal with the chosen topics, looking for problems and activities that serve to connect the chosen clusters or domains. NOTE: An example of evaluating this Criterion might be to look at whether materials include problems in which students analyze a situation by building a function, graphing it, and using it to create and solve an equation. For context, read Criterion #4b in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** © Page xxviii - xxxi CCSSM - Content pages - correlated to Alg I, Geom, Alg Pacing Guide xliv - xlv	✓ **Meets** ___ **Does Not Meet Insufficient Evidence**

Non-Negotiable 1: Focus and Coherence- Materials must focus coherently on the Widely Applicable Prerequisites in a way that is consistent with the progressions in the Standards.

Metric NN 1: If all metrics 1A–1H were rated as Meets, then rate Non-Negotiable 1 as Meets. If one or more metrics were rated as Does Not Meet/Insufficient Evidence, then rate Non-Negotiable 1 as Does Not Meet. Check the final rating.
Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)**

Before moving to Alignment Criterion 1, record the final Meets or Does Not Meet rating in the Evaluation Summary.

✓ **Meets**

Does Not Meet

Strengths/Weaknesses

- Layout - Design
  Easy to find things
- Text size appropriate
- Very well organized.

Now continue by evaluating Alignment Criterion 1 for Rigor and Balance.

Directions for Alignment Criterion 1

Rigor and Balance

Alignment Criterion 1:
Rigor and Balance- Materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.

The Standards set expectations for attention to all three aspects of rigor: conceptual understanding, procedural skill and fluency, and applications. Thus, materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.

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- Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf)
- Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_HS_Spring_2013_FINAL1.pdf)
- Widely Applicable Prerequisites for College and Careers (http://achievethecore.org/prerequisites)
- From the materials being evaluated: teacher guides, student texts and workbooks

Rating this Criterion:

Alignment Criterion 1 is rated as Meets or Does Not Meet.

To rate Alignment Criterion 1, first rate metrics 1A, 1B, and 1C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). For each metric, guiding questions are provided to aid in gathering evidence.

Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 1 if the materials rate 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as rigor and balance, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.

AC Metric 1A: **The materials support the development of students' conceptual understanding of key mathematical concepts, especially where called for in specific content Standards or cluster headings.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Widely Applicable Prerequisites that relate specifically to conceptual understanding to use throughout the questions associated with this metric. NOTE: Some examples of clusters or Standards that call for conceptual understanding include: N-RN.A.1, A-APR.B, A-REI.A.1, A-REI.D.10, A.REI.D.11, F.IF.A.1, F-LE.A.1, G.SRT.A.2, G-SRT.C.6, S-ID.C.7 For context, read Criterion #2a in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	• Choose a cluster/Standard from the Widely Applicable Prerequisites that is aligned to each aspect of rigor and use it to evaluate these metrics. It is most helpful if the same clusters and Standards are chosen for all of the programs being evaluated. (Guidance in choosing clusters/Standards is included in "How to Find the Evidence" below.)	**Use the questions for AC Metric 1A to evaluate Metric 1A. Record evidence for each question and rate Metric 1A.** ✓ **Meets (2)** **Partially Meets (1)** **Does Not Meet (0)**
Is conceptual understanding attended to thoroughly where the Standards set explicit expectations for understanding or interpreting? Evaluate lessons, chapter/unit assessments and homework assignments, paying attention to work aligned to Standards that explicitly call for understanding or interpreting.	**Evidence-** Layering of concepts is a focus - Pre / Post - Appropriate level problems - Students expected to explain reasoning 4.6, 5.1	
Do the materials feature high-quality conceptual problems and conceptual discussion questions? Evaluate lessons, chapter/unit assessments, and homework assignments. NOTE: Examples of conceptual problems might include such questions as "What is the maximum value of the function f(t) = 5 – t2 ?" or "Is √2 a polynomial? How about ½(x + √2)+ ½ (-x + √2)?"	**Evidence-** Example: End Behaviors p.159 - "Essential Questions" "Error Analysis" sections "How do You See it?"	
Do the materials feature opportunities to identify correspondences across mathematical representations? Evaluate lessons, chapter/unit assessments and homework assignments. NOTE: An example of evaluating this metric might include looking at whether materials support students in identifying correspondences among the expression that defines a function, the graph that shows the relationship, and the behavior of the phenomenon being modeled (if any).	**Evidence-** Ample Modeling - tables - Graphs - Diagrams - Writing equations "Error Analysis" Section p.177 Embedded throughout	

AC Metric 1B: **The materials are designed so that students attain the fluencies and procedural skills required by the Standards.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Widely Applicable Prerequisites that relate specifically to fluency and procedural skill to use throughout the questions associated with this metric. NOTE: Some examples of Standards that call for procedural skill and fluency include: A-SSE.A.1b, A-SSE.2, A-APR.A.1, A-APR.C.6, F-BF.B.3, G-GPE.B.4, G-GPE.B.5, G-GPE.B.7, G-CO.A.1, G-SRT.B.5 For context, read Criterion #2b in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).		**Use the questions for AC Metric 1B to evaluate Metric 1B. Record evidence for each question and rate Metric 1B.** ✓ **Meets (2)** ____ **Partially Meets (1)** ____ **Does Not Meet (0)**
Is progress toward fluency and procedural skill interwoven with the student's developing conceptual understanding of the skills in question? Evaluate lessons, chapter/unit assessments, daily routines, and homework assignments for evidence that the development of fluency and procedural skill is supported by conceptual understanding.	**Evidence-** Exercise focus on both fluency ~~and~~ leading to deeper problems / Resources provide Extra - Student Journal P. 204	
Are purely procedural problems and exercises present that include cases in which opportunistic strategies are valuable and generic cases that require efficient and general procedures present? Evaluate lessons, chapter/unit assessments, daily routines, and homework assignments. NOTE: Problems in which opportunistic strategies are valuable might include such examples as solving x2 + 5 = 49 + 5 or (3x – 2)2 = 6x – 4. Generic cases that require efficient and general procedures might include such problems as solving c + 8 – c2 = 3(c – 1)2 – 5).	**Evidence-** Basic question leading to the deepest level of solving. Examples 4.3. 4.4, 4.7. 4.8	
AC Metric 1C: **The materials are designed so that teachers and students spend sufficient time working with engaging applications, without losing focus on the Widely Applicable Prerequisites.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Widely Applicable Prerequisites that relate specifically to application to use throughout the questions associated with this metric. NOTE: Some examples of clusters or Standards that call for application include: N-Q.A, A-SSE.B.3, A-REI.D.11, F-IF.B, F-IF.C.7, F-BF.A.1, G-SRT.C.8, S-ID.A.2, S-IC.A.1 For context, read Criterion #2c in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).		**Use the questions for AC Metric 1C to evaluate Metric 1C. Record evidence for each question and rate Metric 1C.** ✓ **Meets (2)** ____ **Partially Meets (1)** ____ **Does Not Meet (0)**
Are there single- and multi-step contextual problems, including non-routine problems, that develop the mathematics of the course, afford opportunities for practice, and engage students in problem solving? Do the problems attend thoroughly to those places in the content Standards where expectations for multi-step and real-world problems are explicit? Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** Every Section Lauries Notes Explorations Real-Life Applications Problem Solving	

Do application problems particularly stress applying the Widely Applicable Prerequisites? Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** Exploration Real-life	
Are there ample opportunities for students to engage with modeling problems? Do materials require students to use both individual parts of the modeling cycle as well as the full modeling cycle? Read the pages on High School—Modeling in the Standards for Mathematics (pp. 72 and 73). Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** Examples Modeling: 4.7, 4.8, 6.1	

Alignment Criterion 1: Materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.

AC 1: Materials must earn at least 5 of 6 points to meet this Alignment Criterion. If materials earn less than 5 points, the Criterion has not been met. Check the final rating.
Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)**

Before moving to Alignment Criterion 2, record the final Meets or Does Not Meet rating in the Evaluation Summary.

✓ **Meets** 6/6

____ **Does Not Meet**

Strengths/Weaknesses:

Covers content well.

Alignment Criterion 2: **Standards for Mathematical Practice- Materials must demonstrate authentic connections between content Standards and practice Standards.** The Standards require that designers of instructional materials connect the mathematical practices to mathematical content in instruction. Thus, materials must demonstrate authentic connections between content Standards and practice Standards.	The Standards require that designers of instructional materials connect the mathematical practices to mathematical content in instruction. Thus, materials must demonstrate authentic connections between content Standards and practice Standards. **Required Materials:** • Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_HS_Spring_2013_FINAL1.pdf) • Widely Applicable Prerequisites for College and Careers (http://achievethecore.org/prerequisites) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion:** Alignment Criterion 2 is rated as Meets or Does Not Meet. To rate Alignment Criterion 2, first rate metrics 2A, 2B, and 2C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). For each metric, guiding questions are provided to aid in gathering evidence. Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 2 if the materials rate 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as mathematical practices, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.

AC Metric 2A: **Materials address the practice Standards in such a way as to enrich the Widely Applicable Prerequisites; practices strengthen the focus of the course instead of detracting from it, in both teacher and student materials.** **How to Find the Evidence:** Familiarize yourself with the Widely Applicable Prerequisites. Evaluate teacher and student materials for evidence that the mathematical practices support and connect to the focus of the course. NOTE: An example of evaluating this Criterion might include looking at whether materials use regularity in repeated reasoning to illuminate formal algebra as well as functions, particularly recursive definitions of functions. For context, read Criterion #6 in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** Laurie's Notes Math Practices Each Section Noted: Essential Question Making Arguments Analyze Work Constructing Viable Arguments. Chapter 4	✓ Meets (2) ____Partially Meets (1) ____Does Not Meet (0)
AC Metric 2B: **Materials attend to the full meaning of each practice Standard.** **How to Find the Evidence:** For context, read Criterion #7 in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).		**Use the questions for AC Metric 2B to evaluate Metric 2B. Record evidence for each question and rate Metric 2B.** ✓ Meets (2) ____Partially Meets (1) ____Does Not Meet (0)
Over the course of any given year of instruction, is each mathematical practice Standard meaningfully present in the form of assignments, activities, or problems that stimulate students to develop the habits of mind described in the practice Standard? Evaluate lessons, chapter/ unit assessments, and homework assignments for evidence of each mathematical practice being meaningfully present in instruction.	**Evidence-** -Ample opportunities for Math practices. -Cumulative Assessment each Chapter P. 232	
Are teacher-directed materials that explain the role of the practice Standards in the classroom and in students' mathematical development included? Are alignments to practice Standards accurate? Evaluate teacher materials, paying attention to explanations of the role of the practice Standards in the classroom and in students' mathematical development. Evaluate documents aligning lessons to practice Standards for accuracy. NOTE: Examples to look for when evaluating this metric might include the following: a highly scaffolded problem should not be aligned to MP.1; or a problem that directs a student to use a calculator should not be aligned to MP.5; or a problem about merely extending a pattern should not be aligned to MP.8.	**Evidence-** - Laurie's Notes - Recommendations -Spanish Glossary- - Online Resources P. 222	

AC Metric 2C: **Materials support the Standards' emphasis on mathematical reasoning.** **How to Find the Evidence:** For context, read Criterion #8 in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).		**Use the questions for AC Metric 2C to evaluate Metric 2C. Record evidence for each question and rate Metric 2C.** ✓ **Meets (2)** ___ **Partially Meets (1)** ___ **Does Not Meet (0)**
Do the materials support students in constructing viable arguments and critiquing the arguments of others concerning course-level mathematics that is detailed in the content Standards? Read Standard for Mathematical Practice 3. Evaluate teacher and student materials to ensure that students are given opportunities to reason with grade-level mathematics.	**Evidence-** "Mathematical Connections" p.74 Each section asks students to look for structure and make arguments. p.107, 109	
Do the materials support students in producing not only answers and solutions, but also, in a course-appropriate way, arguments, explanations, diagrams, mathematical models, etc., especially in the Widely Applicable Prerequisites? Familiarize yourself with the Widely Applicable Prerequisites. Evaluate teacher and student materials to understand the types of work students are expected to produce.	**Evidence-** "What you will Learn?" p.270 "Essential Questions" Modeling Problems 1.115 "How do You See It?" p.118	
Do materials explicitly attend to the specialized language of mathematics? Is the language of argument, problem solving, and mathematical explanations taught rather than assumed? Evaluate teacher and student materials, paying attention to how mathematical language is taught. NOTE: An example of evaluating this Criterion might include looking at whether students are supported in: basing arguments on definitions; using the method of providing a counter example; or recognizing that examples alone do not establish a general statement.	**Evidence-** Vocab: Core Concepts each Sections Vocab q's P.122	

Alignment Criterion 2: Materials must demonstrate authentic connections between content Standards and practice Standards.

AC 2: Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 points, the Criterion has not been met. Check the final rating.
Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewers only.)**

Before moving to Alignment Criterion 3, record the final Meets or Does Not Meet rating in the Evaluation Summary.

✓ **Meets** 6/6

___ **Does Not Meet**

Strengths/Weaknesses:

Alignment Criterion 3: **Access to the Standards for All Students- Materials must provide supports for English Language Learners and other special populations.** Because Standards are for all students, alignment requires thoughtful support to ensure all students are able to meet the Standards. Thus, aligned materials must provide supports for English Language Learners and other special populations.	Because Standards are for all students, alignment requires thoughtful support to ensure all students are able to meet the Standards. Thus, aligned materials must provide supports for English Language Learners and other special populations. **Required Materials:** • Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math Publishers_Criteria_HS_Spring_2013_FINAL1.pdf) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion:** Alignment Criterion 3 is rated as Meets or Does Not Meet. To rate Alignment Criterion 3, first rate metrics 3A, 3B, and 3C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 3 if the materials rate 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as support for special population, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.
AC Metric 3A: **Support for English Language Learners and other special populations is thoughtful and helps those students meet the same Standards as all other students. The language in which problems are posed is carefully considered.** **How to Find the Evidence:** Evaluate teacher and student materials, paying attention to supports offered for special populations.	**Evidence-** Laurie's Notes 298,299 Beginning of Each Chapter Laurie give guidance	✓ **Meets (2)** **Partially Meets (1)** **Does Not Meet (0)**
AC Metric 3B: **Materials provide appropriate level and type of scaffolding, differentiation, intervention, and support for a broad range of learners with gradual removal of supports, when needed, to allow students to demonstrate their mathematical understanding independently.** **How to Find the Evidence:** Evaluate teacher and student materials, paying attention to whether materials provide differentiation that will lead all learners to engage with on-grade-level content.	**Evidence-** Student Journal/online Supports P.308 Remediation/Enrichments Support each section Laurie's: Diff Instruction P.218	✓ **Meets (2)** **Partially Meets (1)** **Does Not Meet (0)**
AC Metric 3C: **Design of lessons recommends and facilitates a mix of instructional approaches for a variety of learners such as using multiple representations (e.g., including models, using a range of questions, checking for understanding, flexible grouping, pair-share).** **How to Find the Evidence:** Evaluate teacher materials, noting instructional approaches suggested for whole class and differentiated lessons and activities.	**Evidence-** P. 304 ELL questions/Guidance Each Section: Essential Questions x Pair/Groups/Indiv x Turn Talk/Think-Pair-Share P(97)	✓ **Meets (2)** **Partially Meets (1)** **Does Not Meet (0)**

Alignment Criterion 3: Materials must provide supports for English Language Learners and other special populations.	✓ Meets 6/6 ___ Does Not Meet
AC 3 Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 points, the Criterion has not been met. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewers only.)** **Move to the Evaluation Summary and record the final Meets or Does Not Meet rating .**	**Strengths/Weaknesses:** Several locations for supporting ELs RTI, Enrichment.

Once an evaluation for alignment to the Shifts and major features of the CCSS has been conducted using Sections 1-3, it's important to evaluate for overall quality and best practices. A starting list of Indicators of Quality are suggested below. States, districts and others evaluating instructional materials are encouraged to add to this list to ensure materials reflect local contexts. For background information on some of the Indicators of Quality in this section, refer to pp.16–18 in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).

Indicators of Quality	Evidence- Give specific examples.	Rating: (Reviewer only.)
1. Lessons are thoughtfully structured and support the teacher in leading the class through the learning paths at hand, with active participation by all students in their own learning and in the learning of their classmates.	**Evidence-** -ONLine support/Blended Learning opportunities - Laurie's Notes @ Each Section 3.1 TQ2-101	**(Reviewer only.)** ✓ **Yes** ___ **No**
2. The underlying design of the materials includes both problems and exercises. (In solving problems, students learn new mathematics, whereas in working exercises, students apply what they have already learned to build mastery.) Each problem or exercise has a purpose. **NOTE: This Criterion does not require that the problems and exercises be labeled as such.**	**Evidence-** - Exploration Opportunities p.101 - Apply - Analyze - Essential Questions ⇒ Practice Through Each Section	**(Reviewer only.)** ✓ **Yes** ___ **No**

3. Design of assignments is not haphazard: exercises are given in intentional sequences in order to strengthen students' mathematical understanding.	**Evidence-** p.94, p.99 - Leads with Vocab to Tie concepts together. - Ends w/ Vocab and concepts Clear Objectives	**(Reviewer only.)** ✓ Yes ____ No
4. There are separate teacher materials that support and reward teacher study including, but not limited to: discussion of the mathematics of the units and the mathematical point of each lesson as it relates to the organizing concepts of the unit, discussion on student ways of thinking and anticipating a variety of students responses, guidance on lesson flow, guidance on questions that prompt students thinking, and discussion of desired mathematical behaviors being elicited among students.	**Evidence-** Summary with Laurie's Notes p.98 - Vocab/concepts check + Monitoring Progress/Proficiency - Difficulty of Progression - CCSSM noted	**(Reviewer only.)** ✓ Yes ____ No
5. Manipulatives suggested in the materials are faithful representations of the mathematical objects they represent and are connected to written methods.	**Evidence-** * Alg. Tiles * Mirrors for Symmetry * Online resources/digital manipulatives	**(Reviewer only.)** ✓ Yes ____ No
6. Materials include a variety of curriculum-embedded assessments. Examples include pre-, formative, summative, and self-assessment resources.	**Evidence-** - Pre/Post Assessments - Cumulative Assessments - Self-Checks -	**(Reviewer only.)** ✓ Yes ____ No
7. Assessments contain aligned rubrics, answer keys, and scoring guidelines that provide sufficient guidance for interpreting student performance.	**Evidence-** - Rubrics Provided w/out Bias - Performance Tasks Rubrics - Alternative Assess have Rubrics	**(Reviewer only.)** ✓ Yes ____ No
8. Materials assess student proficiency using methods that are accessible and unbiased, including the use of course-level language in student prompts.	**Evidence-** P.41 Lexile Measurement - No Bias found ✓ - Course (Age) level ✓ - Assessments measure concepts ✓	**(Reviewer only.)** ✓ Yes ____ No

9. Materials are carefully evaluated by qualified individuals whose names are listed, in an effort to ensure freedom from mathematical errors and course-level appropriateness.	**Evidence-** Listed Qualified Reviewers at beginning of text.	**(Reviewer only.)** ✓ **Yes** ____ **No**
10. The visual design supports students in engaging thoughtfully with the subject. Navigation through the text is clear.	**Evidence-** Real photos rather than cartoons in some applied problems - Easy to read. - Appropriately sized - Visually appealing.	**(Reviewer only.)** ✓ **Yes** ____ **No**

Reviewer IMET Evaluation Summary **Title/Level:** Big Ideas Math Alg 2

Publisher: Big Ideas Learning, LLC **Copyright:** 201 **ISBN:** 978-1-60840-867-2 TE
840-5 SE

Reviewer ID # KB DG **Date Review Completed:** 3/19/16

Non-Negotiable Criteria-The Non-Negotiable must be met in order for the Non-Negotiable Alignment Criteria to be met overall.

Non- Negotiable 1: Focus and Coherence

✓ **Meets**

____ **Does Not Meet**

Non-Negotiable Overall:

✓ **Meets** _____ **Does Not Meet**

Alignment Criteria- Each Alignment Criterion must be met with a sufficient number of points in order for Alignment Criteria to be labeled as "Meets" overall. The more points the materials receive on the Alignment Criteria, the better they are aligned.

Alignment Criterion 1: Rigor and Balance	Alignment Criterion 2: Standards of Mathematical Practice	Alignment Criterion 3: Access to Standards for All Learners
Points: 6 **of 6 possible.** (Materials must receive at least 5 of 6 points to align.)	**Points:** 6 **of 6 possible.** (Materials must receive at least 5 of 6 points to align.)	**Points:** 6 **of 6 possible.** (Materials must receive at least 5 of 6 points to align.)
✓ **Meets**	✓ **Meets**	✓ **Meets**
_____ **Does Not Meet**	_____ **Does Not Meet**	_____ **Does Not Meet**

Alignment Criteria Overall:

✓ **Meets** _____ **Does Not Meet**

If the materials meet the Non-Negotiable Criterion and each Alignment Criterion, they are aligned to the Shifts and major features of the Co[illegible]standards. **Do the materials meet every Non-Negoti[illegible]e and Alignment Criterion?** ___✓___ **Yes** _____ **N[illegible]**

What are the specific areas of strength and weakness based on this evaluation? Publishers or others modifying or developing assessments can use this information to make improvements and/or to remedy gaps in the alignment of assessment materials.

This text is well organized, flows well.

Supports Differentiation ideas
ELL supports
Math Practices Supported

2015-16 Mathematics Interim Review Recommendation & Summary

Publisher Name:	Carnegie Learning
Title:	Carnegie Learning Algebra I
ISBN #	978-1-60972-152-7
Grade Level(s) or Course:	Algebra 1
Reviewer ID:	LTE KC

RECOMMENDED AS:

___X_____**Core Mathematics Program-** a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials. Substantial evidence clearly supports the designation of this program as Core.

_____**Other Mathematics Program-** a program that substantially, but partially, meets the *focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for* supplemental materials. Substantial evidence clearly supports the designation of this program as Other.

_____**Component Mathematics Program-** a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs. Substantial evidence clearly supports the designation of this program as Component.

_____**Intervention Program-** a program designed and intended to target and support students' specific needs. Substantial evidence clearly supports the designation of this program as Intervention.

_____ **Does not meet criteria** for recommendation as a Curricular Material or Online Resource for Mathematics.

EVIDENCE SUMMARY:

FOCUS-
The text met all of the widely applicable prerequisites and students spend more than 50% of their time on them. Students are provided with a sufficient amount of course level problems. The Teachers Implementation Guide shows in multiple places how and when each standard is covered within each module.

COHERENCE-
The difficulty level gradually increases within each lesson and from lesson to lesson in each chapter. Prior knowledge acquired in previous grades/courses is required and integrated throughout this text. The materials connect and tie clusters and domain together when it is natural and important.

RIGOR-
This course is rigorous for the 9th grade level, however if this curriculum was adopted starting at a middle school level then the level of rigor would be appropriate. Throughout the text there are high expectations for conceptual understanding, but the lessons do a quality job of gradually *increasing each lesson in difficulty to build the students conceptual knowledge. Contextual* problems require students to problem solve and think critically, but there are also a sufficient number of procedural problems to help build fluency and mathematical skills.

CONCEPTUAL UNDERSTANDING-
The authors provide enough examples within each section and numerous problems so that students can gain a deep conceptual understanding of the mathematics. Though there are many problems in a problem set, they are carefully crafted to address as many different cases as possible.

MATHEMATICAL PRACTICES-
Though the text does not specifically address the mathematical practices, it indirectly addresses all of the math practices throughout the text.

ACCESSIBILITY OF STANDARDS TO ALL STUDENTS-

The online resources make this curriculum accessible to students with a variety of levels of understanding. The text is intentionally written at a Lexile level to allow students with lower reading levels the ability to access the content.

OTHER:

Strengths:
– quality exercises
– covers Widely Applicable Prerequisites, standards, and mathematical practices
– requires the students to write about their thinking and discuss with other students
– extensive online resources

Weaknesses:
– lacks accommodations for English Language Learners and gifted students
– Mathematical Practices are not clearly marked in the teachers or students texts
– paperback, would have to be replaced often or lots of copies would need to be made.
– Multiple books for the students and teachers
– not a good text to picture ratio
– bland and boring in appearance
– There are no examples that are fully worked out so that a student who was absent from class could go back and try and learn the material on their own.

It is worth noting, that in order to adopt Carnegie Learning in high school it would be necessary to adopt the same curriculum in at least grades 6 – 8.

2015-1 nterim Mathematics Review

Mathematics Evaluation Tool – High School

Publisher: Carnegie Learning, Inc.

Title of Material: Carnegie Learning Algebra I

Author: Carnegie Learning, Inc.

ISBN #: 978-1-60972-152-7 **Copyright** 2013

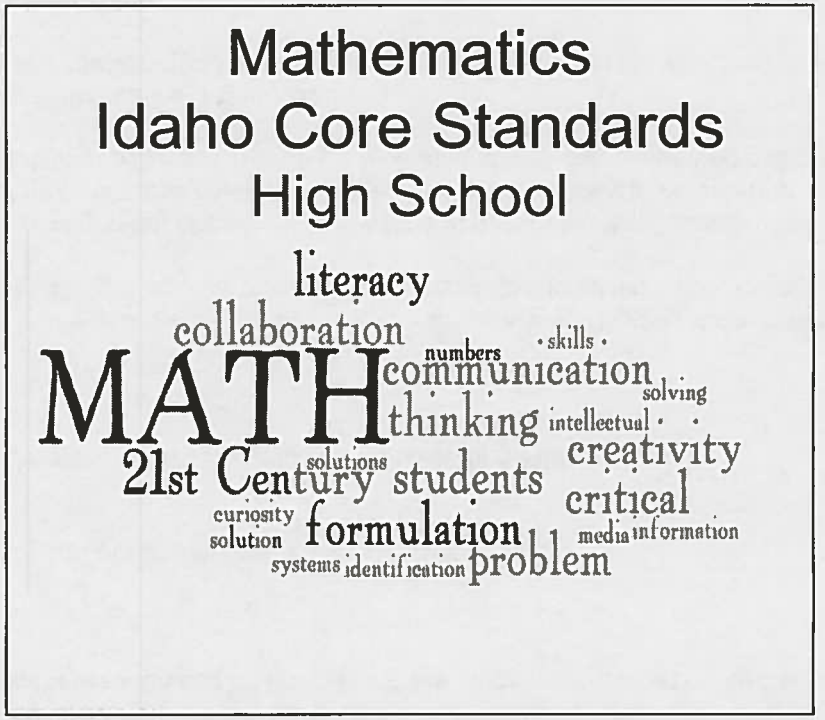
Reviewer ID: K.C. and LTE

Core Mathematics Program- a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Core.

Other Mathematics Program- a program that substantially, but partially, meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Other.

Component Mathematics Program- a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs.
Substantial evidence clearly supports the designation of this program as Component.

Intervention Program- a program designed and intended to target and support students' specific needs.
Substantial evidence clearly supports the designation of this program as Intervention.



- Evaluation Form adapted from Instructional Materials Evaluation Toolkit (IMET).

The IMET was developed by Student Achievement Partners. Educators may use or adapt. http://creativecommons.org/licenses/by/3.0/ Download this tool at http://achievethecore.org/IMET

2015-1 nterim Mathematics Review

Mathematics Evaluation Tool – High School

Publisher: Carnegie Learning Inc.

Title of Material: Carnegie Learning Algebra 1 3rd Edition

Author: Dengler, Finocchi, Hadley, and Metz

ISBN #: 9781609721527 **Copyright 2013**

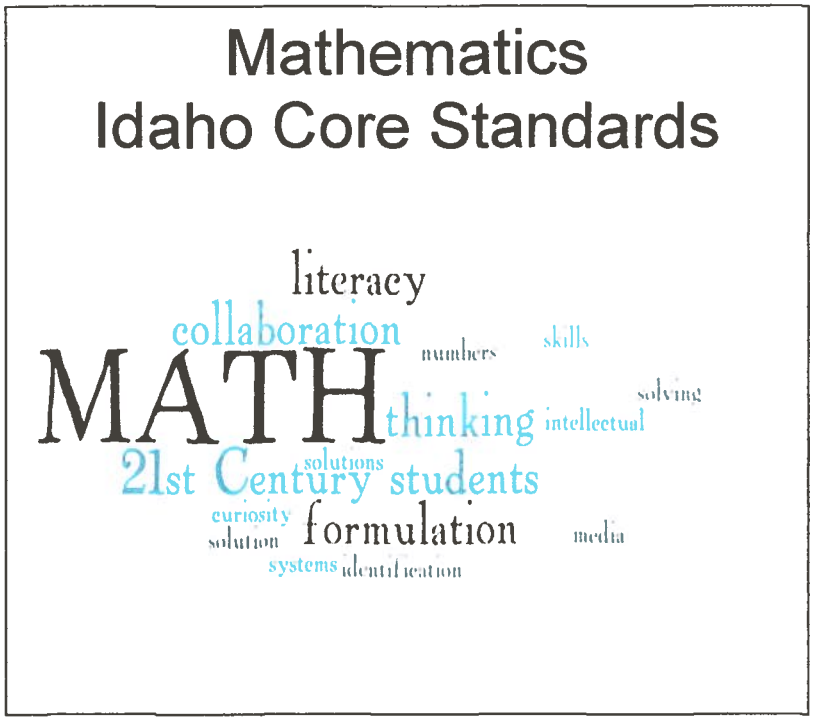
Reviewer ID: LTE KC

Core Mathematics Program- a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Core.

Other Mathematics Program- a program that substantially, but partially, meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Other.

Component Mathematics Program- a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs.
Substantial evidence clearly supports the designation of this program as Component.

Intervention Program- a program designed and intended to target and support students' specific needs.
Substantial evidence clearly supports the designation of this program as Intervention.



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Instructional Materials Evaluation Tool

Mathematics, High School

What Are the Purposes of the IMET?

This Math IMET is designed to help educators determine whether instructional materials are aligned to the Shifts and major features of the Common Core State Standards (CCSS). The substantial instructional Shifts (http://www.corestandards.org/other-resources/key-shifts-in-mathematics/) at the heart of the Common Core State Standards are:

- **Focus** strongly where the Standards focus
- **Coherence**: Think across grades and link to major topics within the grade
- **Rigor**: In major topics, pursue conceptual understanding, procedural skill and fluency, and application with equal intensity.

The IMET draws directly from the following documents:

- Common Core State Standards for Mathematics (www.corestandards.org/Math)
- Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013) (http://www. corestandards.org/wp-content/uploads/Math_Publishers_Criteria_ HS_Spring_2013_FINAL1.pdf)

When to use the IMET

1. Purchasing materials: Many factors go into local purchasing decisions. Alignment to the Standards is a critical factor to consider. This tool is designed to evaluate alignment of instructional materials to the Shifts and the major features of the CCSS. It also provides suggestions of additional indicators to consider in the materials evaluation and purchasing process
2. Evaluating materials currently in use: The IMET can be used to analyze the degree of alignment of existing materials and help to highlight specific, concrete flaws in alignment. Even where materials and tools currently in use fail to meet one or more of these criteria, the pattern of failure is likely to be informative. States and districts can use the evaluation to create a thoughtful plan to modify or combine existing resources in such a way that students' actual learning experiences approach the focus, coherence, and rigor of the Standards.
3. Developing programs: Those developing new programs can use this tool as guidance for creating aligned curricula.

Please note this tool was designed for evaluating comprehensive curricula (including any supplemental or ancillary materials), but it was not designed for the evaluation of standalone supplemental materials.

Who Uses the IMET?

Evaluating instructional materials requires both subject-matter and pedagogical expertise. Evaluators should be well versed in the Standards (www.corestandards.org/Math) for all grades in which materials are being evaluated. This includes understanding the Widely Applicable Prerequisites (www.achievethecore.org/prerequisites), how the content fits into the progressions in the Standards (www. achievethecore.org/progressions), and the expectations of the Standards with respect to conceptual understanding, procedural skill and fluency, and application. Evaluators also should be familiar with the substantial instructional Shifts (http://www.corestandards.org/other-resources/key-shifts-in-mathematics/) of Focus, Coherence and Rigor that are listed above.

Getting Started

Prior to Evaluation

Assemble all of the materials necessary for the evaluation. It is essential for evaluators to have materials for all grades covered by the program, as some criteria cannot be rated without having access to each grade. In addition, each evaluator should have a reference copy of the Common Core State Standards for Mathematics (CCSSM) and the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).

Before conducting the evaluation itself, it is important to develop a protocol for the evaluation process. The protocol should include having evaluators study the Publishers' Criteria and the IMET. It will also be helpful for evaluators to get a sense of each program overall before beginning the process. At a minimum, this would include reading the front matter of the text, looking at the table of contents and paging through multiple chapters.

Sections 1-3 below should be completed to produce a comprehensive picture of the strengths and weaknesses of the materials under evaluation. Information about areas in need of improvement or supplementation should be shared with internal and external stakeholders.

Navigating the Tool

Begin with Section 1: Non-Negotiable Alignment Criteria

- The Non-Negotiable Alignment Criteria must each be met in full for materials to be considered aligned to the Shifts and the major features of the Common Core State Standards. Each Non-Negotiable Alignment Criterion has one or more metrics associated with it; every one of these metrics must be met in order for the criterion as a whole to be met.

- Examine the relevant materials and use evidence to rate the materials against each criterion and its associated metric(s).

- Record and explain the evidence upon which the rating is based.

Continue to Section 2: Alignment Criteria

- The Alignment Criteria must each be met for materials to be considered aligned to the Shifts and the major features of the Common Core State Standards. Each Alignment Criterion has one or more metric associated with it; a specific number of these metrics must be met or partially met in order for the criterion as a whole to be met.

- Examine the materials in relation to these criteria, assigning each metric a point value. Rate the criterion as "Meets" or "Does Note Meet" based on the number of points assigned. The more points the materials receive on the alignment Criteria, the better they are aligned.

- Record and explain the evidence upon which the rating is based.

Proceed to Section 4: Indicators of Quality

- Indicators of Quality are important considerations that will help evaluators better understand the overall quality of instructional materials. These considerations are not criteria for alignment to the CCSS, but they provide valuable information about additional program characteristics. Evaluators may want to add their own indicators to the examples provided.

Directions for Non-Negotiable 1

Focus and Coherence

Criterion	Evidence- Give specific examples.	Rating: (Reviewer only.)
Non-Negotiable 1: Focus and Coherence- Materials must focus coherently on the Widely Applicable Prerequisites in a way that is consistent with the progressions in the Standards. Focus and coherence are the two major evidence-based design principles of the Common Core State Standards for Mathematics (CCSSM, p. 3). Focus is necessary in order to fulfill the ambitious promise the states have made to their students by adopting the Standards: greater achievement at the college and career-ready level; greater depth of understanding of mathematics; and a rich classroom environment in which reasoning, sense-making, applications, and a range of mathematical practices flourish. In high school courses, narrowing and deepening the curriculum creates a structure that ties topics together. Thus, materials must focus coherently on the Widely Applicable Prerequisites in a way that is consistent with the progressions in the Standards.	Focus and coherence are the two major evidence-based design principles of the Common Core State Standards for Mathematics (CCSSM, p. 3). Focus is necessary in order to fulfill the ambitious promise the states have made to their students by adopting the Standards: greater achievement at the college and career-ready level; greater depth of understanding of mathematics; and a rich classroom environment in which reasoning, sense-making, applications, and a range of mathematical practices flourish. In high school courses, narrowing and deepening the curriculum creates a structure that ties topics together. Thus, materials must focus coherently on the Widely Applicable Prerequisites in a way that is consistent with the progressions in the Standards. **Required Materials:** • Common Core State Standards for Mathematics (www.corestandards.org/wpcontent/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_HS_Spring_2013_FINAL1.pdf) • Widely Applicable Prerequisites for College and Careers (http://achievethecore.org/prerequisites) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion**: Non-Negotiable 1 is rated as Meets or Does Not Meet. To rate Non-Negotiable 1, first rate Metrics 1A–1H. Each of these eight metrics must be rated as Meets in order for Non-Negotiable 1 to be rated as Meets. Rate each metric 1A–1H as Meets or Does Not Meet/Insufficient Evidence. If the evidence examined shows that the Criterion is met, then mark the Criterion as Meets. If the evidence examined shows that the Criterion is not met—or if there is insufficient evidence to make a determination—then mark the Criterion as Does Not Meet/Insufficient Evidence. Support all ratings with evidence.

Metric NN1A: **In any single course, students spend at least 50% of their time on Widely Applicable Prerequisites.** **How to Find the Evidence:** Familiarize yourself with the Widely Applicable Prerequisites. Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, lessons, homework assignments, and assessments. (Evaluate both student and teacher materials.) Consider time spent on the Widely Applicable Prerequisites and judge qualitatively whether students and teachers using the materials as designed will devote the majority of time to the Widely Applicable Prerequisites For context, read Criterion #1 in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** Student work corresponds to standards required for Algebra 1. In the front of the Teachers Implementation Guide in the Modules and Standard section on pagesFM-18 and FM-19 all of the standards that are covered under each module are listed accordingly. Also, at the beginning of each chapter there is an overview section where it lists the standards that are covered in each lesson and On the introduction page to each lesson the standards that are covered in that lesson are listed out and described. Students spend the majority of their time on Widely Applicable Prerequisites. At least 50% of their time would be spent on these prerequisites.	**__X__Meets** **____Does Not Meet Insufficient Evidence**
Metric NN1B: **Student work in Geometry involves significant work with applications/modeling and problems that use algebra skills.** **How to Find the Evidence:** Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, lessons, homework assignments, and assessments. (Evaluate both student and teacher materials. NOTE: Since Geometry contains relatively fewer Widely Applicable Prerequisites, this Criterion is important to help foster students' college and career readiness. Problems that use algebra skills might include, for example, algebraic geometry problems in a coordinate setting, or problems of measurement involving unknown quantities.	**Evidence-** Because this is an Algebra I course, and it is generally taught before geometry it is not applicable to this course.	**____Meets** **____Does Not Meet Insufficient Evidence**

Metric NN1C: **There are problems at a level of sophistication appropriate to high school (beyond mere review of middle school topics) that involve the application of knowledge and skills from grades 6-8.** **How to Find the Evidence:** Evaluate lessons, chapter/unit assessments, and homework assignments. NOTE: Problems should include application of the following topics from grades 6-8: • Ratios and proportional relationships. • Percentage and unit conversions, e.g., in the context of complex measurement problems involving quantities with derived or compound units (such as mg/mL, kg/ m3, acre-feet, etc.). • Basic function concepts, e.g., by interpreting the features of a graph in the context of an applied problem. • Concepts and skills of geometric measurement e.g., when analyzing a diagram or schematic. • Concepts and skills of basic statistics and probability (see grades 6–8.SP) • Performing rational number arithmetic fluently. For context, read Table 1 on Page 8 of the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** The application of previously learned concepts from 6th through 8th grade appears throughout this text. For example, rational number operations, solving equations and graphing linear equations is used and then extended in this text. Another example, eighth grade students are expected to create and solve linear equations. In Chapter 6 of this text students are expected to create and solve a system of linear equations, which is an extension of solving and creating one linear equation.	**__X__Meets** **____Does Not Meet Insufficient Evidence**
Metric NN1D: **Materials base courses on the content specified in the Standards.** **How to Find the Evidence:** Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, and lessons in both student and teacher materials. For context, read Criterion #3a in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** An overview of how the standards are addressed in each lesson is provided at the beginning of the Teachers Implementation Guide in the "Modules and Standards" section. Also, each chapter overview provides a summary of which standards are covered in each lesson.	**__X__Meets** **____Does Not Meet Insufficient Evidence**

Metric NN1E: **Materials give all students extensive work with course-level problems.** **How to Find the Evidence:** Evaluate both student and teacher materials. If the materials provide resources for differentiated learning, consider whether lower-performing students have opportunities to engage with course-level problems. Also consider whether higher-performing students are given opportunities to learn current course-level content in greater depth. For context, read Criterion #3b in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** Students are provided with a sufficient amount of course – level problems. A resource is provided to the teachers if they would like more practice problems in the "Student Assignments" book and "Skilled Practice" books. Problems start slow and increased with difficulty in each lesson. In the Skills Practice book worksheets are provided with problems that are fill in the blank or matching to help lower performing students. The problems in the Skills Practice book are more procedural in nature and are intended to increase fluency so that students can access the real world/modeling problems. The answers to the odd problems are also provided in the student text.	**__X__Meets** **____Does Not Meet Insufficient Evidence**
Metric NN1F: **Materials relate course-level concepts explicitly to prior knowledge from earlier grades or courses. The materials are designed so that prior knowledge becomes reorganized and extended to accommodate the new knowledge.** **How to Find the Evidence:** Evaluate student and teacher materials, looking for problems that involve extending the knowledge learned in earlier grades and courses. NOTE: An example of evaluating this Criterion might be to look at whether materials connect the equation of a circle with the distance formula and the Pythagorean theorem. For context, read Criterion #3c in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** Prior knowledge acquired in previous grades or courses is required throughout this text. It might not be explicitly stated, however, it is apparent that prior skills are required. For example, in lesson 14.3 Imaginary and Complex Numbers, students recall the number sets they have learned and expand their knowledge to include imaginary and complex numbers.	**__X__Meets** **____Does Not Meet Insufficient Evidence**

Metric NN1G: **Materials include learning objectives that are visibly shaped by CCSSM cluster and domain headings.** **How to Find the Evidence:** Select several clusters from the course being evaluated. Evaluate teacher and student materials in relation to these clusters. For context, read Criterion #4a in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** The Teachers Implementation Guide shows in multiple places how and when the standards are covered in each module. Each chapter contains a Chapter Overview that includes where the CCSSM standards addressed. It is evident from this chart that multiple clusters and even domains are introduced and developed within a single lesson. Also, on the first page of each lesson the standards that are covered in that lesson are listed and described. Each lesson includes the formal language found in the CCSSM standards. The Learning Goals, which could also be called the objectives, use specific language from the standards.	**__X__Meets** **____Does Not Meet Insufficient Evidence**
Metric NN1H: **Materials include problems and activities that serve to connect two or more clusters in a domain, or two or more domains in a category, or two or more categories, in cases where these connections are natural and important.** **How to Find the Evidence:** In the course being evaluated, choose two or more clusters, two or more domains, or two or more categories for which connections are natural and important. Evaluate the units, chapters, and lessons that deal with the chosen topics, looking for problems and activities that serve to connect the chosen clusters or domains. NOTE: An example of evaluating this Criterion might be to look at whether materials include problems in which students analyze a situation by building a function, graphing it, and using it to create and solve an equation. For context, read Criterion #4b in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** The materials connect and tie clusters within domains together when it is natural and important. For example, in lesson 2.6, within the domain A-CED creating equations clusters 2 and 3 are related and connected as well as domain N-Q and clusters 1 and 2.	**__X__Meets** **____Does Not Meet Insufficient Evidence**

Non-Negotiable 1: Focus and Coherence- Materials must focus coherently on the Widely Applicable Prerequisites in a way that is consistent with the progressions in the Standards.

Metric NN 1: If all metrics 1A–1H were rated as Meets, then rate Non-Negotiable 1 as Meets. If one or more metrics were rated as Does Not Meet/Insufficient Evidence, then rate Non-Negotiable 1 as Does Not Meet. Check the final rating.
Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)**

Before moving to Alignment Criterion 1, record the final Meets or Does Not Meet rating in the Evaluation Summary.

__X__Meets

____Does Not Meet

Strengths/Weaknesses

Strengths, fully addresses all standards and spans at least more than 50% of the time on the Widely Applicable Prerequisites.

Weaknesses, not a lot of resources for lower achieving students.

Now continue by evaluating Alignment Criterion 1 for Rigor and Balance.

Directions for Alignment Criterion 1

Rigor and Balance

Alignment Criterion 1:
Rigor and Balance- Materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.

The Standards set expectations for attention to all three aspects of rigor: conceptual understanding, procedural skill and fluency, and applications. Thus, materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.

The Standards set expectations for attention to all three aspects of rigor: conceptual understanding, procedural skill and fluency, and applications. Thus, materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.

- Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf)
- Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_HS_Spring_2013_FINAL1.pdf)
- Widely Applicable Prerequisites for College and Careers (http://achievethecore.org/prerequisites)
- From the materials being evaluated: teacher guides, student texts and workbooks

Rating this Criterion:

Alignment Criterion 1 is rated as Meets or Does Not Meet.

To rate Alignment Criterion 1, first rate metrics 1A, 1B, and 1C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). For each metric, guiding questions are provided to aid in gathering evidence.
Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 1 if the materials rate 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as rigor and balance, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.

AC Metric 1A: **The materials support the development of students' conceptual understanding of key mathematical concepts, especially where called for in specific content Standards or cluster headings.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Widely Applicable Prerequisites that relate specifically to conceptual understanding to use throughout the questions associated with this metric. NOTE: Some examples of clusters or Standards that call for conceptual understanding include: N-RN.A.1, A-APR.B, A-REI.A.1, A-REI.D.10, A.REI.D.11, F.IF.A.1, F-LE.A.1, G.SRT.A.2, G-SRT.C.6, S-ID.C.7 For context, read Criterion #2a in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	• Choose a cluster/Standard from the Widely Applicable Prerequisites that is aligned to each aspect of rigor and use it to evaluate these metrics. It is most helpful if the same clusters and Standards are chosen for all of the programs being evaluated. (Guidance in choosing clusters/Standards is included in "How to Find the Evidence" below.)	**Use the questions for AC Metric 1A to evaluate Metric 1A. Record evidence for each question and rate Metric 1A.** **_X___Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Is conceptual understanding attended to thoroughly where the Standards set explicit expectations for understanding or interpreting? Evaluate lessons, chapter/unit assessments and homework assignments, paying attention to work aligned to Standards that explicitly call for understanding or interpreting.	**Evidence-** Yes, when the standard has a conceptual component the text has exercises to cover it.	
Do the materials feature high-quality conceptual problems and conceptual discussion questions? Evaluate lessons, chapter/unit assessments, and homework assignments. NOTE: Examples of conceptual problems might include such questions as "What is the maximum value of the function $f(t) = 5 - t2$?" or "Is $\sqrt{2}$ a polynomial? How about $\frac{1}{2}(x + \sqrt{2}) + \frac{1}{2}(-x + \sqrt{2})$?"	**Evidence-** Yes, and the Teachers Implementation Guide in the margins there are Guiding Questions and discussion questions that pertain to the lesson.	
Do the materials feature opportunities to identify correspondences across mathematical representations? Evaluate lessons, chapter/unit assessments and homework assignments. NOTE: An example of evaluating this metric might include looking at whether materials support students in identifying correspondences among the expression that defines a function, the graph that shows the relationship, and the behavior of the phenomenon being modeled (if any).	**Evidence-** Yes, the lesson structure made by Carnegie supports conceptual understanding by requiring students to construct and interpret modules, use multiple representations, compare and contrast concepts, and explain their reasoning.	

AC Metric 1B: **The materials are designed so that students attain the fluencies and procedural skills required by the Standards.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Widely Applicable Prerequisites that relate specifically to fluency and procedural skill to use throughout the questions associated with this metric. NOTE: Some examples of Standards that call for procedural skill and fluency include: A-SSE.A.1b, A-SSE.2, A-APR.A.1, A-APR.C.6, F-BF.B.3, G-GPE.B.4, G-GPE.B.5, G-GPE.B.7, G-CO.A.1, G-SRT.B.5 For context, read Criterion #2b in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).		**Use the questions for AC Metric 1B to evaluate Metric 1B. Record evidence for each question and rate Metric.** **__X__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Is progress toward fluency and procedural skill interwoven with the student's developing conceptual understanding of the skills in question? Evaluate lessons, chapter/unit assessments, daily routines, and homework assignments for evidence that the development of fluency and procedural skill is supported by conceptual understanding.	**Evidence-** This text focuses on fluency and procedural skill when it is required by the CCSSM. The lessons provide the students with the opportunity to slowly build their skills, and then the Skills Practice Worksheets provide more repetition and allow students to practice and improve on procedural skill and fluency.	
Are purely procedural problems and exercises present that include cases in which opportunistic strategies are valuable and generic cases that require efficient and general procedures present? Evaluate lessons, chapter/unit assessments, daily routines, and homework assignments. NOTE: Problems in which opportunistic strategies are valuable might include such examples as solving x2 + 5 = 49 + 5 or (3x – 2)2 = 6x – 4. Generic cases that require efficient and general procedures might include such problems as solving c + 8 – c2 = 3(c – 1)2 – 5).	**Evidence-** Yes the standards that are specifically procedural are covered throughout the text in procedural problems. Example: A-REI.3 - Solve equations and inequalities in one variable can be found on pages 126 to 127 in exercises 2b 3b. Example: A-CED.1 – Create equations and inequalities in one variable can be found on pages 126 and 127 in exercises 1, 2a, and 3a.	
AC Metric 1C: **The materials are designed so that teachers and students spend sufficient time working with engaging applications, without losing focus on the Widely Applicable Prerequisites.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Widely Applicable Prerequisites that relate specifically to application to use throughout the questions associated with this metric. NOTE: Some examples of clusters or Standards that call for application include: N-Q.A, A-SSE.B.3, A-REI.D.11, F-IF.B, F-IF.C.7, F-BF.A.1, G-SRT.C.8, S-ID.A.2, S-IC.A.1 For context, read Criterion #2c in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).		**Use the questions for AC Metric 1C to evaluate Metric 1C. Record evidence for each question and rate Metric 1C.** **__ X__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**

Are there single- and multi-step contextual problems, including non-routine problems, that develop the mathematics of the course, afford opportunities for practice, and engage students in problem solving? Do the problems attend thoroughly to those places in the content Standards where expectations for multi-step and real-world problems are explicit? Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** Carnegie Algebra 1 does a quality job of integrating the use of real world scenarios in lessons to help students recognize and understand the relationship and connection between mass and the real world.	
Do application problems particularly stress applying the Widely Applicable Prerequisites? Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** Yes, materials attend thoroughly to the places in the standards were expectations for multistep and real-world problems are explicit. For an example see Lesson 2.1 Modeling Linear Situations.	
Are there ample opportunities for students to engage with modeling problems? Do materials require students to use both individual parts of the modeling cycle as well as the full modeling cycle? Read the pages on High School—Modeling in the Standards for Mathematics (pp. 72 and 73). Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** The lessons in the student text are structured to provide students with various opportunities to reason, model, and explain their thinking. For example in Chapter 12 students compare and contrast different ways to solve quadratic equations.	
Alignment Criterion 1: Materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations. **AC 1:** Materials must earn at least 5 of 6 points to meet this Alignment Criterion. If materials earn less than 5 points, the Criterion has not been met. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)** **Before moving to Alignment Criterion 2, record the final Meets or Does Not Meet rating in the Evaluation Summary.**	**__X__Meets** **____Does Not Meet** **Strengths/Weaknesses:** Strengths: the Student Assignments resource, the text contains lots of contextual problems throughout lessons, and the Student Skills Practice resource.	

Alignment Criterion 2: **Standards for Mathematical Practice- Materials must demonstrate authentic connections between content Standards and practice Standards.** The Standards require that designers of instructional materials connect the mathematical practices to mathematical content in instruction. Thus, materials must demonstrate authentic connections between content Standards and practice Standards.	The Standards require that designers of instructional materials connect the mathematical practices to mathematical content in instruction. Thus, materials must demonstrate authentic connections between content Standards and practice Standards. **Required Materials**: • Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_HS_Spring_2013_FINAL1.pdf) • Widely Applicable Prerequisites for College and Careers (http://achievethecore.org/prerequisites) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion:** Alignment Criterion 2 is rated Meets or Does Not Meet. To rate Alignment Criterion 2, first rate metrics 2A, 2B, and 2C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). For each metric, guiding questions are provided to aid in gathering evidence. Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 2 if the materials rate 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as mathematical practices, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.
AC Metric 2A: **Materials address the practice Standards in such a way as to enrich the Widely Applicable Prerequisites; practices strengthen the focus of the course instead of detracting from it, in both teacher and student materials.** **How to Find the Evidence:** Familiarize yourself with the Widely Applicable Prerequisites. Evaluate teacher and student materials for evidence that the mathematical practices support and connect to the focus of the course. NOTE: An example of evaluating this Criterion might include looking at whether materials use regularity in repeated reasoning to illuminate formal algebra as well as functions, particularly recursive definitions of functions. For context, read Criterion #6 in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** The mathematical practices are not explicitly marked throughout the text, however, each lesson provides opportunities for students to think critically, reason, and communicate their mathematical understanding. For example, in lesson 12.3 Mathematical Practice #1 is addressed because they present multiple ways to think about factoring: factoring with an area model, factoring by trial and error, factoring by using a multiplication table model, and factoring by listing the factors. This obviously enriches the Widely Applicable Prerequisite A-SSE.3.a which is factoring a quadratic expression.	**__X__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
AC Metric 2B: **Materials attend to the full meaning of each practice Standard.** **How to Find the Evidence:** For context, read Criterion #7 in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).		**Use the questions for AC Metric 2B to evaluate Metric 2B. Record evidence for each question and rate Metric 2B.** **_X___Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**

Over the course of any given year of instruction, is each mathematical practice Standard meaningfully present in the form of assignments, activities, or problems that stimulate students to develop the habits of mind described in the practice Standard? Evaluate lessons, chapter/ unit assessments, and homework assignments for evidence of each mathematical practice being meaningfully present in instruction.	**Evidence-** As previously noted there are many places in the book where exercises require students to try various methods to solve problems, verbalize thinking, use prior learning, solve everyday problems, use appropriate tools, check work, make predictions and explain how they got their answer. For example: MP 1 on page 400 MP 2 on page 78 MP 3 on page 224 MP 4 on page 368 MP 5 on page 145 MP 6 on page 308 MP 7 on page 384 MP 8 on page 284	
Are teacher-directed materials that explain the role of the practice Standards in the classroom and in students' mathematical development included? Are alignments to practice Standards accurate? Evaluate teacher materials, paying attention to explanations of the role of the practice Standards in the classroom and in students' mathematical development. Evaluate documents aligning lessons to practice Standards for accuracy. NOTE: Examples to look for when evaluating this metric might include the following: a highly scaffolded problem should not be aligned to MP.1; or a problem that directs a student to use a calculator should not be aligned to MP.5; or a problem about merely extending a pattern should not be aligned to MP.8.	**Evidence-** The Mathematical Practice Standards are not explicitly marked in the teacher or student materials. Additionally, a connection is not noted between the practice standards and the Widely Applicable Prerequisites.	
AC Metric 2C: **Materials support the Standards' emphasis on mathematical reasoning.** **How to Find the Evidence:** For context, read Criterion #8 in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).		**Use the questions for AC Metric 2C to evaluate Metric 2C. Record evidence for each question and rate Metric 2C.** **____Meets (2)** **_X___Partially Meets (1)**

Do the materials support students in constructing viable arguments and critiquing the arguments of others concerning course-level mathematics that is detailed in the content Standards? Read Standard for Mathematical Practice 3. Evaluate teacher and student materials to ensure that students are given opportunities to reason with grade-level mathematics.	**Evidence-** Yes, there are many exercises that require students to critique other students work and thinking. For example, on page 740 in exercise number 11 students look at the work of three other students and determine who is correct and explain why. They are also asked to make corrections to the two other students who were incorrect. This is a feature that is carried on throughout the student text.	____**Does Not Meet (**
Do the materials support students in producing not only answers and solutions, but also, in a course-appropriate way, arguments, explanations, diagrams, mathematical models, etc., especially in the Widely Applicable Prerequisites? Familiarize yourself with the Widely Applicable Prerequisites. Evaluate teacher and student materials to understand the types of work students are expected to produce.	**Evidence-** Yes, throughout the text, exercises require students to make arguments for or against the way a sample student completed the problem. For example see number six on page 753. Also, students are asked to explain their reasoning as evidenced by number 5 on page 756. They are also required to use diagrams and models to find solutions which can be seen on page 734 in problem 2.	
Do materials explicitly attend to the specialized language of mathematics? Is the language of argument, problem solving, and mathematical explanations taught rather than assumed? Evaluate teacher and student materials, paying attention to how mathematical language is taught. NOTE: An example of evaluating this Criterion might include looking at whether students are supported in: basing arguments on definitions; using the method of providing a counter example; or recognizing that examples alone do not establish a general statement.	**Evidence-** The language of mathematics is present throughout the text. Vocabulary and key mathematical terms are placed at the beginning of each chapter, are used throughout the trapped or, reviewed at the end of the chapter, and contained in a glossary. Students have many opportunities to develop and improve on their mathematical language.	

Alignment Criterion 2: Materials must demonstrate authentic connections between content Standards and practice Standards

AC 2: Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 points, the Criterion has not been met. Check the final rating.
Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewers only.)**

Before moving to Alignment Criterion 3, record the final Meets or Does Not Meet rating in the Evaluation Summary.

_X___Meets

____Does Not Meet

Strengths/Weaknesses:
Strengths: the exercises cover all of the Math Practice Standards, quality problems require explanations and various approaches
Weaknesses: the Math Practice Standards are not explicitly marked anywhere in the student or teacher resources.

Alignment Criterion 3:
Access to the Standards for All Students- Materials must provide supports for English Language Learners and other special populations.

Because Standards are for all students, alignment requires thoughtful support to ensure all students are able to meet the Standards. Thus, aligned materials must provide supports for English Language Learners and other special populations.

Because Standards are for all students, alignment requires thoughtful support to ensure all students are able to meet the Standards. Thus, aligned materials must provide supports for English Language Learners and other special populations.

Required Materials:

- Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf)
- Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math Publishers_Criteria_HS_Spring_2013_FINAL1.pdf)
- From the materials being evaluated: teacher guides, student texts and workbooks

Rating this Criterion:

Alignment Criterion 3 is rated as Meets or Does Not Meet.

To rate Alignment Criterion 3, first rate metrics 3A, 3B, and 3C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 3 if the materials rate 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as support for special population, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.

AC Metric 3A: **Support for English Language Learners and other special populations is thoughtful and helps those students meet the same Standards as all other students. The language in which problems are posed is carefully considered.** **How to Find the Evidence:** Evaluate teacher and student materials, paying attention to supports offered for special populations.	**Evidence-** The lessons in this text are scaffolded in a way to reach lower-level achieving students or ELL students. The text is intentionally written at a Lexile level below ninth grade so that all students can access the content. There are also online resources for teachers to help implement and adapt this text for English Language Learners. However, there really should be more support for English Language Learners, such as a Spanish glossary, Spanish version of the text or worksheets, or worked out explanations in Spanish.	____**Meets (2)** __X__**Partially Meets (1)** ____**Does Not Meet (0)**
AC Metric 3B: **Materials provide appropriate level and type of scaffolding, differentiation, intervention, and support for a broad range of learners with gradual removal of supports, when needed, to allow students to demonstrate their mathematical understanding independently.** **How to Find the Evidence:** Evaluate teacher and student materials, paying attention to whether materials provide differentiation that will lead all learners to engage with on-grade-level content.	**Evidence-** In the text there is good support when it comes to discussion questions and possible miss conceptions students might have. Also, suggestions for grouping students are provided when applicable. Support is provided to help teachers plan and differentiate lessons. Possible warm-up problems, assessments, and assignments are provided.	_X___**Meets (2)** ____**Partially Meets (1)** ____**Does Not Meet (0)**
AC Metric 3C: **Design of lessons recommends and facilitates a mix of instructional approaches for a variety of learners such as using multiple representations (e.g., including models, using a range of questions, checking for understanding, flexible grouping, pair-share).** **How to Find the Evidence:** Evaluate teacher materials, noting instructional approaches suggested for whole class and differentiated lessons and activities.	**Evidence-** Design of lessons are fluid and open for interpretation and integration by the teacher. Throughout the lesson there are suggested guiding questions, discussion questions, grouping techniques, talk the talk, and checks for understanding. These are features that can be found in every lesson.	__X__**Meets (2)** ____**Partially Meets (1)** ____**Does Not Meet (0)**

Alignment Criterion 3: Materials must provide supports for English Language Learners and other special populations. **AC 3** Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 points, the Criterion has not been met. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewers only.)** **Move to the Evaluation Summary and record the final Meets or Does Not Meet rating .**	**_X___Meets** **____Does Not Meet** **Strengths/Weaknesses:** Strengths: the resources in the Teacher Implementation Guide are extensive, in each lesson the suggestions for discussion questions and grouping techniques are helpful Weaknesses: accommodations for English Language Learners are needed

Once an evaluation for alignment to the Shifts and major features of the CCSS has been conducted using Sections 1-3, it's important to evaluate for overall quality and best practices. A starting list of Indicators of Quality are suggested below. States, districts and others evaluating instructional materials are encouraged to add to this list to ensure materials reflect local contexts. For background information on some of the Indicators of Quality in this section, refer to pp.16–18 in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).

Indicators of Quality	**Evidence- Give specific examples.**	**Rating: (Reviewer only.)**
1. Lessons are thoughtfully structured and support the teacher in leading the class through the learning paths at hand, with active participation by all students in their own learning and in the learning of their classmates.	**Evidence-** Lessons are very well structured and are scaffolded to aid students in gradually progressing through the concepts.	**(Reviewer only.)** **___X___ Yes** **_____ No**

2. The underlying design of the materials includes both problems and exercises. (In solving problems, students learn new mathematics, whereas in working exercises, students apply what they have already learned to build mastery.) Each problem or exercise has a purpose. **NOTE: This Criterion does not require that the problems and exercises be labeled as such.**	**Evidence-** There are problems and exercises throughout the student text and extra practice problems are provided in the Student Skills Practice and Student Assignments resources for teachers to assign.	**(Reviewer only.)** **___X___ Yes** **_____ No**
3. Design of assignments is not haphazard: exercises are given in intentional sequences in order to strengthen students' mathematical understanding.	**Evidence-** Assignments are organized and progress gradually in difficulty.	**(Reviewer only.)** **__X____ Yes** **_____ No**
4. There are separate teacher materials that support and reward teacher study including, but not limited to: discussion of the mathematics of the units and the mathematical point of each lesson as it relates to the organizing concepts of the unit, discussion on student ways of thinking and anticipating a variety of students responses, guidance on lesson flow, guidance on questions that prompt students thinking, and discussion of desired mathematical behaviors being elicited among students.	**Evidence-** The following resources are provided for teachers: Teachers Implementation Guide, Student Skills Practice workbook, Student Assignments workbook, and two volumes of Resources and Assessments.	**(Reviewer only.)** **__X____ Yes** **_____ No**
5. Manipulatives suggested in the materials are faithful representations of the mathematical objects they represent and are connected to written methods.	**Evidence-** When required manipulatives are suggested. For this course, the authors mainly suggest the use of a graphing calculator.	**(Reviewer only.)** **___X___ Yes** **_____ No**
6. Materials include a variety of curriculum-embedded assessments. Examples include pre-, formative, summative, and self-assessment resources.	**Evidence-** The Resources and Assessments books contain the following for each chapter: pretest, posttest, standardized practice test, mid chapter test, and end of chapter test. The student text serves as a formative assessment.	**(Reviewer only.)** **___X___ Yes** **_____ No**
7. Assessments contain aligned rubrics, answer keys, and scoring guidelines that provide sufficient guidance for interpreting student performance.	**Evidence-** Answer keys are provided in the resources, but the reviewers did not find any scoring guidelines or rubrics.	**(Reviewer only.)** **___X___ Yes** **_____ No**

8. Materials assess student proficiency using methods that are accessible and unbiased, including the use of course-level language in student prompts.	**Evidence-** Assessment problems are available that allow for multiple solution paths, and supporting a variety of learning styles.	**(Reviewer only.)** __X____ **Yes** _____ **No**
9. Materials are carefully evaluated by qualified individuals, whose names are listed, in an effort to ensure freedom from mathematical errors and course-level appropriateness.	**Evidence-** The Carnegie Learning materials include an acknowledgment page in the front of the teacher and student text. On that page they list eight individuals that comprise the development team.	**(Reviewer only.)** __X____ **Yes** _____ **No**
10. The visual design supports students in engaging thoughtfully with the subject. Navigation through the text is clear.	**Evidence-** All of the texts are soft cover. There are only two colors used black and the accent color and the paper is obviously recycled and kind of a tan color. There are not many pictures and the text seems to be a little bit boring. However, that is not as cluttered as a traditional textbook.	**(Reviewer only.)** _____ **Yes** __X____ **No**

Reviewer IMET Evaluation Summary **Title/Level: Carnegie Learning Algebra II**

Publisher: Carnegie Learning Copyright: 2013 ISBN: 9781609724184

Reviewer ID # Lennart Erickson III **Date Review Completed: February 27, 2016**

Non-Negotiable Criteria-The Non-Negotiable must be met in order for the Non-Negotiable Alignment Criteria to be met overall.

Non-Negotiable 1: Focus and Coherence

___X__ Meets

_____ Does Not Meet

Non-Negotiable Overall:

__X___ Meets _____ Does Not Meet

Alignment Criteria- Each Alignment Criterion must be met with a sufficient number of points in order for Alignment Criteria to be labeled as "Meets" overall. The more points the materials receive on the Alignment Criteria, the better they are aligned.

Alignment Criterion 1: Rigor and Balance	Alignment Criterion 2: Standards of Mathematical Practice	Alignment Criterion 3: Access to Standards for All Learners
Points: __6___ of 6 possible. (Materials must receive at least 5 of 6 points to align.)	**Points: ___5__ of 6 possible.** (Materials must receive at least 5 of 6 points to align.)	**Points: ___5__ of 6 possible.** (Materials must receive at least 5 of 6 points to align.)
____X___ Meets	**___X____ Meets**	**___X____ Meets**
_____ Does Not Meet	**_____ Does Not Meet**	**_____ Does Not Meet**

Alignment Criteria Overall:

___X__ Meets _____ Does Not Meet

If the materials meet the Non-Negotiable Criterion and each Alignment Criterion, they are aligned to the Shifts and major features of the Standards. **Do the materials meet every Non-Negotiable and Alignment Criterion? __X___ Yes _____**

What are the specific areas of strength and weakness based on this evaluation? Publishers or others modifying or developing assessments can use this information to make improvements and/or to remedy gaps in the alignment of assessment materials.

The strengths of the program are: the writing the students are asked to do as they reflect on, explain, and defend their thinking about the mathematical concepts, the systematic and intentional manner in which the concepts are scaffolded in each section as the concepts are introduced and developed.

One of the concerns that I have is the amount of professional development required for teachers to effectively teach the curriculum. This curriculum is radically different from a traditional textbook and will require to fundamentally alter their teaching practices.

Strengths:
– quality exercises
– covers Widely Applicable Prerequisites, standards, and mathematical practices
– requires the students to write about their thinking and discuss with other students
_ Extensive online resources

Weaknesses:
– lacks accommodations for English Language Learners and gifted students
– Mathematical Practices are not clearly marked in the teachers or students texts
– paperback, would have to be replaced often or lots of copies would need to be made.
– Multiple books for the students and teachers
– not a good text to picture ratio
– bland and boring in appearance
– There are no examples that are fully worked out so that a student who was absent from class could go back and try and learn the material on their own.

2015-16 Mathematics Interim Review Recommendation & Summary

Publisher Name:	Carnegie Learning ~~Geometry~~
Title:	Carnegie Learning Geometry
ISBN #	978-1-60972-216-6
Grade Level(s) or Course:	HS Geometry 9th or 10th
Reviewer ID:	MK & LTE

RECOMMENDED AS:

_✓_ **Core Mathematics Program-** a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials. Substantial evidence clearly supports the designation of this program as Core.

_____ **Other Mathematics Program-** a program that substantially, but partially, meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for supplemental materials. Substantial evidence clearly supports the designation of this program as Other.

_____ **Component Mathematics Program-** a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs. Substantial evidence clearly supports the designation of this program as Component.

_____ **Intervention Program-** a program designed and intended to target and support students' specific needs. Substantial evidence clearly supports the designation of this program as Intervention.

_____ **Does not meet criteria** for recommendation as a Curricular Material or Online Resource for Mathematics.

EVIDENCE SUMMARY:

FOCUS- Covers all geometry standards and 92% of WAAs

COHERENCE- Implementation of van Hiele theory supports natural flow of topics and conceptual development

RIGOR-
Scaffolded approach builds towards high-level investigations and discussions. Communication (writing and speaking) requires deeper reflection on mathematics.

CONCEPTUAL UNDERSTANDING-
Implementation of van Hiele theory
Communicating about the mathematics

MATHEMATICAL PRACTICES-
Good treatment in front matter for both teachers and students; could be more visible throughout.

ACCESSIBILITY OF STANDARDS TO ALL STUDENTS-
Intentional written at reading level (slightly below) to allow for consideration of content.

OTHER:
Strengths: Guided discussion
Lesson themes to motivate topics

Weakness: Support for differentiation could be more explicit

2015-1 nterim Mathematics Review

Mathematics Evaluation Tool – High School

Publisher: Carnegie Learning Inc.

Title of Material: Carnegie Learning Geometry

Author: Carnegie Learning Inc

ISBN #: 978-1-60972-216-6 **Copyright** 2013

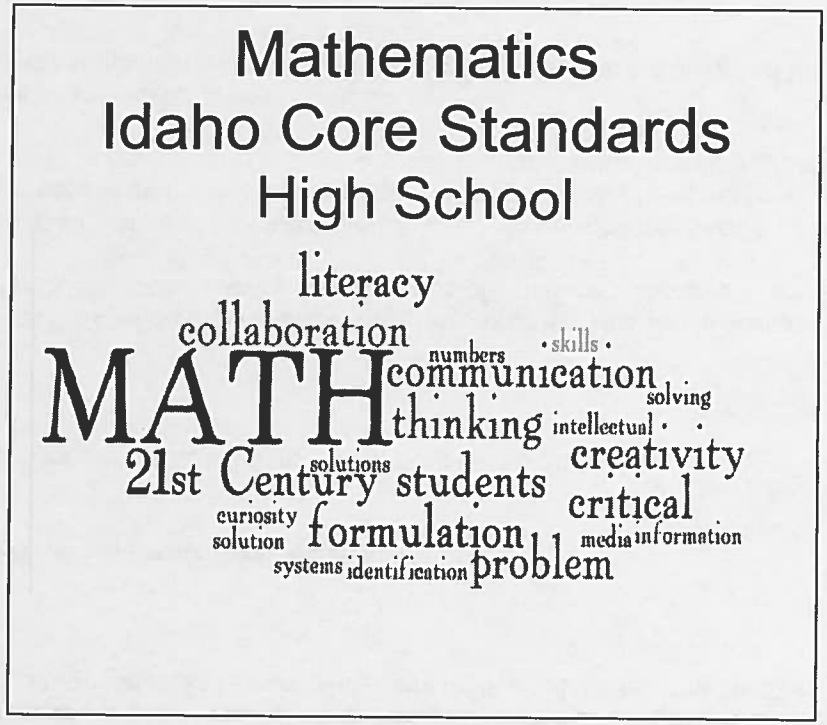
Reviewer ID: MK & LTE

Core Mathematics Program- a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Core.

Other Mathematics Program- a program that substantially, but partially, meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Other.

Component Mathematics Program- a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs.
Substantial evidence clearly supports the designation of this program as Component.

Intervention Program- a program designed and intended to target and support students' specific needs.
Substantial evidence clearly supports the designation of this program as Intervention.



- Evaluation Form adapted from Instructional Materials Evaluation Toolkit (IMET).

The IMET was developed by Student Achievement Partners. Educators may use or adapt. http://creativecommons.org/licenses/by/3.0/ Download this tool at http://achievethecore.org/IMET

Instructional Materials Evaluation Tool

Mathematics, High School

What Are the Purposes of the IMET?

This Math IMET is designed to help educators determine whether instructional materials are aligned to the Shifts and major features of the Common Core State Standards (CCSS). The substantial instructional Shifts (http://www.corestandards.org/other-resources/key-shifts-in-mathematics/) at the heart of the Common Core State Standards are:

- **Focus** strongly where the Standards focus
- **Coherence**: Think across grades and link to major topics within the grade
- **Rigor**: In major topics, pursue conceptual understanding, procedural skill and fluency, and application with equal intensity.

The IMET draws directly from the following documents:

- Common Core State Standards for Mathematics (www.corestandards.org/Math)
- Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013) (http://www. corestandards.org/wp-content/uploads/Math_Publishers_Criteria_ HS_Spring_2013_FINAL1.pdf)

When to use the IMET

1. Purchasing materials: Many factors go into local purchasing decisions. Alignment to the Standards is a critical factor to consider. This tool is designed to evaluate alignment of instructional materials to the Shifts and the major features of the CCSS. It also provides suggestions of additional indicators to consider in the materials evaluation and purchasing process
2. Evaluating materials currently in use: The IMET can be used to analyze the degree of alignment of existing materials and help to highlight specific, concrete flaws in alignment. Even where materials and tools currently in use fail to meet one or more of these criteria, the pattern of failure is likely to be informative. States and districts can use the evaluation to create a thoughtful plan to modify or combine existing resources in such a way that students' actual learning experiences approach the focus, coherence, and rigor of the Standards.
3. Developing programs: Those developing new programs can use this tool as guidance for creating aligned curricula.

Please note this tool was designed for evaluating comprehensive curricula (including any supplemental or ancillary materials), but it was not designed for the evaluation of standalone supplemental materials.

Who Uses the IMET?

Evaluating instructional materials requires both subject-matter and pedagogical expertise. Evaluators should be well versed in the Standards (www.corestandards.org/Math) for all grades in which materials are being evaluated. This includes understanding the Widely Applicable Prerequisites (www.achievethecore.org/prerequisites), how the content fits into the progressions in the Standards (www. achievethecore.org/progressions), and the expectations of the Standards with respect to conceptual understanding, procedural skill and fluency, and application. Evaluators also should be familiar with the substantial instructional Shifts (http://www.corestandards.org/other-resources/key-shifts-in-mathematics/) of Focus, Coherence and Rigor that are listed above.

Getting Started

Prior to Evaluation

Assemble all of the materials necessary for the evaluation. It is essential for evaluators to have materials for all grades covered by the program, as some criteria cannot be rated without having access to each grade. In addition, each evaluator should have a reference copy of the Common Core State Standards for Mathematics (CCSSM) and the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).

Before conducting the evaluation itself, it is important to develop a protocol for the evaluation process. The protocol should include having evaluators study the Publishers' Criteria and the IMET. It will also be helpful for evaluators to get a sense of each program overall before beginning the process. At a minimum, this would include reading the front matter of the text, looking at the table of contents and paging through multiple chapters.

Sections 1-3 below should be completed to produce a comprehensive picture of the strengths and weaknesses of the materials under evaluation. Information about areas in need of improvement or supplementation should be shared with internal and external stakeholders.

Navigating the Tool

Begin with Section 1: Non-Negotiable Alignment Criteria

- The Non-Negotiable Alignment Criteria must each be met in full for materials to be considered aligned to the Shifts and the major features of the Common Core State Standards. Each Non-Negotiable Alignment Criterion has one or more metrics associated with it; every one of these metrics must be met in order for the criterion as a whole to be met.

- Examine the relevant materials and use evidence to rate the materials against each criterion and its associated metric(s).

- Record and explain the evidence upon which the rating is based.

Continue to Section 2: Alignment Criteria

- The Alignment Criteria must each be met for materials to be considered aligned to the Shifts and the major features of the Common Core State Standards. Each Alignment Criterion has one or more metric associated with it; a specific number of these metrics must be met or partially met in order for the criterion as a whole to be met.

- Examine the materials in relation to these criteria, assigning each metric a point value. Rate the criterion as "Meets" or "Does Note Meet" based on the number of points assigned. The more points the materials receive on the alignment Criteria, the better they are aligned.

- Record and explain the evidence upon which the rating is based.

Proceed to Section 4: Indicators of Quality

- Indicators of Quality are important considerations that will help evaluators better understand the overall quality of instructional materials. These considerations are not criteria for alignment to the CCSS, but they provide valuable information about additional program characteristics. Evaluators may want to add their own indicators to the examples provided.

Directions for Non-Negotiable 1

Focus and Coherence

Criterion	Evidence- Give specific examples.	Rating: (Reviewer only.)
Non-Negotiable 1: Focus and Coherence- Materials must focus coherently on the Widely Applicable Prerequisites in a way that is consistent with the progressions in the Standards. Focus and coherence are the two major evidence-based design principles of the Common Core State Standards for Mathematics (CCSSM, p. 3). Focus is necessary in order to fulfill the ambitious promise the states have made to their students by adopting the Standards: greater achievement at the college and career-ready level; greater depth of understanding of mathematics; and a rich classroom environment in which reasoning, sense-making, applications, and a range of mathematical practices flourish. In high school courses, narrowing and deepening the curriculum creates a structure that ties topics together. Thus, materials must focus coherently on the Widely Applicable Prerequisites in a way that is consistent with the progressions in the Standards.	Focus and coherence are the two major evidence-based design principles of the Common Core State Standards for Mathematics (CCSSM, p. 3). Focus is necessary in order to fulfill the ambitious promise the states have made to their students by adopting the Standards: greater achievement at the college and career-ready level; greater depth of understanding of mathematics; and a rich classroom environment in which reasoning, sense-making, applications, and a range of mathematical practices flourish. In high school courses, narrowing and deepening the curriculum creates a structure that ties topics together. Thus, materials must focus coherently on the Widely Applicable Prerequisites in a way that is consistent with the progressions in the Standards. **Required Materials:** • Common Core State Standards for Mathematics (www.corestandards.org/wpcontent/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_HS_Spring_2013_FINAL1.pdf) • Widely Applicable Prerequisites for College and Careers (http://achievethecore.org/prerequisites) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion:** Non-Negotiable 1 is rated as Meets or Does Not Meet. To rate Non-Negotiable 1, first rate Metrics 1A–1H. Each of these eight metrics must be rated as Meets in order for Non-Negotiable 1 to be rated as Meets. Rate each metric 1A–1H as Meets or Does Not Meet/Insufficient Evidence. If the evidence examined shows that the Criterion is met, then mark the Criterion as Meets. If the evidence examined shows that the Criterion is not met—or if there is insufficient evidence to make a determination—then mark the Criterion as Does Not Meet/Insufficient Evidence. Support all ratings with evidence.

Metric NN1A: **In any single course, students spend at least 50% of their time on Widely Applicable Prerequisites.** **How to Find the Evidence:** Familiarize yourself with the Widely Applicable Prerequisites. Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, lessons, homework assignments, and assessments. (Evaluate both student and teacher materials.) Consider time spent on the Widely Applicable Prerequisites and judge qualitatively whether students and teachers using the materials as designed will devote the majority of time to the Widely Applicable Prerequisites For context, read Criterion #1 in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** 91.76% of lessons address WAPs Focus on developing geometric reasoning	✓ **Meets** ___ **Does Not Meet Insufficient Evidence**
Metric NN1B: **Student work in Geometry involves significant work with applications/modeling and problems that use algebra skills.** **How to Find the Evidence:** Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, lessons, homework assignments, and assessments. (Evaluate both student and teacher materials. NOTE: Since Geometry contains relatively fewer Widely Applicable Prerequisites, this Criterion is important to help foster students' college and career readiness. Problems that use algebra skills might include, for example, algebraic geometry problems in a coordinate setting, or problems of measurement involving unknown quantities.	**Evidence-** Apply algebraic reasoning to coordinate geometry problems Lawn Care Task in 12.4 good application of knowledge of circles	✓ **Meets** ___ **Does Not Meet Insufficient Evidence**

Metric NN1C: **There are problems at a level of sophistication appropriate to high school (beyond mere review of middle school topics) that involve the application of knowledge and skills from grades 6-8.** **How to Find the Evidence:** Evaluate lessons, chapter/unit assessments, and homework assignments. NOTE: Problems should include application of the following topics from grades 6-8: • Ratios and proportional relationships. • Percentage and unit conversions, e.g., in the context of complex measurement problems involving quantities with derived or compound units (such as mg/mL, kg/ m3, acre-feet, etc.). • Basic function concepts, e.g., by interpreting the features of a graph in the context of an applied problem. • Concepts and skills of geometric measurement e.g., when analyzing a diagram or schematic. • Concepts and skills of basic statistics and probability (see grades 6–8.SP) • Performing rational number arithmetic fluently. For context, read Table 1 on Page 8 of the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** Appropriate implementation of van Hiele theory of geometric thought For example, middle school focuses on measurement of geometric objects & this high school course moves into proof and justifications	✓ **Meets** ___ **Does Not Meet Insufficient Evidence**
Metric NN1D: **Materials base courses on the content specified in the Standards.** **How to Find the Evidence:** Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, and lessons in both student and teacher materials. For context, read Criterion #3a in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** Aligns well with geometry path recommended in App. A.	✓ **Meets** ___ **Does Not Meet Insufficient Evidence**
Metric NN1E: **Materials give all students extensive work with course-level problems.** **How to Find the Evidence:** Evaluate both student and teacher materials. If the materials provide resources for differentiated learning, consider whether lower-performing students have opportunities to engage with course-level problems. Also consider whether higher-performing students are given opportunities to learn current course-level content in greater depth. For context, read Criterion #3b in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** Sections are organized for guided learning. Material is scaffolded. Assignment book & skills practice book could allow for creation of balanced assignments Real-world contexts are used to motivate topics.	✓ **Meets** ___ **Does Not Meet Insufficient Evidence**

Metric NN1F: **Materia[illegible]late course-level concepts explicitly to prior knowledge from earlier grades or courses. The materials are designed so that prior knowledge becomes reorganized and extended to accommodate the new knowledge.** **How to Find the Evidence:** Evaluate student and teacher materials, looking for problems that involve extending the knowledge learned in earlier grades and courses. NOTE: An example of evaluating this Criterion might be to look at whether materials connect the equation of a circle with the distance formula and the Pythagorean theorem. For context, read Criterion #3c in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** Pre-assessments and warm-ups address this somewhat. Vertical progression could be more explicit. "Crew" tips do prompt recall of previous knowledge – in brief way.	✓ **Meets** **___Does Not Meet Insufficient Evidence**
Metric NN1G: **Materials include learning objectives that are visibly shaped by CCSSM cluster and domain headings.** **How to Find the Evidence:** Select several clusters from the course being evaluated. Evaluate teacher and student materials in relation to these clusters. For context, read Criterion #4a in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** Language of goals is consistent with language in standards. Indicated at beginning of each Chapter. (Ch 3 as example)	✓ **Meets** **___Does Not Meet Insufficient Evidence**
Metric NN1H: **Materials include problems and activities that serve to connect two or more clusters in a domain, or two or more domains in a category, or two or more categories, in cases where these connections are natural and important.** **How to Find the Evidence:** In the course being evaluated, choose two or more clusters, two or more domains, or two or more categories for which connections are natural and important. Evaluate the units, chapters, and lessons that deal with the chosen topics, looking for problems and activities that serve to connect the chosen clusters or domains. NOTE: An example of evaluating this Criterion might be to look at whether materials include problems in which students analyze a situation by building a function, graphing it, and using it to create and solve an equation. For context, read Criterion #4b in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** Example: Ch 3 Alignment Chart lesson 3.1 addresses standards from 3 clusters. Connections with algebra through coordinate geometry and some use of expressions.	✓ **Meets** **___Does Not Meet Insufficient Evidence**

Non-Negotiable 1: Focus and Coherence- Materials must focus coherently on the Widely Applicable Prerequisites in a way that is consistent with the progressions in the Standards.

Metric NN 1: If all metrics 1A–1H were rated as Meets, then rate Non-Negotiable 1 as Meets. If one or more metrics were rated as Does Not Meet/Insufficient Evidence, then rate Non-Negotiable 1 as Does Not Meet. Check the final rating.
Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)**

build step-by-step to conceptual understanding

Before moving to Alignment Criterion 1, record the final Meets or Does Not Meet rating in the Evaluation Summary.

✓ **Meets**

Does Not Meet

Strengths/Weaknesses

Strengths
- guided discussion
- instructional focus
- appropriate attention to WAPs
- Cognitive Tutor online flows well

Weakness:

Now continue by evaluating Alignment Criterion 1 for Rigor and Balance.

Directions for Alignment Criterion 1

Rigor and Balance

Alignment Criterion 1:
Rigor and Balance- Materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.

The Standards set expectations for attention to all three aspects of rigor: conceptual understanding, procedural skill and fluency, and applications. Thus, materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.

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- Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf)
- Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_HS_Spring_2013_FINAL1.pdf)
- Widely Applicable Prerequisites for College and Careers (http://achievethecore.org/prerequisites)
- From the materials being evaluated: teacher guides, student texts and workbooks

Rating this Criterion:

Alignment Criterion 1 is rated as Meets or Does Not Meet.

To rate Alignment Criterion 1, first rate metrics 1A, 1B, and 1C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). For each metric, guiding questions are provided to aid in gathering evidence.
Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 1 if the materials rate 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as rigor and balance, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.

AC Metric 1A: **The materials support the development of students' conceptual understanding of key mathematical concepts, especially where called for in specific content Standards or cluster headings.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Widely Applicable Prerequisites that relate specifically to conceptual understanding to use throughout the questions associated with this metric. NOTE: Some examples of clusters or Standards that call for conceptual understanding include: N-RN.A.1, A-APR.B, A-REI.A.1, A-REI.D.10, A.REI.D.11, F.IF.A.1, F-LE.A.1, G.SRT.A.2, G-SRT.C.6, S-ID.C.7 For context, read Criterion #2a in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	• Choose a cluster/Standard from the Widely Applicable Prerequisites that is aligned to each aspect of rigor and use it to evaluate these metrics. It is most helpful if the same clusters and Standards are chosen for all of the programs being evaluated. (Guidance in choosing clusters/Standards is included in "How to Find the Evidence" below.)	**Use the questions for AC Metric 1A to evaluate Metric 1A. Record evidence for each question and rate Metric** ✓ **____Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Is conceptual understanding attended to thoroughly where the Standards set explicit expectations for understanding or interpreting? Evaluate lessons, chapter/unit assessments and homework assignments, paying attention to work aligned to Standards that explicitly call for understanding or interpreting.	**Evidence-** Scaffolded approach to each section builds towards conceptual understanding Assignments & Skills Practice blend together	
Do the materials feature high-quality conceptual problems and conceptual discussion questions? Evaluate lessons, chapter/unit assessments, and homework assignments. NOTE: Examples of conceptual problems might include such questions as "What is the maximum value of the function f(t) = 5 – t2 ?" or "Is √2 a polynomial? How about ½(x + √2)+ ½ (-x + √2)?"	**Evidence-** Assignment manual focuses on Conceptual treatment of topics. Individual lessons designed to promote discussion.	
Do the materials feature opportunities to identify correspondences across mathematical representations? Evaluate lessons, chapter/unit assessments and homework assignments. NOTE: An example of evaluating this metric might include looking at whether materials support students in identifying correspondences among the expression that defines a function, the graph that shows the relationship, and the behavior of the phenomenon being modeled (if any).	**Evidence-** Uses pictures, graphs, equations where appropriate.	

AC Metric 1B: **The materials are designed so that students attain the fluencies and procedural skills required by the Standards.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Widely Applicable Prerequisites that relate specifically to fluency and procedural skill to use throughout the questions associated with this metric. NOTE: Some examples of Standards that call for procedural skill and fluency include: A-SSE.A.1b, A-SSE.2, A-APR.A.1, A-APR.C.6, F-BF.B.3, G-GPE.B.4, G-GPE.B.5, G-GPE.B.7, G-CO.A.1, G-SRT.B.5 For context, read Criterion #2b in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).		**Use the questions for AC Metric 1B to evaluate Metric 1B. Record evidence for each question and rate Metric 1B.** ✓ **Meets (2)** **Partially Meets (1)** **Does Not Meet (0)**
Is progress toward fluency and procedural skill interwoven with the student's developing conceptual understanding of the skills in question? Evaluate lessons, chapter/unit assessments, daily routines, and homework assignments for evidence that the development of fluency and procedural skill is supported by conceptual understanding.	**Evidence-** Skills Practice book; Cognitive Tutor Academic Glossary in front matter very good – could be more visible throughout. (pp 34-41)	
Are purely procedural problems and exercises present that include cases in which opportunistic strategies are valuable and generic cases that require efficient and general procedures present? Evaluate lessons, chapter/unit assessments, daily routines, and homework assignments. NOTE: Problems in which opportunistic strategies are valuable might include such examples as solving $x2 + 5 = 49 + 5$ or $(3x - 2)2 = 6x - 4$. Generic cases that require efficient and general procedures might include such problems as solving $c + 8 - c2 = 3(c - 1)2 - 5)$.	**Evidence-** Problem Types encourage variety of reasoning skills: Worked Examples, Thumbs Up/Down, Who's Correct	
AC Metric 1C: **The materials are designed so that teachers and students spend sufficient time working with engaging applications, without losing focus on the Widely Applicable Prerequisites.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Widely Applicable Prerequisites that relate specifically to application to use throughout the questions associated with this metric. NOTE: Some examples of clusters or Standards that call for application include: N-Q.A, A-SSE.B.3, A-REI.D.11, F-IF.B, F-IF.C.7, F-BF.A.1, G-SRT.C.8, S-ID.A.2, S-IC.A.1 For context, read Criterion #2c in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).		**Use the questions for AC Metric 1C to evaluate Metric 1C. Record evidence for each question and rate Metric 1C.** ✓ **Meets (2)** **Partially Meets (1)** **Does Not Meet (0)**
Are there single- and multi-step contextual problems, including non-routine problems, that develop the mathematics of the course, afford opportunities for practice, and engage students in problem solving? Do the problems attend thoroughly to those places in the content Standards where expectations for multi-step and real-world problems are explicit? Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** Most sections were multi-step contextual situations for guided discovery. Problem 3 in 4.6 as example of open ended multi-step task	

Do application problems particularly stress applying the Widely Applicable Prerequisites? Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** Example 9 on right triangle trigonometry	
Are there ample opportunities for students to engage with modeling problems? Do materials require students to use both individual parts of the modeling cycle as well as the full modeling cycle? Read the pages on High School—Modeling in the Standards for Mathematics (pp. 72 and 73). Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** Apply modeling cycle across topics	
Alignment Criterion 1: Materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations. **AC 1:** Materials must earn at least 5 of 6 points to meet this Alignment Criterion. If materials earn less than 5 points, the Criterion has not been met. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)** **Before moving to Alignment Criterion 2, record the final Meets or Does Not Meet rating in the Evaluation Summary.**		✓ **Meets** 6/6 **___Does Not Meet** **Strengths/Weaknesses:** Focus on discussion/ communication encourages conceptual development Balance btw conceptual & procedural possible →
Alignment Criterion 2: **Standards for Mathematical Practice- Materials must demonstrate authentic connections between content Standards and practice Standards.** The Standards require that designers of instructional materials connect the mathematical practices to mathematical content in instruction. Thus, materials must demonstrate authentic connections between content Standards and practice Standards.	The Standards require that designers of instructional materials connect the mathematical practices to mathematical content in instruction. Thus, materials must demonstrate authentic connections between content Standards and practice Standards. **Required Materials:** • Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_HS_Spring_2013_FINAL1.pdf) • Widely Applicable Prerequisites for College and Careers (http://achievethecore.org/prerequisites) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion:** Alignment Criterion 2 is rated as Meets or Does Not Meet. To rate Alignment Criterion 2, first rate metrics 2A, 2B, and 2C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). For each metric, guiding questions are provided to aid in gathering evidence. Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 2 if the materials rate 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as mathematical practices, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.

Put in two different boxes

AC Metric 2A: **Materials address the practice Standards in such a way as to enrich the Widely Applicable Prerequisites; practices strengthen the focus of the course instead of detracting from it, in both teacher and student materials.** **How to Find the Evidence:** Familiarize yourself with the Widely Applicable Prerequisites. Evaluate teacher and student materials for evidence that the mathematical practices support and connect to the focus of the course. NOTE: An example of evaluating this Criterion might include looking at whether materials use regularity in repeated reasoning to illuminate formal algebra as well as functions, particularly recursive definitions of functions. For context, read Criterion #6 in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** Overall focus is on developing geometric reasoning. Front matter explanation of SMPs good – and then embedded in problem types – but could be more visible at least in teacher edition.	✓ **Meets (2)** **Partially Meets (1)** **Does Not Meet (0)**
AC Metric 2B: **Materials attend to the full meaning of each practice Standard.** **How to Find the Evidence:** For context, read Criterion #7 in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).		**Use the questions for AC Metric 2B to evaluate Metric 2B. Record evidence for each question and rate Metric 2B.** ✓ **Meets (2)** **Partially Meets (1)** **Does Not Meet (0)**
Over the course of any given year of instruction, is each mathematical practice Standard meaningfully present in the form of assignments, activities, or problems that stimulate students to develop the habits of mind described in the practice Standard? Evaluate lessons, chapter/ unit assessments, and homework assignments for evidence of each mathematical practice being meaningfully present in instruction.	**Evidence-** Embedded in problem types – could draw teacher's attention throughout so that SMPs not forgotten.	
Are teacher-directed materials that explain the role of the practice Standards in the classroom and in students' mathematical development included? Are alignments to practice Standards accurate? Evaluate teacher materials, paying attention to explanations of the role of the practice Standards in the classroom and in students' mathematical development. Evaluate documents aligning lessons to practice Standards for accuracy. NOTE: Examples to look for when evaluating this metric might include the following: a highly scaffolded problem should not be aligned to MP.1; or a problem that directs a student to use a calculator should not be aligned to MP.5; or a problem about merely extending a pattern should not be aligned to MP.8.	**Evidence-**	

AC Metric 2C: **Materials support the Standards' emphasis on mathematical reasoning.** **How to Find the Evidence:** For context, read Criterion #8 in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).		**Use the questions for AC Metric 2C to evaluate Metric 2C. Record evidence for each question and rate Metric.** ✓ **Meets (2)** **Partially Meets (1)** **Does Not Meet (0)**
Do the materials support students in constructing viable arguments and critiquing the arguments of others concerning course-level mathematics that is detailed in the content Standards? Read Standard for Mathematical Practice 3. Evaluate teacher and student materials to ensure that students are given opportunities to reason with grade-level mathematics.	**Evidence-** Writing & critiquing proofs & arguments Thumbs Up/Down Who's Correct	
Do the materials support students in producing not only answers and solutions, but also, in a course-appropriate way, arguments, explanations, diagrams, mathematical models, etc., especially in the Widely Applicable Prerequisites? Familiarize yourself with the Widely Applicable Prerequisites. Evaluate teacher and student materials to understand the types of work students are expected to produce.	**Evidence-** Proofs, communication, discussion	
Do materials explicitly attend to the specialized language of mathematics? Is the language of argument, problem solving, and mathematical explanations taught rather than assumed? Evaluate teacher and student materials, paying attention to how mathematical language is taught. NOTE: An example of evaluating this Criterion might include looking at whether students are supported in: basing arguments on definitions; using the method of providing a counter example; or recognizing that examples alone do not establish a general statement.	**Evidence-** Vocabulary listed at beginning & bolded in text. More explicit visibly & more support (Teacher Tips) Academic Glossary good- but only in front matter?	
Alignment Criterion 2: Materials must demonstrate authentic connections between content Standards and practice Standards. **AC 2:** Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 points, the Criterion has not been met. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewers only.)** **Before moving to Alignment Criterion 3, record the final Meets or Does Not Meet rating in the Evaluation Summary.**		✓ **Meets** 6/6 **Does Not Meet** **Strengths/Weaknesses:** S: Development of reasoning skills Guiding Questions in margin notes W: Literacy helps could be more explicit

Alignment Criterion 3: **Access to the Standards for All Students- Materials must provide supports for English Language Learners and other special populations.** Because Standards are for all students, alignment requires thoughtful support to ensure all students are able to meet the Standards. Thus, aligned materials must provide supports for English Language Learners and other special populations.	Because Standards are for all students, alignment requires thoughtful support to ensure all students are able to meet the Standards. Thus, aligned materials must provide supports for English Language Learners and other special populations. **Required Materials:** • Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math Publishers_Criteria_HS_Spring_2013_FINAL1.pdf) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion:** Alignment Criterion 3 is rated as Meets or Does Not Meet. To rate Alignment Criterion 3, first rate metrics 3A, 3B, and 3C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 3 if the materials rate 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as support for special population, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.
AC Metric 3A: **Support for English Language Learners and other special populations is thoughtful and helps those students meet the same Standards as all other students. The language in which problems are posed is carefully considered.** **How to Find the Evidence:** Evaluate teacher and student materials, paying attention to supports offered for special populations.	**Evidence-** Design choice that guided discussion is good for all students Includes literacy strategies – could be more explict or visible. Other languages may be supported in online resources (hard to access)	____**Meets (2)** __✓__**Partially Meets (1)** ____**Does Not Meet (0)**
AC Metric 3B: **Materials provide appropriate level and type of scaffolding, differentiation, intervention, and support for a broad range of learners with gradual removal of supports, when needed, to allow students to demonstrate their mathematical understanding independently.** **How to Find the Evidence:** Evaluate teacher and student materials, paying attention to whether materials provide differentiation that will lead all learners to engage with on-grade-level content.	**Evidence-** Research-based scaffolded design encourages communication & flow of concepts. Activities & assignments can be adapted for individual needs. Cognitive Tutor not only skill practice	__✓__**Meets (2)** ____**Partially Meets (1)** ____**Does Not Meet (0)**
AC Metric 3C: **Design of lessons recommends and facilitates a mix of instructional approaches for a variety of learners such as using multiple representations (e.g., including models, using a range of questions, checking for understanding, flexible grouping, pair-share).** **How to Find the Evidence:** Evaluate teacher materials, noting instructional approaches suggested for whole class and differentiated lessons and activities.	**Evidence-** Variety built in; attention to sharing/communicating Teacher tips in margin notes Academic Glossary practices addressed throughout	__✓__**Meets (2)** ____**Partially Meets (1)** ____**Does Not Meet (0)** → grouping strategies for examp

Alignment Criterion 3: Materials must provide supports for English Language Learners and other special populations.	✓ Meets 5/4 ___ Does Not Meet
AC 3 Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 points, the Criterion has not been met. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewers only.)** **Move to the Evaluation Summary and record the final Meets or Does Not Meet rating .**	**Strengths/Weaknesses:** Overall approach consistent & research-based. Suggestions for adaptations could be more visible.

Once an evaluation for alignment to the Shifts and major features of the CCSS has been conducted using Sections 1-3, it's important to evaluate for overall quality and best practices. A starting list of Indicators of Quality are suggested below. States, districts and others evaluating instructional materials are encouraged to add to this list to ensure materials reflect local contexts. For background information on some of the Indicators of Quality in this section, refer to pp.16–18 in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).

Indicators of Quality	**Evidence- Give specific examples.**	**Rating: (Reviewer only.)**
1. Lessons are thoughtfully structured and support the teacher in leading the class through the learning paths at hand, with active participation by all students in their own learning and in the learning of their classmates.	**Evidence-** Guided discussion is dominant instructional method. Intends to involve all students	**(Reviewer only.)** ✓ **Yes** ____ **No**
2. The underlying design of the materials includes both problems and exercises. (In solving problems, students learn new mathematics, whereas in working exercises, students apply what they have already learned to build mastery.) Each problem or exercise has a purpose. **NOTE: This Criterion does not require that the problems and exercises be labeled as such.**	**Evidence-** Assignments and Skills Practice address both. Based on van Hiele theory of development of geometric thought	**(Reviewer only.)** ✓ **Yes** ____ **No**

3. Design of assignments is not haphazard: exercises are given in intentional sequences in order to strengthen students' mathematical understanding.	**Evidence-** Student texts flows into Assignment manual. Skills Practice manual available for further support.	**(Reviewer only.)** ✓ Yes ____ No
4. There are separate teacher materials that support and reward teacher study including, but not limited to: discussion of the mathematics of the units and the mathematical point of each lesson as it relates to the organizing concepts of the unit, discussion on student ways of thinking and anticipating a variety of students responses, guidance on lesson flow, guidance on questions that prompt students thinking, and discussion of desired mathematical behaviors being elicited among students.	**Evidence-** Essential Ideas & Vocabulary listed for each section but not explained. Standards alignment is clear. Margin notes (particularly Guiding Questions) support SMPs.	**(Reviewer only.)** ✓ Yes ____ No
5. Manipulatives suggested in the materials are faithful representations of the mathematical objects they represent and are connected to written methods.	**Evidence-** Construction tools Reference to other manipulatives less visible	**(Reviewer only.)** ✓ Yes ____ No
6. Materials include a variety of curriculum-embedded assessments. Examples include pre-, formative, summative, and self-assessment resources.	**Evidence-** Student text is essentially a formative assessment Summative assessments in teacher materials	**(Reviewer only.)** ✓ Yes ____ No
7. Assessments contain aligned rubrics, answer keys, and scoring guidelines that provide sufficient guidance for interpreting student performance.	**Evidence-** Answer keys available & accurate Some attention to formative in teacher margin notes No formal rubrics to assess discussion/Practice	**(Reviewer only.)** ✓ Yes ____ No
8. Materials assess student proficiency using methods that are accessible and unbiased, including the use of course-level language in student prompts.	**Evidence-** Reading level seems appropriate Assessments accessible	**(Reviewer only.)** ✓ Yes ____ No

9. Materials are carefully evaluated by qualified individuals whose names are listed, in an effort to ensure freedom from mathematical errors and course-level appropriateness.	**Evidence-** Curriculum Development Team identified Research studies shared (more on Algebra course)	**(Reviewer only.)** ✓ **Yes** ____ **No**
10. The visual design supports students in engaging thoughtfully with the subject. Navigation through the text is clear.	**Evidence-** Somewhat monocromatic - not busy so not overwhelming - but may be underwhelming for some Key terms could be made more visible	**(Reviewer only.)** ✓ **Yes** ____ **No**

Reviewer IMET Evaluation Summary **Title/Level:** Carnegie Learning Geometry

Publisher: Carnegie Learning **Copyright:** 2013 **ISBN:** 978-1-60972-216-6

Reviewer ID # MK & LTE **Date Review Completed:** 3/8/14

Non-Negotiable Criteria-The Non-Negotiable must be met in order for the Non-Negotiable Alignment Criteria to be met overall.

Non- Negotiable 1: Focus and Coherence

✓ **Meets**

____ **Does Not Meet**

Non-Negotiable Overall:

_____ **Meets** _____ **Does Not Meet**

Alignment Criteria- Each Alignment Criterion must be met with a sufficient number of points in order for Alignment Criteria to be labeled as "Meets" overall. The more points the materials receive on the Alignment Criteria, the better they are aligned.

Alignment Criterion 1: Rigor and Balance	Alignment Criterion 2: Standards of Mathematical Practice	Alignment Criterion 3: Access to Standards for All Learners
Points: 6 **of 6 possible.** **(Materials must receive at least 5 of 6 points to align.)** ✓ **Meets** _____ **Does Not Meet**	**Points:** 6 **of 6 possible.** **(Materials must receive at least 5 of 6 points to align.)** ✓ **Meets** _____ **Does Not Meet**	**Points:** 5 **of 6 possible.** **(Materials must receive at least 5 of 6 points to align.)** ✓ **Meets** _____ **Does Not Meet**

Alignment Criteria Overall:

✓ **Meets** _____ **Does Not Meet**

If the materials meet the Non-Negotiable Criterion and each Alignment Criterion, they are aligned to the Shifts and major features of the Co[illegible]tandards. **Do the materials meet every Non-Negoti[illegible] and Alignment Criterion?** ✓ **Yes** ____ **No**

What are the specific areas of strength and weakness based on this evaluation? Publishers or others modifying or developing assessments can use this information to make improvements and/or to remedy gaps in the alignment of assessment materials.

Guided discussion format & approach good

Consumable materials are appealing & not overwhelming

Lesson themes used to introduce section and carried through

Adaptable for all students through focus on communication

Weaknesses:

Specific helps for ELLs & other needs could be more explicit

Two distinct manuals for Assignments & Skills Practice could be seen as a weakness.

2015-16 Mathematics Interim Review Recommendation & Summary

Publisher Name:	Carnegie Learning
Title:	Carnegie Learning Algebra II
ISBN #	978-1-60972-418-4
Grade Level(s) or Course:	Algebra 2
Reviewer ID:	LTE KC

RECOMMENDED AS:

___X_____**Core Mathematics Program-** a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials. Substantial evidence clearly supports the designation of this program as Core.

_____**Other Mathematics Program-** a program that substantially, but partially, meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for supplemental materials. Substantial evidence clearly supports the designation of this program as Other.

_____**Component Mathematics Program-** a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs. Substantial evidence clearly supports the designation of this program as Component.

_____**Intervention Program-** a program designed and intended to target and support students' specific needs. Substantial evidence clearly supports the designation of this program as Intervention.

_____ **Does not meet criteria** for recommendation as a Curricular Material or Online Resource for Mathematics.

EVIDENCE SUMMARY:

FOCUS-
The text met all of the widely applicable prerequisites and students spend more than 50% of their time on them. Students are provided with a sufficient amount of course level problems. The Teachers Implementation Guide shows in multiple places how and when each standard is covered within each module.

COHERENCE-
The difficulty level gradually increases within each lesson and from lesson to lesson in each chapter. Prior knowledge acquired in previous grades/courses is required and integrated throughout this text. The materials connect and tie clusters and domain together when it is natural and important.

RIGOR-
This course is rigorous for the normal level of Algebra 2 students, however if this curriculum was adopted starting at a middle school level then the level of rigor would be appropriate. Throughout the text there are high expectations for conceptual understanding, but the lessons do a quality job of gradually increasing each lesson in difficulty to build the students conceptual knowledge. Contextual problems require students to problem solve and think critically, but there are also a sufficient number of procedural problems to help build fluency and mathematical skills.

CONCEPTUAL UNDERSTANDING-
The authors provide enough examples within each section and numerous problems so that students can gain a deep conceptual understanding of the mathematics. Though there are many problems in a problem set, they are carefully crafted to address as many different cases as possible.

MATHEMATICAL PRACTICES-
Though the text does not specifically address the mathematical practices, it indirectly addresses all of the math practices throughout the text.

ACCESSIBILITY OF STANDARDS TO ALL STUDENTS-

The online resources make this curriculum accessible to students with a variety of levels of understanding. The text is intentionally written at a Lexile level to allow students with lower reading levels the ability to access the content.

OTHER:

Strengths:
– quality exercises
– covers Widely Applicable Prerequisites, standards, and mathematical practices
– requires the students to write about their thinking and discuss with other students
- Extensive online resources

Weaknesses:
– lacks accommodations for English Language Learners and gifted students
– Mathematical Practices are not clearly marked in the teachers or students texts
– paperback, would have to be replaced often or lots of copies would need to be made.
– Multiple books for the students and teachers
– not a good text to picture ratio
– bland and boring in appearance
– There are no examples that are fully worked out so that a student who was absent from class could go back and try and learn the material on their own.

It is worth noting, that in order to adopt Carnegie Learning in high school it would be necessary to adopt the same curriculum in at least grades 6 – 8.

2015-1 nterim Mathematics Review

Mathematics Evaluation Tool – High School

Publisher: Carnegie Learning, Inc

Title of Material: Carnegie Learning Algebra 2

Author: Carnegie Learning

ISBN #: 978-1-60972-418-4 **Copyright** 2013

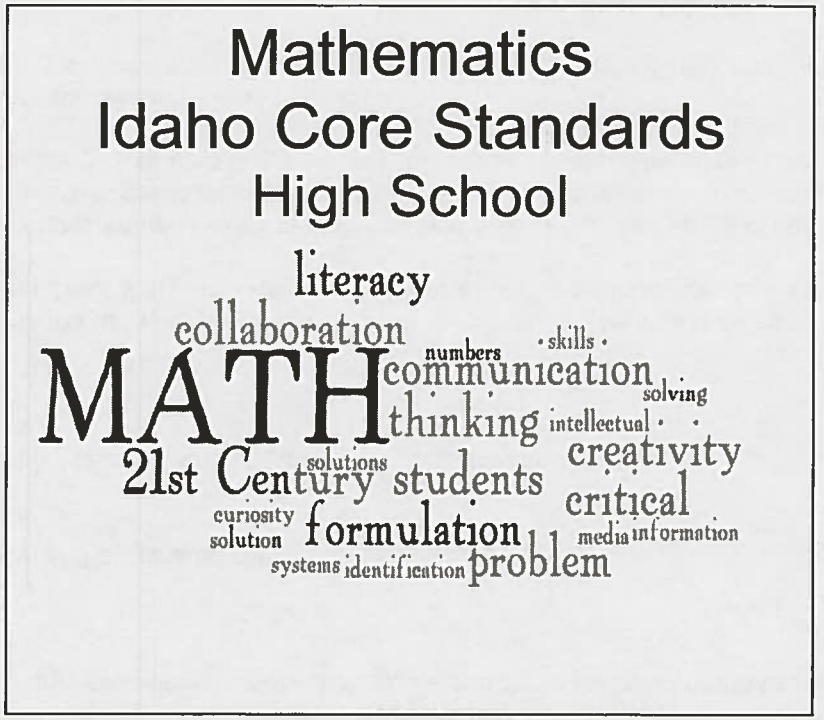
Reviewer ID: KC and LTE

Core Mathematics Program- a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Core.

Other Mathematics Program- a program that substantially, but partially, meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Other.

Component Mathematics Program- a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs.
Substantial evidence clearly supports the designation of this program as Component.

Intervention Program- a program designed and intended to target and support students' specific needs.
Substantial evidence clearly supports the designation of this program as Intervention.



- Evaluation Form adapted from Instructional Materials Evaluation Toolkit (IMET).

The IMET was developed by Student Achievement Partners. Educators may use or adapt. http://creativecommons.org/licenses/by/3.0/ Download this tool at http://achievethecore.org/IMET

2015-16 Interim Mathematics Review

Mathematics Evaluation Tool – High School

Publisher: Carnegie Learning Inc.

Title of Material: Carnegie Learning Algebra 2 3rd Edition

Author: Dengler, Finocchi, Hadley, and Metz

ISBN #: 9781609724184 **Copyright 2013**_____

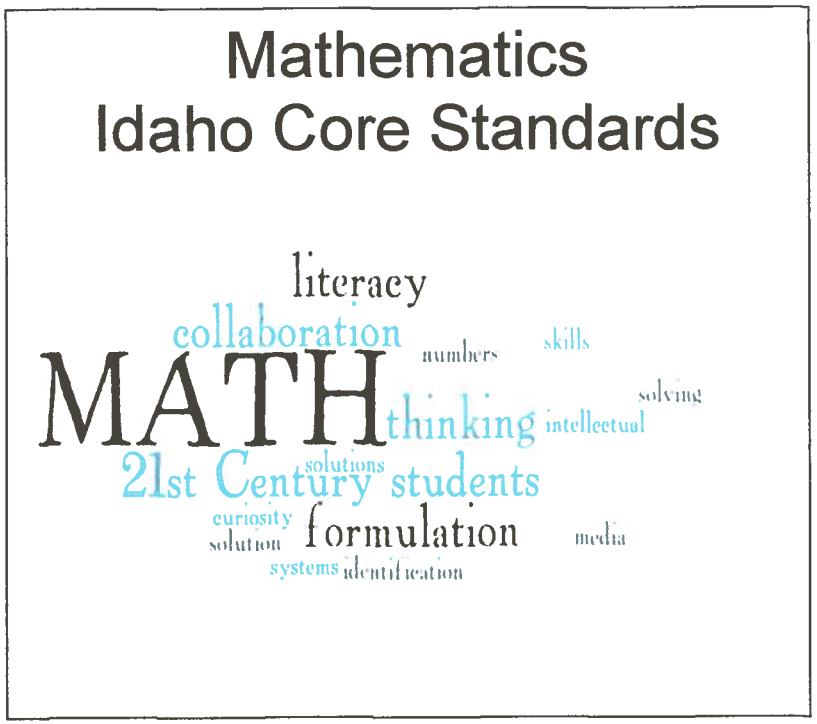
Reviewer ID: Lennart Erickson III

Core Mathematics Program- a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Core.

Other Mathematics Program- a program that substantially, but partially, meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Other.

Component Mathematics Program- a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs.
Substantial evidence clearly supports the designation of this program as Component.

Intervention Program- a program designed and intended to target and support students' specific needs.
Substantial evidence clearly supports the designation of this program as Intervention.



- Evaluation Form adapted from Instructional Materials Evaluation Toolkit (IMET).

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Instructional Materials Evaluation Tool

Mathematics, High School

What Are the Purposes of the IMET?

This Math IMET is designed to help educators determine whether instructional materials are aligned to the Shifts and major features of the Common Core State Standards (CCSS). The substantial instructional Shifts (http://www.corestandards.org/other-resources/key-shifts-in-mathematics/) at the heart of the Common Core State Standards are:

- **Focus** strongly where the Standards focus
- **Coherence**: Think across grades and link to major topics within the grade
- **Rigor**: In major topics, pursue conceptual understanding, procedural skill and fluency, and application with equal intensity.

The IMET draws directly from the following documents:

- Common Core State Standards for Mathematics (www.corestandards.org/Math)
- Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013) (http://www. corestandards.org/wp-content/uploads/Math_Publishers_Criteria_ HS_Spring_2013_FINAL1.pdf)

When to use the IMET

1. Purchasing materials: Many factors go into local purchasing decisions. Alignment to the Standards is a critical factor to consider. This tool is designed to evaluate alignment of instructional materials to the Shifts and the major features of the CCSS. It also provides suggestions of additional indicators to consider in the materials evaluation and purchasing process
2. Evaluating materials currently in use: The IMET can be used to analyze the degree of alignment of existing materials and help to highlight specific, concrete flaws in alignment. Even where materials and tools currently in use fail to meet one or more of these criteria, the pattern of failure is likely to be informative. States and districts can use the evaluation to create a thoughtful plan to modify or combine existing resources in such a way that students' actual learning experiences approach the focus, coherence, and rigor of the Standards.
3. Developing programs: Those developing new programs can use this tool as guidance for creating aligned curricula.

Please note this tool was designed for evaluating comprehensive curricula (including any supplemental or ancillary materials), but it was not designed for the evaluation of standalone supplemental materials.

Who Uses the IMET?

Evaluating instructional materials requires both subject-matter and pedagogical expertise. Evaluators should be well versed in the Standards (www.corestandards.org/Math) for all grades in which materials are being evaluated. This includes understanding the Widely Applicable Prerequisites (www.achievethecore.org/prerequisites), how the content fits into the progressions in the Standards (www. achievethecore.org/progressions), and the expectations of the Standards with respect to conceptual understanding, procedural skill and fluency, and application. Evaluators also should be familiar with the substantial instructional Shifts (http://www.corestandards.org/other-resources/key-shifts-in-mathematics/) of Focus, Coherence and Rigor that are listed above.

Getting Started

Prior to Evaluation

Assemble all of the materials necessary for the evaluation. It is essential for evaluators to have materials for all grades covered by the program, as some criteria cannot be rated without having access to each grade. In addition, each evaluator should have a reference copy of the Common Core State Standards for Mathematics (CCSSM) and the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).

Before conducting the evaluation itself, it is important to develop a protocol for the evaluation process. The protocol should include having evaluators study the Publishers' Criteria and the IMET. It will also be helpful for evaluators to get a sense of each program overall before beginning the process. At a minimum, this would include reading the front matter of the text, looking at the table of contents and paging through multiple chapters.

Sections 1-3 below should be completed to produce a comprehensive picture of the strengths and weaknesses of the materials under evaluation. Information about areas in need of improvement or supplementation should be shared with internal and external stakeholders.

Navigating the Tool

Begin with Section 1: Non-Negotiable Alignment Criteria

- The Non-Negotiable Alignment Criteria must each be met in full for materials to be considered aligned to the Shifts and the major features of the Common Core State Standards. Each Non-Negotiable Alignment Criterion has one or more metrics associated with it; every one of these metrics must be met in order for the criterion as a whole to be met.

- Examine the relevant materials and use evidence to rate the materials against each criterion and its associated metric(s).

- Record and explain the evidence upon which the rating is based.

Continue to Section 2: Alignment Criteria

- The Alignment Criteria must each be met for materials to be considered aligned to the Shifts and the major features of the Common Core State Standards. Each Alignment Criterion has one or more metric associated with it; a specific number of these metrics must be met or partially met in order for the criterion as a whole to be met.

- Examine the materials in relation to these criteria, assigning each metric a point value. Rate the criterion as "Meets" or "Does Note Meet" based on the number of points assigned. The more points the materials receive on the alignment Criteria, the better they are aligned.

- Record and explain the evidence upon which the rating is based.

Proceed to Section 4: Indicators of Quality

- Indicators of Quality are important considerations that will help evaluators better understand the overall quality of instructional materials. These considerations are not criteria for alignment to the CCSS, but they provide valuable information about additional program characteristics. Evaluators may want to add their own indicators to the examples provided.

Directions for Non-Negotiable 1

Focus and Coherence

Criterion	Evidence- Give specific examples.	Rating: (Reviewer only.)
Non-Negotiable 1: Focus and Coherence- Materials must focus coherently on the Widely Applicable Prerequisites in a way that is consistent with the progressions in the Standards. Focus and coherence are the two major evidence-based design principles of the Common Core State Standards for Mathematics (CCSSM, p. 3). Focus is necessary in order to fulfill the ambitious promise the states have made to their students by adopting the Standards: greater achievement at the college and career-ready level; greater depth of understanding of mathematics; and a rich classroom environment in which reasoning, sense-making, applications, and a range of mathematical practices flourish. In high school courses, narrowing and deepening the curriculum creates a structure that ties topics together. Thus, materials must focus coherently on the Widely Applicable Prerequisites in a way that is consistent with the progressions in the Standards.	Focus and coherence are the two major evidence-based design principles of the Common Core State Standards for Mathematics (CCSSM, p. 3). Focus is necessary in order to fulfill the ambitious promise the states have made to their students by adopting the Standards: greater achievement at the college and career-ready level; greater depth of understanding of mathematics; and a rich classroom environment in which reasoning, sense-making, applications, and a range of mathematical practices flourish. In high school courses, narrowing and deepening the curriculum creates a structure that ties topics together. Thus, materials must focus coherently on the Widely Applicable Prerequisites in a way that is consistent with the progressions in the Standards. **Required Materials:** • Common Core State Standards for Mathematics (www.corestandards.org/wpcontent/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_HS_Spring_2013_FINAL1.pdf) • Widely Applicable Prerequisites for College and Careers (http://achievethecore.org/prerequisites) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion**: Non-Negotiable 1 is rated as Meets or Does Not Meet. To rate Non-Negotiable 1, first rate Metrics 1A–1H. Each of these eight metrics must be rated as Meets in order for Non-Negotiable 1 to be rated as Meets. Rate each metric 1A–1H as Meets or Does Not Meet/Insufficient Evidence. If the evidence examined shows that the Criterion is met, then mark the Criterion as Meets. If the evidence examined shows that the Criterion is not met—or if there is insufficient evidence to make a determination—then mark the Criterion as Does Not Meet/Insufficient Evidence. Support all ratings with evidence.

Metric NN1A: **In any single course, students spend at least 50% of their time on Widely Applicable Prerequisites.** **How to Find the Evidence:** Familiarize yourself with the Widely Applicable Prerequisites. Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, lessons, homework assignments, and assessments. (Evaluate both student and teacher materials.) Consider time spent on the Widely Applicable Prerequisites and judge qualitatively whether students and teachers using the materials as designed will devote the majority of time to the Widely Applicable Prerequisites For context, read Criterion #1 in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** According to the publisher "The Carnegie Learning High School Math Series instructional materials were developed after the release of the final draft of the common core state standards." A thorough review of the text with the widely applicable prerequisites in mind revealed that at least 50% of the students' time will be spent on the prerequisites. It is important to keep in mind that the teacher plays a part in what they emphasize. However, the text provides the teacher enough material to spend at least 50% of their time on the prerequisites. The Carnegie Learning Algebra 2 text includes 16 chapters and 85 sections within those chapters. In the Teacher's Implementation Guide at the beginning of each chapter, the authors include a table that lists each lesson, the CCSS standards that align with each section, a pacing guide, highlights from section, and a checklist that references models, worked examples, peer analysis, talk the talk, and technology that can be found in each section. A review of the pacing guide reveals that if a teacher sticks closely with it in a standard school year they should be able to get through all 16 chapters. The authors suggest that about half of the sections will require one day and the other half two days of instruction and formative assessment.	**__X__Meets** **____Does Not Meet Insufficient Evidence**

Metric M 3: **Student work in Geometry involves significant work with applications/modeling and problems that use algebra skills.** **How to Find the Evidence:** Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, lessons, homework assignments, and assessments. (Evaluate both student and teacher materials. NOTE: Since Geometry contains relatively fewer Widely Applicable Prerequisites, this Criterion is important to help foster students' college and career readiness. Problems that use algebra skills might include, for example, algebraic geometry problems in a coordinate setting, or problems of measurement involving unknown quantities.	**Evidence-** Because this is Algebra II course, and it is generally taught after geometry, this text builds upon the learning from geometry to extend algebraic concepts/standards. For example in Lesson 1.2 students used their geometry background while working with patterns. Also, in lesson 12.5 the use of geometric sequences is required.	**__X__Meets** **____Does Not Meet Insufficient Evidence**

Metric NN1C: **There are problems at a level of sophistication appropriate to high school (beyond mere review of middle school topics) that involve the application of knowledge and skills from grades 6-8.** **How to Find the Evidence:** Evaluate lessons, chapter/unit assessments, and homework assignments. NOTE: Problems should include application of the following topics from grades 6-8: • Ratios and proportional relationships. • Percentage and unit conversions, e.g., in the context of complex measurement problems involving quantities with derived or compound units (such as mg/mL, kg/ m3, acre-feet, etc.). • Basic function concepts, e.g., by interpreting the features of a graph in the context of an applied problem. • Concepts and skills of geometric measurement e.g., when analyzing a diagram or schematic. • Concepts and skills of basic statistics and probability (see grades 6–8.SP) • Performing rational number arithmetic fluently. For context, read Table 1 on Page 8 of the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** The problems in this text are advanced for where Algebra 2 students are currently in a traditional run classroom. However, if this type of text was used starting in earlier grades then the level of sophistication would be appropriate. Knowledge and	**__X__Meets** **____Does Not Meet Insufficient Evidence**

Metric NN1D: **Materials base courses on the content specified in the Standards.** **How to Find the Evidence:** Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, and lessons in both student and teacher materials. For context, read Criterion #3a in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** An extensive review of the materials revealed that they cover all the content specified in the Algebra 2 Common Core State Standards. An overview of how the standards are addresses throughout the course can be found in the Teachers Implementation Guide. Each lesson provides the detail of the clusters and standards addressed.	**__X__Meets** **____Does Not Meet Insufficient Evidence**
Metric NN1E: **Materials give all students extensive work with course-level problems.** **How to Find the Evidence:** Evaluate both student and teacher materials. If the materials provide resources for differentiated learning, consider whether lower-performing students have opportunities to engage with course-level problems. Also consider whether higher-performing students are given opportunities to learn current course-level content in greater depth. For context, read Criterion #3b in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** A main focus of the course – level problems focuses on the students explaining and writing about their understanding of the concepts presented. The Student Text and the Student Assignments books contain a variety of problems that progress in difficulty towards the application level. The texts are very different from a traditional Algebra 2 textbook. The student texts do not include the vast amounts of information, examples, formulas, theorems, and vocabulary terms that might be found in a traditional textbook. However, it appears that the student texts cover and include the essential understandings that are needed to master the Algebra 2 standard/concepts.	**__X__Meets** **____Does Not Meet Insufficient Evidence**

Metric NN1F: **Materials relate course-level concepts explicitly to prior knowledge from earlier grades or courses. The materials are designed so that prior knowledge becomes reorganized and extended to accommodate the new knowledge.** **How to Find the Evidence:** Evaluate student and teacher materials, looking for problems that involve extending the knowledge learned in earlier grades and courses. NOTE: An example of evaluating this Criterion might be to look at whether materials connect the equation of a circle with the distance formula and the Pythagorean theorem. For context, read Criterion #3c in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** When necessary the authors refer to previous knowledge needed to successfully master the concepts in a given section. For example, on page 326 of the student text It States "the previous function building lessons showed how the factors of a polynomial determine its key characteristics. From the factors, you can determine the type and location of a polynomial's zeros." Additionally, another example relating to prior knowledge can be found on page 374 of the student text, "Remember that a Pythagorean triple is a set of three positive integers such that..." The references to prior knowledge are scattered throughout the text at the appropriate time when they are needed to help the students with the concepts they are learning. The teacher materials mention the "Crew Characters" which is the people in the text that remind the students about prior learning they need to apply or consider with a given exercise.	**__X__Meets** **____Does Not Meet Insufficient Evidence**
Metric NN1G: **Materials include learning objectives that are visibly shaped by CCSSM cluster and domain headings.** **How to Find the Evidence:** Select several clusters from the course being evaluated. Evaluate teacher and student materials in relation to these clusters. For context, read Criterion #4a in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** At the beginning of the Teachers Implementation Guide the authors have included a table that is a crosswalk between the modules and the Common Core State Standards. At the beginning of each section of the student text, the authors have included learning goals (objectives) that align with the cluster and domain headings of the standards. An example is in the learning goals for section 1.2 it mentions "Determine whether expressions are equivalent" and the cluster heading states "Write expressions and equivalent forms to solve problems." The learning goals use much of the same language as the standards.	**__X__Meets** **____Does Not Meet Insufficient Evidence**

Metric NN1H: **Materials include problems and activities that serve to connect two or more clusters in a domain, or two or more domains in a category, or two or more categories, in cases where these connections are natural and important.** **How to Find the Evidence:** In the course being evaluated, choose two or more clusters, two or more domains, or two or more categories for which connections are natural and important. Evaluate the units, chapters, and lessons that deal with the chosen topics, looking for problems and activities that serve to connect the chosen clusters or domains. NOTE: An example of evaluating this Criterion might be to look at whether materials include problems in which students analyze a situation by building a function, graphing it, and using it to create and solve an equation. For context, read Criterion #4b in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** In the Teacher Implementation Guide at the beginning of each chapter there is a table that includes a crosswalk of each section of the chapter and the standards covered in that section. An example is that in section 4.1 Analyzing Polynomial Functions it covers A.SSE1.A, A.CED.3, A.REI 1.1, F.IF.4, and F.IF.6. A review of the Chapter Overviews for each chapter revealed that most of the sections cover multiple standards within a cluster and often multiple domains, clusters, and standards. Another example is in section 5.2 it covers: A.CED.3, F.IF.4, F.IF.5, F.BF.1, and S.ID.6a.	**__X__Meets** **____Does Not Meet Insufficient Evidence**
Non-Negotiable 1: Focus and Coherence- Materials must focus coherently on the Widely Applicable Prerequisites in a way that is consistent with the progressions in the Standards. **Metric NN 1:** If all metrics 1A–1H were rated as Meets, then rate Non-Negotiable 1 as Meets. If one or more metrics were rated as Does Not Meet/Insufficient Evidence, then rate Non-Negotiable 1 as Does Not Meet. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)** **Before moving to Alignment Criterion 1, record the final Meets or Does Not Meet rating in the Evaluation Summary.**		**__X__Meets** **____Does Not Meet** **Strengths/Weaknesses** Strengths: Covers all of the standards and the widely applicable prerequsites.
Now continue by evaluating Alignment Criterion 1 for Rigor and Balance.		
Directions for Alignment Criterion 1 **Rigor and Balance**		

Alignment Criterion 1: **Rigor and Balance- Materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.** The Standards set expectations for attention to all three aspects of rigor: conceptual understanding, procedural skill and fluency, and applications. Thus, materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.	The Standards set expectations for attention to all three aspects of rigor: conceptual understanding, procedural skill and fluency, and applications. Thus, materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations. • Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_HS_Spring_2013_FINAL1.pdf) • Widely Applicable Prerequisites for College and Careers (http://achievethecore.org/prerequisites) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion:** Alignment Criterion 1 is rated as Meets or Does Not Meet. To rate Alignment Criterion 1, first rate metrics 1A, 1B, and 1C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). For each metric, guiding questions are provided to aid in gathering evidence. Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 1 if the materials rate 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as rigor and balance, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.
AC Metric 1A: **The materials support the development of students' conceptual understanding of key mathematical concepts, especially where called for in specific content Standards or cluster headings.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Widely Applicable Prerequisites that relate specifically to conceptual understanding to use throughout the questions associated with this metric. NOTE: Some examples of clusters or Standards that call for conceptual understanding include: N-RN.A.1, A-APR.B, A-REI.A.1, A-REI.D.10, A.REI.D.11, F.IF.A.1, F-LE.A.1, G.SRT.A.2, G-SRT.C.6, S-ID.C.7 For context, read Criterion #2a in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	• Choose a cluster/Standard from the Widely Applicable Prerequisites that is aligned to each aspect of rigor and use it to evaluate these metrics. It is most helpful if the same clusters and Standards are chosen for all of the programs being evaluated. (Guidance in choosing clusters/Standards is included in "How to Find the Evidence" below.)	**Use the questions for AC Metric 1A to evaluate Metric 1A. Record evidence for each question and rate Metric 1A.** **_X___Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**

Is conceptual understanding attended to thoroughly where the Standards set explicit expectations for understanding or interpreting? Evaluate lessons, chapter/unit assessments and homework assignments, paying attention to work aligned to Standards that explicitly call for understanding or interpreting.	**Evidence-** The student resources include a Student Text, Student Skills Practice book, and a Student Assignments manual. The Student Text introduces and develops new concepts by walking the students through a series of exercises to get them ready to do the assignment. Often, one section in the student text is 10 to 20 pages long. The authors carefully present the material on a scaffolded manner to build upon prior learning to become proficient with the new concepts. If the teacher recognizes that the students are struggling the Skills Practice book can be used to go back and review skills needed to be successful in a given section. The student text and the student assignments manual include many opportunities for students to write about their conceptual understanding of the topics they are learning. Additionally, they are asked to write about their interpretations of the topics being studied. This curriculum focuses heavily on students talking, writing, and discussing their understanding of the concepts/standards.	

Do the materials feature high-quality conceptual problems and conceptual discussion questions? Evaluate lessons, chapter/unit assessments, and homework assignments. NOTE: Examples of conceptual problems might include such questions as "What is the maximum value of the function f(t) = 5 – t2 ?" or "Is √2 a polynomial? How about ½(x + √2)+ ½ (-x + √2)?"	**Evidence-** The lessons are structured in such a way that students have multiple opportunities to model and expand on explanations about mathematical concepts. Throughout the text the students are asked to: look for patterns, estimate, predict, describe, determine, and represent their thinking. Throughout the text, students are asked to discuss their understanding, think for themselves, work with a partner, and share with the class their thinking/understanding about the concepts they are working on. In the student text the authors carefully present the students with questions that scaffold the learning and eventually get them to a deep conceptual understanding. By the time they get to the end of a section they have had numerous opportunities to write about and discuss with their peers their understanding.	
Do the materials feature opportunities to identify correspondences across mathematical representations? Evaluate lessons, chapter/unit assessments and homework assignments. NOTE: An example of evaluating this metric might include looking at whether materials support students in identifying correspondences among the expression that defines a function, the graph that shows the relationship, and the behavior of the phenomenon being modeled (if any).	**Evidence-** Throughout the Algebra 2 text students graphically and algebraically develop an understanding of the subject. For example, in section 10.3 the students are asked to analyze graphs and describe the transformations of functions. Additionally, they are asked to find the domain and range of those functions. Another example is found in Chapter 5: Polynomial Models. Section 5.1 the students focus on solving polynomial inequalities, in section 5.2 they moved to modeling with polynomials, section 5.3 focuses on piecewise functions, 5.4 refers to modeling polynomial data, and section 5.5 the students are asked to compare polynomials in different representations. In this chapter they work with the algebraic and graphical representations of polynomials to model and solve real-world problems.	

AC Metric 1B: **The materials are designed so that students attain the fluencies and procedural skills required by the Standards.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Widely Applicable Prerequisites that relate specifically to fluency and procedural skill to use throughout the questions associated with this metric. NOTE: Some examples of Standards that call for procedural skill and fluency include: A-SSE.A.1b, A-SSE.2, A-APR.A.1, A-APR.C.6, F-BF.B.3, G-GPE.B.4, G-GPE.B.5, G-GPE.B.7, G-CO.A.1, G-SRT.B.5 For context, read Criterion #2b in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).		**Use the questions for AC Metric 1B to evaluate Metric 1B. Record evidence for each question and rate Metric** **__X__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Is progress toward fluency and procedural skill interwoven with the student's developing conceptual understanding of the skills in question? Evaluate lessons, chapter/unit assessments, daily routines, and homework assignments for evidence that the development of fluency and procedural skill is supported by conceptual understanding.	**Evidence-** The lessons are formatted to help students progress through the content in a meaningful way to achieve a conceptual understanding. Additionally, the skills practice worksheets are provided to allow students more practice with procedural problems.	
Are purely procedural problems and exercises present that include cases in which opportunistic strategies are valuable and generic cases that require efficient and general procedures present? Evaluate lessons, chapter/unit assessments, daily routines, and homework assignments. NOTE: Problems in which opportunistic strategies are valuable might include such examples as solving x2 + 5 = 49 + 5 or (3x – 2)2 = 6x – 4. Generic cases that require efficient and general procedures might include such problems as solving c + 8 – c2 = 3(c – 1)2 – 5).	**Evidence-** The Student Assignments manual scaffolds the problems from the fluency and procedural skill level to problems that require students to use opportunistic strategies to solve. The problems at the end of the assignments asked the students to consider, explain, determine, right, and interpret. For these problems students have to draw upon prior knowledge and use opportunistic strategies to solve. An example of this is the assignment for lesson 5.2. This assignment contains one problem with nine separate parts that towards the end asked the students to "predict the years when John's free-throw percentage is at least 70%. Explain your reasoning" and "for what intervals is the model appropriate for the problem situation? Explain your reasoning." And "predict the type of polynomial that you sketched in part H. Explain your reasoning." The text forces the students to think about and explain the reasoning often. To do this they need to have a deep conceptual understanding of the topics.	

AC Metric 1C: **The materials are designed so that teachers and students spend sufficient time working with engaging applications, without losing focus on the Widely Applicable Prerequisites.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Widely Applicable Prerequisites that relate specifically to application to use throughout the questions associated with this metric. NOTE: Some examples of clusters or Standards that call for application include: N-Q.A, A-SSE.B.3, A-REI.D.11, F-IF.B, F-IF.C.7, F-BF.A.1, G-SRT.C.8, S-ID.A.2, S-IC.A.1 For context, read Criterion #2c in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).		**Use the questions for AC Metric 1C to evaluate Metric 1C. Record evidence for each question and rate Metric** **__ X__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Are there single- and multi-step contextual problems, including non-routine problems, that develop the mathematics of the course, afford opportunities for practice, and engage students in problem solving? Do the problems attend thoroughly to those places in the content Standards where expectations for multi-step and real-world problems are explicit? Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** Many of the single step, procedural problems are found in the Student Skills Practice book. This is one of the areas in which this textbook excels. Every section in the student text and the student assignments text includes problems that require multiple steps that develop the concepts in a logical progression. The authors of taking great care to lead the students along from a simple to a deep understanding of the concepts. An example of this can be found in section 6.5 of the student text, this section comprises 14 pages. In this section the authors dedicate six pages and 10 questions with multiple steps on one problem related to a student that wants to purchase a laptop for $1000 on a credit card with a 19% interest. In this problem the authors carefully walks the students through each step in which they are asked to write multiple formulas calculate payments and principal interest and at the end culminating in "how much money will Vince end up spending on his $1000 laptop?" At the end of this one problem, the students have a deep conceptual understanding of the topic.	

Do application problems particularly stress applying the Widely Applicable prerequisites? Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** Another area in which this text excels is that it makes an effort to show the applications of the math whenever possible. Almost every section refers to the application of the mathematics in a way that is relevant to the interests of the students and written in a language that is easily understood. The many and varied application problems apply and address the widely applicable prerequisites for this course.	
Are there ample opportunities for students to engage with modeling problems? Do materials require students to use both individual parts of the modeling cycle as well as the full modeling cycle? Read the pages on High School—Modeling in the Standards for Mathematics (pp. 72 and 73). Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** The application problems throughout the text address modeling. Some examples are: section 3.1, exploring cubic functions; lesson 5.2, modeling with polynomials; section 7.5, using rational functions to solve problems; section 9.6, solving radical equations; and section 11.5, applications of exponential and logarithmic functions. In each of these sections the application problems focus on the modeling of the mathematics to explain and understand real-world situations.	
Alignment Criterion 1: Materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations. **AC 1:** Materials must earn at least 5 of 6 points to meet this Alignment Criterion. If materials earn less than 5 points, the Criterion has not been met. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)** **Before moving to Alignment Criterion 2, record the final Meets or Does Not Meet rating in the Evaluation Summary.**	**__X__Meets** **____Does Not Meet** **Strengths/Weaknesses:** Strengths: Quality number of both procedural and contextual problems.	

Alignment Criterion 2: **Standards for Mathematical Practice- Materials must demonstrate authentic connections between content Standards and practice Standards.** The Standards require that designers of instructional materials connect the mathematical practices to mathematical content in instruction. Thus, materials must demonstrate authentic connections between content Standards and practice Standards.	The Standards require that designers of instructional materials connect the mathematical practices to mathematical content in instruction. Thus, materials must demonstrate authentic connections between content Standards and practice Standards. **Required Materials**: • Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_HS_Spring_2013_FINAL1.pdf) • Widely Applicable Prerequisites for College and Careers (http://achievethecore.org/prerequisites) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion:** Alignment Criterion 2 is rated as Meets or Does Not Meet. To rate Alignment Criterion 2, first rate metrics 2A, 2B, and 2C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). For each metric, guiding questions are provided to aid in gathering evidence. Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 2 if the materials rate 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as mathematical practices, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.
AC Metric 2A: **Materials address the practice Standards in such a way as to enrich the Widely Applicable Prerequisites; practices strengthen the focus of the course instead of detracting from it, in both teacher and student materials.** **How to Find the Evidence:** Familiarize yourself with the Widely Applicable Prerequisites. Evaluate teacher and student materials for evidence that the mathematical practices support and connect to the focus of the course. NOTE: An example of evaluating this Criterion might include looking at whether materials use regularity in repeated reasoning to illuminate formal algebra as well as functions, particularly recursive definitions of functions. For context, read Criterion #6 in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** Throughout the text students are required to complete problems that address both the practice standards and the widely applicable prerequisites at the same time. For example, in lesson 3.1 on page 216 #2 covers MP 1-4 and the following standards A.SSE.1, A.APR.1, and F.IF.7.	**__X__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
AC Metric 2B: **Materials attend to the full meaning of each practice Standard.** **How to Find the Evidence:** For context, read Criterion #7 in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).		**Use the questions for AC Metric 2B to evaluate Metric 2B. Record evidence for each question and rate Metric 2B.** **_X___Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**

Over the course of any given year of instruction, is each mathematical practice Standard meaningfully present in the form of assignments, activities, or problems that stimulate students to develop the habits of mind described in the practice Standard? Evaluate lessons, chapter/ unit assessments, and homework assignments for evidence of each mathematical practice being meaningfully present in instruction.	**Evidence-** At the beginning of the Teachers Implementation Guide and the Student Text the authors reference and discuss the Standards for Mathematical Practice. In the Teacher's Implementation Guide, the authors present each standard with an explanation of how the text supports the practices and they include an example of where each practice is addressed in the text. Practice #1: The text provides multiple opportunities for students to make sense of problems by writing about and discussing their thinking with their classmates. The multiple steps for many of the problems throughout the text require the students to persevere in solving the problems. Practice #2: The students are often asked to explain their reasoning. Practice #3: The text is designed in such a way that some of the examples have two students that explained the reasoning and the students are asked to decide who is correct and to justify the reasoning. Practice #4: the students have multiple opportunities throughout the text to use words, tables, graphs to communicate mathematical ideas. Practice #5: The text refers to and encourages students to use appropriate tools such as calculators, rulers, protractor's, and other manipulatives. Practice #6: The nature of Algebra 2 requires the students to attend to precision to solve problems. However, unique to this text, is the need for students to attend to precision when writing about their understanding of the topics/concepts studied in each section. Practice #7: Students are given multiple opportunities to analyze numeric, geometric, and algebraic patterns. Practice #8: The text includes multiple tables that lead the students along to express regularity in repeated reasoning.	

Are teacher-directed materials that explain the role of the practice Standards in the classroom and in students' mathematical development included? Are alignments to practice Standards accurate? Evaluate teacher materials, paying attention to explanations of the role of the practice Standards in the classroom and in students' mathematical development. Evaluate documents aligning lessons to practice Standards for accuracy. NOTE: Examples to look for when evaluating this metric might include the following: a highly scaffolded problem should not be aligned to MP.1; or a problem that directs a student to use a calculator should not be aligned to MP.5; or a problem about merely extending a pattern should not be aligned to MP.8.	**Evidence-** The teacher materials include an extensive discussion about the role of the practice standards in the classroom and where they can be found throughout the text. Although the math practice standards are not specifically marked in the text the students provided ample opportunities to think, discuss, reason, and write about the mathematics. This text doesn't exceptional job of requiring students to reflect on their understanding of the concepts/standards.	
AC Metric 2C: **Materials support the Standards' emphasis on mathematical reasoning.** **How to Find the Evidence:** For context, read Criterion #8 in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).		**Use the questions for AC Metric 2C to evaluate Metric 2C. Record evidence for each question and rate Metric 2C.** **_X___Meets (2)** **____Partially Meets (1)**

Do the materials support students in constructing viable arguments and critiquing the arguments of others concerning course-level mathematics that is detailed in the content Standards? Read Standard for Mathematical Practice 3. Evaluate teacher and student materials to ensure that students are given opportunities to reason with grade-level mathematics.	**Evidence-** Again, this is an area in which this curriculum excels. The Worked Examples in the text allow the students to see the flow of the problem from one step to the next until completion. Throughout these examples the students are asked to reflect on and explain their understanding. The Thumbs Down problems given the incorrect example of how a student solved the problem and then asked the students to explain and show where the student made their mistakes. The Whose Correct problems are an advanced form of correct versus incorrect responses. In these problems to students answer a question differently and the students are asked to decide who's answer is correct and explain their reasoning. Additionally, throughout the text students are asked to explain, describe, and write about their understanding of the concepts. The text also includes for other features that relate to this area. The Discuss to Understand sections ask students to read the problem carefully and then discuss with other students their understanding of the problem. The Think for Yourself sections prompt the students with targeted questions to think through the process of solving the problems. The Work with Your Partner sections ask the students to work through the problem and then discuss their findings with their partner. Finally, the Share with the Class sections ask the students to communicate clearly with the class there reasoning.	____**Does Not Meet (0)**
Do the materials support students in producing not only answers and solutions, but also, in a course-appropriate way, arguments, explanations, diagrams, mathematical models, etc., especially in the Widely Applicable Prerequisites? Familiarize yourself with the Widely Applicable Prerequisites. Evaluate teacher and student materials to understand the types of work students are expected to produce.	**Evidence-** The "Who's Correct" section in each lesson requires students to think critically and determine which student is correct and then they are required to fix the errors and explain their reasoning.	

Do materials explicitly attend to the specialized language of mathematics the language of argument, problem solving, and mathematical explanations taught rather than assumed? Evaluate teacher and student materials, paying attention to how mathematical language is taught. NOTE: An example of evaluating this Criterion might include looking at whether students are supported in: basing arguments on definitions; using the method of providing a counter example; or recognizing that examples alone do not establish a general statement.	**Evidence-** At the beginning of the student text, the authors review the different ways that students will be asked to represent their mathematical understanding of the concept their study. Additionally, key terms are given at the beginning of each section and referred to throughout the section. Another feature of the text is that at the beginning of the student text the authors define and give examples related to the following academic terms they will see throughout the text; analyze, explain your reasoning, represent, predict, and describe. Each term is defined in the authors also give examples of the types of questions to ask themselves when they are asked to describe or predict etc. Additionally they give an example of each of the terms and what it looks like in a problem set.	
Alignment Criterion 2: Materials must demonstrate authentic connections between content Standards and practice Standards. **AC 2:** Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 points, the Criterion has not been met. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewers only.)** **Before moving to Alignment Criterion 3, record the final Meets or Does Not Meet rating in the Evaluation Summary.**		**_X___Meets** **____Does Not Meet** **Strengths/Weaknesses:** **Strengths: Covers all of the mathematical practices, there is a section at the beginning of the book that reviews the language of writing for mathematics in the Key Terms at the front of the text** **Weaknesses: The mathematical practices were not specifically marked anywhere in the text.**

Alignment Criterion 3: **Access[illegible]he Standards for All Students- Materials must provide supports for English Language Learners and other special populations.** Because Standards are for all students, alignment requires thoughtful support to ensure all students are able to meet the Standards. Thus, aligned materials must provide supports for English Language Learners and other special populations.	Because Standards are for all students, alignment requires thoughtful support to ensure a[illegible]ents are able to meet the Standards. Thus, aligned materials m[illegible]rovide supports for English Language Learners and other special populations. **Required Materials:** • Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math Publishers_Criteria_HS_Spring_2013_FINAL1.pdf) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion:** Alignment Criterion 3 is rated as[illegible]ts or Does Not Meet. To rate Alignment Criterion 3, first rate metrics 3A, 3B, and 3C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 3 if the materials rate 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as support for special population, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.
AC Metric 3A: **Support for English Language Learners and other special populations is thoughtful and helps those students meet the same Standards as all other students. The language in which problems are posed is carefully considered.** **How to Find the Evidence:** Evaluate teacher and student materials, paying attention to supports offered for special populations.	**Evidence-** The reviewer did not find any specific mention of how to support English language learners or other special populations such as gifted and talented. However, the entire student text is written in student friendly language and includes examples that are relative to their interests. It appears to the reviewer, that the authors have made a conscious effort to only include the necessary information in the student text. Therefore, it is not as busy and cluttered as many traditional textbooks making it easier to read and understand. It is quite possible that the entire text was written to address the needs of English language learners and other special populations. It is for this reason that I marked it as meets and not partially meets. The text and resource materials should include more support for ELL and other special populations. Additionally, the resources could include a Spanish-English glossary and solutions worked out and explained in Spanish.	**____Meets (2)** **__X__Partially Meets (1)** **____Does Not Meet (0)**

AC Metric 3B: **Materials provide appropriate level and type of scaffolding, differentiation, intervention, and support for a broad range of learners with gradual removal of supports, when needed, to allow students to demonstrate their mathematical understanding independently.** **How to Find the Evidence:** Evaluate teacher and student materials, paying attention to whether materials provide differentiation that will lead all learners to engage with on-grade-level content.	**Evidence-** This text provides appropriate scaffolding in each lesson to support a broad range of learners. The Teachers Implementation Guide provided teachers guidance and support in many ways, such as including teacher notes, implementation strategies, graphic organizers, and grouping suggestions.	**_X___Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
AC Metric 3C: **Design of lessons recommends and facilitates a mix of instructional approaches for a variety of learners such as using multiple representations (e.g., including models, using a range of questions, checking for understanding, flexible grouping, pair-share).** **How to Find the Evidence:** Evaluate teacher materials, noting instructional approaches suggested for whole class and differentiated lessons and activities.	**Evidence-** The lessons include four types of problems: Worked Examples, Thumbs Down, Thumbs Up, and Who's Correct? The Worked Examples ask the students to read through the problem, question their understandings, and think about connections between the steps. The Thumbs Down examples ask the students to read through the incorrect solution and think about where the error was made. The Thumbs Up examples ask the students to read through the correct example and think about connections between the steps. The Who's Correct? Examples ask the students to read through the situation, question the reason or strategy given, and determine which solution is correct and which is incorrect. Additionally, the students are asked to explain their reasoning and write about their understandings and share those understandings with classmates.	**__X__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**

Alignment Criteria Overall:

___X__ Meets **_____ Does Not Meet**

Alignment Criterion 3: Materials must provide supports for English Language Learners and other special populations. **AC 3** Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 points, the Criterion has not been met. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewers only.)** **Move to the Evaluation Summary and record the final Meets or Does Not Meet rating .**	**_X___Meets** **____Does Not Meet** **Strengths/Weaknesses:** Strengths: resources to support teachers Weaknesses: ELL accommodations are lacking, gifted and talented accommodations are lacking

Once an evaluation for alignment to the Shifts and major features of the CCSS has been conducted using Sections 1-3, it's important to evaluate for overall quality and best practices. A starting list of Indicators of Quality are suggested below. States, districts and others evaluating instructional materials are encouraged to add to this list to ensure materials reflect local contexts. For background information on some of the Indicators of Quality in this section, refer to pp.16–18 in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).

Indicators of Quality	**Evidence- Give specific examples.**	**Rating: (Reviewer only.)**
1. Lessons are thoughtfully structured and support the teacher in leading the class through the learning paths at hand, with active participation by all students in their own learning and in the learning of their classmates.	**Evidence-** Each section of the student text assist the teacher with strategically and incrementally leading the students to a deep understanding of the concepts. The sections include multiple opportunities for students to discuss with a partner and share out to the class. The structure of the sections allow the students to talk about and do the learning.	**(Reviewer only.)** **___X___ Yes** **_____ No**

2. The underlying design of the materials includes both problems and exercises. (In solving problems, students learn new mathematics, whereas in working exercises, students apply what they have already learned to build mastery.) Each problem or exercise has a purpose. **NOTE: This Criterion does not require that the problems and exercises be labeled as such.**	**Evidence-** The problems allow the students to learn new concepts. If the students are struggling with prerequisite concepts the teacher can have the students use the Skills Practice manual to review. Additionally, each problem set includes problems that require students to apply and model the mathematics. Additionally, the students are required to write extensively about their understandings of the concepts. A hallmark of this curriculum is the amount of writing that students do with regards to the concepts in each section.	**(Reviewer only.)** **___X___ Yes** **_____ No**
3. Design of assignments is not haphazard: exercises are given in intentional sequences in order to strengthen students' mathematical understanding.	**Evidence-** The assignments intentionally scaffold the concepts from procedural, to conceptual, to the application level. A traditional textbook might have as many as 80 problems, while this text carefully selects the problems to achieve a deep understanding of the concepts related to each section. For example, the section 10.3 assignment only has three problems with multiple steps that assist the students with reaching a level of proficiency with the targeted concepts of the section. However, the Student Text for section 10.3 comprises 10 pages and allows the teacher and the students to work through 13 exercises with multiple steps so that when they do the assignment they have had many opportunities to practice.	**(Reviewer only.)** **__X____ Yes** **_____ No**
4. There are separate teacher materials that support and reward teacher study including, but not limited to: discussion of the mathematics of the units and the mathematical point of each lesson as it relates to the organizing concepts of the unit, discussion on student ways of thinking and anticipating a variety of students responses, guidance on lesson flow, guidance on questions that prompt students thinking, and discussion of desired mathematical behaviors being elicited among students.	**Evidence-** The teacher materials include the Teacher's Implementation Guide and the Teacher's Resources & Assessments manual. The teacher materials give numerous suggestions for developing, presenting and reviewing the concepts. The teacher's guide includes suggestions for: presenting concepts, discussing the example problems, suggestions for grouping students, guiding questions, and solutions to the problems. The guiding questions give the teacher a list of questions to ask students as they work through the examples.	**(Reviewer only.)** **__X____ Yes** **_____ No**

5. Manipulatives suggested in the materials are faithful representations of the mathematical objects they represent and are connected to written methods.	**Evidence-** The text uses multiple representations to present and develop concepts. Students are asked to interpret graphs, use graphing utilities when appropriate, complete and interpret tables, and construct graphs from functions and tables of data.	**(Reviewer only.)** ___X___ **Yes** _____ **No**
6. Materials include a variety of curriculum-embedded assessments. Examples include pre-, formative, summative, and self-assessment resources.	**Evidence-** The Teacher's Resources and Assessments manual includes all of the solutions to the assignments, and skills practice problems. Additionally, the assessments include pre-test, post-tests, mid-chapter tests, end of chapter tests and standardized test practice.	**(Reviewer only.)** ___X___ **Yes** _____ **No**
7. Assessments contain aligned rubrics, answer keys, and scoring guidelines that provide sufficient guidance for interpreting student performance.	**Evidence-** The assessments include answer keys that show all of the steps to solve the problems.	**(Reviewer only.)** ___X___ **Yes** _____ **No**
8. Materials assess student proficiency using methods that are accessible and unbiased, including the use of course-level language in student prompts.	**Evidence-** The text is written in student friendly language making it easy to read. Additionally, the text is not nearly as busy as a traditional textbook.	**(Reviewer only.)** __X____ **Yes** _____ **No**
9. Materials are carefully evaluated by qualified individuals, whose names are listed, in an effort to ensure freedom from mathematical errors and course-level appropriateness.	**Evidence-** The Carnegie Learning Development Team is listed at the beginning of the text.	**(Reviewer only.)** __X____ **Yes** _____ **No**
10. The visual design supports students in engaging thoughtfully with the subject. Navigation through the text is clear.	**Evidence-** The design of the text takes a minimalist approach. The authors only include essential information to master the concepts. The Student Text includes a lot of blank space for the students to write in. The general format is intimidating and not engaging. Lack of graphics in color.	**(Reviewer only.)** __X____ **Yes** _____ **No**

Reviewer IMET Evaluation Summary **Title/Level: Carnegie Learning Algebra II**

Publisher: Carnegie Learning Copyright: 2013 ISBN: 9781609724184

Reviewer ID # Lennart Erickson III **Date Review Completed: February 27, 2016**

Non-Negotiable Criteria-The Non-Negotiable must be met in order for the Non-Negotiable Alignment Criteria to be met overall.		
Non- Negotiable 1: Focus and Coherence **___X__ Meets** **_____ Does Not Meet**		
Non-Negotiable Overall: **__X___ Meets** **_____ Does Not Meet**		
Alignment Criteria- Each Alignment Criterion must be met with a sufficient number of points in order for Alignment Criteria to be labeled as "Meets" overall. The more points the materials receive on the Alignment Criteria, the better they are aligned.		
Alignment Criterion 1: Rigor and Balance **Points: __6___ of 6 possible.** **(Materials must receive at least 5 of 6 points to align.)** **____X___ Meets** **_____ Does Not Meet**	**Alignment Criterion 2: Standards of Mathematical Practice** **Points: ___5__ of 6 possible.** **(Materials must receive at least 5 of 6 points to align.)** **___X____ Meets** **_____ Does Not Meet**	**Alignment Criterion 3: Access to Standards for All Learners** **Points: ___6__ of 6 possible.** **(Materials must receive at least 5 of 6 points to align.)** **___X____ Meets** **_____ Does Not Meet**

If the materials meet the Non-Negotiable Criterion and each Alignment Criterion, they are aligned to the Shifts and major features of the Core standards. **Do the materials meet every Non-Negotiable and Alignment Criterion? __X___ Yes _____ No**

What are the specific areas of strength and weakness based on this evaluation? Publishers or others modifying or developing assessments can use this information to make improvements and/or to remedy gaps in the alignment of assessment materials.

The strengths of the program are: the writing the students are asked to do as they reflect on, explain, and defend their thinking about the mathematical concepts, the systematic and intentional manner in which the concepts are scaffolded in each section as the concepts are introduced and developed.

One of the concerns that I have is the amount of professional development required for teachers to effectively teach the curriculum. This curriculum is radically different from a traditional textbook and will require to fundamentally alter their teaching practices.

Strengths:

- Very thorough glossary
- Teachers resources are extensive and helpful
- Covers all of the required Algebra 2 standards
- Applies all of the mathematical practices
- The academic glossary at the beginning of the text
- Quality contextual problems

Weaknesses:

- Soft cover
- Many books
- Lacking ELL accommodations
- Lacking in gifted student accommodations
- There are no examples that are fully worked out so that a student who was absent from class could go back and try and learn the material on their own.

2015-16 Mathematics Interim Review Recommendation & Summary

Publisher Name:	Cengage Learning - *
Title:	Algebra and Trigonometry 9E
ISBN #	978-1-133-95096-7
Grade Level(s) or Course:	9-12
Reviewer ID:	MB + JB

RECOMMENDED AS:

_✓_ **Core Mathematics Program-** a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials. Substantial evidence clearly supports the designation of this program as Core.

_____ **Other Mathematics Program-** a program that substantially, but partially, meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for supplemental materials. Substantial evidence clearly supports the designation of this program as Other.

_____ **Component Mathematics Program-** a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs. Substantial evidence clearly supports the designation of this program as Component.

_____ **Intervention Program-** a program designed and intended to target and support students' specific needs. Substantial evidence clearly supports the designation of this program as Intervention.

_____ **Does not meet criteria** for recommendation as a Curricular Material or Online Resource for Mathematics.

EVIDENCE SUMMARY:

FOCUS- Materials address the Widely Applicable Prerequisites throughout. The problems are at a level of sophistication appropriate to high school students.

COHERENCE- Each lesson includes connections. For example, multiple representations (tables, graphs, equations). Connections are made to prior mathematics throughout.

RIGOR- Ample exercises that address procedural fluency and application, with varying degree of difficulty.

CONCEPTUAL UNDERSTANDING- While the text includes modeling problems, there is not enough opportunity to practice conceptual understanding.

MATHEMATICAL PRACTICES- mathematical practices are utilized but not specifically identified.

ACCESSIBILITY OF STANDARDS TO ALL STUDENTS- This text is not designed for the general student population. The Teacher Edition does include suggestions, remarks, and exploration ideas that could be used.

OTHER: Well organized and logical. Meets the common core 4th year standards.

2015-1 nterim Mathematics Review

Mathematics Evaluation Tool – High School

Publisher: Cengage Learning, Inc

Title of Material: Algebra and Trigonometry 9E

Author: Ron Larson

ISBN #: 978-1-133-95096-7 **Copyright** 2014

Reviewer ID: MB & JB

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Substantial evidence clearly supports the designation of this program as Core.

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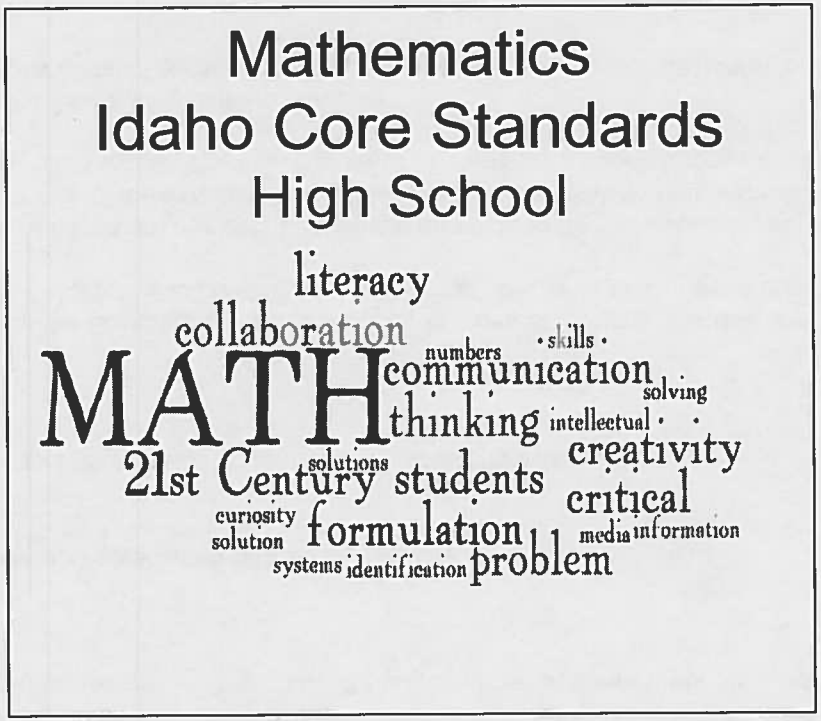
Substantial evidence clearly supports the designation of this program as Other.

Component Mathematics Program- a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs.
Substantial evidence clearly supports the designation of this program as Component.

Intervention Program- a program designed and intended to target and support students' specific needs.
Substantial evidence clearly supports the designation of this program as Intervention.



- Evaluation Form adapted from Instructional Materials Evaluation Toolkit (IMET).

The IMET was developed by Student Achievement Partners. Educators may use or adapt. http://creativecommons.org/licenses/by/3.0/ Download this tool at http://achievethecore.org/IMET

Instructional Materials Evaluation Tool

Mathematics, High School

What Are the Purposes of the IMET?

This Math IMET is designed to help educators determine whether instructional materials are aligned to the Shifts and major features of the Common Core State Standards (CCSS). The substantial instructional Shifts (http://www.corestandards.org/other-resources/key-shifts-in-mathematics/) at the heart of the Common Core State Standards are:

- **Focus** strongly where the Standards focus
- **Coherence**: Think across grades and link to major topics within the grade
- **Rigor**: In major topics, pursue conceptual understanding, procedural skill and fluency, and application with equal intensity.

The IMET draws directly from the following documents:

- Common Core State Standards for Mathematics (www.corestandards.org/Math)
- Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013) (http://www. corestandards.org/wp-content/uploads/Math_Publishers_Criteria_ HS_Spring_2013_FINAL1.pdf)

When to use the IMET

1. Purchasing materials: Many factors go into local purchasing decisions. Alignment to the Standards is a critical factor to consider. This tool is designed to evaluate alignment of instructional materials to the Shifts and the major features of the CCSS. It also provides suggestions of additional indicators to consider in the materials evaluation and purchasing process
2. Evaluating materials currently in use: The IMET can be used to analyze the degree of alignment of existing materials and help to highlight specific, concrete flaws in alignment. Even where materials and tools currently in use fail to meet one or more of these criteria, the pattern of failure is likely to be informative. States and districts can use the evaluation to create a thoughtful plan to modify or combine existing resources in such a way that students' actual learning experiences approach the focus, coherence, and rigor of the Standards.
3. Developing programs: Those developing new programs can use this tool as guidance for creating aligned curricula.

Please note this tool was designed for evaluating comprehensive curricula (including any supplemental or ancillary materials), but it was not designed for the evaluation of standalone supplemental materials.

Who Uses the IMET?

Evaluating instructional materials requires both subject-matter and pedagogical expertise. Evaluators should be well versed in the Standards (www.corestandards.org/Math) for all grades in which materials are being evaluated. This includes understanding the Widely Applicable Prerequisites (www.achievethecore.org/prerequisites), how the content fits into the progressions in the Standards (www. achievethecore.org/progressions), and the expectations of the Standards with respect to conceptual understanding, procedural skill and fluency, and application. Evaluators also should be familiar with the substantial instructional Shifts (http://www.corestandards.org/other-resources/key-shifts-in-mathematics/) of Focus, Coherence and Rigor that are listed above.

Getting Started

Prior to Evaluation

Assemble all of the materials necessary for the evaluation. It is essential for evaluators to have materials for all grades covered by the program, as some criteria cannot be rated without having access to each grade. In addition, each evaluator should have a reference copy of the Common Core State Standards for Mathematics (CCSSM) and the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).

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Before conducting the evaluation itself, it is important to develop a protocol for the evaluation process. The protocol should include having evaluators study the Publishers' Criteria and the IMET. It will also be helpful for evaluators to get a sense of each program overall before beginning the process. At a minimum, this would include reading the front matter of the text, looking at the table of contents and paging through multiple chapters.

Sections 1-3 below should be completed to produce a comprehensive picture of the strengths and weaknesses of the materials under evaluation. Information about areas in need of improvement or supplementation should be shared with internal and external stakeholders.

Navigating the Tool

Begin with Section 1: Non-Negotiable Alignment Criteria

- The Non-Negotiable Alignment Criteria must each be met in full for materials to be considered aligned to the Shifts and the major features of the Common Core State Standards. Each Non-Negotiable Alignment Criterion has one or more metrics associated with it; every one of these metrics must be met in order for the criterion as a whole to be met.

- Examine the relevant materials and use evidence to rate the materials against each criterion and its associated metric(s).

- Record and explain the evidence upon which the rating is based.

Continue to Section 2: Alignment Criteria

- The Alignment Criteria must each be met for materials to be considered aligned to the Shifts and the major features of the Common Core State Standards. Each Alignment Criterion has one or more metric associated with it; a specific number of these metrics must be met or partially met in order for the criterion as a whole to be met.

- Examine the materials in relation to these criteria, assigning each metric a point value. Rate the criterion as "Meets" or "Does Note Meet" based on the number of points assigned. The more points the materials receive on the alignment Criteria, the better they are aligned.

- Record and explain the evidence upon which the rating is based.

- Indicators of Quality are important considerations that will help evaluators better understand the overall quality of instructional materials. These considerations are not criteria for alignment to the CCSS, but they provide valuable information about additional program characteristics. Evaluators may want to add their own indicators to the examples provided.

Directions for Non-Negotiable 1

Focus and Coherence

Criterion	Evidence- Give specific examples.	Rating: (Reviewer only.)
Non-Negotiable 1: Focus and Coherence- Materials must focus coherently on the Widely Applicable Prerequisites in a way that is consistent with the progressions in the Standards. Focus and coherence are the two major evidence-based design principles of the Common Core State Standards for Mathematics (CCSSM, p. 3). Focus is necessary in order to fulfill the ambitious promise the states have made to their students by adopting the Standards: greater achievement at the college and career-ready level; greater depth of understanding of mathematics; and a rich classroom environment in which reasoning, sense-making, applications, and a range of mathematical practices flourish. In high school courses, narrowing and deepening the curriculum creates a structure that ties topics together. Thus, materials must focus coherently on the Widely Applicable Prerequisites in a way that is consistent with the progressions in the Standards.	Focus and coherence are the two major evidence-based design principles of the Common Core State Standards for Mathematics (CCSSM, p. 3). Focus is necessary in order to fulfill the ambitious promise the states have made to their students by adopting the Standards: greater achievement at the college and career-ready level; greater depth of understanding of mathematics; and a rich classroom environment in which reasoning, sense-making, applications, and a range of mathematical practices flourish. In high school courses, narrowing and deepening the curriculum creates a structure that ties topics together. Thus, materials must focus coherently on the Widely Applicable Prerequisites in a way that is consistent with the progressions in the Standards. **Required Materials:** • Common Core State Standards for Mathematics (www.corestandards.org/wpcontent/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_HS_Spring_2013_FINAL1.pdf) • Widely Applicable Prerequisites for College and Careers (http://achievethecore.org/prerequisites) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion:** Non-Negotiable 1 is rated as Meets or Does Not Meet. To rate Non-Negotiable 1, first rate Metrics 1A–1H. Each of these eight metrics must be rated as Meets in order for Non-Negotiable 1 to be rated as Meets. Rate each metric 1A–1H as Meets or Does Not Meet/Insufficient Evidence. If the evidence examined shows that the Criterion is met, then mark the Criterion as Meets. If the evidence examined shows that the Criterion is not met—or if there is insufficient evidence to make a determination—then mark the Criterion as Does Not Meet/Insufficient Evidence. Support all ratings with evidence.

Metric NN1A: **In any single course, students spend at least 50% of their time on Widely Applicable Prerequisites.** **How to Find the Evidence:** Familiarize yourself with the Widely Applicable Prerequisites. Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, lessons, homework assignments, and assessments. (Evaluate both student and teacher materials.) Consider time spent on the Widely Applicable Prerequisites and judge qualitatively whether students and teachers using the materials as designed will devote the majority of time to the Widely Applicable Prerequisites For context, read Criterion #1 in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** Text utilizes widely applicable prerequisites—real numbers, quantities, algebra, functions, geometry, and some work with probability.	**_X__Meets** **____Does Not Meet Insufficient Evidence**
Metric NN1B: **Student work in Geometry involves significant work with applications/modeling and problems that use algebra skills.** **How to Find the Evidence:** Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, lessons, homework assignments, and assessments. (Evaluate both student and teacher materials. NOTE: Since Geometry contains relatively fewer Widely Applicable Prerequisites, this Criterion is important to help foster students' college and career readiness. Problems that use algebra skills might include, for example, algebraic geometry problems in a coordinate setting, or problems of measurement involving unknown quantities.	**Evidence-** Students have to solve for missing sides and angles in right triangles. Students use algebra to verify trigonometric identities (sections 6.2, 7.2, 8.1, 8.2), Distance Formula (P6), and parallel and perpendicular lines (2.1)	**__X__Meets** **____Does Not Meet Insufficient Evidence**

Metric NN1C: **There are problems at a level of sophistication appropriate to high school (beyond mere review of middle school topics) that involve the application of knowledge and skills from grades 6-8.** **How to Find the Evidence:** Evaluate lessons, chapter/unit assessments, and homework assignments. NOTE: Problems should include application of the following topics from grades 6-8: • Ratios and proportional relationships. • Percentage and unit conversions, e.g., in the context of complex measurement problems involving quantities with derived or compound units (such as mg/mL, kg/ m3, acre-feet, etc.). • Basic function concepts, e.g., by interpreting the features of a graph in the context of an applied problem. • Concepts and skills of geometric measurement e.g., when analyzing a diagram or schematic. • Concepts and skills of basic statistics and probability (see grades 6–8.SP) • Performing rational number arithmetic fluently. For context, read Table 1 on Page 8 of the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** Use of ratio and proportion to solve right triangles (6.2). Use of unit conversions to change between radians and degrees (6.1). Graph in context—Section 5.3 interpreting a graph in terms of astronomical units and also using geometric measurement. Angle measure section 6.1 Function concepts used throughout text. Probability including the Binomial Theorem, counting principles, and probability rules (sections 11.5-11.7). Rational number fluency expected throughout. Rational expressions (P5 extension of fraction concepts)	**__X__Meets** **____Does Not Meet Insufficient Evidence**
Metric NN1D: **Materials base courses on the content specified in the Standards.** **How to Find the Evidence:** Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, and lessons in both student and teacher materials. For context, read Criterion #3a in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** Materials meet or exceed content in the standards. Complex numbers (section 1.5), Vectors (sections 8.3/8.4), Matrices (chapter 10), Systems of Equations (chapter 11), Logarithmic Functions (chapter 5), Composition of Functions (section 2.6), Inverse Functions (section 2.7), Trigonometric Functions and Identities (chapters 6 and 7), Conics (sections 4.3/4.4). Cavalieri's Principle is not addressed, however.	**__X__Meets** **____Does Not Meet Insufficient Evidence**
Metric NN1E: **Materials give all students extensive work with course-level problems.** **How to Find the Evidence:** Evaluate both student and teacher materials. If the materials provide resources for differentiated learning, consider whether lower-performing students have opportunities to engage with course-level problems. Also consider whether higher-performing students are given opportunities to learn current course-level content in greater depth. For context, read Criterion #3b in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** Texts contain problems of varying degree of difficulty. Plenty of opportunity for higher-performing students in "how do you see it" and many types of application problems. Most problem sets contain close to one hundred problems. There are both a Study Guide (for students) and a Note Taking Guide to accompany the text. These may be a way to differentiate course-level content.	**__X__Meets** **____Does Not Meet Insufficient Evidence**

Metric NN1F: **Materials relate course-level concepts explicitly to prior knowledge from earlier grades or courses. The materials are designed so that prior knowledge becomes reorganized and extended to accommodate the new knowledge.** **How to Find the Evidence:** Evaluate student and teacher materials, looking for problems that involve extending the knowledge learned in earlier grades and courses. NOTE: An example of evaluating this Criterion might be to look at whether materials connect the equation of a circle with the distance formula and the Pythagorean theorem. For context, read Criterion #3c in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** Students use long division algorithm when dividing polynomials (section 3.3). Materials connect the equation of a circle with the equation for an ellipse (section 4.3). In Chapter 3, students start with quadratics and move higher-degree polynomials. Prerequisite chapter reviews main concepts before students begin the rest of the course.	**_X___Meets** **____Does Not Meet Insufficient Evidence**
Metric NN1G: **Materials include learning objectives that are visibly shaped by CCSSM cluster and domain headings.** **How to Find the Evidence:** Select several clusters from the course being evaluated. Evaluate teacher and student materials in relation to these clusters. For context, read Criterion #4a in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** While the text doesn't clearly state "seeing structure in expressions" or other domain headings, the text, TE, student Study Guide, and student Note Taking guide, has objectives shaped by CCSSM domain headings. For example, section 4.1 Rational Functions has the objectives, 1) find the domain of rational functions, 2) find vertical and horizontal asymptotes, 3) use rational functions to model and solve real life problems. These objectives correlate to F-IF.C.7.D and F-BF.A	**__X__Meets** **____Does Not Meet Insufficient Evidence**
Metric NN1H: **Materials include problems and activities that serve to connect two or more clusters in a domain, or two or more domains in a category, or two or more categories, in cases where these connections are natural and important.** **How to Find the Evidence:** In the course being evaluated, choose two or more clusters, two or more domains, or two or more categories for which connections are natural and important. Evaluate the units, chapters, and lessons that deal with the chosen topics, looking for problems and activities that serve to connect the chosen clusters or domains. NOTE: An example of evaluating this Criterion might be to look at whether materials include problems in which students analyze a situation by building a function, graphing it, and using it to create and solve an equation. For context, read Criterion #4b in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** Each lesson includes connections. For example, in the Graphs of Equations section 1.1, students are asked to construct a table, draw and use a graph from the information in the table, and then interpret he information. Connections to algebra and prior mathematics are used throughout.	**__X__Meets** **____Does Not Meet Insufficient Evidence**

Non-Negotiable 1: Focus and Coherence- Materials must focus coherently on the Widely Applicable Prerequisites in a way that is consistent with the progressions in the Standards. **Metric NN 1:** If all metrics 1A–1H were rated as Meets, then rate Non-Negotiable 1 as Meets. If one or more metrics were rated as Does Not Meet/Insufficient Evidence, then rate Non-Negotiable 1 as Does Not Meet. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)** **Before moving to Alignment Criterion 1, record the final Meets or Does Not Meet rating in the Evaluation Summary.**	**__X__Meets** **____Does Not Meet** **Strengths/Weaknesses** Strengths: high level of rigor in exercises and applications. Knowledge of prior math and ability to apply is essential. Weaknesses: their aren't clear CCSS headings as seen in lower level (algebra & geometry) texts

Now continue by evaluating Alignment Criterion 1 for Rigor and Balance.

Directions for Alignment Criterion 1

Rigor and Balance

Alignment Criterion 1: **Rigor and Balance- Materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.** The Standards set expectations for attention to all three aspects of rigor: conceptual understanding, procedural skill and fluency, and applications. Thus, materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.	The Standards set expectations for attention to all three aspects of rigor: conceptual understanding, procedural skill and fluency, and applications. Thus, materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations. • Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_HS_Spring_2013_FINAL1.pdf) • Widely Applicable Prerequisites for College and Careers (http://achievethecore.org/prerequisites) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion:** Alignment Criterion 1 is rated as Meets or Does Not Meet. To rate Alignment Criterion 1, first rate metrics 1A, 1B, and 1C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). For each metric, guiding questions are provided to aid in gathering evidence. Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 1 if the materials rate 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as rigor and balance, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.

AC Metric 1A: **The materials support the development of students' conceptual understanding of key mathematical concepts, especially where called for in specific content Standards or cluster headings.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Widely Applicable Prerequisites that relate specifically to conceptual understanding to use throughout the questions associated with this metric. NOTE: Some examples of clusters or Standards that call for conceptual understanding include: N-RN.A.1, A-APR.B, A-REI.A.1, A-REI.D.10, A.REI.D.11, F.IF.A.1, F-LE.A.1, G.SRT.A.2, G-SRT.C.6, S-ID.C.7 For context, read Criterion #2a in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	• Choose a cluster/Standard from the Widely Applicable Prerequisites that is applied to each aspect of rigor and use it to evaluate these metrics. It is most helpful if the same clusters and Standards are chosen for all of the programs being evaluated. (Guidance in choosing clusters/Standards is included in "How to Find the Evidence" below.)	**".Use the questions for AC Metric 1A to evaluate Metric 1A. Record evidence for each question and rate Metric.** **_X___Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Is conceptual understanding attended to thoroughly where the Standards set explicit expectations for understanding or interpreting? Evaluate lessons, chapter/unit assessments and homework assignments, paying attention to work aligned to Standards that explicitly call for understanding or interpreting.	**Evidence-** Conceptual understanding is adhered to throughout the materials. For example, standard F.IF.A.1 is addressed in section 2.2. Students have to find domain & range and how to use function notation.	
Do the materials feature high-quality conceptual problems and conceptual discussion questions? Evaluate lessons, chapter/unit assessments, and homework assignments. NOTE: Examples of conceptual problems might include such questions as "What is the maximum value of the function f(t) = 5 – t2 ?" or "Is √2 a polynomial? How about ½(x + √2)+ ½ (-x + √2)?"	**Evidence-** Fluency expectations visible throughout exercise sets. Also included—"Think about it" questions. Example: "the graph of |x-5|<3 can be described as all real numbers less than three units from 5. Give a similar description of |x-10|<8." SectionP1	
Do the materials feature opportunities to identify correspondences across mathematical representations? Evaluate lessons, chapter/unit assessments and homework assignments. NOTE: An example of evaluating this metric might include looking at whether materials support students in identifying correspondences among the expression that defines a function, the graph that shows the relationship, and the behavior of the phenomenon being modeled (if any).	**Evidence-** Example: "match the description of the situation with its graph" (section 2.5). In section 2.2, students have to find the domain and range of different representations, such as graph, table, verbal description, and equation.	

AC Metric 1B: **The materials are designed so that students attain the fluencies and procedural skills required by the Standards.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Widely Applicable Prerequisites that relate specifically to fluency and procedural skill to use throughout the questions associated with this metric. NOTE: Some examples of Standards that call for procedural skill and fluency include: A-SSE.A.1b, A-SSE.2, A-APR.A.1, A-APR.C.6, F-BF.B.3, G-GPE.B.4, G-GPE.B.5, G-GPE.B.7, G-CO.A.1, G-SRT.B.5 For context, read Criterion #2b in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).		**Use the questions for AC Metric 1B to evaluate Metric 1B. Record evidence for each question and rate Metric 1B.** **__X__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Is progress toward fluency and procedural skill interwoven with the student's developing conceptual understanding of the skills in question? Evaluate lessons, chapter/unit assessments, daily routines, and homework assignments for evidence that the development of fluency and procedural skill is supported by conceptual understanding.	**Evidence-** Each exercise set includes skill and application problems, exploration problems, and interpretation problems. Problems have a varying degree of difficulty. For example A-APR.A.1 is addressed in section P.3. Students are asked to perform addition, subtraction, multiplication and division of polynomials.	
Are purely procedural problems and exercises present that include cases in which opportunistic strategies are valuable and generic cases that require efficient and general procedures present? Evaluate lessons, chapter/unit assessments, daily routines, and homework assignments. NOTE: Problems in which opportunistic strategies are valuable might include such examples as solving x2 + 5 = 49 + 5 or (3x – 2)2 = 6x – 4. Generic cases that require efficient and general procedures might include such problems as solving c + 8 – c2 = 3(c – 1)2 – 5).	**Evidence-** Text provides opportunities for opportunistic strategies. Application problems follow procedural generic cases.	
AC Metric 1C: **The materials are designed so that teachers and students spend sufficient time working with engaging applications, without losing focus on the Widely Applicable Prerequisites.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Widely Applicable Prerequisites that relate specifically to application to use throughout the questions associated with this metric. NOTE: Some examples of clusters or Standards that call for application include: N-Q.A, A-SSE.B.3, A-REI.D.11, F-IF.B, F-IF.C.7, F-BF.A.1, G-SRT.C.8, S-ID.A.2, S-IC.A.1 For context, read Criterion #2c in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).		**Use the questions for AC Metric 1C to evaluate Metric 1C. Record evidence for each question and rate Metric 1C.** **_X___Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**

Are there simple- and multi-step contextual problems, including non-routine problems, that develop the mathematics of the course, afford opportunities for practice, and engage students in problem solving? Do the problems attend thoroughly to those places in the content Standards where expectations for multi-step and real-world problems are explicit? Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** Example: "The length and width of a rectangular garden are 15 m and 10 m respectively. A walkway of width x surrounds the garden. (a) draw a diagram that gives a visible representation (b) write the equation for the perimeter y in terms of x (c) use a graphing utility to graph the equation for the perimeter (d) determine the slope of the graph in part (c). For each additional one-meter increase in the width of the walkway, determine the increase in perimeter."	
Do application problems particularly stress applying the Widely Applicable Prerequisites? Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** Example—students must use applications from geometry and algebra to determine the maximum volume of a can. Referring to N-Q-A , linear, quadratic, exponential models are used throughout.	
Are there ample opportunities for students to engage with modeling problems? Do materials require students to use both individual parts of the modeling cycle as well as the full modeling cycle? Read the pages on High School—Modeling in the Standards for Mathematics (pp. 72 and 73). Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** Many examples throughout the text. For example, in section 5.5 students are asked to compare models for compound interest and interpret the results. In section 11.6 (counting principles) students have an application related to law enforcement in which they may determine the number of different faces that a software program can produce.	

Alignment Criterion 1: Materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.

AC 1: Materials must earn at least 5 of 6 points to meet this Alignment Criterion. If materials earn less than 5 points, the Criterion has not been met. Check the final rating.
Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)**

Before moving to Alignment Criterion 2, record the final Meets or Does Not Meet rating in the Evaluation Summary.

_X___Meets 6 points

____Does Not Meet

Strengths/Weaknesses:
Strengths: many problems utilizing procedural fluency and application.

Weaknesses: there could be more conceptual understanding questions.

Alignment Criterion 2: **Standards for Mathematical Practice- Materials must demonstrate authentic connections between content Standards and practice Standards.** The Standards require that designers of instructional materials connect the mathematical practices to mathematical content in instruction. Thus, materials must demonstrate authentic connections between content Standards and practice Standards.	The Standards require that designers of instructional materials connect the mathematical practices to mathematical content in instruction. Thus, materials must demonstrate authentic connections between content Standards and practice Standards. **Required Materials:** • Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_HS_Spring_2013_FINAL1.pdf) • Widely Applicable Prerequisites for College and Careers (http://achievethecore.org/prerequisites) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion:** Alignment Criterion 2 is rated as Meets or Does Not Meet. To rate Alignment Criterion 2, first rate metrics 2A, 2B, and 2C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). For each metric, guiding questions are provided to aid in gathering evidence. Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 2 if the materials rate 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as mathematical practices, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.
AC Metric 2A: **Materials address the practice Standards in such a way as to enrich the Widely Applicable Prerequisites; practices strengthen the focus of the course instead of detracting from it, in both teacher and student materials.** **How to Find the Evidence:** Familiarize yourself with the Widely Applicable Prerequisites. Evaluate teacher and student materials for evidence that the mathematical practices support and connect to the focus of the course. NOTE: An example of evaluating this Criterion might include looking at whether materials use regularity in repeated reasoning to illuminate formal algebra as well as functions, particularly recursive definitions of functions. For context, read Criterion #6 in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** Example: students encounter several examples of translations of functions and can then generalize an equation for a particular function (section 2.5). As stated in the criteria F-BF and F-LE are particularly important. F-BF focuses on building functions. This is seen in creating functions to model real life scenarios as well as combining functions. Sections 1.3, 2.6, and 6.7 have examples. F-LE focuses on constructing and comparing linear, exponential, and quadratic functions. Each type of function is discussed—however, students are not asked to determine which type of function would best model the data.	**__X__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
AC Metric 2B: **Materials attend to the full meaning of each practice Standard.** **How to Find the Evidence:** For context, read Criterion #7 in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	Example—see above. Students look for and express regularity in repeated reasoning. This is one of several examples.	**Use the questions for AC Metric 2B to evaluate Metric 2B. Record evidence for each question and rate Metric 2B.** **___Meets (2)** **__X__Partially Meets (1)** **____Does Not Meet (0)**

Over the course of any given year of instruction, is each mathematical practice Standard meaningfully present in the form of assignments, activities, or problems that stimulate students to develop the habits of mind described in the practice Standard? Evaluate lessons, chapter/ unit assessments, and homework assignments for evidence of each mathematical practice being meaningfully present in instruction.	**Evidence-** Practice standards not explicitly stated but are implied and utilized throughout.	
Are teacher-directed materials that explain the role of the practice Standards in the classroom and in students' mathematical development included? Are alignments to practice Standards accurate? Evaluate teacher materials, paying attention to explanations of the role of the practice Standards in the classroom and in students' mathematical development. Evaluate documents aligning lessons to practice Standards for accuracy. NOTE: Examples to look for when evaluating this metric might include the following: a highly scaffolded problem should not be aligned to MP.1; or a problem that directs a student to use a calculator should not be aligned to MP.5; or a problem about merely extending a pattern should not be aligned to MP.8.	**Evidence-** A teacher would need to be familiar with the practice standards to know that they were being used throughout the text. Practice standard alignment is not very clear.	
AC Metric 2C: **Materials support the Standards' emphasis on mathematical reasoning.** **How to Find the Evidence:** For context, read Criterion #8 in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).		**Use the questions for AC Metric 2C to evaluate Metric 2C. Record evidence for each question and rate Metric 2C.** **_ X___Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Do the materials support students in constructing viable arguments and critiquing the arguments of others concerning course-level mathematics that is detailed in the content Standards? Read Standard for Mathematical Practice 3. Evaluate teacher and student materials to ensure that students are given opportunities to reason with grade-level mathematics.	**Evidence-** Students are given opportunities to construct arguments and reasoning with mathematics.	
Do the materials support students in producing not only answers and solutions, but also, in a course-appropriate way, arguments, explanations, diagrams, mathematical models, etc., especially in the Widely Applicable Prerequisites? Familiarize yourself with the Widely Applicable Prerequisites. Evaluate teacher and student materials to understand the types of work students are expected to produce.	**Evidence-** Students have opportunities to create and interpret diagrams, to use mathematical models in problem solving, and to provide explanations for their mathematical thinking. Each section has an exploration section at the end of the assignment. Often these exercises ask students to construct arguments when answering true/false questions. Students are also asked to apply their knowledge in a different way when completing these questions. However, when an assignment section contains nearly 100 problems, it would be easy for an instructor to overlook or omit these types of problems.	

Do materials explicitly attend to the specialized language of mathematics, the language of argument, problem solving, and mathematical explanations taught rather than assumed? Evaluate teacher and student materials, paying attention to how mathematical language is taught. NOTE: An example of evaluating this Criterion might include looking at whether students are supported in: basing arguments on definitions; using the method of providing a counter example; or recognizing that examples alone do not establish a general statement.	**Evidence-** Clear use of mathematical language throughout. Student Study Guide and student Note Taking Guide also include specific vocabulary sections.	
Alignment Criterion 2: Materials must demonstrate authentic connections between content Standards and practice Standards. **AC 2:** Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 points, the Criterion has not been met. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewers only.)** **Before moving to Alignment Criterion 3, record the final Meets or Does Not Meet rating in the Evaluation Summary.**		**__X__Meets 5 points** **____Does Not Meet** **Strengths/Weaknesses:** Strengths: reasoning is clearly emphasized Weaknesses: difficult to identify utilization of practice standards
Alignment Criterion 3: **Access to the Standards for All Students- Materials must provide supports for English Language Learners and other special populations.** Because Standards are for all students, alignment requires thoughtful support to ensure all students are able to meet the Standards. Thus, aligned materials must provide supports for English Language Learners and other special populations.	Because Standards are for all students, alignment requires thoughtful support to ensure all students are able to meet the Standards. Thus, aligned materials must provide supports for English Language Learners and other special populations. **Required Materials:** • Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math Publishers_Criteria_HS_Spring_2013_FINAL1.pdf) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion:** Alignment Criterion 3 is rated as Meets or Does Not Meet. To rate Alignment Criterion 3, first rate metrics 3A, 3B, and 3C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 3 if the materials rate 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as support for special population, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.

AC Metric 3A: **Support for English Language Learners and other special populations is thoughtful and helps those students meet the same Standards as all other students. The language in which problems are posed is carefully considered.** **How to Find the Evidence:** Evaluate teacher and student materials, paying attention to supports offered for special populations.	**Evidence-** One has to visit the website www.LarsonPrecalculus.com for tutorials with Spanish audio.	**____Meets (2)** **_X___Partially Meets (1)** **____Does Not Meet (0)**
AC Metric 3B: **Materials provide appropriate level and type of scaffolding, differentiation, intervention, and support for a broad range of learners with gradual removal of supports, when needed, to allow students to demonstrate their mathematical understanding independently.** **How to Find the Evidence:** Evaluate teacher and student materials, paying attention to whether materials provide differentiation that will lead all learners to engage with on-grade-level content.	**Evidence-** The text is not designed for the general student population, but for a more specific group—namely college-level or college bound. Differentiation for students needing support is found in the student Study Guide. Assignment sections start with basic problems and move to more difficult ones.	**__X_Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
AC Metric 3C: **Design of lessons recommends and facilitates a mix of instructional approaches for a variety of learners such as using multiple representations (e.g., including models, using a range of questions, checking for understanding, flexible grouping, pair-share).** **How to Find the Evidence:** Evaluate teacher materials, noting instructional approaches suggested for whole class and differentiated lessons and activities.	**Evidence-** Material in the text could be presented with a mix of instructional approaches. TE includes remarks, suggestions, project ideas, and exploration ideas that could be used in instruction. Examples in the book offer opportunities to check for understanding. Student Study Guide offers other learning strategies.	**__X__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Alignment Criterion 3: Materials must provide supports for English Language Learners and other special populations. **AC 3** Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 points, the Criterion has not been met. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewers only.)** **Move to the Evaluation Summary and record the final Meets or Does Not Meet rating .**		**__X__Meets 5 points** **____Does Not Meet** **Strengths/Weaknesses:** Strengths: variety of instructional approaches available Weaknesses: difficult to access materials for ELL and other special populations

Once an evaluation for alignment to the Shifts and major features of the CCSS has been conducted using Sections 1-3, it's important to evaluate for overall quality and best practices. A starting list of Indicators of Quality are suggested below. States, districts and others evaluating instructional materials are encouraged to add to this list to ensure materials reflect local contexts. For background information on some of the Indicators of Quality in this section, refer to pp.16–18 in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).

Indicators of Quality	Evidence- Give specific examples.	Rating: (Reviewer only.)
1. Lessons are thoughtfully structured and support the teacher in leading the class through the learning paths at hand, with active participation by all students in their own learning and in the learning of their classmates.	**Evidence-** TE provides both teacher suggestions and support. Student Study Guide assists students with their own learning. Each lesson has multiple examples with an explanation. The lessons are thoughtfully structured and organized in a way that builds on prerequisite knowledge. For example, in section 8.1 (Law of Sines), explains oblique triangles, states law, multiple examples of solving for missing side, ambiguous case, example of each type, and application problems.	**(Reviewer only.)** **___X___ Yes** **_____ No**
2. The underlying design of the materials includes both problems and exercises. (In solving problems, students learn new mathematics, whereas in working exercises, students apply what they have already learned to build mastery.) Each problem or exercise has a purpose. **NOTE: This Criterion does not require that the problems and exercises be labeled as such.**	**Evidence-** Numerous problems and exercises in each assignment. Nearly 100 problems/exercises in each unit. In the lesson, problems are used to introduce and explain the new concepts. Assignments following the lesson contain practice exercises.	**(Reviewer only.)** **___X___ Yes** **_____ No**
3. Design of assignments is not haphazard: exercises are given in intentional sequences in order to strengthen students' mathematical understanding.	**Evidence-** A very logical sequence of exercises is present in each lesson.	**(Reviewer only.)** **__X____ Yes** **_____ No**
4. There are separate teacher materials that support and reward teacher study including, but not limited to: discussion of the mathematics of the units and the mathematical point of each lesson as it relates to the organizing concepts of the unit, discussion on student ways of thinking and anticipating a variety of students responses, guidance on lesson flow, guidance on questions that prompt students thinking, and discussion of desired mathematical behaviors being elicited among students.	**Evidence-** In addition to the text, there is a student Study Guide and student Note Taking Guide. Clear evidence focused on student ways of thinking. An example from the Study Guide: "You may be thinking, 'why don't I just graph polynomials on my calculator? Why do I have to mess with the steps in the text'?" The Guide then goes on to explain why graphing polynomials by hand is important. In the TE, there are side notes that include common errors, additional examples, and extra teacher explanations.	**(Reviewer only.)** **___X___ Yes** **_____ No**

5. Manipulatives suggested in the materials are faithful representations of the mathematical objects they represent and are connected to written methods.	**Evidence-** No manipulatives, other than a graphing calculator, appear to be used.	**(Reviewer only.)** _____ **Yes** ___X___ **No**
6. Materials include a variety of curriculum-embedded assessments. Examples include pre-, formative, summative, and self-assessment resources.	**Evidence-** Self-assessment is evident in the "Checkpoint" part of each lesson. Chapter reviews, chapter tests, cumulative reviews, and problem solving are included at the end of chapters. A separate test bank is also included in the materials. In the Student Study and Solution manual there are self-assessments at the end of each chapter with solutions and steps to the solutions. The test bank book includes 6 different forms for each chapter test, all in multiple choice format.	**(Reviewer only.)** ___X___ **Yes** _____ **No**
7. Assessments contain aligned rubrics, answer keys, and scoring guidelines that provide sufficient guidance for interpreting student performance.	**Evidence-** Testbank includes answer keys, but not scoring guidelines or rubrics.	**(Reviewer only.)** _____ **Yes** ___X___ **No**
8. Materials assess student proficiency using methods that are accessible and unbiased, including the use of course-level language in student prompts.	**Evidence-** Course-level language is utilized throughout without bias.	**(Reviewer only.)** ___X___ **Yes** _____ **No**
9. Materials are carefully evaluated by qualified individuals, whose names are listed, in an effort to ensure freedom from mathematical errors and course-level appropriateness.	**Evidence-** Text is written by Ron Larson and he received assistance from David C. Falvo and there is an additional list of 22 reviewers.	**(Reviewer only.)** ___X___ **Yes** _____ **No**
10. The visual design supports students in engaging thoughtfully with the subject. Navigation through the text is clear.	**Evidence-** Clear, free of clutter. Visuals are engaging—including color photographs and drawings related to the math content. Clear navigation and progression through text.	**(Reviewer only.)** ___X___ **Yes** _____ **No**

Reviewer IMET Evaluation Summary **Title/Level: Algebra and Trigonometry, Ninth Edition**

Publisher: Cengage Learning, Inc. **Copyright: 2014 ISBN: 978-1-133-95096-7**

Reviewer ID # MB **Date Review Completed: 02/18/2016**

Non-Negotiable Criteria-The Non-Negotiable must be met in order for the Non-Negotiable Alignment Criteria to be met overall.

Non- Negotiable 1: Focus and Coherence

___X__ Meets

_____ Does Not Meet

Non-Negotiable Overall:

__X___ Meets _____ Does Not Meet

Alignment Criteria- Each Alignment Criterion must be met with a sufficient number of points in order for Alignment Criteria to be labeled as "Meets" overall. The more points the materials receive on the Alignment Criteria, the better they are aligned.

Alignment Criterion 1: Rigor and Balance	Alignment Criterion 2: Standards of Mathematical Practice	Alignment Criterion 3: Access to Standards for All Learners
Points: ___6__ of 6 possible. **(Materials must receive at least 5 of 6 points to align.)**	**Points: __5___ of 6 possible.** **(Materials must receive at least 5 of 6 points to align.)**	**Points: _5____ of 6 possible.** **(Materials must receive at least 5 of 6 points to align.)**
____X___ Meets	**____X___ Meets**	**___X____ Meets**
_____ Does Not Meet	**_____ Does Not Meet**	**_____ Does Not Meet**

Alignment Criteria Overall:

__X___ Meets **_____ Does Not Meet**

If the materials meet the Non-Negotiable Criterion and each Alignment Criterion, they are aligned to the Shifts and major features of the Core Standards. **Do the materials meet every Non-Negotiable and Alignment Criterion? __X___ Yes _____ No**

What are the specific areas of strength and weakness based on this evaluation? Publishers or others modifying or developing assessments can use this information to make improvements and/or to remedy gaps in the alignment of assessment materials.

Strengths:

- text includes a high level of rigor
- ample problems and exercises
- procedural and application exercises
- well-organized and logical structure
- visually appealing
- meets CCSSM 4th year standards

Weaknesses:

- practice standards and state standards are not readily identifiable
- lacking conceptual understanding problems
- little support for ELL and other special populations
- assessments do not include rubrics are only in multiple-choice format

IDAHO STATE DEPARTMENT OF EDUCATION

Advanced Placement Course: Calculus AB & BC

Content Area: _____

Course Title: _____

Title of Material: Calculus, 10/E, AP® Edition

Author: Larson

Publisher: Cengage

ISBN #: 9781285060309 **Copyright** 2014

Reviewers: C M, P.P

Meets Content Standards Alignment: X **Yes** _____ **No**

Meets Materials Analysis Evaluation: X **Yes** _____ **No**

94.3% **Core Program**

_____ **Other Program**

_____ **Resource/Supplemental**

_____ **Not Recommended**

Advanced Placement:

- ☐ AP Capstone
- ☐ Arts
- ☐ English
- ☐ History & Social Science
- ☐ Math & Computer Science
- ☐ Sciences
- ☐ World Languages & Cultures

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Standards Alignment Evaluation Rubric

0 = No Alignment– **Not Evident:** Content as described in the Standards is **not evident**.

.5 = Partial Alignment- **Partially Evident:** Content as described in the Standards is **partially evident** and there are few gaps.

1 = High Alignment – **Clearly Evident:** Content is fully aligned as described in the Standards and repeatedly included to guarantee extensive opportunities for students to work with the content. Alignment is **clearly evident**.

N/A = Not applicable for standard

Note: In the Concept Outline, subject matter that is included only in the BC course is indicated with blue shading.

<table>
<tr><td colspan="3">Advanced Placement</td><td>Calculus AB & BC</td><td></td></tr>
<tr><td colspan="3">Standards and Learning Indicators</td><td>Publisher/Provider: List units/lessons with specific examples of where standards are Introduced/Taught/Assessed.</td><td>Point Value 0/.5/1 (Reviewer)</td></tr>
<tr><td colspan="5">Big Idea 1: Limits
Many calculus concepts are developed by first considering a discrete model and then the consequences of a limiting case. Therefore, the idea of limits is essential for discovering and developing important ideas, definitions, formulas, and theorems in calculus. Students must have a solid, intuitive understanding of limits and be able to compute various limits, including one-sided limits, limits at infinity, the limit of a sequence, and infinite limits. They should be able to work with tables and graphs in order to estimate the limit of a function at a point. Students should know the algebraic properties of limits and techniques for finding limits of indeterminate forms, and they should be able to apply limits to understand the behavior of a function near a point. Students must also understand how limits are used to determine continuity, a fundamental property of functions.</td></tr>
<tr><td>Enduring Understandings
(Students will understand that…)</td><td>Learning Objectives
(Students will be able to…)</td><td>Essential Knowledge
(Students will know that…)</td><td></td><td></td></tr>
</table>

EU 1.1: The concept of a limit can be used to understand the behavior of functions.	**LO 1.1A (a):** Express limits symbolically using correct notation. **LO 1.1A (b):** Interpret limits expressed symbolically.	**EK 1.1A1:** Given a function f, the limit of $f(x)$ as x approaches c is a real number R if $f(x)$ can be made arbitrarily close to R by taking x sufficiently close to c (but not equal to c). If the limit exists and is a real number, then the common notation is $\lim_{x \to c} f(x) = R$. **EXCLUSION STATEMENT (EK 1.1A1):** The epsilon-delta definition of a limit is not assessed on the AP Calculus AB or BC Exam. However, teachers may include this topic in the course if time permits.	Pg 52	1
		EK 1.1A2: The concept of a limit can be extended to include one-sided limits, limits at infinity, and infinite limits.	Pgs. 72-73 (One sided limits and Continuity on a closed interval. Pgs 83-90 infinite Pg 195-205	1
		EK 1.1A3: A limit might not exist for some functions at particular values of . Some ways that the limit might not exist are if the function is unbounded, if the function is oscillating near this value, or if the limit from the left does not equal the limit from the right. **EXAMPLES OF LIMITS THAT DO NOT EXIST:** $\lim_{x \to 0} \frac{1}{x^2} = \infty$ $\lim_{x \to 0} \sin\left(\frac{1}{x}\right)$ *does not exist* $\lim_{x \to 0} \frac{\lvert x \rvert}{x}$ *does not exist* $\lim_{x \to 0} \frac{1}{x}$ *does not exist*	Pg 50-51	1
	LO 1.1B: Estimate limits of functions	**EK 1.1B1:** Numerical and graphical information can be used to estimate limits.	Pg 48-49	1

	LO 1.1C: Determine limits of functions.	**EK 1.1C1:** Limits of sums, differences, products, quotients, and composite functions can be found using the basic theorems of limits and algebraic rules.	Pgs 59-69, (Limits and Their properties) Pg 87 (Theorem 1.15)	1
		EK 1.1C2: The limit of a function may be found by using algebraic manipulation, alternate forms of trigonometric functions, or the squeeze theorem.	Pgs 59-69 (limits and their properties) Pg 87 (Theorem 1.15)	1
		EK 1.1C3: Limits of the indeterminate forms $\frac{0}{0}$ and $\frac{\infty}{\infty}$ may be evaluated using L'Hospital's Rule.	Pg 63, (Dividing Out Technique) Pgs 557-567 (Indeterminant Forms and L'Hopital's Rule).	1
	LO 1.1D: Deduce and interpret behavior of functions using limits.	**EK 1.1D1:** Asymptotic and unbounded behavior of functions can be explained and described using limits.	Pg 83-90 (Infinite Limits)	1
		EK 1.1D2: Relative magnitudes of functions and their rates of change can be compared using limits.	Pgs. 112-113	1
EU 1.2: Continuity is a key property of functions that is defined using limits	**LO 1.2A:** Analyze functions for intervals of continuity or points of discontinuity.	**EK 1.2A1:** A function f is continuous at $x=c$ provided that $f(c)$ exists, $\lim_{x\to c} f(x)$ exists, and $\lim_{x\to c} f(x) = f(c)$.	Pg 70 Definition of Continuity	1
		EK 1.2A2: Polynomial, rational, power, exponential, logarithmic, and trigonometric functions are continuous at all points in their domains.	Pg 75 - Properties of Continuity, (Section above Ex. 6).	1

		EK 1.2A3: Types of discontinuities include removable discontinuities, jump discontinuities, and discontinuities due to vertical asymptotes.	Pg. 71 (Example 1 and paragraph above Example 1).	1
	LO 1.2B: Determine the applicability of important calculus theorems using continuity.	**EK 1.2B1:** Continuity is an essential condition for theorems such as the Intermediate Value Theorem, the Extreme Value Theorem, and the Mean Value Theorem.	Pgs 77-78 (The Intermediate Value Theorem. Pg 101 - Differentiability and Continuity. Pg 162 - Theorem 2.4 Extreme Value Theorem. Pg 172 - Mean Value Theorem)	1

Standards and Learning Indicators			Publisher/Provider: List units/lessons with specific examples of where standards are Introduced/Taught/Assessed.	Point Value 0/.5/1 (Reviewer)
Big Idea 2: Derivatives Using derivatives to describe the rate of change of one variable with respect to another variable allows students to understand change in a variety of contexts. In AP Calculus, students build the derivative using the concept of limits and use the derivative primarily to compute the instantaneous rate of change of a function. Applications of the derivative include finding the slope of a tangent line to a graph at a point, analyzing the graph of a function (for example, determining whether a function is increasing or decreasing and finding concavity and extreme values), and solving problems involving rectilinear motion. Students should be able to use different definitions of the derivative, estimate derivatives from tables and graphs, and apply various derivative rules and properties. In addition, students should be able to solve separable differential equations, understand and be able to apply the Mean Value Theorem, and be familiar with a variety of real-world applications, including related rates, optimization, and growth and decay models.				
Enduring Understandings (Students will understand that…)	**Learning Objectives** (Students will be able to…)	**Essential Knowledge** (Students will know that…)		
EU 2.1: The derivative of a function is defined as the limit of a difference quotient and can be determined using a variety of strategies.	**LO 2.1A:** Identify the derivative of a function as the limit of a difference quotient.	**EK 2.1A1:** The difference quotients $\frac{f(a+h)-f(a)}{h}$ and $\frac{f(x)-f(a)}{x-a}$ express the average rate of change of a function over an interval.	Pg 97 (top). Pg 99 (The Dereviative Function	1

		EK 2.1A2: The instantaneous rate of change of a function at a point can be expressed by $\lim_{h\to 0}\frac{f(a+h)-f(a)}{h}$ or $\lim_{x\to a}\frac{f(x)-f(a)}{x-a}$, provided that the limit exists. These are common forms of the definition of the derivative and are denoted $f'(a)$.	Pg 99 (The derivative of a Function)	1
		EK 2.1A3: The derivative of f is the function whose value at x is $\lim_{h\to 0}\frac{f(x+h)-f(x)}{h}$ provided this limit exists.	Pg 99 (The derivative of a Function)	1
		EK 2.1A4: For $y=f(x)$, notations for the derivative include $\frac{dy}{dx}$, $f'(x)$, and y'.	Pg 99 same as above.	1
		EK 2.1A5: The derivative can be represented graphically, numerically, analytically, and verbally.	Pgs 96-105 (The derivative and the Tangent Line Problem).	1
	LO 2.1B: Estimate derivatives.	**EK 2.1B1:** The derivative at a point can be estimated from information given in tables or graphs.	Pgs 96-98 (The Tangent Line Problem)	1
	LO 2.1C: Calculate derivatives.	**EK 2.1C1:** Direct application of the definition of the derivative can be used to find the derivative for selected functions, including polynomial, power, sine, cosine, exponential, and logarithmic functions.	Pgs 118-128 (Product and Quotient Rules and Higher Order Derivatives) Pg 129-139 (Chain Rule); Pg 369 (Derivatives of Inverse Trig Functions)	1
		EK 2.1C2: Specific rules can be used to calculate derivatives for classes of functions, including polynomial, rational, power, exponential, logarithmic, trigonometric, and inverse trigonometric.	Pgs 106-117 (Basic Differentiation Rules and Rates of Change) Pg 322-323 (Derivative of the Natural Logarithmic Function) Pgs 348-349 (Derivatives of Exponential Functions).	1

		EK 2.1C3: Sums, differences, products, and quotients of functions can be differentiated using derivative rules.	Pgs 106-117 (Basic Differentiation Rules and Rates of Change) Pg 118-128, (Product and Quotient Rules and Higher-Order Derivatives)	1
		EK 2.1C4: The chain rule provides a way to differentiate composite functions.	Pgs 129-139 (The chain Rule)	1
		EK 2.1C5: The chain rule is the basis for implicit differentiation.	Pgs 140-147, Implicit Differentiation	1
		EK 2.1C6: The chain rule can be used to find the derivative of an inverse function, provided the derivative of that function exists.	Pgs 341-342, - Derivative of an Inverse Function	1
		EK 2.1C7: (BC) Methods for calculating derivatives of realvalued functions can be extended to vector-valued functions, parametric functions, and functions in polar coordinates.	Pgs 706-708, Parametric Pgs 719-720, Polar Pgs 824-827, Vector-Valued Functions	1

	LO 2.1D: Determine higher order derivatives.	**EK 2.1D1:** Differentiating f' produces the second derivative f'', provided the derivative of f' exists; repeating this process produces higher order derivatives of f.	Pg 124, Higher-Order Derivatives	1
		EK 2.1D2: Higher order derivatives are represented with a variety of notations. For $y = f(x)$, notations for the second derivative include $\frac{d^2y}{dx^2}$, $f''(x)$, and y''. Higher order derivatives can be denoted $\frac{d^ny}{dx^n}$ or $f^{(n)}(x)$.	Pg 124, Higher-Order Derivatives	1
EU 2.2: A function's derivative, which is itself a function, can be used to understand the behavior of the function.	**LO 2.2A:** Use derivatives to analyze properties of a function.	**EK 2.2A1:** First and second derivatives of a function can provide information about the function and its graph including intervals of increase or decrease, local (relative) and global (absolute) extrema, intervals of upward or downward concavity, and points of inflection.	Pgs 177-186, Increasing/Decreasing Functions and First Derivative Test Pgs 187-194, Concavity and the Second Derivative Test	1
		EK 2.2A2: Key features of functions and their derivatives can be identified and related to their graphical, numerical, and analytical representations.	Pgs 187-214, Concavity, Second Derivative Test, Limits at Infinity, A Summary of Curve Sketching.	1
		EK 2.2A3: Key features of the graphs of f, f', and f'' are related to one another.	Pgs. 206-214 A Summary of curve sketching.	1
		EK 2.2A4: (BC) For a curve given by a polar equation $r = f(\theta)$, derivatives of r, x, and y with respect to θ and first and second derivatives of y with respect to x can provide information about the curve.	Pgs 719-720 Slope and Tangent Lines * Can not find reference to the second derivative.*	.5

	LO 2.2B: Recognize the connection between differentiability and continuity.	**EK 2.2B1:** A continuous function may fail to be differentiable at a point in its domain.	Pgs 101-102, Differentiability and Continuity, more specific AbsoluteValue	1
		EK 2.2B2: If a function is differentiable at a point, then it is continuous at that point.	Pg 101-102, Differentiability and Continuity=Theorem 2.1	1
EU 2.3: The derivative has multiple interpretations and applications including those that involve instantaneous rates of change.	**LO 2.3A:** Interpret the meaning of a derivative within a problem.	**EK 2.3A1:** The unit for $f'(x)$ is the unit for f divided by the unit for x.	None.	0
		EK 2.3A2: The derivative of a function can be interpreted as the instantaneous rate of change with respect to its independent variable.	Pg 99, Derivative of a Function	1
	LO 2.3B: Solve problems involving the slope of a tangent line.	**EK 2.3B1:** The derivative at a point is the slope of the line tangent to a graph at that point on the graph.	Pg 96-98, The Tangent Line Problem	1
		EK 2.3B2: The tangent line is the graph of a locally linear approximation of the function near the point of tangency.	Pgs 96-98, The Tangent Line Problem	1
	LO 2.3C: Solve problems involving related rates, optimization, rectilinear motion, (BC) and planar motion.	**EK 2.3C1:** The derivative can be used to solve rectilinear motion problems involving position, speed, velocity, and acceleration.	Pgs 112-113 Rates of Change Pgs 148-156 Related Rates Pg 173 Example 4	1

		EK 2.3C2: The derivative can be used to solve related rates problems, that is, finding a rate at which one quantity is changing by relating it to other quantities whose rates of change are known.	Pgs 148-156 Related Rates	1
		EK 2.3C3: The derivative can be used to solve optimization problems, that is, finding a maximum or minimum value of a function over a given interval.	Pgs 215-224 Optimization Problems	1
		EK 2.3C4: (BC) Derivatives can be used to determine velocity, speed, and acceleration for a particle moving along curves given by parametric or vector-valued functions.	Pgs 832-840 Velocity and Acceleration	1
	LO 2.3D: Solve problems involving rates of change in applied contexts.	**EK 2.3D1:** The derivative can be used to express information about rates of change in applied contexts.	Pgs 112-113 Rates of Change Pgs 148-156 Related Rates Pg 173 Example 4	1
	LO 2.3E: Verify solutions to differential equations.	**EK 2.3E1:** Solutions to differential equations are functions or families of functions.	Pgs 400-401 Slope Fields Pgs 425 Example 2	1
		EK 2.3E2: Derivatives can be used to verify that a function is a solution to a given differential equation.	Pg 398 Example 1	1
	LO 2.3F: Estimate solutions to differential equations.	**EK 2.3F1:** Slope fields provide visual clues to the behavior of solutions to first order differential equations.	Pgs 400-401 Slope Fields	1

		EK 2.3F2: (BC) For differential equations, Euler's method provides a procedure for approximating a solution or a point on a solution curve.	Pg 402, Euler's Methods	1
EU 2.4: The Mean Value Theorem connects the behavior of a differentiable function over an interval to the behavior of the derivative of that function at a particular point in the interval.	**LO 2.4A:** Apply the Mean Value Theorem to describe the behavior of a function over an interval.	**EK 2.4A1:** If a function f is continuous over the interval $[a, b]$ and differentiable over the interval (a, b), the Mean Value Theorem guarantees a point within that open interval where the instantaneous rate of change equals the average rate of change over the interval.	Pgs 172-173 The Mean Value Theorem	1

Standards & Learning Indicators			Publisher/Provider: List units/lessons with specific examples of where standards are Introduced/Taught/Assessed.	Point Value 0/.5/1 (Reviewer)
Big Idea 3: Integrals and the Fundamental Theorem of Calculus Integrals are used in a wide variety of practical and theoretical applications. AP Calculus students should understand the definition of a definite integral involving a Riemann sum, be able to approximate a definite integral using different methods, and be able to compute definite integrals using geometry. They should be familiar with basic techniques of integration and properties of integrals. The interpretation of a definite integral is an important skill, and students should be familiar with area, volume, and motion applications, as well as with the use of the definite integral as an accumulation function. It is critical that students grasp the relationship between integration and differentiation as expressed in the Fundamental Theorem of Calculus — a central idea in AP Calculus. Students should be able to work with and analyze functions defined by an integral.				
Enduring Understandings (Students will understand that…)	**Learning Objectives** (Students will be able to…)	**Essential Knowledge** (Students will know that…)		
EU 3.1: Antidifferentiation is the inverse process of differentiation.	**LO 3.1A:** Recognize antiderivatives of basic functions.	**EK 3.1A1:** An antiderivative of a function f is a function g whose derivative is f.	Pgs 244 Antiderivatives	1
		EK 3.1A2: Differentiation rules provide the foundation for finding antiderivatives.	Pgs 246-248 Basic Integration Rules	1
EU 3.2: The definite integral of a function over an interval is the limit of a Riemann sum over that interval and can be calculated using a variety of strategies	**LO 3.2A(a):** Interpret the definite integral as the limit of a Riemann sum.	**EK 3.2A1:** A Riemann sum, which requires a partition of an interval , is the sum of products, each of which is the value of the function at a point in a subinterval multiplied by the length of that subinterval of the partition.	Pgs 266-267 Riemann Sums	1

	LO 3.2A(b): Express the limit of a Riemann sum in integral notation.	**EK 3.2A2:** The definite integral of a continuous function f over the interval $[a, b]$, denoted by $\int_a^b f(x)dx$, is the limit of Riemann sums as the widths of the subintervals approach 0. That is, $\int_a^b f(x)dx = \lim_{\max \Delta x_i \to 0} \sum_{i=1}^{n} f(x_i^*)\Delta x_i$ where x_i^* is a value in the ith subinterval, Δx_i is the width of the ith subinterval, n is the number of subintervals, and $\max \Delta x_i$ is the width of the largest subinterval. Another form of the definition is $\int_a^b f(x)dx = \lim_{n \to \infty} \sum_{i=1}^{n} f(x_i^*)\Delta x_i$, where $\Delta x_i = \frac{b-a}{n}$ and x_i^* is a value in the ith subinterval.	Pgs 268-270 Definite Integrals	1
		EK 3.2A3: The information in a definite integral can be translated into the limit of a related Riemann sum, and the limit of a Riemann sum can be written as a definite integral.	Pgs 268-270 Definite Integrals.	1
	LO 3.2B: Approximate a definite integral.	**EK 3.2B1:** Definite integrals can be approximated for functions that are represented graphically, numerically, algebraically, and verbally.	Pg. 281 Average Value of a Function Pgs. 305-307 The Trapezoid Rule. Pgs. 307-308 Simpson's Rule	1
		EK 3.2B2: Definite integrals can be approximated using a left Riemann sum, a right Riemann sum, a midpoint Riemann sum, or a trapezoidal sum; approximations can be computed using either uniform or nonuniform partitions.	Pgs. 305-307 The Trapezoid Rule Pgs 307-308 Simpson's Rule.	1

	LO 3.2C: Calculate a definite integral using areas and properties of definite integrals.	**EK 3.2C1:** In some cases, a definite integral can be evaluated by using geometry and the connection between the definite integral and area.	Pgs 269-270 Theorem 4.5 and Example 3	1
		EK 3.2C2: Properties of definite integrals include the integral of a constant times a function, the integral of the sum of two functions, reversal of limits of integration, and the integral of a function over adjacent intervals.	Pgs 271-272 Properties of Definite Integrals Pgs 292-304 Integration by Substitution Pgs 515-523 Integration by Parts	1
		EK 3.2C3: The definition of the definite integral may be extended to functions with removable or jump discontinuities.	Not found.	0
	LO 3.2D: (BC) Evaluate an improper integral or show that an improper integral diverges.	**EK 3.2D1:** (BC) An improper integral is an integral that has one or both limits infinite or has an integrand that is unbounded in the interval of integration.	Pg 568, Definition of Improper Integrals with Infinite Integral Limits.	1
		EK 3.2D2: (BC) Improper integrals can be determined using limits of definite integrals.	Pg 568-578 Improper Integrals.	1

EU 3.3: The Fundamental Theorem of Calculus, which has two distinct formulations, connects differentiation and integration.	**LO 3.3A:** Analyze functions defined by an integral.	**EK 3.3A1:** The definite integral can be used to define new functions; for example, $f(x)=\int_a^x e^{-t^2}dt$.	Pgs 283–285 The Second Fundemental Theorem of Calculus	1
		EK 3.3A2: If f is a continuous function on the interval $[a, b]$, then $\frac{d}{dx}\left(\int_a^x f(t)dt\right)=f(x)$, where x is between a and b.	Pgs 283-285 The Second Fundemental Theorem of Calculus-Theorem 4.11	1
		EK 3.3A3: Graphical, numerical, analytical, and verbal representations of a function f provide information about the function g defined as $g(x)=\int_a^x f(t)dt$.	Pgs 277-291 Fundemental Theorem of Calculus.	1
	LO 3.3B(a): Calculate antiderivatives.	**EK 3.3B1:** The function defined by $F(x)=\int_a^x f(t)dt$ is an antiderivative of f.	Pg 244 Antiderivatives	1
	LO 3.3B(b): Evaluate definite integrals.	**EK 3.3B2:** If f is continuous on the interval $[a, b]$ and F is an antiderivative of f, then $\int_a^b f(x)dx=F(b)-F(a)$.	Pgs 277-279 Fundamental Theorem of Calculus	1
		EK 3.3B3: The notation $\int f(x)dx=F(x)+C$ means that $F'(x)=f(x)$, and $\int f(x)dx$ is called an indefinite integral of the function f.	Pg 245 bottom of the page	1
		EK 3.3B4: Many functions do not have closed form antiderivatives.	Pg 245 bottom of the page	1

		EK 3.3B5: Techniques for finding antiderivatives include algebraic manipulation such as long division and completing the square, substitution of variables, (BC) integration by parts, and nonrepeating linear partial fractions.	Pgs 375-382 Inverse Trig Functions Pgs 508-514 Basic Integration Pgs 551-556 Integration by Tables and Other Integration Techniques	1
EU 3.4: The definite integral of a function over an interval is a mathematical tool with many interpretations and applications involving accumulation.	**LO 3.4A:** Interpret the meaning of a definite integral within a problem.	**EK 3.4A1:** A function defined as an integral represents an accumulation of a rate of change.	Pg 441 Intergration as an Accumulation Process	1
		EK 3.4A2: The definite integral of the rate of change of a quantity over an interval gives the net change of that quantity over that interval.	Pgs 286-287 Net Change Theorem	1
		EK 3.4A3: The limit of an approximating Riemann sum can be interpreted as a definite integral.	Pgs 268-270 Definite Integrals	1
	LO 3.4B: Apply definite integrals to problems involving the average value of a function.	**EK 3.4B1:** The average value of a function f over an interval $[a, b]$ is $\frac{1}{b-a}\int_a^b f(x)dx$.	Pg 281 Average Value of a Function.	1
	LO 3.4C: Apply definite integrals to problems involving motion.	**EK 3.4C1:** For a particle in rectilinear motion over an interval of time, the definite integral of velocity represents the particle's displacement over the interval of time, and the definite integral of speed represents the particle's total distance traveled over the interval of time.	Pg 250, Example 9 - Solving Vertical motion. Pg 282, Ex. 5 - speed of sound. Pg 287, Ex. 10 - Solving a particle in motion	1

		EK 3.4C2: (BC) The definite integral can be used to determine displacement, distance, and position of a particle moving along a curve given by parametric or vector-valued functions.	Pg 702, The Tautochrone and Barchistochrone Problems Pg 729 Arc Length in Polar Form Pgs 836-837 Projectile Motion	|
	LO 3.4D: Apply definite integrals to problems involving area, volume, (BC) and length of a curve.	**EK 3.4D1:** Areas of certain regions in the plane can be calculated with definite integrals. (BC) Areas bounded by polar curves can be calculated with definite integrals	Pg 270 Area of Common Geometric Figures Pg 436-445 Area of a Region Between Two Curves	|
		EK 3.4D2: Volumes of solids with known cross sections, including discs and washers, can be calculated with definite integrals.	Pgs 446-456 Volume: Disk Method Pgs 457-465 Volume: Shell Method	|
		EK 3.4D3: (BC) The length of a planar curve defined by a function or by a parametrically defined curve can be calculated using a definite integral.	Pg 729, Arc Length in Polar Form	|
	LO 3.4E: Use the definite integral to solve problems in various contexts.	**EK 3.4E1:** The definite integral can be used to express information about accumulation and net change in many applied contexts.	Pgs 286-287 Net change Theorem Pgs 441 - Integration as an Accumulation Process	|

EU 3.5: Antidifferentiation is an underlying concept involved in solving separable differential equations. Solving separable differential equations involves determining a function or relation given its rate of change.	**LO 3.5A:** Analyze differential equations to obtain general and specific solutions.	**EK 3.5A1:** Antidifferentiation can be used to find specific solutions to differential equations with given initial conditions, including applications to motion along a line, exponential growth and decay, (BC) and logistic growth.	Pg 249 Initial Conditions and Particular Solutions Pg 398-406 Slope Fields and Eulers Method Pgs 415-423 Separation of Variables and the Logistic Equation	1
		EK 3.5A2: Some differential equations can be solved by separation of variables.	Pg 415-418 Separation of Variables	1
		EK 3.5A3: Solutions to differential equations may be subject to domain restrictions.	Pgs 407-414 Differential Equations Growth and Decay. Pgs 415-423 Separation of Variables and Logistic Equations.	1
		EK 3.5A4: The function F defined by $F(x)=c+\int_a^x f(t)dt$ is a general solution to the differential equation $\frac{dy}{dx}=f(x)$, and $F(x)=y_0+\int_a^x f(t)dt$ is a particular solution to the differential equation $\frac{dy}{dx}=f(x)$ satisfying $F(a)=y_0$.	Pg 249 Initial Conditions and Particular Solutions Pg 398-399 General and Particular Solutions	1
	LO 3.5B: Interpret, create and solve differential equations from problems in context.	**EK 3.5B1:** The model for exponential growth and decay that arises from the statement "The rate of change of a quantity is proportional to the size of the quantity" is $\frac{dy}{dt}=ky$.	Pgs 408-411 Growth and Decay Models	1
		EK 3.5B2: (BC) The model for logistic growth that arises from the statement "The rate of change of a quantity is jointly proportional to the size of the quantity and the difference between the quantity and the carrying capacity" is $\frac{dy}{dt}=ky(a-y)$.	Pg 419-420 Logistics Differential Equations	1

Standards and Learning Indicators			Publisher/Provider: List units/lessons with specific examples of where standards are Introduced/Taught/Assessed.	Point Value 0/.5/1 (Reviewer)
Big Idea 4: Series (BC) The AP Calculus BC curriculum includes the study of series of numbers, power series, and various methods to determine convergence or divergence of a series. Students should be familiar with Maclaurin series for common functions and general Taylor series representations. Other topics include the radius and interval of convergence and operations on power series. The technique of using power series to approximate an arbitrary function near a specific value allows for an important connection to the tangent-line problem and is a natural extension that helps achieve a better approximation. The concept of approximation is a common theme throughout AP Calculus, and power series provide a unifying, comprehensive conclusion.				
Enduring Understandings (Students will understand that...)	**Learning Objectives** (Students will be able to...)	**Essential Knowledge** (Students will know that...)		
EU 4.1: The sum of an infinite number of real numbers may converge.	**LO 4.1A:** Determine whether a series converges or diverges.	**EK 4.1A1:** The nth partial sum is defined as the sum of the first n terms of a sequence.	Pg 595, Definitions of Convergent and Divergent Series	1
		EK 4.1A2: An infinite series of numbers converges to a real number S (or has sum S), if and only if the limit of its sequence of partial sums exists and equals S.	Pg 595,	1
		EK 4.1A3: Common series of numbers include geometric series, the harmonic series, and p-series.	Pg 597 Geometric Series Pg 607 p-Series and Harmonic Pg 611 Harmonic Series	1
		EK 4.1A4: A series may be absolutely convergent, conditionally convergent, or divergent.	Pgs 595-604 Convergent and Series Pgs 622-623 Absolute and Conditional Convergence	1
		EK 4.1A5: If a series converges absolutely, then it converges.	Pg 622 Definitions of Absolute and Conditional Convergence	1

		EK 4.1A6: In addition to examining the lim[illegible]f the sequence of partial sums of the series, methods for determining whether a series of numbers converges or diverges are the nth term test, the comparison test, the limit comparison test, the integral test, the ratio test, and the alternating series test. **EXCLUSION STATEMENT (EK 4.1A6):** *Other methods for determining convergence or divergence of a series of numbers are not assessed on the AP Calculus AB or BC Exam. However, teachers may include these topics in the course if time permits.*	Pgs 599-606 nth Term Test for Divergence. Pgs 614-615 Limit Comparison Test Pgs 631-632 Strategies for Testing Series	1
	LO 4.1B: Determine or estimate the sum of a series.	**EK 4.1B1:** If a is a real number and r is a real number such that $\|r\| < 1$, then the geometric series $\sum_{n=0}^{\infty} ar^n = \frac{a}{1-r}$.	Pg 597 Geometric Series Theorem 9.6	1
		EK 4.1B2: If an alternating series converges by the alternating series test, then the alternating series error bound can be used to estimate how close a partial sum is to the value of the infinite series.	Pg 621 Alternating Series Remainder	1
		EK 4.1B3: If a series converges absolutely, then any series obtained from it by regrouping or rearranging the terms has the same value.	Pg 624 Rearrangement of Series	1

EU 4.2: A function can be represented by an associated power series over the interval of convergence for the power series.	**LO 4.2A:** Construct and use Taylor polynomials.	**EK 4.2A1:** The coefficient of the nth-degree term in a Taylor polynomial centered at $x = a$ for the function f is $\frac{f^{(n)}(a)}{n!}$.	Pgs 638 Taylor and Maclaurin Polynomials	1
		EK 4.2A2: Taylor polynomials for a function f centered at $x = a$ can be used to approximate function values of f near $x = a$.	Pgs 636-637 Polynomial Approx. of Elementary Functions	1
		EK 4.2A3: In many cases, as the degree of a Taylor polynomial increases, the nth-degree polynomial will converge to the original function over some interval.	Pg 666 Theorem 9.23 and its Proof	1
		EK 4.2A4: The Lagrange error bound can be used to bound the error of a Taylor polynomial approximation to a function.	Pg 642 Remainder of a Taylor Polynomial and Theorem 9.19	1
		EK 4.2A5: In some situations where the signs of a Taylor polynomial are alternating, the alternating series error bound can be used to bound the error of a Taylor polynomial approximation to the function.		0
	LO 4.2B: Write a power series representing a given function.	**EK 4.2B1:** A power series is a series of the form $\sum_{n=0}^{\infty} a_n(x-r)^n$ where n is a non-negative integer, $\{a_n\}$ is a sequence of real numbers, and r is a real number.	Pg 647 Power Series	1
		EK 4.2B2: The Maclaurin series for $\sin(x)$, $\cos(x)$, and e^x provide the foundation for constructing the Maclaurin series for other functions.	Pg 664-675 Taylor and Maclaurin Polynomials	1

		EK 4.2B3: The Maclaurin series for $\frac{1}{1-x}$ is a geometric series.	No	0
		EK 4.2B4: A Taylor polynomial for $f(x)$ is a partial sum of the Taylor series for $f(x)$.	No	0
		EK 4.2B5: A power series for a given function can be derived by various methods (e.g., algebraic processes, substitutions, using properties of geometric series, and operations on known series such as term-byterm integration or term-by-term differentiation).	Pg 647-656 Power Series Pg 657-664 Representations of Functions by Power Series.	1
	LO 4.2C: Determine the radius and interval of convergence of a power series.	**EK 4.2C1:** If a power series converges, it either converges at a single point or has an interval of convergence.	Pg 648, Theorem 9.20	1
		EK 4.2C2: The ratio test can be used to determine the radius of convergence of a power series.	Pg 649 Ex 2, 3, 4	1
		EK 4.2C3: If a power series has a positive radius of convergence, then the power series is the Taylor series of the function to which it converges over the open interval.	Pg 664 Theorem 9.22	1
		EK 4.2C4: The radius of convergence of a power series obtained by term-by-term differentiation or term-by-term integration is the same as the radius of convergence of the original power series.	Pg 652 Differentiation and Integration of Power Series and Theorem 9.21	1

Indicators of Quality:

Indicators of Quality	Evidence- Give specific examples.	Rating: (Reviewer only.)
1. Lessons are thoughtfully structured and support the teacher in leading the class through the learning paths at hand, with active participation by all students in their own learning and in the learning of their classmates.	Evidence- Pacing Guides, tips are given in the Teacher Resource.	(Reviewer only.) X Yes ____ No
2. The underlying design of the materials includes both problems and exercises. (In solving problems, students learn new mathematics, whereas in working exercises, students apply what they have already learned to build mastery.) Each problem or exercise has a purpose. NOTE: This Criterion does not require that the problems and exercises be labeled as such.	Evidence- Sect 4.4- Problem set starts with skill problems, moving into problem solving and applying concepts in "How Do You See It"	(Reviewer only.) X Yes ____ No
3. Design of assignments is not haphazard: exercises are given in intentional sequences in order to strengthen students' mathematical understanding.	Evidence- See above	(Reviewer only.) X Yes ____ No
4. There are separate teacher materials that support and reward teacher study including, but not limited to: discussion of the mathematics of the units and the mathematical point of each lesson as it relates to the organizing concepts of the unit, discussion on student ways of thinking and anticipating a variety of students responses, guidance on lesson flow, guidance on questions that prompt students thinking, and discussion of desired mathematical behaviors being elicited among students.	Evidence- Tips, Common student errors, Suggest assignments.	(Reviewer only.) X Yes ____ No

5. Manipul[illegible]es suggested in the materials are faithful representations of the mathematical objects they represent and are connected to written methods.	**Evidence-** None given. This is a College Level Course.	**(Reviewer only.)** _____ **Yes** _____ **No**
6. Materials include a variety of curriculum-embedded assessments. Examples include pre-, formative, summative, and self-assessment resources.	**Evidence-** "How Do You See It", Test Banks. Homework Quizzes are resources used throughout the book and Teacher Book.	**(Reviewer only.)** _X_ **Yes** _____ **No**
7. Assessments contain aligned rubrics, answer keys, and scoring guidelines that provide sufficient guidance for interpreting student performance.	**Evidence-** College Level Course.	**(Reviewer only.)** _____ **Yes** _____ **No**
8. Materials assess student proficiency using methods that are accessible and unbiased, including the use of course-level language in student prompts.	**Evidence-**	**(Reviewer only.)** _X_ **Yes** _____ **No**
9. Materials are carefully evaluated by qualified individuals, whose names are listed, in an effort to ensure freedom from mathematical errors and course-level appropriateness.	**Evidence-** Yes,	**(Reviewer only.)** _X_ **Yes** _____ **No**
10. The visual design supports students in engaging thoughtfully with the subject. Navigation through the text is clear.	**Evidence-** Yes. Table of Contents is clearly marked. assigments follow each section. Practice Tests at end of chapter	**(Reviewer only.)** _X_ **Yes** _____ **No**

COMMENTS:

STRENGTHS	WEAKNESSES
• Writing opportunities in "How Do You See It". There are exercises throughout each section that have students explain the concepts. •	• Looks like a college text book that might not engage High School students.

IDAHO STATE DEPARTMENT OF EDUCATION

Advanced Placement Course: Calculus AB & BC

Content Area: _____

Course Title: _____

Title of Material: Calculus, 8th Edition "Fast Track to a 5"

Author: James Stewart

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Reviewers: DQ PP

Meets Content Standards Alignment: X **Yes** _____ **No**

Meets Materials Analysis Evaluation: X **Yes** _____ **No**

100% **Core Program**

_____ **Other Program**

_____ **Resource/Supplemental**

_____ **Not Recommended**

Advanced Placement:

- ☐ AP Capstone
- ☐ Arts
- ☐ English
- ☐ History & Social Science
- ☐ Math & Computer Science
- ☐ Sciences
- ☐ World Languages & Cultures

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Standards Alignment Evaluation Rubric

0 = No Alignment– **Not Evident:** Content as described in the Standards is **not evident**.

.5 = Partial Alignment- **Partially Evident:** Content as described in the Standards is **partially evident** and there are few gaps.

1 = High Alignment – **Clearly Evident:** Content is fully aligned as described in the Standards and repeatedly included to guarantee extensive opportunities for students to work with the content. Alignment is **clearly evident**.

N/A = Not applicable for standard

Note: In the Concept Outline, subject matter that is included only in the BC course is indicated with blue shading.

Advanced Placement	**Calculus AB & BC**	
Standards and Learning Indicators	**Publisher/Provider: List units/lessons with specific examples of where standards are Introduced/Taught/Assessed.**	**Point Value 0/.5/1 (Reviewer)**

Big Idea 1: Limits

Many calculus concepts are developed by first considering a discrete model and then the consequences of a limiting case. Therefore, the idea of limits is essential for discovering and developing important ideas, definitions, formulas, and theorems in calculus. Students must have a solid, intuitive understanding of limits and be able to compute various limits, including one-sided limits, limits at infinity, the limit of a sequence, and infinite limits. They should be able to work with tables and graphs in order to estimate the limit of a function at a point. Students should know the algebraic properties of limits and techniques for finding limits of indeterminate forms, and they should be able to apply limits to understand the behavior of a function near a point. Students must also understand how limits are used to determine continuity, a fundamental property of functions.

Enduring Understandings (Students will understand that…)	**Learning Objectives** (Students will be able to…)	**Essential Knowledge** (Students will know that…)		

EU 1.1: The concept of a limit can be used to understand the behavior of functions.	**LO 1.1A (a):** Express limits symbolically using correct notation. **LO 1.1A (b):** Interpret limits expressed symbolically.	**EK 1.1A1:** Given a function f, the limit of $f(x)$ as x approaches c is a real number R if $f(x)$ can be made arbitrarily close to R by taking x sufficiently close to c (but not equal to c). If the limit exists and is a real number, then the common notation is $\lim_{x \to c} f(x) = R$. **EXCLUSION STATEMENT (EK 1.1A1):** The epsilon-delta definition of a limit is not assessed on the AP Calculus AB or BC Exam. However, teachers may include this topic in the course if time permits.	Pg 72, 1.7, "Precise Definition of a Limit." Pg 50-62 Pg 81, Exercises 1-9	)
		EK 1.1A2: The concept of a limit can be extended to include one-sided limits, limits at infinity, and infinite limits.	Pgs 50-59, 231-247, pg 80-82	)
		EK 1.1A3: A limit might not exist for some functions at particular values of . Some ways that the limit might not exist are if the function is unbounded, if the function is oscillating near this value, or if the limit from the left does not equal the limit from the right. **EXAMPLES OF LIMITS THAT DO NOT EXIST:** $\lim_{x \to 0} \frac{1}{x^2} = \infty$ $\lim_{x \to 0} \sin\left(\frac{1}{x}\right)$ *does not exist* $\lim_{x \to 0} \frac{\lvert x \rvert}{x}$ *does not exist* $\lim_{x \to 0} \frac{1}{x}$ *does not exist*	Pg 52, Example 2 Pg 53 Example 4	)
	LO 1.1B: Estimate limits of functions	**EK 1.1B1:** Numerical and graphical information can be used to estimate limits.	P 50-59 P 59-60 P 61, Exercises 27-28	)

	LO 1.1C: Determine limits of functions.	**EK 1.1C1:** Limits of sums, differences, products, quotients, and composite functions can be found using the basic theorems of limits and algebraic rules.	Pg 62-69, Calculating Limits Using Limit Laws.	1
		EK 1.1C2: The limit of a function may be found by using algebraic manipulation, alternate forms of trigonometric functions, or the squeeze theorem.	Pgs 62-69 Pg 69, Squeeze Theorem	1
		EK 1.1C3: Limits of the indeterminate forms $\frac{0}{0}$ and $\frac{\infty}{\infty}$ may be evaluated using L'Hospital's Rule.	Pg 491, 6.8: Indeterminant Forms and L'Hopital's Rule. Pgs 499-503	1
	LO 1.1D: Deduce and interpret behavior of functions using limits.	**EK 1.1D1:** Asymptotic and unbounded behavior of functions can be explained and described using limits.	Pg 56-59 Pg 59-62	1
		EK 1.1D2: Relative magnitudes of functions and their rates of change can be compared using limits.	Pgs 106-113	1
EU 1.2: Continuity is a key property of functions that is defined using limits	**LO 1.2A:** Analyze functions for intervals of continuity or points of discontinuity.	**EK 1.2A1:** A function f is continuous at $x = c$ provided that $f(c)$ exists, $\lim_{x \to c} f(x)$ exists, and $\lim_{x \to c} f(x) = f(c)$.	Pgs 82-91 Pgs 91-94	1
		EK 1.2A2: Polynomial, rational, power, exponential, logarithmic, and trigonometric functions are continuous at all points in their domains.	Pg 86-94	1

		EK 1.2A3: Types of discontinuities inclu[illegible]emovable discontinuities, jump discontinuities, and discontinuities due to vertical asymptotes.	Pgs 83-84, Example 1 Pgs 91-94, Exercises 5-8.	1
	LO 1.2B: Determine the applicability of important calculus theorems using continuity.	**EK 1.2B1:** Continuity is an essential condition for theorems such as the Intermediate Value Theorem, the Extreme Value Theorem, and the Mean Value Theorem.	Pg 90 - Intermediate Value Theorem Pg 206 - Extreme Value Theorem Pg 216 - Mean Value Theorem	1

Standards and Learning Indicators			Publisher/Provider: List units/lessons with specific examples of where standards are Introduced/Taught/Assessed.	Point Value 0/.5/1 (Reviewer)
Big Idea 2: Derivatives Using derivatives to describe the rate of change of one variable with respect to another variable allows students to understand change in a variety of contexts. In AP Calculus, students build the derivative using the concept of limits and use the derivative primarily to compute the instantaneous rate of change of a function. Applications of the derivative include finding the slope of a tangent line to a graph at a point, analyzing the graph of a function (for example, determining whether a function is increasing or decreasing and finding concavity and extreme values), and solving problems involving rectilinear motion. Students should be able to use different definitions of the derivative, estimate derivatives from tables and graphs, and apply various derivative rules and properties. In addition, students should be able to solve separable differential equations, understand and be able to apply the Mean Value Theorem, and be familiar with a variety of real-world applications, including related rates, optimization, and growth and decay models.				
Enduring Understandings (Students will understand that…)	**Learning Objectives** (Students will be able to…)	**Essential Knowledge** (Students will know that…)		
EU 2.1: The derivative of a function is defined as the limit of a difference quotient and can be determined using a variety of strategies.	**LO 2.1A:** Identify the derivative of a function as the limit of a difference quotient.	**EK 2.1A1:** The difference quotients $\frac{f(a+h)-f(a)}{h}$ and $\frac{f(x)-f(a)}{x-a}$ express the average rate of change of a function over an interval.	Pg 106-113 Exercises Pg 113-116.	1

		EK 2.1A2: The instantaneous rate of change of a function at a point can be expressed by $\lim_{h\to 0}\frac{f(a+h)-f(a)}{h}$ or $\lim_{x\to a}\frac{f(x)-f(a)}{x-a}$, provided that the limit exists. These are common forms of the definition of the derivative and are denoted $f'(a)$.	Pgs 106-113 Pgs 113-116	
		EK 2.1A3: The derivative of f is the function whose value at x is $\lim_{h\to 0}\frac{f(x+h)-f(x)}{h}$ provided this limit exists.	Pg 117-125 Pgs 125-130	
		EK 2.1A4: For $y=f(x)$, notations for the derivative include $\frac{dy}{dx}$, $f'(x)$, and y'.	Pgs 106-113	
		EK 2.1A5: The derivative can be represented graphically, numerically, analytically, and verbally.	Pg. 106-113	
	LO 2.1B: Estimate derivatives.	**EK 2.1B1:** The derivative at a point can be estimated from information given in tables or graphs.	Pgs 106-113	
	LO 2.1C: Calculate derivatives.	**EK 2.1C1:** Direct application of the definition of the derivative can be used to find the derivative for selected functions, including polynomial, power, sine, cosine, exponential, and logarithmic functions.	Polynomial Pg 106-113 Log Pgs 428-436 Trig 144-150 Power 792-797	
		EK 2.1C2: Specific rules can be used to calculate derivatives for classes of functions, including polynomial, rational, power, exponential, logarithmic, trigonometric, and inverse trigonometric.	see above	

		EK 2.1C3: Sums, differences, products, and quotients of functions can be differentiated using derivative rules.	Pgs 130-140	1
		EK 2.1C4: The chain rule provides a way to differentiate composite functions.	Pgs 152-158, Chain Rule	1
		EK 2.1C5: The chain rule is the basis for implicit differentiation.	Pgs 161-166, Implicit Differentiation	1
		EK 2.1C6: The chain rule can be used to find the derivative of an inverse function, provided the derivative of that function exists.	Pgs 400-406, Note 2	1
		EK 2.1C7: (BC) Methods for calculating derivatives of realvalued functions can be extended to vector-valued functions, parametric functions, and functions in polar coordinates.	Pgs 895-899 Vectors Pgs 698-708 Polars.	1

	LO 2.1D: Determine higher order derivatives.	**EK 2.1D1:** Differentiating f' produces the second derivative f'', provided the derivative of f' exists; repeating this process produces higher order derivatives of f.	Pg 117-125 Higher Derivatives Derivatives as a Function.	1
		EK 2.1D2: Higher order derivatives are represented with a variety of notations. For $y = f(x)$, notations for the second derivative include $\frac{d^2y}{dx^2}$, $f''(x)$, and y''. Higher order derivatives can be denoted $\frac{d^ny}{dx^n}$ or $f^{(n)}(x)$.	See above	1
EU 2.2: A function's derivative, which is itself a function, can be used to understand the behavior of the function.	**LO 2.2A:** Use derivatives to analyze properties of a function.	**EK 2.2A1:** First and second derivatives of a function can provide information about the function and its graph including intervals of increase or decrease, local (relative) and global (absolute) extrema, intervals of upward or downward concavity, and points of inflection.	See above	1
		EK 2.2A2: Key features of functions and their derivatives can be identified and related to their graphical, numerical, and analytical representations.	See above.	1
		EK 2.2A3: Key features of the graphs of f, f', and f'' are related to one another.	See above.	1
		EK 2.2A4: (BC) For a curve given by a polar equation $r = f(\theta)$, derivatives of r, x, and y with respect to θ and first and second derivatives of y with respect to x can provide information about the curve.	Pg 698-708 Tangents to Polar curves	1

	LO 2.2B: Recognize the connection between differentiability and continuity.	**EK 2.2B1:** A continuous function may fail to be differentiable at a point in its domain.	Pgs 122-123 Higher Derivatives Exercises 47-54 Pg 129	1
		EK 2.2B2: If a function is differentiable at a point, then it is continuous at that point.	See Above	1
EU 2.3: The derivative has multiple interpretations and applications including those that involve instantaneous rates of change.	**LO 2.3A:** Interpret the meaning of a derivative within a problem.	**EK 2.3A1:** The unit for $f'(x)$ is the unit for f divided by the unit for x.	Pg 106-113	1
		EK 2.3A2: The derivative of a function can be interpreted as the instantaneous rate of change with respect to its independent variable.	See above	1
	LO 2.3B: Solve problems involving the slope of a tangent line.	**EK 2.3B1:** The derivative at a point is the slope of the line tangent to a graph at that point on the graph.	See above	1
		EK 2.3B2: The tangent line is the graph of a locally linear approximation of the function near the point of tangency.	See above	1
	LO 2.3C: Solve problems involving related rates, optimization, rectilinear motion, (BC) and planar motion.	**EK 2.3C1:** The derivative can be used to solve rectilinear motion problems involving position, speed, velocity, and acceleration.	Pg 281-282	1

		EK 2.3C2: The derivative can be used to solve related rates problems, that is, finding a rate at which one quantity is changing by relating it to other quantities whose rates of change are known.	pgs 181-188 Related Rates	1
		EK 2.3C3: The derivative can be used to solve optimization problems, that is, finding a maximum or minimum value of a function over a given interval.	pg 258-270 Optimization Problems	1
		EK 2.3C4: (BC) Derivatives can be used to determine velocity, speed, and acceleration for a particle moving along curves given by parametric or vector-valued functions.	pg 108-116	1
	LO 2.3D: Solve problems involving rates of change in applied contexts.	**EK 2.3D1:** The derivative can be used to express information about rates of change in applied contexts.	pgs 169-181 - Rates of Change in the Natural and Social Sciences Extended also in Chapter 3	1
	LO 2.3E: Verify solutions to differential equations.	**EK 2.3E1:** Solutions to differential equations are functions or families of functions.	pg 131-144	1
		EK 2.3E2: Derivatives can be used to verify that a function is a solution to a given differential equation.	pg 630 Exercises 1-5	1
	LO 2.3F: Estimate solutions to differential equations.	**EK 2.3F1:** Slope fields provide visual clues to the behavior of solutions to first order differential equations.	pgs 631-639 Direction fields	1

		EK 2.3F2: (BC) For differential equations, Euler's method provides a procedure for approximating a solution or a point on a solution curve.	Pgs 635-639 Euler's Method	1
EU 2.4: The Mean Value Theorem connects the behavior of a differentiable function over an interval to the behavior of the derivative of that function at a particular point in the interval.	**LO 2.4A:** Apply the Mean Value Theorem to describe the behavior of a function over an interval.	**EK 2.4A1:** If a function f is continuous over the interval $[a, b]$ and differentiable over the interval (a,b), the Mean Value Theorem guarantees a point within that open interval where the instantaneous rate of change equals the average rate of change over the interval.	Pgs 215-222 Mean Value Theorem	1

Standards & Learning Indicators			Publisher/Provider: List units/lessons with specific examples of where standards are Introduced/Taught/Assessed.	Point Value 0/.5/1 (Reviewer)
Big Idea 3: Integrals and the Fundamental Theorem of Calculus Integrals are used in a wide variety of practical and theoretical applications. AP Calculus students should understand the definition of a definite integral involving a Riemann sum, be able to approximate a definite integral using different methods, and be able to compute definite integrals using geometry. They should be familiar with basic techniques of integration and properties of integrals. The interpretation of a definite integral is an important skill, and students should be familiar with area, volume, and motion applications, as well as with the use of the definite integral as an accumulation function. It is critical that students grasp the relationship between integration and differentiation as expressed in the Fundamental Theorem of Calculus — a central idea in AP Calculus. Students should be able to work with and analyze functions defined by an integral.				
Enduring Understandings (Students will understand that…)	**Learning Objectives** (Students will be able to…)	**Essential Knowledge** (Students will know that…)		
EU 3.1: Antidifferentiation is the inverse process of differentiation.	**LO 3.1A:** Recognize antiderivatives of basic functions.	**EK 3.1A1:** An antiderivative of a function f is a function g whose derivative is f.	Pgs 278-284 3.9-Antiderivatives	1
		EK 3.1A2: Differentiation rules provide the foundation for finding antiderivatives.	- See above	1
EU 3.2: The definite integral of a function over an interval is the limit of a Riemann sum over that interval and can be calculated using a variety of strategies	**LO 3.2A(a):** Interpret the definite integral as the limit of a Riemann sum.	**EK 3.2A1:** A Riemann sum, which requires a partition of an interval , is the sum of products, each of which is the value of the function at a point in a subinterval multiplied by the length of that subinterval of the partition.	Pg 306-319 The Definite Integral	1

	LO 3.2A(b): Express the limit of a Riemann sum in integral notation.	**EK 3.2A2:** The definite integral of a continuous function f over the interval $[a, b]$, denoted by $\int_a^b f(x)dx$, is the limit of Riemann sums as the widths of the subintervals approach 0. That is, $\int_a^b f(x)dx = \lim_{\max \Delta x_i \to 0} \sum_{i=1}^{n} f(x_i^*)\Delta x_i$ where x_i^* is a value in the ith subinterval, Δx_i is the width of the ith subinterval, n is the number of subintervals, and $\max \Delta x_i$ is the width of the largest subinterval. Another form of the definition is $\int_a^b f(x)dx = \lim_{n \to \infty} \sum_{i=1}^{n} f(x_i^*)\Delta x_i$, where $\Delta x_i = \frac{b-a}{n}$ and x_i^* is a value in the ith subinterval.	306-319	1
		EK 3.2A3: The information in a definite integral can be translated into the limit of a related Riemann sum, and the limit of a Riemann sum can be written as a definite integral.	Pg 306-319	1
	LO 3.2B: Approximate a definite integral.	**EK 3.2B1:** Definite integrals can be approximated for functions that are represented graphically, numerically, algebraically, and verbally.	Pgs 306-319	1
		EK 3.2B2: Definite integrals can be approximated using a left Riemann sum, a right Riemann sum, a midpoint Riemann sum, or a trapezoidal sum; approximations can be computed using either uniform or nonuniform partitions.	Pgs 306-319	1

	LO 3.2C: Calculate a definite integral using areas and properties of definite integrals.	**EK 3.2C1:** In some cases, a definite integral can be evaluated by using geometry and the connection between the definite integral and area.	Pgs 306-319	1
		EK 3.2C2: Properties of definite integrals include the integral of a constant times a function, the integral of the sum of two functions, reversal of limits of integration, and the integral of a function over adjacent intervals.	Pgs 306-319	1
		EK 3.2C3: The definition of the definite integral may be extended to functions with removable or jump discontinuities.	Pgs 567-574 574-576 Improper Integrals.	1
	LO 3.2D: (BC) Evaluate an improper integral or show that an improper integral diverges.	**EK 3.2D1:** (BC) An improper integral is an integral that has one or both limits infinite or has an integrand that is unbounded in the interval of integration.	Pgs 567-576	1
		EK 3.2D2: (BC) Improper integrals can be determined using limits of definite integrals.	Pgs 567-576	1

EU 3.3: The Fundamental Theorem of Calculus, which has two distinct formulations, connects differentiation and integration.	**LO 3.3A:** Analyze functions defined by an integral.	**EK 3.3A1:** The definite integral can be used to define new functions; for example, $f(x)=\int_a^x e^{-t^2}dt$.	Pgs 319 - Discovery Project. Pgs 320-330	1
		EK 3.3A2: If f is a continuous function on the interval $[a, b]$, then $\frac{d}{dx}\left(\int_a^x f(t)dt\right)=f(x)$, where x is between a and b.	Pgs 320-330	1
		EK 3.3A3: Graphical, numerical, analytical, and verbal representations of a function f provide information about the function g defined as $g(x)=\int_a^x f(t)dt$.	Pgs 320-330	1
	LO 3.3B(a): Calculate antiderivatives.	**EK 3.3B1:** The function defined by $F(x)=\int_a^x f(t)dt$ is an antiderivative of f.	Pgs 320-330	1
	LO 3.3B(b): Evaluate definite integrals.	**EK 3.3B2:** If f is continuous on the interval $[a, b]$ and F is an antiderivative of f, then $\int_a^b f(x)dx=F(b)-F(a)$.	Pgs 320-330	1
		EK 3.3B3: The notation $\int f(x)dx=F(x)+C$ means that $F'(x)=f(x)$, and $\int f(x)dx$ is called an indefinite integral of the function f.	Pgs 330-339	1
		EK 3.3B4: Many functions do not have closed form antiderivatives.	Pgs 546-47	1

		EK 3.3B5: Techniques for finding antiderivatives include algebraic manipulation such as long division and completing the square, substitution of variables, (BC) integration by parts, and nonrepeating linear partial fractions.	Pgs 340-Substitution Pg 572-518 Integration by Parts Pg 533-43 Division (Partial Fractions)	1
EU 3.4: The definite integral of a function over an interval is a mathematical tool with many interpretations and applications involving accumulation.	**LO 3.4A:** Interpret the meaning of a definite integral within a problem.	**EK 3.4A1:** A function defined as an integral represents an accumulation of a rate of change.	Pg 333-339 Applications	1
		EK 3.4A2: The definite integral of the rate of change of a quantity over an interval gives the net change of that quantity over that interval.	Pg 333-339 Applications	1
		EK 3.4A3: The limit of an approximating Riemann sum can be interpreted as a definite integral.	Pg 306-319 Definite Integrals	1
	LO 3.4B: Apply definite integrals to problems involving the average value of a function.	**EK 3.4B1:** The average value of a function f over an interval $[a, b]$ is $\frac{1}{b-a}\int_a^b f(x)dx$.	Pgs 389-392	1
	LO 3.4C: Apply definite integrals to problems involving motion.	**EK 3.4C1:** For a particle in rectilinear motion over an interval of time, the definite integral of velocity represents the particle's displacement over the interval of time, and the definite integral of speed represents the particle's total distance traveled over the interval of time.	Pgs 281-284 Rectilinear Motion.	1

		EK 3.4C2: (BC) The definite integral can be used to determine displacement, distance, and position of a particle moving along a curve given by parametric or vector-valued functions.	Pgs 689, 10.2 - Calculus with Parametric Curves Pg 910-919 Motion	1
	LO 3.4D: Apply definite integrals to problems involving area, volume, (BC) and length of a curve.	**EK 3.4D1:** Areas of certain regions in the plane can be calculated with definite integrals. (BC) Areas bounded by polar curves can be calculated with definite integrals	Pg 355-364 Area Between Curves Pg 709-114 Polar	1
		EK 3.4D2: Volumes of solids with known cross sections, including discs and washers, can be calculated with definite integrals.	Pg 366-377 Volumes Pg 377-383	1
		EK 3.4D3: (BC) The length of a planar curve defined by a function or by a parametrically defined curve can be calculated using a definite integral.	Pgs 584-590 Arc Lengths	1
	LO 3.4E: Use the definite integral to solve problems in various contexts.	**EK 3.4E1:** The definite integral can be used to express information about accumulation and net change in many applied contexts.	definition Pg 333 Applications 598-608 608-613	1

EU 3.5: Antidifferentiation is an underlying concept involved in solving separable differential equations. Solving separable differential equations involves determining a function or relation given its rate of change.	**LO 3.5A:** Analyze differential equations to obtain general and specific solutions.	**EK 3.5A1:** Antidifferentiation can be used to find specific solutions to differential equations with given initial conditions, including applications to motion along a line, exponential growth and decay, (BC) and logistic growth.	Pg 643 - Trajectory. Pg 650-660 Growth.	1
		EK 3.5A2: Some differential equations can be solved by separation of variables.	Pgs 639-648	1
		EK 3.5A3: Solutions to differential equations may be subject to domain restrictions.	Pgs 626-631	1
		EK 3.5A4: The function F defined by $F(x) = c + \int_a^x f(t)dt$ is a general solution to the differential equation $\frac{dy}{dx} = f(x)$, and $F(x) = y_0 + \int_a^x f(t)dt$ is a particular solution to the differential equation $\frac{dy}{dx} = f(x)$ satisfying $F(a) = y_0$.	Pg 628-631	1
	LO 3.5B: Interpret, create and solve differential equations from problems in context.	**EK 3.5B1:** The model for exponential growth and decay that arises from the statement "The rate of change of a quantity is proportional to the size of the quantity" is $\frac{dy}{dt} = ky$.	Pgs 650-660	1
		EK 3.5B2: (BC) The model for logistic growth that arises from the statement "The rate of change of a quantity is jointly proportional to the size of the quantity and the difference between the quantity and the carrying capacity" is $\frac{dy}{dt} = ky(a - y)$.	Pgs 650-660	1

Standards and Learning Indicators			Publisher/Provider: List units/lessons with specific examples of where standards are Introduced/Taught/Assessed.	Point Value 0/.5/1 (Reviewer)
Big Idea 4: Series (BC) The AP Calculus BC curriculum includes the study of series of numbers, power series, and various methods to determine convergence or divergence of a series. Students should be familiar with Maclaurin series for common functions and general Taylor series representations. Other topics include the radius and interval of convergence and operations on power series. The technique of using power series to approximate an arbitrary function near a specific value allows for an important connection to the tangent-line problem and is a natural extension that helps achieve a better approximation. The concept of approximation is a common theme throughout AP Calculus, and power series provide a unifying, comprehensive conclusion.				
Enduring Understandings (Students will understand that…)	**Learning Objectives** (Students will be able to…)	**Essential Knowledge** (Students will know that…)		
EU 4.1: The sum of an infinite number of real numbers may converge.	**LO 4.1A:** Determine whether a series converges or diverges.	**EK 4.1A1:** The nth partial sum is defined as the sum of the first n terms of a sequence.	Pgs 747-759	1
		EK 4.1A2: An infinite series of numbers converges to a real number S (or has sum S), if and only if the limit of its sequence of partial sums exists and equals S.	Pgs 747-759	1
		EK 4.1A3: Common series of numbers include geometric series, the harmonic series, and p-series.	Pgs 747-759 Pgs 759-767	1
		EK 4.1A4: A series may be absolutely convergent, conditionally convergent, or divergent.	Absolute Pgs 777-784 Conditional Divergent Pgs 747-759	1
		EK 4.1A5: If a series converges absolutely, then it converges.	Pg 777-784	1

		EK 4.1A6: In addition to examining the limit of the sequence of partial sums of the series, methods for determining whether a series of numbers converges or diverges are the nth term test, the comparison test, the limit comparison test, the integral test, the ratio test, and the alternating series test. **EXCLUSION STATEMENT (EK 4.1A6):** *Other methods for determining convergence or divergence of a series of numbers are not assessed on the AP Calculus AB or BC Exam. However, teachers may include these topics in the course if time permits.*	Pgs 772-777 Alternating Pg 761 - Integral Test Pg 767-771 - Comparision Test Pg 779 - Rato Test	1
	LO 4.1B: Determine or estimate the sum of a series.	**EK 4.1B1:** If a is a real number and r is a real number such that $\lvert r\rvert < 1$, then the geometric series $\sum_{n=0}^{\infty} ar^n = \frac{a}{1-r}$.	Pg 750 Pg 756	1
		EK 4.1B2: If an alternating series converges by the alternating series test, then the alternating series error bound can be used to estimate how close a partial sum is to the value of the infinite series.	Pg 772-777	1
		EK 4.1B3: If a series converges absolutely, then any series obtained from it by regrouping or rearranging the terms has the same value.	Pgs 777-784	1

EU 4.2: A function can be represented by an associated power series over the interval of convergence for the power series.	**LO 4.2A:** Construct and use Taylor polynomials.	**EK 4.2A1:** The coefficient of the nth-degree term in a Taylor polynomial centered at $x=a$ for the function f is $\frac{f^{(n)}(a)}{n!}$.	Pg 799-812	1
		EK 4.2A2: Taylor polynomials for a function f centered at $x=a$ can be used to approximate function values of f near $x=a$.	Pg 814-822	1
		EK 4.2A3: In many cases, as the degree of a Taylor polynomial increases, the nth-degree polynomial will converge to the original function over some interval.	Pg 814-822	1
		EK 4.2A4: The Lagrange error bound can be used to bound the error of a Taylor polynomial approximation to a function.	Pg 814-822	1
		EK 4.2A5: In some situations where the signs of a Taylor polynomial are alternating, the alternating series error bound can be used to bound the error of a Taylor polynomial approximation to the function.	Pg 814-822	1
	LO 4.2B: Write a power series representing a given function.	**EK 4.2B1:** A power series is a series of the form $\sum_{n=0}^{\infty} a_n(x-r)^n$ where n is a non-negative integer, $\{a_n\}$ is a sequence of real numbers, and r is a real number.	Pgs 786-792	1
		EK 4.2B2: The Maclaurin series for $\sin(x)$, $\cos(x)$, and e^x provide the foundation for constructing the Maclaurin series for other functions.	Pgs 799-812	1

		EK 4.2B3: The Maclaurin series for $\frac{1}{1-x}$ is a geometric series.	Pgs 799-812
		EK 4.2B4: A Taylor polynomial for $f(x)$ is a partial sum of the Taylor series for $f(x)$.	Pgs 812-822
		EK 4.2B5: A power series for a given function can be derived by various methods (e.g., algebraic processes, substitutions, using properties of geometric series, and operations on known series such as term-byterm integration or term-by-term differentiation).	Pgs 792-798
	LO 4.2C: Determine the radius and interval of convergence of a power series.	**EK 4.2C1:** If a power series converges, it either converges at a single point or has an interval of convergence.	Pgs 786-792
		EK 4.2C2: The ratio test can be used to determine the radius of convergence of a power series.	Pgs 786-792
		EK 4.2C3: If a power series has a positive radius of convergence, then the power series is the Taylor series of the function to which it converges over the open interval.	Pgs 792-798
		EK 4.2C4: The radius of convergence of a power series obtained by term-by-term differentiation or term-by-term integration is the same as the radius of convergence of the original power series.	Pgs 792-797

Indicators of Quality:

Indicators of Quality	Evidence- Give specific examples.	Rating: (Reviewer only.)
1. Lessons are thoughtfully structured and support the teacher in leading the class through the learning paths at hand, with active participation by all students in their own learning and in the learning of their classmates.	Evidence- Yes, each Chapter starts with what was learned and where Chapter is going	(Reviewer only.) X Yes ____ No
2. The underlying design of the materials includes both problems and exercises. (In solving problems, students learn new mathematics, whereas in working exercises, students apply what they have already learned to build mastery.) Each problem or exercise has a purpose. NOTE: This Criterion does not require that the problems and exercises be labeled as such.	Evidence- Yes. Exercises start with skill development building to exercises that combine skills and understanding concepts.	(Reviewer only.) X Yes ____ No
3. Design of assignments is not haphazard: exercises are given in intentional sequences in order to strengthen students' mathematical understanding.	Evidence- Yes, See above	(Reviewer only.) X Yes ____ No
4. There are separate teacher materials that support and reward teacher study including, but not limited to: discussion of the mathematics of the units and the mathematical point of each lesson as it relates to the organizing concepts of the unit, discussion on student ways of thinking and anticipating a variety of students responses, guidance on lesson flow, guidance on questions that prompt students thinking, and discussion of desired mathematical behaviors being elicited among students.	Evidence- Yes. In TE there are time pacing guides, Points to Stress, Quiz questions, etc.	(Reviewer only.) X Yes ____ No

5. Manipulatives suggested in the materials are faithful representations of the mathematical objects they represent and are connected to written methods.	**Evidence-** Yes. Graphing Calculator symbols indicate and incorporate the use of calculators.	**(Reviewer only.)** X Yes ____ No
6. Materials include a variety of curriculum-embedded assessments. Examples include pre-, formative, summative, and self-assessment resources.	**Evidence-** Imbedded in TE ~~s~~ are Ap questions	**(Reviewer only.)** X Yes ____ No
7. Assessments contain aligned rubrics, answer keys, and scoring guidelines that provide sufficient guidance for interpreting student performance.	**Evidence-** Yes, appropriate for college level Course	**(Reviewer only.)** X Yes ____ No
8. Materials assess student proficiency using methods that are accessible and unbiased, including the use of course-level language in student prompts.	**Evidence-** Yes. Appriopriate for college level Courses	**(Reviewer only.)** X Yes ____ No
9. Materials are carefully evaluated by qualified individuals, whose names are listed, in an effort to ensure freedom from mathematical errors and course-level appropriateness.	**Evidence-** Yes, see xviii and ~~xxii~~ xix	**(Reviewer only.)** X Yes ____ No
10. The visual design supports students in engaging thoughtfully with the subject. Navigation through the text is clear.	**Evidence-** Yes. Graphs are clear.	**(Reviewer only.)** X Yes ____ No

COMMENTS:

STRENGTHS	WEAKNESSES
• The Teacher Resources are fantastic. They will help lead me through suggested group discussions. Scaffolding assignments. • Scope and Sequence was good. Didn't place concepts not learned before students had knowledge. • Student guides were great for extra help with struggling students • Reference pages located in the back of books is perforated and can easily come out and placed in plastic covers.	• Red on white examples will create problems for colorblind students. • Student guides might become expensive if purchased every year. • The perforated reference guides can be taken out by students.

IDAHO STATE DEPARTMENT OF EDUCATION

Advanced Placement Course: Calculus AB & BC

Content Area: AP Mathematics

Course Title: AP Calculus AB

Title of Material: Calculus of a Single Variable 10e

Author: Ron Larson and Bruce Edwards

Publisher: Cengage Learning, Inc

ISBN #: 9781285060330 **Copyright** 2014

Reviewers: MB & CJ

Meets Content Standards Alignment: ✓ Yes _____ No

Meets Materials Analysis Evaluation: ✓ Yes _____ No

✓ **Core Program** 98%

_____ **Other Program**

_____ **Resource/Supplemental**

_____ **Not Recommended**

Advanced Placement:

- ☐ AP Capstone
- ☐ Arts
- ☐ English
- ☐ History & Social Science
- ☐ Math & Computer Science
- ☐ Sciences
- ☐ World Languages & Cultures

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Standards Alignment Evaluation Rubric

0 = No Alignment– **Not Evident:** Content as described in the Standards is **not evident**.

.5 = Partial Alignment- **Partially Evident:** Content as described in the Standards is **partially evident** and there are few gaps.

1 = High Alignment – **Clearly Evident:** Content is fully aligned as described in the Standards and repeatedly included to guarantee extensive opportunities for students to work with the content. Alignment is **clearly evident**.

N/A = Not applicable for standard

Note: In the Concept Outline, subject matter that is included only in the BC course is indicated with blue shading.

Advanced Placement			**Calculus AB & BC**	
Standards and Learning Indicators			**Publisher/Provider: List units/lessons with specific examples of where standards are Introduced/Taught/Assessed.**	**Point Value 0/.5/1 (Reviewer)**
Big Idea 1: Limits Many calculus concepts are developed by first considering a discrete model and then the consequences of a limiting case. Therefore, the idea of limits is essential for discovering and developing important ideas, definitions, formulas, and theorems in calculus. Students must have a solid, intuitive understanding of limits and be able to compute various limits, including one-sided limits, limits at infinity, the limit of a sequence, and infinite limits. They should be able to work with tables and graphs in order to estimate the limit of a function at a point. Students should know the algebraic properties of limits and techniques for finding limits of indeterminate forms, and they should be able to apply limits to understand the behavior of a function near a point. Students must also understand how limits are used to determine continuity, a fundamental property of functions.				
Enduring Understandings (Students will understand that…)	**Learning Objectives** (Students will be able to…)	**Essential Knowledge** (Students will know that…)		

EU 1.1: The concept of a limit can be used to understand the behavior of functions.	**LO 1.1A (a):** Express limits symbolically using correct notation. **LO 1.1A (b):** Interpret limits expressed symbolically.	**EK 1.1A1:** Given a function f, the limit of $f(x)$ as x approaches c is a real number R if $f(x)$ can be made arbitrarily close to R by taking x sufficiently close to c (but not equal to c). If the limit exists and is a real number, then the common notation is $\lim_{x \to c} f(x) = R$. **EXCLUSION STATEMENT (EK 1.1A1):** The epsilon-delta definition of a limit is not assessed on the AP Calculus AB or BC Exam. However, teachers may include this topic in the course if time permits.	**Lessons 1.2 and 1.3** **Definition of limit along with informal definition using tables and graphs.** **Text also includes $\varepsilon - \delta$ definition.**	1
		EK 1.1A2: The concept of a limit can be extended to include one-sided limits, limits at infinity, and infinite limits.	**Lesson 1.4 one-sided limits** **Lesson 1.5 infinite limits** **Lesson 3.5 limits at infinity**	1
		EK 1.1A3: A limit might not exist for some functions at particular values of . Some ways that the limit might not exist are if the function is unbounded, if the function is oscillating near this value, or if the limit from the left does not equal the limit from the right. **EXAMPLES OF LIMITS THAT DO NOT EXIST:** $\lim_{x \to 0} \frac{1}{x^2} = \infty$ $\lim_{x \to 0} \sin\left(\frac{1}{x}\right)$ *does not exist* $\lim_{x \to 0} \frac{\lvert x \rvert}{x}$ *does not exist* $\lim_{x \to 0} \frac{1}{x}$ *does not exist*	**Lesson 1.2 and 1.4** **Pages 50-51 examples 3, 4, and 5 along with table on page 51 "Common Types of Behavior Associated with Nonexistence of a Limit"** **Graphically in exercises 15-22 page 55** **Pages 70 limits failing to exists at a point, left- and right-hand limits are not equal**	1
	LO 1.1B: Estimate limits of functions	**EK 1.1B1:** Numerical and graphical information can be used to estimate limits.	**Lesson 1.2** **Text routinely makes connection between tables and graphs for analyzing limits (e.g. figures 1.5 and 1.6 with tables—page 48)**	1

	LO 1.1C: Determine limits of functions.	**EK 1.1C1:** Limits of sums, differences, products, quotients, and composite functions can be found using the basic theorems of limits and algebraic rules.	**Lesson 1.3 Properties of limits are clearly outlined in Theorem 1.2 on page 59. Limits of polynomial and rational functions (Theorem 1.3, 1.4). Limit of a composite function (Theorem 1.5).**	1
		EK 1.1C2: The limit of a function may be found by using algebraic manipulation, alternate forms of trigonometric functions, or the squeeze theorem.	**All methods are used throughout chapter 1 including multiple techniques such as factoring and division. Trigonometric limits on page 61. Squeeze Theorem introduced in lesson 1.3. Video proof to accompany Squeeze Theorem found at LarsonCalculus.com**	1
		EK 1.1C3: Limits of the indeterminate forms $\frac{0}{0}$ and $\frac{\infty}{\infty}$ may be evaluated using L'Hospital's Rule.	**Lesson 1.3 addresses indeterminate form Lesson 8.7 L'Hopital's rule**	1
	LO 1.1D: Deduce and interpret behavior of functions using limits.	**EK 1.1D1:** Asymptotic and unbounded behavior of functions can be explained and described using limits.	**Lesson 1.5 Definition of infinite limits preceded by tabular example. Definition of limits related to vertical asymptotes (pg 85), horizontal asymptotes (pg 196) with supporting analysis and graphs.**	1
		EK 1.1D2: Relative magnitudes of functions and their rates of change can be compared using limits.	**Comparison of rates of change using limits. Rates of change is addressed in lesson 2.2**	0
EU 1.2: Continuity is a key property of functions that is defined using limits	**LO 1.2A:** Analyze functions for intervals of continuity or points of discontinuity.	**EK 1.2A1:** A function f is continuous at $x = c$ provided that $f(c)$ exists, $\lim_{x \to c} f(x)$ exists, and $\lim_{x \to c} f(x) = f(c)$.	**Lesson 1.4 Definition of continuity at a point and on an open interval (page 70) followed by multiple examples and graphical representations.**	1
		EK 1.2A2: Polynomial, rational, power, exponential, logarithmic, and trigonometric functions are continuous at all points in their domains.	**Lesson 1.4 identifies which functions are continuous at every point in their domains**	1

		EK 1.2A3: Types of discontinuities include removable discontinuities, jump discontinuities, and discontinuities due to vertical asymptotes.	**Lesson 1.4 Discontinuities identified with numerical, analytical and graphical examp Vertical asymptote discontinuity in example 7 on page 76.**	1
	LO 1.2B: Determine the applicability of important calculus theorems using continuity.	**EK 1.2B1:** Continuity is an essential condition for theorems such as the Intermediate Value Theorem, the Extreme Value Theorem, and the Mean Value Theorem.	**Intermediate Value Theorem Lesson 1.4** **Extreme Value Theorem Lesson 3.1** **Mean Value Theorem Lesson 3.2** **Each theorem emphasizes continuity**	1

Standards and Learning Indicators			Publisher/Provider: List units/lessons with specific examples of where standards are Introduced/Taught/Assessed.	Point Value 0/.5/1 (Reviewer)
Big Idea 2: Derivatives Using derivatives to describe the rate of change of one variable with respect to another variable allows students to understand change in a variety of contexts. In AP Calculus, students build the derivative using the concept of limits and use the derivative primarily to compute the instantaneous rate of change of a function. Applications of the derivative include finding the slope of a tangent line to a graph at a point, analyzing the graph of a function (for example, determining whether a function is increasing or decreasing and finding concavity and extreme values), and solving problems involving rectilinear motion. Students should be able to use different definitions of the derivative, estimate derivatives from tables and graphs, and apply various derivative rules and properties. In addition, students should be able to solve separable differential equations, understand and be able to apply the Mean Value Theorem, and be familiar with a variety of real-world applications, including related rates, optimization, and growth and decay models.				
Enduring Understandings (Students will understand that...)	**Learning Objectives** (Students will be able to...)	**Essential Knowledge** (Students will know that...)		
EU 2.1: The derivative of a function is defined as the limit of a difference quotient and can be determined using a variety of strategies.	**LO 2.1A:** Identify the derivative of a function as the limit of a difference quotient.	**EK 2.1A1:** The difference quotients $\frac{f(a+h)-f(a)}{h}$ and $\frac{f(x)-f(a)}{x-a}$ express the average rate of change of a function over an interval.	**Lesson 2.1** **Introduction to the derivative as slope of secant line. Uses Δx instead of h and c instead of a.**	1

		EK 2.1A2: The instantaneous rate of change of a function at a point can be expressed by $\lim_{h\to 0}\frac{f(a+h)-f(a)}{h}$ or $\lim_{x\to a}\frac{f(x)-f(a)}{x-a}$, provided that the limit exists. These are common forms of the definition of the derivative and are denoted $f'(a)$.	**Lesson 2.1** **Text highlights relationship between average rate of change and instantaneous rate of change. Definition of derivative is used throughout 2.1. Alternate definition (page 101). Proof is provided in appendix A. Text emphasizes "provided the limit exists".**	1
		EK 2.1A3: The derivative of f is the function whose value at x is $\lim_{h\to 0}\frac{f(x+h)-f(x)}{h}$ provided this limit exists.	**Lesson 2.1** **As part of EK 2.1A2 above**	1
		EK 2.1A4: For $y=f(x)$, notations for the derivative include $\frac{dy}{dx}$, $f'(x)$, and y'.	**Lesson 2.1** **Five different notations for the derivative are given on page 99 of text**	1
		EK 2.1A5: The derivative can be represented graphically, numerically, analytically, and verbally.	**Lesson 2.1 emphasis on all representations. Derivative is used in throughout text using multiple representations.**	1
	LO 2.1B: Estimate derivatives.	**EK 2.1B1**: The derivative at a point can be estimated from information given in tables or graphs.	**Lesson 2.2 graphical estimation** **Exercise 85 (page 116) students complete table to approximate derivative.**	1
	LO 2.1C: Calculate derivatives.	**EK 2.1C1:** Direct application of the definition of the derivative can be used to find the derivative for selected functions, including polynomial, power, sine, cosine, exponential, and logarithmic functions.	**Lesson 2.2, 2.3, 2.4, 5.1, and 5.4**	1
		EK 2.1C2: Specific rules can be used to calculate derivatives for classes of functions, including polynomial, rational, power, exponential, logarithmic, trigonometric, and inverse trigonometric.	**Lesson 2.2 Power Rule and polynomials, sine and cosine.** **Lesson 2.3 Rational and trigonometric** **Lesson 5.1 Logarithmic** **Lesson 5.4 Logarithmic, exponential** **Lesson 5.6 Inverse trig functions**	1

		EK 2.1C3: Sums, differences, products, and quotients of functions can be differentiated using derivative rules.	**Lesson 2.2 Sum and Difference** **Lesson 2.3 Product and Quotient**	1
		EK 2.1C4: The chain rule provides a way to differentiate composite functions.	**Lesson 2.4 Chain Rule** **References composite functions (page 129)**	1
		EK 2.1C5: The chain rule is the basis for implicit differentiation.	**Lesson 2.5**	1
		EK 2.1C6: The chain rule can be used to find the derivative of an inverse function, provided the derivative of that function exists.	**Lesson 5.3 Explains relationship between differentiability and continuity. Includes and exploration of inverse functions. However, the relationship between the chain rule and derivatives of inverse functions is not emphasized.**	1
		EK 2.1C7: (BC) Methods for calculating derivatives of realvalued functions can be extended to vector-valued functions, parametric functions, and functions in polar coordinates.	**Lesson 10.3 (parametric)** **Lesson 10.4 (polar)**	

	LO 2.1D: Determine higher order derivatives.	**EK 2.1D1:** Differentiating f' produces the second derivative f'', provided the derivative of f' exists; repeating this process produces higher order derivatives of f.	**Lesson 2.3 Higher order derivatives**	1
		EK 2.1D2: Higher order derivatives are represented with a variety of notations. For $y = f(x)$, notations for the second derivative include $\frac{d^2y}{dx^2}$, $f''(x)$, and y''. Higher order derivatives can be denoted $\frac{d^n y}{dx^n}$ or $f^{(n)}(x)$.	**Lesson 2.3 higher order derivatives with multiple representations**	1
EU 2.2: A function's derivative, which is itself a function, can be used to understand the behavior of the function.	**LO 2.2A:** Use derivatives to analyze properties of a function.	**EK 2.2A1:** First and second derivatives of a function can provide information about the function and its graph including intervals of increase or decrease, local (relative) and global (absolute) extrema, intervals of upward or downward concavity, and points of inflection.	**Lesson 3.1 Relative extrema and critical numbers on open and closed intervals.** **Lesson 3.3 Increasing/decreasing functions and first derivative test.** **Lesson 3.4 Concavity and 2nd derivative test**	1
		EK 2.2A2: Key features of functions and their derivatives can be identified and related to their graphical, numerical, and analytical representations.	**Throughout the text, students are expected to use multiple representations of functions and their derivatives including tables, graphs, numerical and analytic methods. Figures 3.27 and 3.31**	1
		EK 2.2A3: Key features of the graphs of f, f', and f'' are related to one another.	**Lesson 3.6 A Summary of Curve Sketching highlights features and characteristics of f, f', and f'' graphs and their relationships**	1
		EK 2.2A4: (BC) For a curve given by a polar equation $r = f(\theta)$, derivatives of r, x, and y with respect to θ and first and second derivatives of y with respect to x can provide information about the curve.	**Lesson 10.4**	

	LO 2.2B: Recognize the connection between differentiability and continuity.	**EK 2.2B1:** A continuous function may fail to be differentiable at a point in its domain.	**Lesson 2.1**	1
		EK 2.2B2: If a function is differentiable at a point, then it is continuous at that point.	**Lesson 2.1**	1
EU 2.3: The derivative has multiple interpretations and applications including those that involve instantaneous rates of change.	**LO 2.3A:** Interpret the meaning of a derivative within a problem.	**EK 2.3A1:** The unit for $f'(x)$ is the unit for f divided by the unit for x.	**Lesson 2.2 not explicitly but by example and discussion**	
		EK 2.3A2: The derivative of a function can be interpreted as the instantaneous rate of change with respect to its independent variable.	**Lesson 2.1 derivative as instantaneous rate of change**	1
	LO 2.3B: Solve problems involving the slope of a tangent line.	**EK 2.3B1:** The derivative at a point is the slope of the line tangent to a graph at that point on the graph.	**Lesson 2.1 Discussion of tangent line problem**	1
		EK 2.3B2: The tangent line is the graph of a locally linear approximation of the function near the point of tangency.	**Lesson 3.9 Linear approximation**	1
	LO 2.3C: Solve problems involving related rates, optimization, rectilinear motion, **(BC)** and planar motion.	**EK 2.3C1:** The derivative can be used to solve rectilinear motion problems involving position, speed, velocity, and acceleration.	**Lesson 2.2 (position, velocity, and acceleration) This concept could be emphasized to a greater extent.**	1

		EK 2.3C2: The derivative can be used to solve related rates problems, that is, finding a rate at which one quantity is changing by relating it to other quantities whose rates of change are known.	**Lesson 2.6** **Guidelines for solving related rates problems on page 149**	1
		EK 2.3C3: The derivative can be used to solve optimization problems, that is, finding a maximum or minimum value of a function over a given interval.	**Lesson 3.7** **Guidelines on page 216**	1
		EK 2.3C4: (BC) Derivatives can be used to determine velocity, speed, and acceleration for a particle moving along curves given by parametric or vector-valued functions.		
	LO 2.3D: Solve problems involving rates of change in applied contexts.	**EK 2.3D1:** The derivative can be used to express information about rates of change in applied contexts.	**Lessons 2.6, 3.2, 3.7, and in other exercises throughout text**	1
	LO 2.3E: Verify solutions to differential equations.	**EK 2.3E1:** Solutions to differential equations are functions or families of functions.	**Lesson 4.1 and 6.1** **Supporting examples on pages 398 and 399**	1
		EK 2.3E2: Derivatives can be used to verify that a function is a solution to a given differential equation.	**Lesson 6.1**	1
	LO 2.3F: Estimate solutions to differential equations.	**EK 2.3F1:** Slope fields provide visual clues to the behavior of solutions to first order differential equations.	**Lesson 6.1**	1

		EK 2.3F2: (BC) For differential equations, Euler's method provides a procedure for approximating a solution or a point on a solution curve.	**Lesson 6.1**	1
EU 2.4: The Mean Value Theorem connects the behavior of a differentiable function over an interval to the behavior of the derivative of that function at a particular point in the interval.	**LO 2.4A:** Apply the Mean Value Theorem to describe the behavior of a function over an interval.	**EK 2.4A1:** If a function f is continuous over the interval $[a, b]$ and differentiable over the interval (a, b), the Mean Value Theorem guarantees a point within that open interval where the instantaneous rate of change equals the average rate of change over the interval.	**Lesson 3.2 Addresses Rolle's Theorem and the Mean Value Theorem for derivatives**	1

Standards and Learning Indicators			Publisher/Provider: List units/lessons with specific examples of where standard is Introduced/Taught/Assessed.	Point Value 0/.5/1 (Reviewer)
Big Idea 3: Integrals and the Fundamental Theorem of Calculus Integrals are used in a wide variety of practical and theoretical applications. AP Calculus students should understand the definition of a definite integral involving a Riemann sum, be able to approximate a definite integral using different methods, and be able to compute definite integrals using geometry. They should be familiar with basic techniques of integration and properties of integrals. The interpretation of a definite integral is an important skill, and students should be familiar with area, volume, and motion applications, as well as with the use of the definite integral as an accumulation function. It is critical that students grasp the relationship between integration and differentiation as expressed in the Fundamental Theorem of Calculus — a central idea in AP Calculus. Students should be able to work with and analyze functions defined by an integral.				
Enduring Understandings (Students will understand that...)	**Learning Objectives** (Students will be able to...)	**Essential Knowledge** (Students will know that...)		
EU 3.1: Antidifferentiation is the inverse process of differentiation.	**LO 3.1A:** Recognize antiderivatives of basic functions.	**EK 3.1A1:** An antiderivative of a function f is a function g whose derivative is f.	**Lesson 4.1**	1
		EK 3.1A2: Differentiation rules provide the foundation for finding antiderivatives.	**Lesson 4.1 includes table of Basic Integration Rules**	1
EU 3.2: The definite integral of a function over an interval is the limit of a Riemann sum over that interval and can be calculated using a variety of strategies	**LO 3.2A(a):** Interpret the definite integral as the limit of a Riemann sum.	**EK 3.2A1:** A Riemann sum, which requires a partition of an interval , is the sum of products, each of which is the value of the function at a point in a subinterval multiplied by the length of that subinterval of the partition.	**Lesson 4.3**	1

	LO 3.2A(b): Express the limit of a Riemann sum in integral notation.	**EK 3.2A2:** The definite integral of a continuous function f over the interval $[a, b]$, denoted by $\int_a^b f(x)dx$, is the limit of Riemann sums as the widths of the subintervals approach 0. That is, $\int_a^b f(x)dx = \lim_{\max \Delta x_i \to 0} \sum_{i=1}^{n} f(x_i^*)\Delta x_i$ where x_i^* is a value in the ith subinterval, Δx_i is the width of the ith subinterval, n is the number of subintervals, and $\max \Delta x_i$ is the width of the largest subinterval. Another form of the definition is $\int_a^b f(x)dx = \lim_{n \to \infty} \sum_{i=1}^{n} f(x_i^*)\Delta x_i$, where $\Delta x_i = \frac{b-a}{n}$ and x_i^* is a value in the ith subinterval.	**Lesson 4.3 definite integrals**	1
		EK 3.2A3: The information in a definite integral can be translated into the limit of a related Riemann sum, and the limit of a Riemann sum can be written as a definite integral.	**Lesson 4.3**	1
	LO 3.2B: Approximate a definite integral.	**EK 3.2B1:** Definite integrals can be approximated for functions that are represented graphically, numerically, algebraically, and verbally.	**Lesson 4.3 and 4.4**	1
		EK 3.2B2: Definite integrals can be approximated using a left Riemann sum, a right Riemann sum, a midpoint Riemann sum, or a trapezoidal sum; approximations can be computed using either uniform or nonuniform partitions.	**Lesson 4.2 midpoint rule, uniform partitions, upper and lower sums** **Lesson 4.3 non-uniform partitions (page 266)** **Lesson 4.6 Trapezoidal Rule**	1

	LO 3.2C: Calculate a definite integral using areas and properties of definite integrals.	**EK 3.2C1:** In some cases, a definite integral can be evaluated by using geometry and the connection between the definite integral and area.	**Lesson 4.3 students approximate area with midpoint rule and other geometric formulas like the area of a triangle, or area of a circle identified as areas of common geometric figures** **Lesson 4.6 trapezoidal approximation**	1
		EK 3.2C2: Properties of definite integrals include the integral of a constant times a function, the integral of the sum of two functions, reversal of limits of integration, and the integral of a function over adjacent intervals.	**Lesson 4.3**	1
		EK 3.2C3: The definition of the definite integral may be extended to functions with removable or jump discontinuities.	**Lesson 4.3** **Exercise 57 on page 275**	1
	LO 3.2D: (BC) Evaluate an improper integral or show that an improper integral diverges.	**EK 3.2D1:** (BC) An improper integral is an integral that has one or both limits infinite or has an integrand that is unbounded in the interval of integration.		
		EK 3.2D2: (BC) Improper integrals can be determined using limits of definite integrals.		

EU 3.3: The Fundamental Theorem of Calculus, which has two distinct formulations, connects differentiation and integration.	**LO 3.3A:** Analyze functions defined by an integral.	**EK 3.3A1:** The definite integral can be used to define new functions; for example, $f(x)=\int_a^x e^{-t}\,dt$.	**Lesson 4.4 Second Fundamental Theorem of Calculus**	1
		EK 3.3A2: If f is a continuous function on the interval $[a, b]$, then $\frac{d}{dx}\left(\int_a^x f(t)dt\right)=f(x)$, where x is between a and b.	**Lesson 4.4** **Theorem 4.11 page 284**	1
		EK 3.3A3: Graphical, numerical, analytical, and verbal representations of a function f provide information about the function g defined as $g(x)=\int_a^x f(t)dt$.	**Lesson 4.4** **Section project on page 291 demonstrating the Second Fundamental Theorem. Includes multiple representations.**	1
	LO 3.3B(a): Calculate antiderivatives.	**EK 3.3B1:** The function defined by $F(x)=\int_a^x f(t)dt$ is an antiderivative of f.	**Lesson 4.1 – 4.4**	1
	LO 3.3B(b): Evaluate definite integrals.	**EK 3.3B2:** If f is continuous on the interval $[a, b]$ and F is an antiderivative of f, then $\int_a^b f(x)dx=F(b)-F(a)$.	**Lesson 4.4 Fundamental Theorem of Calculus**	1
		EK 3.3B3: The notation $\int f(x)dx=F(x)+C$ means that $F'(x)=f(x)$, and $\int f(x)dx$ is called an indefinite integral of the function f.	**Lesson 4.1**	1
		EK 3.3B4: Many functions do not have closed form antiderivatives.	**Lesson 4.1** **Not emphasized**	0.5

		EK 3.3B5: Techniques for finding antiderivatives include algebraic manipulation such as long division and completing the square, substitution of variables, (BC) integration by parts, and nonrepeating linear partial fractions.	**Lesson 4.5 change of variables** **Lesson 5.2 long division and u-substitution** **Lesson 5.7 integration by substitution and completing the square** **Lesson 8.2 Integration by parts**	1
EU 3.4: The definite integral of a function over an interval is a mathematical tool with many interpretations and applications involving accumulation.	**LO 3.4A:** Interpret the meaning of a definite integral within a problem.	**EK 3.4A1:** A function defined as an integral represents an accumulation of a rate of change.	**Lesson 7.1**	1
		EK 3.4A2: The definite integral of the rate of change of a quantity over an interval gives the net change of that quantity over that interval.	**Lesson 4.4 Net Change Theorem**	1
		EK 3.4A3: The limit of an approximating Riemann sum can be interpreted as a definite integral.	**Lesson 4.3**	1
	LO 3.4B: Apply definite integrals to problems involving the average value of a function.	**EK 3.4B1:** The average value of a function f over an interval $[a, b]$ is $\frac{1}{b-a}\int_a^b f(x)\,dx$.	**Lesson 4.4**	1
	LO 3.4C: Apply definite integrals to problems involving motion.	**EK 3.4C1:** For a particle in rectilinear motion over an interval of time, the definite integral of velocity represents the particle's displacement over the interval of time, and the definite integral of speed represents the particle's total distance traveled over the interval of time.	**Lesson 4.4**	1

		EK 3.4C2: (BC) The definite integral can be used to determine displacement, distance, and position of a particle moving along a curve given by parametric or vector-valued functions.		
	LO 3.4D: Apply definite integrals to problems involving area, volume, (BC) and length of a curve.	**EK 3.4D1:** Areas of certain regions in the plane can be calculated with definite integrals. (BC) Areas bounded by polar curves can be calculated with definite integrals	**Lesson 4.3 area of common geometric figures** **Lesson 7.1 area between two curves**	1
		EK 3.4D2: Volumes of solids with known cross sections, including discs and washers, can be calculated with definite integrals.	**Lesson 7.2 known cross sections, disk, & washer methods**	1
		EK 3.4D3: (BC) The length of a planar curve defined by a function or by a parametrically defined curve can be calculated using a definite integral.		
	LO 3.4E: Use the definite integral to solve problems in various contexts.	**EK 3.4E1:** The definite integral can be used to express information about accumulation and net change in many applied contexts.	**Student exercises in lesson 7.1** **Section 7.5 Section Project**	1

EU 3.5: Antidifferentiation is an underlying concept involved in solving separable differential equations. Solving separable differential equations involves determining a function or relation given its rate of change.	**LO 3.5A:** Analyze differential equations to obtain general and specific solutions.	**EK 3.5A1:** Antidifferentiation can be used to find specific solutions to differential equations with given initial conditions, including applications to motion along a line, exponential growth and decay, **(BC)** and logistic growth.	**Lesson 4.1 Initial Conditions and Particular Solutions** **Lesson 6.1 Slope Fields** **Lesson 6.2 Differential Equations: growth & decay**	1
		EK 3.5A2: Some differential equations can be solved by separation of variables.	**Lesson 6.3**	1
		EK 3.5A3: Solutions to differential equations may be subject to domain restrictions.	**Lessons 4.1 and 6.3**	1
		EK 3.5A4: The function F defined by $F(x) = c + \int_a^x f(t)\,dt$ is a general solution to the differential equation $\frac{dy}{dx} = f(x)$, and $F(x) = y_0 + \int_a^x f(t)\,dt$ is a particular solution to the differential equation $\frac{dy}{dx} = f(x)$ satisfying $F(a) = y_0$.	**Lesson 6.1 verifying general and particular solutions**	1
	LO 3.5B: Interpret, create and solve differential equations from problems in context.	**EK 3.5B1:** The model for exponential growth and decay that arises from the statement "The rate of change of a quantity is proportional to the size of the quantity" is $\frac{dy}{dt} = ky$.	**Lesson 6.2 explicitly stated at the top of page 408**	1
		EK 3.5B2: (BC) The model for logistic growth that arises from the statement "The rate of change of a quantity is jointly proportional to the size of the quantity and the difference between the quantity and the carrying capacity" is $\frac{dy}{dt} = ky(a - y)$.		

Standards and Learning Indicators			Publisher/Provider: List units/lessons with specific examples of where standards are Introduced/Taught/Assessed.	Point Value 0/.5/1 (Reviewer)
Big Idea 4: Series (BC) The AP Calculus BC curriculum includes the study of series of numbers, power series, and various methods to determine convergence or divergence of a series. Students should be familiar with Maclaurin series for common functions and general Taylor series representations. Other topics include the radius and interval of convergence and operations on power series. The technique of using power series to approximate an arbitrary function near a specific value allows for an important connection to the tangent-line problem and is a natural extension that helps achieve a better approximation. The concept of approximation is a common theme throughout AP Calculus, and power series provide a unifying, comprehensive conclusion.				
Enduring Understandings (Students will understand that...)	**Learning Objectives** (Students will be able to...)	**Essential Knowledge** (Students will know that...)		
EU 4.1: The sum of an infinite number of real numbers may converge.	**LO 4.1A:** Determine whether a series converges or diverges.	**EK 4.1A1:** The nth partial sum is defined as the sum of the first n terms of a sequence.		
		EK 4.1A2: An infinite series of numbers converges to a real number S (or has sum S), if and only if the limit of its sequence of partial sums exists and equals S.		
		EK 4.1A3: Common series of numbers include geometric series, the harmonic series, and p-series.		
		EK 4.1A4: A series may be absolutely convergent, conditionally convergent, or divergent.		
		EK 4.1A5: If a series converges absolutely, then it converges.		

		EK 4.1A6: In addition to examining the limit of the sequence of partial sums of the series, methods for determining whether a series of numbers converges or diverges are the nth term test, the comparison test, the limit comparison test, the integral test, the ratio test, and the alternating series test. **EXCLUSION STATEMENT (EK 4.1A6):** *Other methods for determining convergence or divergence of a series of numbers are not assessed on the AP Calculus AB or BC Exam. However, teachers may include these topics in the course if time permits.*		
	LO 4.1B: Determine or estimate the sum of a series.	**EK 4.1B1:** If a is a real number and r is a real number such that $\lvert r\rvert < 1$, then the geometric series $\sum_{n=0}^{\infty} ar^n = \frac{a}{1-r}$.		
		EK 4.1B2: If an alternating series converges by the alternating series test, then the alternating series error bound can be used to estimate how close a partial sum is to the value of the infinite series.		
		EK 4.1B3: If a series converges absolutely, then any series obtained from it by regrouping or rearranging the terms has the same value.		

EU 4.2: A function can represented by an associated power series over the interval of convergence for the power series.	**LO 4.2A:** Construct and use Taylor polynomials.	**EK 4.2A1:** The coefficient of the nth-degree term in a Taylor polynomial centered at $x=a$ for the function f is $\frac{f^{(n)}(a)}{n!}$.		
		EK 4.2A2: Taylor polynomials for a function f centered at $x=a$ can be used to approximate function values of f near $x=a$.		
		EK 4.2A3: In many cases, as the degree of a Taylor polynomial increases, the nth-degree polynomial will converge to the original function over some interval.		
		EK 4.2A4: The Lagrange error bound can be used to bound the error of a Taylor polynomial approximation to a function.		
		EK 4.2A5: In some situations where the signs of a Taylor polynomial are alternating, the alternating series error bound can be used to bound the error of a Taylor polynomial approximation to the function.		
	LO 4.2B: Write a power series representing a given function.	**EK 4.2B1:** A power series is a series of the form $\sum_{n=0}^{\infty} a_n(x-r)^n$ where n is a non-negative integer, $\{a_n\}$ is a sequence of real numbers, and r is a real number.		
		EK 4.2B2: The Maclaurin series for $\sin(x)$, $\cos(x)$, and e^x provide the foundation for constructing the Maclaurin series for other functions.		

		EK 4.2B3: The Maclaurin series for $\frac{1}{1-x}$ is a geometric series.	
		EK 4.2B4: A Taylor polynomial for $f(x)$ is a partial sum of the Taylor series for $f(x)$.	
		EK 4.2B5: A power series for a given function can be derived by various methods (e.g., algebraic processes, substitutions, using properties of geometric series, and operations on known series such as term-byterm integration or term-by-term differentiation).	
	LO 4.2C: Determine the radius and interval of convergence of a power series.	**EK 4.2C1:** If a power series converges, it either converges at a single point or has an interval of convergence.	
		EK 4.2C2: The ratio test can be used to determine the radius of convergence of a power series.	
		EK 4.2C3: If a power series has a positive radius of convergence, then the power series is the Taylor series of the function to which it converges over the open interval.	
		EK 4.2C4: The radius of convergence of a power series obtained by term-by-term differentiation or term-by-term integration is the same as the radius of convergence of the original power series.	

Indicators of Quality:

Indicators of Quality	Evidence- Give specific examples.	Rating: (Reviewer only.)
1. Lessons are thoughtfully structured and support the teacher in leading the class through the learning paths at hand, with active participation by all students in their own learning and in the learning of their classmates.	Evidence- Lessons follow a logical progression. AP Calculus is a course requiring much participation and direction by students in their learning path.	(Reviewer only.) ___X___ Yes _____ No
2. The underlying design of the materials includes both problems and exercises. (In solving problems, students learn new mathematics, whereas in working exercises, students apply what they have already learned to build mastery.) Each problem or exercise has a purpose. NOTE: This Criterion does not require that the problems and exercises be labeled as such.	Evidence- The problems are in abundant evidence in the examples throughout the text. Exercises in each section reinforce new mathematics. Students also must apply what they've learned in the How Do You See It? and Writing About Concepts sections. Exercises help build mastery.	(Reviewer only.) ___X___ Yes _____ No
3. Design of assignments is not haphazard: exercises are given in intentional sequences in order to strengthen students' mathematical understanding.	Evidence- Exercises follow a logical progression from basic to more complex. Students are also to extend their knowledge through applications. The end of each chapter also includes AP review questions.	(Reviewer only.) ___X___ Yes _____ No
4. There are separate teacher materials that support and reward teacher study including, but not limited to: discussion of the mathematics of the units and the mathematical point of each lesson as it relates to the organizing concepts of the unit, discussion on student ways of thinking and anticipating a variety of students responses, guidance on lesson flow, guidance on questions that prompt students thinking, and discussion of desired mathematical behaviors being elicited among students.	Evidence- There is very little teacher support compared to other AP Calculus curriculums. There are some homework quizzes in the support materials binder along with lesson suggestions—very weak. Materials include a cumbersome test bank. There is an online test generator—Exam View, with problems that have not changed in many years.	(Reviewer only.) _____ Yes ___X___ No

5. Manipulatives suggested in the materials are faithful representations of the mathematical objects they represent and are connected to written methods.	Evidence- Students at this level of mathematics aren't using manipulatives encountered at lower grade levels. Students are expected to be fluent in the use of a graphing calculator.	(Reviewer only.) ___X___ Yes _____ No
6. Materials include a variety of curriculum-embedded assessments. Examples include pre-, formative, summative, and self-assessment resources.	Evidence- The end of each chapter includes a review, a problem solving section, and AP practice questions.	(Reviewer only.) ___X___ Yes _____ No
7. Assessments contain aligned rubrics, answer keys, and scoring guidelines that provide sufficient guidance for interpreting student performance.	Evidence- Assessments only include answer keys. No rubrics or scoring guidelines are provided. Students may access CalcChat for worked out solutions to lesson exercises.	(Reviewer only.) _____ Yes ___X___ No
8. Materials assess student proficiency using methods that are accessible and unbiased, including the use of course-level language in student prompts.	Evidence- Course-level language is used throughout materials. Materials are accessible and unbiased.	(Reviewer only.) ___X___ Yes _____ No
9. Materials are carefully evaluated by qualified individuals, whose names are listed, in an effort to ensure freedom from mathematical errors and course-level appropriateness.	Evidence- Primary authors are Ron Larson and Bruce Edwards. Both have a great deal of experience in writing calculus texts and materials. More than ten additional qualified individuals reviewed the text.	(Reviewer only.) ___X___ Yes _____ No
10. The visual design supports students in engaging thoughtfully with the subject. Navigation through the text is clear.	Evidence- The visual design is engaging and appealing. Color photos, graphs, and drawings are included throughout. Navigation is very clear. A positive is that examples are contained on one page – not continued between pages. This makes it very easy to follow the examples for both teacher and student.	(Reviewer only.) ___X___ Yes _____ No

COMMENTS: Overall an outstanding and thorough AP Calculus AB curriculum

STRENGTHS	WEAKNESSES
• Clear and concise design • Multiple representations of concepts are bundled • Examples do not span multiple pages • AP practice exercises included for each chapter • Text promotes higher order thinking skills through the "How do you see it?" and "Writing about Concepts" exercises • AP tips in the margins of the text are useful • Text includes section projects • Useful online support for students and teachers through videos and worked out solutions • Numerous real-world application problems in each lesson • Text uses precise mathematical language	• Supplementary teacher resources are lacking • No glossary in text • Text should include a vocabulary review or preview with key terms emphasized • Assessment materials need to be improved • Interactive materials at LarsonCalculus.com use a deprecated plug-in (NPAPI) – does not work in Chrome or Edge

IDAHO STATE DEPARTMENT OF EDUCATION

Advanced Placement Course: Calculus AB & BC

Content Area: AP Calculus AB & BC

Course Title: Mathematics

Title of Material: Calculus of A Single Variable: Early transcendental functions 6/E AP Edition

Author: Larson

Publisher: Cengage

ISBN #: 9781285775913 **Copyright** 2015

Reviewers: CMJN

Meets Content Standards Alignment: X Yes ____ No

Meets Materials Analysis Evaluation: X Yes ____ No

99% Core Program

____ Other Program

____ Resource/Supplemental

____ Not Recommended

Advanced Placement:

- ☐ AP Capstone
- ☐ Arts
- ☐ English
- ☐ History & Social Science
- ☑ Math & Computer Science
- ☐ Sciences
- ☐ World Languages & Cultures

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Standards Alignment Evaluation Rubric

0 = No Alignment– **Not Evident:** Content as described in the Standards is **not evident**.

.5 = Partial Alignment- **Partially Evident:** Content as described in the Standards is **partially evident** and there are few gaps.

1 = High Alignment – **Clearly Evident:** Content is fully aligned as described in the Standards and repeatedly included to guarantee extensive opportunities for students to work with the content. Alignment is **clearly evident**.

N/A = Not applicable for standard

Note: In the Concept Outline, subject matter that is included only in the BC course is indicated with blue shading.

Advanced Placement			**Calculus AB & BC**	
Standards and Learning Indicators			**Publisher/Provider: List units/lessons with specific examples of where standards are Introduced/Taught/Assessed.**	**Point Value 0/.5/1 (Reviewer)**
Big Idea 1: Limits Many calculus concepts are developed by first considering a discrete model and then the consequences of a limiting case. Therefore, the idea of limits is essential for discovering and developing important ideas, definitions, formulas, and theorems in calculus. Students must have a solid, intuitive understanding of limits and be able to compute various limits, including one-sided limits, limits at infinity, the limit of a sequence, and infinite limits. They should be able to work with tables and graphs in order to estimate the limit of a function at a point. Students should know the algebraic properties of limits and techniques for finding limits of indeterminate forms, and they should be able to apply limits to understand the behavior of a function near a point. Students must also understand how limits are used to determine continuity, a fundamental property of functions.				
Enduring Understandings (Students will understand that…)	**Learning Objectives** (Students will be able to…)	**Essential Knowledge** (Students will know that…)		

EU 1.1: The concept of a can be used to understand the behavior of functions.	**LO 1.1A (a):** Express limits symbolically using correct notation. **LO 1.1A (b):** Interpret limits expressed symbolically.	**EK 1.1A1:** Given a function f, the limit of $f(x)$ as x approaches c is a real number R if $f(x)$ can be made arbitrarily close to R by taking x sufficiently close to c (but not equal to c). If the limit exists and is a real number, then the common notation is $\lim_{x \to c} f(x) = R$. **EXCLUSION STATEMENT (EK 1.1A1):** The epsilon-delta definition of a limit is not assessed on the AP Calculus AB or BC Exam. However, teachers may include this topic in the course if time permits.	The formal definition of a limit is presented and can be used to determine the behavior of function Pg. 52 (A Formal Definition of Limit)	1
		EK 1.1A2: The concept of a limit can be extended to include one-sided limits, limits at infinity, and infinite limits.	The topic of one-sided limits, limits at infinity and infinite limits are clearly introduced and explored with in depth development of conceptual understanding using correct notation. Pgs. 92-93 (One-Sided Limits and Continuity on a Closed Interval); Pgs. 103-110 (Infinite Limits); Pgs. 235-245 (Limits at Infinity) 92,103,107,241 Horizontal asymptote and limits at infinity in 2.5	1
		EK 1.1A3: A limit might not exist for some functions at particular values of . Some ways that the limit might not exist are if the function is unbounded, if the function is oscillating near this value, or if the limit from the left does not equal the limit from the right. **EXAMPLES OF LIMITS THAT DO NOT EXIST:** $\lim_{x \to 0} \frac{1}{x^2} = \infty$ $\lim_{x \to 0} \sin\left(\frac{1}{x}\right)$ *does not exist* $\lim_{x \to 0} \frac{\lvert x \rvert}{x}$ *does not exist* $\lim_{x \to 0} \frac{1}{x}$ *does not exist*	The content shows multiple representations of limits that do not exist. Pgs. 70-71 (Limits That Fail to Exist) 71,72	1
	LO 1.1B: Estimate limits of functions	**EK 1.1B1:** Numerical and graphical information can be used to estimate limits.	The content shows a clear procedure and multiple representation for the estimation of limits of functions. Pgs. 68-69 (An Introduction to Limits) 65,68	1

	LO 1.1C: Determine limits of functions.	**EK 1.1C1:** Limits of sums, differences, products, quotients, and composite functions can be found u the basic theorems of limits and algebraic rules.	Students are asked to determine limits of functions using basic theorems of limits and algebraic r. Pgs. 79, 83, 84	1
		EK 1.1C2: The limit of a function may be found by using algebraic manipulation, alternate forms of trigonometric functions, or the squeeze theorem	Use of the squeeze theorem and the alternate forms of trigonometric functions Pgs. 83,84,88	1
		EK 1.1C3: Limits of the indeterminate forms $\frac{0}{0}$ and $\frac{\infty}{\infty}$ may be evaluated using L'Hospital's Rule.	Limits of indeterminate forms using L'Hospitals rule – this is an extension for AB and required for BC Pg83,558,562,563	1
	LO 1.1D: Deduce and interpret behavior of functions using limits.	**EK 1.1D1:** Asymptotic and unbounded behavior of functions can be explained and described using limits.	Asymptotic and unbounded behavior is explained using multiple representations with the definition of a limit, and limit theorems. Pgs. 103,105,110	1
		EK 1.1D2: Relative magnitudes of functions and their rates of change can be compared using limits	Comparison of rates of change using limits Pgs. 132-133.	1
EU 1.2: Continuity is a key property of functions that is defined using limits	**LO 1.2A:** Analyze functions for intervals of continuity or points of discontinuity.	**EK 1.2A1:** A function f is continuous at $x = c$ provided that $f(c)$ exists, $\lim_{x \to c} f(x)$ exists, and $\lim_{x \to c} f(x) = f(c)$.	The definition of continuity is presented as a key property Pg. 90	1
		EK 1.2A2: Polynomial, rational, power, exponential, logarithmic, and trigonometric functions are continuous at all points in their domains.	Functions are analyzed for intervals of continuity, points of continuity and points of discontinuity Pg. 95 (Properties of Continuity - section above Example 6)	1

		EK 1.2A3: Types of discontinuities include removable discontinuities, jump discontinuities, and discontinuities due to vertical asymptotes.	Students are asked to differentiate between the different types of discontinuities. Pg. 91 (Example 1 and paragraph above Example 1)	1
	LO 1.2B: Determine the applicability of important calculus theorems using continuity.	**EK 1.2B1:** Continuity is an essential condition for theorems such as the Intermediate Value Theorem, the Extreme Value Theorem, and the Mean Value Theorem.	The intermediate value theorem, extreme value theorem, and mean value theorem are taught and Pgs. 95-96 (Properties of Continuity); Pgs. 97-98 (The Intermediate Value Theorem); Pg. 202 (Theorem 4.1); Pg. 212 (The Mean Value Theorem)	1

Standards and Learning Indicators			Publisher/Provider: List units/lessons with specific examples of where standards Introduced/Taught/Assessed.	Point Value 0/.5/1 (Reviewer)
Big Idea 2: Derivatives Using derivatives to describe the rate of change of one variable with respect to another variable allows students to understand change in a variety of contexts. In AP Calculus, students build the derivative using the concept of limits and use the derivative primarily to compute the instantaneous rate of change of a function. Applications of the derivative include finding the slope of a tangent line to a graph at a point, analyzing the graph of a function (for example, determining whether a function is increasing or decreasing and finding concavity and extreme values), and solving problems involving rectilinear motion. Students should be able to use different definitions of the derivative, estimate derivatives from tables and graphs, and apply various derivative rules and properties. In addition, students should be able to solve separable differential equations, understand and be able to apply the Mean Value Theorem, and be familiar with a variety of real-world applications, including related rates, optimization, and growth and decay models.				
Enduring Understandings (Students will understand that…)	**Learning Objectives** (Students will be able to…)	**Essential Knowledge** (Students will know that…)		
EU 2.1: The derivative of a function is defined as the limit of a difference quotient and can be determined using a variety of strategies.	**LO 2.1A:** Identify the derivative of a function as the limit of a difference quotient.	**EK 2.1A1:** The difference quotients $\frac{f(a+h)-f(a)}{h}$ and $\frac{f(x)-f(a)}{x-a}$ express the average rate of change of a function over an interval.	The derivative of a function is introduced as the limit of a difference quotient. Pg. 117 (top); Pg. 119 (The Derivative of a Function)	1

		EK 2.1A2: The instantaneous rate of change of a function at a point can be expressed by $\lim_{h\to 0}\frac{f(a+h)-f(a)}{h}$ or $\lim_{x\to a}\frac{f(x)-f(a)}{x-a}$, provided that the limit exists. These are common forms of the definition of the derivative and are denoted $f'(a)$.	The instantaneous rate of change of a function is related to the difference quotient Pg. 119 (The Derivative of a Function)	1
		EK 2.1A3: The derivative of f is the function whose value at x is $\lim_{h\to 0}\frac{f(x+h)-f(x)}{h}$ provided this limit exists.	The existence of a limit is shown to be related to the difference quotient Pg. 119 (The Derivative of a Function)	1
		EK 2.1A4: For $y=f(x)$, notations for the derivative include $\frac{dy}{dx}$, $f'(x)$, and y'.	Derivative notations are shown Pg. 119 (The Derivative of a Function)	1
		EK 2.1A5: The derivative can be represented graphically, numerically, analytically, and verbally.	Multiple representations are present throughout the text. Pgs. 119-125 (The Derivative and the Tangent Line Problem)	1
	LO 2.1B: Estimate derivatives.	**EK 2.1B1**: The derivative at a point can be estimated from information given in tables or graphs	Students are given ample opportunity to estimate derivatives using tables and graphs Pgs. 116-118 (The Tangent Line Problem)	1
	LO 2.1C: Calculate derivatives.	**EK 2.1C1:** Direct application of the definition of the derivative can be used to find the derivative for selected functions, including polynomial, power, sine, cosine, exponential, and logarithmic functions.	Derivatives rules are applied including, the following: Pgs. 139-149 (Product and Quotient Rules and Higher-Order Derivatives); Pgs. 150-164 (The Chain Rule); Pgs. 174-180 (Derivatives of Inverse Functions)	1
		EK 2.1C2: Specific rules can be used to calculate derivatives for classes of functions, including polynomial, rational, power, exponential, logarithmic, trigonometric, and inverse trigonometric.	Derivatives rules are applied including, the following: Pgs. 126-138 (Basic Differentiation Rules and Rates of Change); Pgs. 150-164 (The Chain Rule); Pgs. 174-180 (Derivatives of Inverse Functions)	1
		EK 2.1C3: Sums, differences, products, and quotients of functions can be differentiated using derivative rules.	Derivatives rules are applied including, the following Pgs. 126-138 (Basic Differentiation Rules and Rates of Change); Pgs. 139-149 (Product and Quotient Rules and Higher-Order Derivatives)	1

		EK 2.1C4: The chain rule provides a way to differentiate composite functions.	Derivatives rules are applied including, the following Pgs. 150-164 (The Chain Rule)	1
		EK 2.1C5: The chain rule is the basis for implicit differentiation.	Derivatives rules are applied including, the following :Pgs. 165-172 (Implicit Differentiation)	1
		EK 2.1C6: The chain rule can be used to find the derivative of an inverse function, provided the derivative of that function exists.	Derivatives rules are applied including, the following :Pgs. 174-180 (Derivatives of Inverse Functions).	1
		EK 2.1C7: (BC) Methods for calculating derivatives of realvalued functions can be extended to vector-valued functions, parametric functions, and functions in polar coordinates.	There is very little evidence of vectors in the text, however it is not relevant to AB and only BC. Pgs. 706-708 (Slope and Tangent Lines); Pgs. 719-720 (Slope and Tangent Lines); Pgs. 824-827 (Differentiation of Vector-Valued Functions)	.5

	LO 2.1D: Determine higher order derivatives.	**EK 2.1D1:** Differentiating f' produces the second derivative f'', provided the derivative of f' exists; iterating this process produces higher order derivatives of f.	Content includes conceptual understanding and multiple representations of first and second derivative tests. Pg. 145 (Higher-Order Derivatives)	1
		EK 2.1D2: Higher order derivatives are represented with a variety of notations. For $y = f(x)$, notations for the second derivative include $\frac{d^2y}{dx^2}$, $f''(x)$, and y''. Higher order derivatives can be denoted $\frac{d^n y}{dx^n}$ or $f^{(n)}(x)$.	Higher order derivatives are represented with a variety of notations both in lesson, examples, and assignments. Pg. 145 (Higher-Order Derivatives)	1
EU 2.2: A function's derivative, which is itself a function, can be used to understand the behavior of the function.	**LO 2.2A:** Use derivatives to analyze properties of a function.	**EK 2.2A1:** First and second derivatives of a function can provide information about the function and its graph including intervals of increase or decrease, local (relative) and global (absolute) extrema, intervals of upward or downward concavity, and points of inflection.	Use of functions derivative to understand the behavior of a functinos. Pgs. 217-226 (Increasing and Decreasing Functions and the First Derivative Test); Pgs. 227-234 (Concavity and the Second Derivative Test)	1
		EK 2.2A2: Key features of functions and their derivatives can be identified and related to their graphical, numerical, and analytical representations.	Information about Functions and their Derivatives are used to identify and relate graphs using multiple represntations. Pgs. 217-226 (Increasing and Decreasing Functions and the First Derivative Test); Pgs. 227-234 (Concavity and the Second Derivative Test); Pgs. 235-245 (Limits at Infinity);	1
		EK 2.2A3: Key features of the graphs of f, f', and f'' are related to one another.	Conceptual understanding of curve sketching between f, f', and f'' Pgs. 246-255 (A Summary of Curve Sketching)	1
		EK 2.2A4: (BC) For a curve given by a polar equation $r = f(\theta)$, derivatives of r, x, and y with respect to θ and first and second derivatives of y with respect to x can provide information about the curve.	Pgs. 719-720 (Slope and Tangent Lines). This is a BC topic, but it is well represented in the content	1

	LO 2.2B: Recognize the connection between differentiability and continuity.	**EK 2.2B1:** A continuous function may fail to be differentiable at a point in its domain.	Differentiability and continuity at specific points in the domain Pgs. 121-122 (Differentiability and Continuity)	1
		EK 2.2B2: If a function is differentiable at a point, then it is continuous at that point.	Definition between differentiation and continuity Pgs. 121-122 (Differentiability and Continuity)	1
EU 2.3: The derivative has multiple interpretations and applications including those that involve instantaneous rates of change.	**LO 2.3A:** Interpret the meaning of a derivative within a problem.	**EK 2.3A1:** The unit for $f'(x)$ is the unit for f divided by the unit for x.	The relationship of the derivative of a function is defined	1
		EK 2.3A2: The derivative of a function can be interpreted as the instantaneous rate of change with respect to its independent variable.	The relationship of the derivative with respect to the instantaneous rate of change. Pg. 119 (The Derivative of a Function)	1
	LO 2.3B: Solve problems involving the slope of a tangent line.	**EK 2.3B1:** The derivative at a point is the slope of the line tangent to a graph at that point on the graph.	The relationship between the derivative and the slope of the tangent line at that point Pgs. 116-118 (The Tangent Line Problem)	1
		EK 2.3B2: The tangent line is the graph of a locally linear approximation of the function near the point of tangency.	Local linearization and approximation Pgs. 116-118 (The Tangent Line Problem)	1
	LO 2.3C: Solve problems involving related rates, optimization, rectilinear motion, **(BC)** and planar motion.	**EK 2.3C1:** The derivative can be used to solve rectilinear motion problems involving position, speed, velocity, and acceleration.	There is content relative to related rates, optimization, rectilinear motion and planar motion(BC) Pgs. 133-134 (Rates of Change); Pgs. 181-189 (Related Rates); Pg. 213 (Example 4)	1

		EK 2.3C2: The derivative can be used to solve related rates problems, that is, finding a rate at which one quantity is changing by relating it to other quantities whose rates of change are known.	Related Rates Pgs. 181-189 (Related Rates)	1
		EK 2.3C3: The derivative can be used to solve optimization problems, that is, finding a maximum or minimum value of a function over a given interval.	Optimization involving max and min values Pgs. 256-265 (Optimization Problems)	1
		EK 2.3C4: (BC) Derivatives can be used to determine velocity, speed, and acceleration for a particle moving along curves given by parametric or vector-valued functions.	Planar and rectilinear motion Pgs. 832-840 (Velocity and Acceleration)	1
	LO 2.3D: Solve problems involving rates of change in applied contexts.	**EK 2.3D1:** The derivative can be used to express information about rates of change in applied contexts.	Rates of change in applied contexts Pgs. 133-134 (Rates of Change); Pgs. 181-189 (Related Rates); Pg. 213 (Example 4)	1
	LO 2.3E: Verify solutions to differential equations.	**EK 2.3E1:** Solutions to differential equations are functions or families of functions.	Solutions to differential equations are represented as families of functions, general solutions and particular solutions. Pgs. 382-383 (Slope Fields); Pg. 398 (Example 3); Pgs. 409-415 (The Logistic Equation); Pg. 417 (Example 2)	1
		EK 2.3E2: Derivatives can be used to verify that a function is a solution to a given differential equation.	Pgs. 380-381 (Example 1); Pg. 410 (Example 2)	1
	LO 2.3F: Estimate solutions to differential equations.	**EK 2.3F1:** Slope fields provide visual clues to the behavior of solutions to first order differential equations.	Use of slope fields for solutions to differential equations Pgs. 382-383 (Slope Fields); Pg. 420 (Exercises 15-16); Pgs. 424-425 (Examples 3 and 4);	1
		EK 2.3F2: (BC) For differential equations, Euler's method provides a procedure for approximating a solution or a point		1

		on a solution curve.		
EU 2.4: The Mean Value Theorem connects the behavior of a differentiable function over an interval to the behavior of the derivative of that function at a particular point in the interval.	**LO 2.4A:** Apply the Mean Value Theorem to describe the behavior of a function over an interval.	**EK 2.4A1:** If a function f is continuous over the interval $[a, b]$ and differentiable over the interval (a,b), the Mean Value Theorem guarantees a point within that open interval where the instantaneous rate of change equals the average rate of change over the interval.	Use of the Mean Value theorem to describe and determine behavior of a function over an interval. Pgs. 212-213 (The Mean Value Theorem)	1

Standards and Learning Indicators			Publisher/Provider: List units/lessons with specific examples of where standards Introduced/Taught/Assessed.	Point Value 0/.5/1 (Reviewer)
Big Idea 3: Integrals and the Fundamental Theorem of Calculus Integrals are used in a wide variety of practical and theoretical applications. AP Calculus students should understand the definition of a definite integral involving a Riemann sum, be able to approximate a definite integral using different methods, and be able to compute definite integrals using geometry. They should be familiar with basic techniques of integration and properties of integrals. The interpretation of a definite integral is an important skill, and students should be familiar with area, volume, and motion applications, as well as with the use of the definite integral as an accumulation function. It is critical that students grasp the relationship between integration and differentiation as expressed in the Fundamental Theorem of Calculus — a central idea in AP Calculus. Students should be able to work with and analyze functions defined by an integral.				
Enduring Understandings (Students will understand that…)	**Learning Objectives** (Students will be able to…)	**Essential Knowledge** (Students will know that…)		
EU 3.1: Antidifferentiation is the inverse process of differentiation.	**LO 3.1A:** Recognize antiderivatives of basic functions.	**EK 3.1A1:** An antiderivative of a function f is a function g whose derivative is f.	The antiderivative as an inverse process Pg. 280 (Antiderivatives)	1
		EK 3.1A2: Differentiation rules provide the foundation for finding antiderivatives.	The connection between the rules of the differentiation rules and foundation for integration Pgs. 282-284 (Basic Integration Rules)	1
EU 3.2: The definite integral of a function over an interval is the limit of a Riemann sum over that interval and can be calculated using a variety of strategies	**LO 3.2A(a):** Interpret the definite integral as the limit of a Riemann sum.	**EK 3.2A1:** A Riemann sum, which requires a partition of an interval , is the sum of products, each of which is the value of the function at a point in a subinterval multiplied by the length of that subinterval of the partition.	Riemann sum and the connection to the definite integral Pgs. 302-303 (Riemann Sums)	1

	LO 3.2A(b): Express the limit of a Riemann sum in integral notation.	**EK 3.2A2:** The definite integral of a continuous function f over the interval $[a, b]$, denoted by $\int_a^b f(x)dx$, is the limit of Riemann sums as the widths of the subintervals approach 0. That is, $\int_a^b f(x)dx = \lim_{\max \Delta x_i \to 0} \sum_{i=1}^{n} f(x_i^*)\Delta x_i$ where x_i^* is a value in the ith subinterval, Δx_i is the widtl of the ith subinterval, n is the number of subintervals, and $\max \Delta x_i$ is the width of the largest subinterval. Another form of the definition is $\int_a^b f(x)dx = \lim_{n \to \infty} \sum_{i=1}^{n} f(x_i^*)\Delta x_i$, where $\Delta x_i = \frac{b-a}{n}$ and x_i^* is a value in the ith subinterval.	Riemann sum in integral notation Pgs. 304-306 (Definite Integrals)	1
		EK 3.2A3: The information in a definite integral can be translated into the limit of a related Riemann sum, and the limit of a Riemann sum can be written as a definite integral.	Translation between definite integral and Riemann sum and vice versa Pgs. 304-306 (Definite Integrals)	1
	LO 3.2B: Approximate a definite integral.	**EK 3.2B1:** Definite integrals can be approximated for functions that are represented graphically, numerically, algebraically, and verbally.	Multiple representations of the definite integral Pgs. 304-306 (Definite Integrals); Pg. 316 (The Mean Value Theorem for Integrals); Pgs. 341-343 (The Trapezoid Rule);	1
		EK 3.2B2: Definite integrals can be approximated using a left Riemann sum, a right Riemann sum, a midpoint Riemann sum, or a trapezoidal sum; approximations can be computed using either uniform or nonuniform partitions.	Left, Right, Midpoint, Reiman sums as well as trap sums with uniform and non uniform partitions Pgs. 341-343 (The Trapezoid Rule); Pgs. 343-344 (Simpson's Rule)	1

	LO 3.2C: Calculate a definite integral using areas and properties of definite integrals.	**EK 3.2C1:** In some cases, a definite integral can be evaluated by using geometry and the connection between the definite integral and area.	Geometric sums with the definite integral Pgs. 305-306 (Theorem 5.5 and Example 3)	1
		EK 3.2C2: Properties of definite integrals include the integral of a constant times a function, the integral of the sum of two functions, reversal of limits of integration, and the integral of a function over adjacent intervals.	Integral of a constant, sum of 2 functions, reversal of limits and other limit rules. Pgs. 307-308 (Properties of Definite Integrals); Pgs. 313-327 (The Fundamental Theorem of Calculus); Pgs. 515-523 (Integration by Parts)	1
		EK 3.2C3: The definition of the definite integral may be extended to functions with removable or jump discontinuities.	Connection between jump and removable discontinuities and integrals	1
	LO 3.2D: (BC) Evaluate an improper integral or show that an improper integral diverges.	**EK 3.2D1:** (BC) An improper integral is an integral that has one or both limits infinite or has an integrand that is unbounded in the interval of integration.	Pg. 568 (Definition of Improper Integrals with Infinite Integration Limits)	1
		EK 3.2D2: (BC) Improper integrals can be determined using limits of definite integrals.	Pgs. 568-578 (Improper Integrals)	1

EU 3.3: The Fundamental Theorem of Calculus, which has two distinct formulations, connects differentiation and integration.	**LO 3.3A:** Analyze functions defined by an integral.	**EK 3.3A1:** The definite integral can be used to define new functions; for example, $f(x)=\int_a^x e^{-t^2}dt$.	Definite integral to define functions Pgs. 319-321 (The Second Fundamental Theorem of Calculus)	1
		EK 3.3A2: If f is a continuous function on the interval $[a, b]$, then $\frac{d}{dx}\left(\int_a^x f(t)dt\right)=f(x)$, where x is between a and b.	Continuous function on the closed interval Pgs. 319-321 (The Second Fundamental Theorem of Calculus - Theorem 5.11)	1
		EK 3.3A3: Graphical, numerical, analytical, and verbal representations of a function f provide information about the function g defined as $g(x)=\int_a^x f(t)dt$.	Multiple representations as required by the college board. Pgs. 313-327 (The Fundamental Theorem of Calculus)	1
	LO 3.3B(a): Calculate antiderivatives.	**EK 3.3B1:** The function defined by $F(x)=\int_a^x f(t)dt$ is an antiderivative of f.	Students are able to calculate antiderivatives Pg. 280 (Antiderivatives)	1
	LO 3.3B(b): Evaluate definite integrals.	**EK 3.3B2:** If f is continuous on the interval $[a, b]$ and F is an antiderivative of f, then $\int_a^b f(x)dx = F(b)-F(a)$.	Evaluation of definite integrals using the FTC Pgs. 313-315 (The Fundamental Theorem of Calculus)	1
		EK 3.3B3: The notation $\int f(x)dx = F(x)+C$ means that $F'(x)=f(x)$, and $\int f(x)dx$ is called an indefinite integral of the function f.	The constant of integration Pg. 281 (bottom of page)	1
		EK 3.3B4: Many functions do not have closed form antiderivatives.	Pg. 281 (bottom of page)	1

		EK 3.3B5: Techniques for finding antiderivatives include algebraic manipulation such as long division and completing the square, substitution of variables, (BC) integration by parts, and nonrepeating linear partial fractions.	Pgs. 357-364 (Inverse Trigonometric Functions: Integration); Pgs. 508-514 (Basic Integration Rules); Pgs. 551-556 (Integration by Tables and Other Integration Techniques)	1
EU 3.4: The definite integral of a function over an interval is a mathematical tool with many interpretations and applications involving accumulation.	**LO 3.4A:** Interpret the meaning of a definite integral within a problem.	**EK 3.4A1:** A function defined as an integral represents an accumulation of a rate of change.	Accumulation of a rate of change Pg. 441 (Integration as an Accumulation Process)	1
		EK 3.4A2: The definite integral of the rate of change of a quantity over an interval gives the net change of that quantity over that interval.	Rate of change connection to net change Pgs. 322-323 (Net Change Theorem)	1
		EK 3.4A3: The limit of an approximating Riemann sum can be interpreted as a definite integral.	Riemann sum connection to definite integral Pgs. 306-308 (Definite Integrals)	1
	LO 3.4B: Apply definite integrals to problems involving the average value of a function.	**EK 3.4B1:** The average value of a function f over an interval $[a, b]$ is $\frac{1}{b-a}\int_a^b f(x)dx$.	Definite integral connection to average Pg. 317 (Average Value of a Function)	1
	LO 3.4C: Apply definite integrals to problems involving motion.	**EK 3.4C1:** For a particle in rectilinear motion over an interval of time, the definite integral of velocity represents the particle's displacement over the interval of time, and the definite integral of speed represents the particle's total distance traveled over the interval of time.	Particle motion over an interval in relation to displacement, speed, total distance Pg. 286 (Example 9); Pg. 318 (Example 5); Pg. 323 (Example 10)	1

		EK 3.4C2: (BC) The definite integral can be used to determine displacement, distance, and position of a particle moving along a curve given by parametric or vector-valued functions.	Limited use of parametric and vectors Pg. 702 (The Tautochrone and Barchi…hrone Problems); Pg. 729 (Arc Length in Polar Form); Pgs. 836-837 (Projectile Motion)	.5
	LO 3.4D: Apply definite integrals to problems involving area, volume, (BC) and length of a curve.	**EK 3.4D1:** Areas of certain regions in the plane can be calculated with definite integrals. (BC) Areas bounded by polar curves can be calculated with definite integrals	Area bound by polar curves with definite integrals Pg. 306 (Area of Common Geometric Figures); Pgs. 436-445 (Area of a Region Between Two Curves)	1
		EK 3.4D2: Volumes of solids with known cross sections, including discs and washers, can be calculated with definite integrals.	Volumes with cross sections, Disk and Shell..even washers Pg. 446-456 (Volume: The Disk Method); Pgs. 457-465 (Volume: The Shell Method)	1
		EK 3.4D3: (BC) The length of a planar curve defined by a function or by a parametrically defined curve can be calculated using a definite integral.	Planar curve with definite integral Pg. 729 (Arc Length in Polar Form)	1
	LO 3.4E: Use the definite integral to solve problems in various contexts.	**EK 3.4E1:** The definite integral can be used to express information about accumulation and net change in many applied contexts.	Accumulation and net change in applied context Pgs. 322-323 (Net Change Theorem); Pgs. 441 441 (Integration as an Accumulation Process)	1

EU 3.5: Antidifferentiation is an underlying concept involved in solving separable differential equations. Solving separable differential equations involves determining a function or relation given its rate of change.	**LO 3.5A:** Analyze differential equations to obtain general and specific solutions.	**EK 3.5A1:** Antidifferentiation can be used to find specific solutions to differential equations with given initial conditions, including applications to motion along a line, exponential growth and decay, (BC) and logistic growth.	Specific solutions given initial conditions with both Slope Fields and Eulers method Pgs. 380-388 (Slope Fields and Euler's Method); Pgs. 397-408 (Differential Equations: Separation of Variables); Pgs. 409-415 (The Logistic Equation)	1
		EK 3.5A2: Some differential equations can be solved by separation of variables.	Separation of Variables with general and particular solutions. Pgs. 397-408 (Differential Equations: Separation of Variables)	1
		EK 3.5A3: Solutions to differential equations may be subject to domain restrictions.	Growth and Decay, linear differential equations Pgs. 389-396 (Differential Equations: Growth and Decay); Pgs. 397-408 (Differential Equations: Separation of Variables); Pgs. 416-422 (First-Order Linear Differential Equations);	1
		EK 3.5A4: The function F defined by $F(x)=c+\int_a^x f(t)dt$ is a general solution to the differential equation $\frac{dy}{dx}=f(x)$, and $F(x)=y_0+\int_a^x f(t)dt$ is a particular solution to the differential equation $\frac{dy}{dx}=f(x)$ satisfying $F(a)=y_0$.	General and Particular solutions Pg. 285 (Initial Conditions and Particular Solutions); Pgs. 380-381 (General and Particular Solutions)	1
	LO 3.5B: Interpret, create and solve differential equations from problems in context.	**EK 3.5B1:** The model for exponential growth and decay that arises from the statement "The rate of change of a quantity is proportional to the size of the quantity" is $\frac{dy}{dt}=ky$.	The connection to growth and decay and the algebraic rate of change Pgs. 390-393 (Growth and Decay Models)	1
		EK 3.5B2: (BC) The model for logistic growth that arises from the statement "The rate of change of a quantity is jointly proportional to the size of the quantity and the difference between the quantity and the carrying capacity" is $\frac{dy}{dt}=ky(a-y)$.	Pgs. 409-415 (The Logistic Equation)	1

Standards and Learning Indicators			Publisher/Provider: List units/lessons with specific examples of where standards Introduced/Taught/Assessed.	Point Value 0/.5/1 (Reviewer)
Big Idea 4: Series (BC) The AP Calculus BC curriculum includes the study of series of numbers, power series, and various methods to determine convergence or divergence of a series. Students should be familiar with Maclaurin series for common functions and general Taylor series representations. Other topics include the radius and interval of convergence and operations on power series. The technique of using power series to approximate an arbitrary function near a specific value allows for an important connection to the tangent-line problem and is a natural extension that helps achieve a better approximation. The concept of approximation is a common theme throughout AP Calculus, and power series provide a unifying, comprehensive conclusion.				
Enduring Understandings (Students will understand that…)	**Learning Objectives** (Students will be able to…)	**Essential Knowledge** (Students will know that…)		
EU 4.1: The sum of an infinite number of real numbers may converge.	**LO 4.1A:** Determine whether a series converges or diverges.	**EK 4.1A1:** The nth partial sum is defined as the sum of the first n terms of a sequence.	Nth partial sums Pg. 595 (Definitions of Convergent and Divergent Series)	1
		EK 4.1A2: An infinite series of numbers converges to a real number S (or has sum S), if and only if the limit of its sequence of partial sums exists and equals S.	Convergence of infinite series Pg. 595 (Definitions of Convergent and Divergent Series)	1
		EK 4.1A3: Common series of numbers include geometric series, the harmonic series, and p-series.	Geometric, harmonic, p series Pg. 597 (Geometric Series); Pg. 607 (p-Series and Harmonic Series); Pg. 611 (The Harmonic Series)	1
		EK 4.1A4: A series may be absolutely convergent, conditionally convergent, or divergent.	Absolute convergence and divergent, conditional convergence Pgs. 595-604 (Series and Convergence); Pgs. 622-623 (Absolute and Conditional Convergence)	1
		EK 4.1A5: If a series converges absolutely, then it converges.	Absolute convergence. Pg. 622 (Definitions of Absolute and Conditional Convergence)	1

		EK 4.1A6: In addition to examining the limit of the sequence of partial sums of the series, methods for determining whether a series of numbers converges or diverges are the nth term test, the comparison test, the limit comparison test, the integral test, the ratio test, and the alternating series test. **EXCLUSION STATEMENT (EK 4.1A6):** ***Other methods for determining convergence or divergence of a series of numbers are not assessed on the AP Calculus AB or BC Exam. However, teachers may include these topics in the course if time permits.***	Limits of a sequence and partial sums Pgs. 599-600 (nth-Term Test for Divergence); Pgs. 612-613 (Direct Comparison Test); Pgs. 627-629 (The Ratio Test);	1
	LO 4.1B: Determine or estimate the sum of a series.	**EK 4.1B1:** If a is a real number and r is a real number such that $\lvert r\rvert < 1$, then the geometric series $\sum_{n=0}^{\infty} ar^n = \frac{a}{1-r}$.	Geometric Series Pg. 597 (Geometric Series and Theorem 9.6)	1
		EK 4.1B2: If an alternating series converges by the alternating series test, then the alternating series error bound can be used to estimate how close a partial sum is to the value of the infinite series.	Alternating series and alternating series test, and error bound Pg. 621 (Alternating Series Remainder)	1
		EK 4.1B3: If a series converges absolutely, then any series obtained from it by regrouping or rearranging the terms has the same value.	Absolute Convergence Pg. 624 (Rearrangement of Series)	1

EU 4.2: A function can be represented by an associated power series over the interval of convergence for the power series.	**LO 4.2A:** Construct and use Taylor polynomials.	**EK 4.2A1:** The coefficient of the nth-degree term in a Taylor polynomial centered at $x=a$ for the function f is $\frac{f^{(n)}(a)}{n!}$.	Pg. 638 (Taylor and Maclaurin Polynomials)	1
		EK 4.2A2: Taylor polynomials for a function f centered at $x=a$ can be used to approximate function values of f near $x=a$.	Pgs. 636-637 (Polynomial Approximation of Elementary Functions)	1
		EK 4.2A3: In many cases, as the degree of a Taylor polynomial increases, the nth-degree polynomial will converge to the original function over some interval.	Pg. 666 (Theorem 9.23 and it's proof)	1
		EK 4.2A4: The Lagrange error bound can be used to bound the error of a Taylor polynomial approximation to a function.	Pg. 642 (Reminder of a Taylor Polynomial and Theorem 9.19)	1
		EK 4.2A5: In some situations where the signs of a Taylor polynomial are alternating, the alternating series error bound can be used to bound the error of a Taylor polynomial approximation to the function.		1
	LO 4.2B: Write a power series representing a given function.	**EK 4.2B1:** A power series is a series of the form $\sum_{n=0}^{\infty} a_n(x-r)^n$ where n is a non-negative integer, $\{a_n\}$ is a sequence of real numbers, and r is a real number.	Pg. 647 (Power Series)	
		EK 4.2B2: The Maclaurin series for $\sin(x)$, $\cos(x)$, and e^x provide the foundation for constructing the Maclaurin series for other functions.	Pgs. 664-675 (Taylor and Maclaurin Polynomials)	

		EK 4.2B3: The Maclaurin series for $\frac{1}{1-x}$ is a geometric series.	
		EK 4.2B4: A Taylor polynomial for $f(x)$ is a partial sum of the Taylor series for $f(x)$.	
		EK 4.2B5: A power series for a given function can be derived by various methods (e.g., algebraic processes, substitutions, using properties of geometric series, and operations on known series such as term-byterm integration or term-by-term differentiation).	Pgs. 647-656 (Power Series); Pgs. 657-664 (Representations of Functions by Power Series)
	LO 4.2C: Determine the radius and interval of convergence of a power series.	**EK 4.2C1:** If a power series converges, it either converges at a single point or has an interval of convergence.	Pg. 648 (Theorem 9.20)
		EK 4.2C2: The ratio test can be used to determine the radius of convergence of a power series.	Pg. 649 (Examples 2, 3, 4)
		EK 4.2C3: If a power series has a positive radius of convergence, then the power series is the Taylor series of the function to which it converges over the open interval.	Pg. 664 (Theorem 9.22)
		EK 4.2C4: The radius of convergence of a power series obtained by term-by-term differentiation or term-by-term integration is the same as the radius of convergence of the original power series.	Pg. 652 (Differentiation and Integration of Power Series and Theorem 9.21)

Indicators of Quality:

Indicators of Quality	Evidence- Give specific examples.	Rating: (Reviewer only.)
1. Lessons are thoughtfully structured and support the teacher in leading the class through the learning paths at hand, with active participation by all students in their own learning and in the learning of their classmates.	Evidence- The content in this program is structured in such a fashion to benefit the teacher in the role as an instructor and a facilitator to the students through the role of independent and group learning	(Reviewer only.) ____X__ Yes _____ No
2. The underlying design of the materials includes both problems and exercises. (In solving problems, students learn new mathematics, whereas in working exercises, students apply what they have already learned to build mastery.) Each problem or exercise has a purpose. NOTE: This Criterion does not require that the problems and exercises be labeled as such.	Evidence- The materials included exercises that build on each other as well as modeling and applications that build students conceptual understanding.	(Reviewer only.) ____X__ Yes _____ No
3. Design of assignments is not haphazard: exercises are given in intentional sequences in order to strengthen students' mathematical understanding.	Evidence- Lessons and units lend to a coherent flow of concept introduction, examples, check for understanding, independent learning, group learning, exercises and connections.	(Reviewer only.) ___X___ Yes _____ No
4. There are separate teacher materials that support and reward teacher study including, but not limited to: discussion of the mathematics of the units and the mathematical point of each lesson as it relates to the organizing concepts of the unit, discussion on student ways of thinking and anticipating a variety of students responses, guidance on lesson flow, guidance on questions that prompt students thinking, and discussion of desired mathematical behaviors being elicited among students.	Evidence- The teacher materials support the teachers role as instructor and facilitator and lend to mathematical discussions and deepening of the conceptual understanding.	(Reviewer only.) __X____ Yes _____ No

5. Manipulatives suggested in the materials are faithful representations of the mathematical objects they represent and are connected to written methods.	**Evidence-** **There are no physical manipulatives for this program, however this course is a college level course and manipulatives are not really appropriate at this level.**	**(Reviewer only.)** **___X__ Yes** **_____ No**
6. Materials include a variety of curriculum-embedded assessments. Examples include pre-, formative, summative, and self-assessment resources.	**Evidence-** **There are self assessments provided in the units, a long with an assessment bank, lesson quizzes, and AP questions.**	**(Reviewer only.)** **___X___ Yes** **_____ No**
7. Assessments contain aligned rubrics, answer keys, and scoring guidelines that provide sufficient guidance for interpreting student performance.	**Evidence-** **Answer keys, solutions guides, guided solutions, scoring rubrics for AP questions are provided**	**(Reviewer only.)** **___X___ Yes** **_____ No**
8. Materials assess student proficiency using methods that **are accessible and unbiased, including the use of course-level language in student prompts.**	**Evidence-** **The content is accessible to all students and no sign of bias is evident in the the lesson material, student text, or teacher materiasl. Appropriate course level language is evident throughout the course.**	**(Reviewer only.)** **___X___ Yes** **_____ No**
9. Materials are carefully evaluated by qualified individuals, whose names are listed, in an effort to ensure freedom from mathematical errors and course-level appropriateness.	**Evidence-** **The material was written and edited by qualified instructors and appear to be free from mathematical error and shows an appropriate course level.**	**(Reviewer only.)** **____X__ Yes** **_____ No**
10. The visual design supports students in engaging thoughtfully with the subject. Navigation through the text is clear.	**Evidence-** **Navigation through the text is clear and well organized. The visual graphics and designs are level appropriate and engaging.**	**(Reviewer only.)** **___X___ Yes** **_____ No**

COMMENTS:

STRENGTHS	WEAKNESSES
The Strengths of this curriculum are evident in the AP level questioning techniques and review. There are AP Exam tips, and interactive examples as well as videos of proofs to help students deepen their conceptual understanding. The author does a great job of presenting the material in a graphical, analytical, numerical, and verbal approach. Students are required to use mathematical reasoning and problem solving skills throughout each lesson of the text. There are a lot of historical and biographical information to help students understand the where, why, how and by who questions about calculus.	The only weakness found in the content of this text is the limited exercises, examples and applications with vectors. Vectors typically do not show up until Calculus 3, so while they are mentioned in Calculus BC they are not a necessary content.

IDAHO STATE DEPARTMENT OF EDUCATION

Advanced Placement Course: Calculus AB & BC

Content Area: AP Calculus AB + BC

Course Title: Mathematics

Title of Material: Calculus: Early Transcendental Functions, 6e

Author: Larson

Publisher: Cengage

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Reviewers: CM SO

Meets Content Standards Alignment: X Yes _____ No

Meets Materials Analysis Evaluation: X Yes _____ No

95% Core Program

_____ Other Program

_____ Resource/Supplemental

_____ Not Recommended

Advanced Placement:

- ☐ AP Capstone
- ☐ Arts
- ☐ English
- ☐ History & Social Science
- ☐ Math & Computer Science
- ☐ Sciences
- ☐ World Languages & Cultures

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Standards Alignment Evaluation Rubric

0 = No Alignment– **Not Evident:** Content as described in the Standards is **not evident.**

.5 = Partial Alignment- **Partially Evident:** Content as described in the Standards is **partially evident** and there are few gaps.

1 = High Alignment – **Clearly Evident:** Content is fully aligned as described in the Standards and repeatedly included to guarantee extensive opportunities for students to work with the content. Alignment is **clearly evident.**

N/A = Not applicable for standard

Note: In the Concept Outline, subject matter that is included only in the BC course is indicated with blue shading.

Advanced Placement			**Calculus AB & BC**	
Standards and Learning Indicators			**Publisher/Provider: List units/lessons with specific examples of where standards are Introduced/Taught/Assessed.**	**Point Value 0/.5/1 (Reviewer)**
Big Idea 1: Limits Many calculus concepts are developed by first considering a discrete model and then the consequences of a limiting case. Therefore, the idea of limits is essential for discovering and developing important ideas, definitions, formulas, and theorems in calculus. Students must have a solid, intuitive understanding of limits and be able to compute various limits, including one-sided limits, limits at infinity, the limit of a sequence, and infinite limits. They should be able to work with tables and graphs in order to estimate the limit of a function at a point. Students should know the algebraic properties of limits and techniques for finding limits of indeterminate forms, and they should be able to apply limits to understand the behavior of a function near a point. Students must also understand how limits are used to determine continuity, a fundamental property of functions.				
Enduring Understandings (Students will understand that…)	**Learning Objectives** (Students will be able to…)	**Essential Knowledge** (Students will know that…)		

EU 1.1: The concept of a limit can be used to understand the behavior of functions.	**LO 1.1A (a):** Express limits symbolically using correct notation. **LO 1.1A (b):** Interpret limits expressed symbolically.	**EK 1.1A1:** Given a function f, the limit of $f(x)$ as x aproaches c is a real number R if $f(x)$ can be made arbitrarily close to R by taking x sufficiently close to c (but not equal to c). If the limit exists and is a real number, then the common notation is $\lim_{x \to c} f(x) = R$. **EXCLUSION STATEMENT (EK 1.1A1):** The epsilon-delta definition of a limit is not assessed on the AP Calculus AB or BC Exam. However, teachers may include this topic in the course if time permits.	**Lesson 2.2 Epsilon-Delta here also**	1
		EK 1.1A2: The concept of a limit can be extended to include one-sided limits, limits at infinity, and infinite limits.	**Lesson 2.4**	1
		EK 1.1A3: A limit might not exist for some functions at particular values of . Some ways that the limit might not exist are if the function is unbounded, if the function is oscillating near this value, or if the limit from the left does not equal the limit from the right. **EXAMPLES OF LIMITS THAT DO NOT EXIST:** $\lim_{x \to 0} \frac{1}{x^2} = \infty$ $\lim_{x \to 0} \sin\left(\frac{1}{x}\right)$ *does not exist* $\lim_{x \to 0} \frac{\lvert x \rvert}{x}$ *does not exist* $\lim_{x \to 0} \frac{1}{x}$ *does not exist*	**Lesson 2.4, 2.5 and Lesson 4.5**	1
	LO 1.1B: Estimate limits of functions	**EK 1.1B1:** Numerical and graphical information can be used to estimate limits.	**Lesson 2.2**	1

	LO 1.1C: Determine limits of functions.	**EK 1.1C1:** Limits of sums, differences, products, quotients, and composite functions can be found using the basic theorems of limits and algebraic rules.	**Lesson 2.3 Lesson 2.5**	1
		EK 1.1C2: The limit of a function may be found by using algebraic manipulation, alternate forms of trigonometric functions, or the squeeze theorem.	**Lesson 2.3 Lesson 2.5**	1
		EK 1.1C3: Limits of the indeterminate forms $\frac{0}{0}$ and $\frac{\infty}{\infty}$ may be evaluated using L'Hospital's Rule.	**Lesson 2.3 Lesson 8.7 BC**	1
	LO 1.1D: Deduce and interpret behavior of functions using limits.	**EK 1.1D1:** Asymptotic and unbounded behavior of functions can be explained and described using limits.	**Lesson 2.5**	1
		EK 1.1D2: Relative magnitudes of functions and their rates of change can be compared using limits.	**Did not find any explicit treatment of this topic in limits or in L'Hopital's Rule 8.7**	0
EU 1.2: Continuity is a key property of functions that is defined using limits	**LO 1.2A:** Analyze functions for intervals of continuity or points of discontinuity.	**EK 1.2A1:** A function f is continuous at $x=c$ provided that $f(c)$ exists, $\lim_{x\to c} f(x)$ exists, and $\lim_{x\to c} f(x)=f(c)$.	**Lesson 2.4**	1
		EK 1.2A2: Polynomial, rational, power, exponential, logarithmic, and trigonometric functions are continuous at all points in their domains.	**Lesson 2.4**	1

		EK 1.2A3: Types of discontinuities include removable discontinuities, jump discontinuities, and discontinuities due to vertical asymptotes.	**Lesson 2.4**	1
	LO 1.2B: Determine the applicability of important calculus theorems using continuity.	**EK 1.2B1:** Continuity is an essential condition for theorems such as the Intermediate Value Theorem, the Extreme Value Theorem, and the Mean Value Theorem.	**Lesson 2.4 Lesson 4.1, 4.2**	1

Standards and Learning Indicators			Publisher/Provider: List units/lessons with specific examples of where standards are Introduced/Taught/Assessed.	Point Value 0/.5/1 (Reviewer)
Big Idea 2: Derivatives Using derivatives to describe the rate of change of one variable with respect to another variable allows students to understand change in a variety of contexts. In AP Calculus, students build the derivative using the concept of limits and use the derivative primarily to compute the instantaneous rate of change of a function. Applications of the derivative include finding the slope of a tangent line to a graph at a point, analyzing the graph of a function (for example, determining whether a function is increasing or decreasing and finding concavity and extreme values), and solving problems involving rectilinear motion. Students should be able to use different definitions of the derivative, estimate derivatives from tables and graphs, and apply various derivative rules and properties. In addition, students should be able to solve separable differential equations, understand and be able to apply the Mean Value Theorem, and be familiar with a variety of real-world applications, including related rates, optimization, and growth and decay models.				
Enduring Understandings (Students will understand that…)	**Learning Objectives** (Students will be able to…)	**Essential Knowledge** (Students will know that…)		
EU 2.1: The derivative of a function is defined as the limit of a difference quotient and can be determined using a variety of strategies.	**LO 2.1A:** Identify the derivative of a function as the limit of a difference quotient.	**EK 2.1A1:** The difference quotients $\frac{f(a+h)-f(a)}{h}$ and $\frac{f(x)-f(a)}{x-a}$ express the average rate of change of a function over an interval.	**Lesson 3.1**	1

		EK 2.1A2: The instantaneous rate of cha of a function at a point can be expressed by $\lim_{h\to 0}\frac{f(a+h)-f(a)}{h}$ or $\lim_{x\to a}\frac{f(x)-f(a)}{x-a}$, provided that the limit exists. These are common forms of the definition of the derivative and are denoted $f'(a)$.	**Lesson 3.1**	**1**
		EK 2.1A3: The derivative of f is the function whose value at x is $\lim_{h\to 0}\frac{f(x+h)-f(x)}{h}$ provided this limit exists.	**Lesson 3.1**	**1**
		EK 2.1A4: For $y=f(x)$, notations for the derivative include $\frac{dy}{dx}$, $f'(x)$, and y'.	**Lesson 3.1 More notation styles were included**	**1**
		EK 2.1A5: The derivative can be represented graphically, numerically, analytically, and verbally.	**Lesson 3.1**	**1**
	LO 2.1B: Estimate derivatives.	**EK 2.1B1: The derivative at a point can be estimated from information given in tables or graphs.**	**Lesson 3.1 Did not see any examples with tables**	**.5**
	LO 2.1C: Calculate derivatives.	**EK 2.1C1:** Direct application of the definition of the derivative can be used to find the derivative for selected functions, including polynomial, power, sine, cosine, exponential, and logarithmic functions.	**Lesson 3.3. 3.4, 3.6**	**1**
		EK 2.1C2: Specific rules can be used to calculate derivatives for classes of functions, including polynomial, rational, power, exponential, logarithmic, trigonometric, and inverse trigonometric.	**Lesson 3.3, 3.4, 3.6**	**1**

		EK 2.1C3: Sums, differences, products, and quotients of functions can be differentiated using derivative rules.	**Lesson 3.2, 3.3**	**1**
		EK 2.1C4: The chain rule provides a way to differentiate composite functions.	**Lesson 3.4**	**1**
		EK 2.1C5: The chain rule is the basis for implicit differentiation.	**Lesson 3.5**	**1**
		EK 2.1C6: The chain rule can be used to find the derivative of an inverse function, provided the derivative of that function exists.	**Lesson 3.6 Very nice presentation of this idea on p. 174**	**1**
		EK 2.1C7: (BC) Methods for calculating derivatives of realvalued functions can be extended to vector-valued functions, parametric functions, and functions in polar coordinates.	**Lesson 10.3, 10.4, Lesson 12.2**	**1**

	LO 2.1D: Determine higher order derivatives.	**EK 2.1D1:** Differentiating f' produces the second derivative f'', provided the derivative of f' exists; repeating this process produces higher order derivatives of f.	**Lesson 3.3**	1
		EK 2.1D2: Higher order derivatives are represented with a variety of notations. For $y = f(x)$, notations for the second derivative include $\frac{d^2y}{dx^2}$, $f''(x)$, and y''. Higher order derivatives can be denoted $\frac{d^ny}{dx^n}$ or $f^{(n)}(x)$.	**Lesson 3.3**	1
EU 2.2: A function's derivative, which is itself a function, can be used to understand the behavior of the function.	**LO 2.2A:** Use derivatives to analyze properties of a function.	**EK 2.2A1:** First and second derivatives of a function can provide information about the function and its graph including intervals of increase or decrease, local (relative) and global (absolute) extrema, intervals of upward or downward concavity, and points of inflection.	**Lesson 4.3, 4.4**	1
		EK 2.2A2: Key features of functions and their derivatives can be identified and related to their graphical, numerical, and analytical representations.	**Lesson 4.3, 4.4, 4.5**	1
		EK 2.2A3: Key features of the graphs of f, f', and f'' are related to one another.	**Lesson 4.6**	1
		EK 2.2A4: (BC) For a curve given by a polar equation $r = f(\theta)$, derivatives of r, x, and y with respect to θ and first and second derivatives of y with respect to x can provide information about the curve.	**Lesson 10.4** **No second derivative formula or applications for polar equations**	.5

	LO 2.2B: Recognize the connection between differentiability and continuity.	**EK 2.2B1:** A continuous function may fail to be differentiable at a point in its domain.	**Lesson 3.1**	**1**
		EK 2.2B2: If a function is differentiable at a point, then it is continuous at that point.	**Lesson 3.1**	**1**
EU 2.3: The derivative has multiple interpretations and applications including those that involve instantaneous rates of change.	**LO 2.3A:** Interpret the meaning of a derivative within a problem.	**EK 2.3A1:** The unit for $f'(x)$ is the unit for f divided by the unit for x.	**Lesson 2.4**	**1**
		EK 2.3A2: The derivative of a function can be interpreted as the instantaneous rate of change with respect to its independent variable.	**Lesson 3.1 No explicit reference is made to independent variables. The text only references the rate of change of one variable to another**	**.5**
	LO 2.3B: Solve problems involving the slope of a tangent line.	**EK 2.3B1:** The derivative at a point is the slope of the line tangent to a graph at that point on the graph.	**Lesson 3.1**	**1**
		EK 2.3B2: The tangent line is the graph of a locally linear approximation of the function near the point of tangency.	**Lesson 3.8 and 4.8**	**1**
	LO 2.3C: Solve problems involving related rates, optimization, rectilinear motion, **(BC)** and planar motion.	**EK 2.3C1:** The derivative can be used to solve rectilinear motion problems involving position, speed, velocity, and acceleration.	**Lesson 3.2, 3.7, 4.2**	**1**

		EK 2.3C2: The derivative can be u to solve related rates problems, that is, finding a rate at which one quantity is changing by relating it to other quantities whose rates of change are known.	**Lesson 3.7**	**1**
		EK 2.3C3: The derivative can be used to solve optimization problems, that is, finding a maximum or minimum value of a function over a given interval.	**Lesson 4.7**	**1**
		EK 2.3C4: (BC) Derivatives can be used to determine velocity, speed, and acceleration for a particle moving along curves given by parametric or vector-valued functions.	**Lesson 12.3**	**1**
	LO 2.3D: Solve problems involving rates of change in applied contexts.	**EK 2.3D1:** The derivative can be used to express information about rates of change in applied contexts.	**Lesson 3.2, 3.7, 4.7**	**1**
	LO 2.3E: Verify solutions to differential equations.	**EK 2.3E1:** Solutions to differential equations are functions or families of functions.	**Lesson 6.1, 6.3, 6.4, 6.5**	**1**
		EK 2.3E2: Derivatives can be used to verify that a function is a solution to a given differential equation.	**Lesson 6.1, 6.5**	**1**
	LO 2.3F: Estimate solutions to differential equations.	**EK 2.3F1:** Slope fields provide visual clues to the behavior of solutions to first order differential equations.	**Lesson 6.1, 6.5, 6.6**	**1**

		EK 2.3F2: (BC) For differential eq ns, Euler's method provides a procedure for approximating a solution or a point on a solution curve.	**Lesson 6.1**	**1**
EU 2.4: The Mean Value Theorem connects the behavior of a differentiable function over an interval to the behavior of the derivative of that function at a particular point in the interval.	**LO 2.4A:** Apply the Mean Value Theorem to describe the behavior of a function over an interval.	**EK 2.4A1:** If a function f is continuous over the interval $[a, b]$ and differentiable over the interval (a, b), the Mean Value Theorem guarantees a point within that open interval where the instantaneous rate of change equals the average rate of change over the interval.	**Lesson 4.2**	**1**

Standards and Learning Indicators			Publisher/Provider: List units/lessons with specific examples of where standards are Introduced/Taught/Assessed.	Point Value 0/.5/1 (Reviewer)
Big Idea 3: Integrals and the Fundamental Theorem of Calculus Integrals are used in a wide variety of practical and theoretical applications. AP Calculus students should understand the definition of a definite integral involving a Riemann sum, be able to approximate a definite integral using different methods, and be able to compute definite integrals using geometry. They should be familiar with basic techniques of integration and properties of integrals. The interpretation of a definite integral is an important skill, and students should be familiar with area, volume, and motion applications, as well as with the use of the definite integral as an accumulation function. It is critical that students grasp the relationship between integration and differentiation as expressed in the Fundamental Theorem of Calculus — a central idea in AP Calculus. Students should be able to work with and analyze functions defined by an integral.				
Enduring Understandings (Students will understand that…)	**Learning Objectives** (Students will be able to…)	**Essential Knowledge** (Students will know that…)		
EU 3.1: Antidifferentiation is the inverse process of differentiation.	**LO 3.1A:** Recognize antiderivatives of basic functions.	**EK 3.1A1:** An antiderivative of a function f is a function g whose derivative is f.	**Lesson 5.1**	1
		EK 3.1A2: Differentiation rules provide the foundation for finding antiderivatives.	**Lesson 5.1**	1
EU 3.2: The definite integral of a function over an interval is the limit of a Riemann sum over that interval and can be calculated using a variety of strategies	**LO 3.2A(a):** Interpret the definite integral as the limit of a Riemann sum.	**EK 3.2A1:** A Riemann sum, which requires a partition of an interval , is the sum of products, each of which is the value of the function at a point in a subinterval multiplied by the length of that subinterval of the partition.	**Lesson 5.3**	1

	LO 3.2A(b): Express the limit of a Riemann sum in integral notation.	**EK 3.2A2:** The definite integral of a continuous function f over the interval $[a, b]$, denoted by $\int_a^b f(x)dx$, is the limit of Riemann sums as the widths of the subintervals aporoach 0. That is, $\int_a^b f(x)dx = \lim_{\max \Delta x_i \to 0} \sum_{i=1}^{n} f(x_i^*)\Delta x_i$ where x_i^* is a value in the ith subinterval, Δx_i is the widtl of the ith subinterval, n is the number of subintervals, and $\max \Delta x_i$ is the width of the largest subinterval. Another form of the definition is $\int_a^b f(x)dx = \lim_{n \to \infty} \sum_{i=1}^{n} f(x_i^*)\Delta x_i$, where $\Delta x_i = \frac{b-a}{n}$ and x_i^* is a value in the ith subinterval.	**Lesson 5.3**	1
		EK 3.2A3: The information in a definite integral can be translated into the limit of a related Riemann sum, and the limit of a Riemann sum can be written as a definite integral.	**Lesson 5.3**	1
	LO 3.2B: Approximate a definite integral.	**EK 3.2B1:** Definite integrals can be approximated for functions that are represented graphically, numerically, algebraically, and verbally.	**Lesson 5.3, 5.4, 5.6**	1
		EK 3.2B2: Definite integrals can be approximated using a left Riemann sum, a right Riemann sum, a midpoint Riemann sum, or a trapezoidal sum; approximations can be computed using either uniform or nonuniform partitions.	**Lesson 5.2, 5.6**	1

	LO 3.2C: Calculate a definite integral using areas and properties of definite integrals.	**EK 3.2C1:** In some cases, a definite integral can be evaluated by using geometry and the connection between the definite integral and area.	**Lesson 5.3**	**1**
		EK 3.2C2: Properties of definite integrals include the integral of a constant times a function, the integral of the sum of two functions, reversal of limits of integration, and the integral of a function over adjacent intervals.	**Lesson 5.3, 5.4, 8.2**	**1**
		EK 3.2C3: The definition of the definite integral may be extended to functions with removable or jump discontinuities.	**Did not see this.**	**0**
	LO 3.2D: (BC) Evaluate an improper integral or show that an improper integral diverges.	**EK 3.2D1:** (BC) An improper integral is an integral that has one or both limits infinite or has an integrand that is unbounded in the interval of integration.	**Lesson 8.8**	**1**
		EK 3.2D2: (BC) Improper integrals can be determined using limits of definite integrals.	**Lesson 8.8**	**1**

EU 3.3: The Fundamental Theorem of Calculus, which has two distinct formulations, connects differentiation and integration.	**LO 3.3A:** Analyze functions defined by an integral.	**EK 3.3A1:** The definite integral can be used to define new functions; for example, $f(x)=\int_a^x e^{-t}\,dt$.	**Lesson 5.4**	1
		EK 3.3A2: If f is a continuous function on the interval $[a, b]$, then $\frac{d}{dx}\left(\int_a^x f(t)dt\right)=f(x)$, where x is between a and b.	**Lesson 5.4**	1
		EK 3.3A3: Graphical, numerical, analytical, and verbal representations of a function f provide information about the function g defined as $g(x)=\int_a^x f(t)dt$.	**Lesson 5.4**	1
	LO 3.3B(a): Calculate antiderivatives.	**EK 3.3B1:** The function defined by $F(x)=\int_a^x f(t)dt$ is an antiderivative of f.	**Lesson 5.1**	1
	LO 3.3B(b): Evaluate definite integrals.	**EK 3.3B2:** If f is continuous on the interval $[a, b]$ and F is an antiderivative of f, then $\int_a^b f(x)dx=F(b)-F(a)$.	**Lesson 5.4**	1
		EK 3.3B3: The notation $\int f(x)dx=F(x)+C$ means that $F'(x)=f(x)$, and $\int f(x)dx$ is called an indefinite integral of the function f.	**Lesson 5.1**	1
		EK 3.3B4: Many functions do not have closed form antiderivatives.	**Lesson 5.1 The terminology closed form is missing.**	1

		EK 3.3B5: Techniques for finding antiderivatives include algebraic manipulation such as long division and completing the square, substitution of variables, (BC) integration by parts, and nonrepeating linear partial fractions.	**Lesson 5.5 Lesson 8.2, 8.5**	**1**
EU 3.4: The definite integral of a function over an interval is a mathematical tool with many interpretations and applications involving accumulation.	**LO 3.4A:** Interpret the meaning of a definite integral within a problem.	**EK 3.4A1:** A function defined as an integral represents an accumulation of a rate of change.	**Lesson 7.1**	**1**
		EK 3.4A2: The definite integral of the rate of change of a quantity over an interval gives the net change of that quantity over that interval.	**Lesson 5.4**	**1**
		EK 3.4A3: The limit of an approximating Riemann sum can be interpreted as a definite integral.	**Lesson 5.3**	**1**
	LO 3.4B: Apply definite integrals to problems involving the average value of a function.	**EK 3.4B1:** The average value of a function f over an interval $[a, b]$ is $\frac{1}{b-a}\int_a^b f(x)dx$.	**Lesson 5.4**	**1**
	LO 3.4C: Apply definite integrals to problems involving motion.	**EK 3.4C1:** For a particle in rectilinear motion over an interval of time, the definite integral of velocity represents the particle's displacement over the interval of time, and the definite integral of speed represents the particle's total distance traveled over the interval of time.	**Lesson 5.1, 5.4**	**1**

		EK 3.4C2: (BC) The definite integral can be used to determine displacement, distance, and position of a particle moving along a curve given by parametric or vector-valued functions.	**Lesson 10.2, 10.5, 12.3**	**.5**
	LO 3.4D: Apply definite integrals to problems involving area, volume, (BC) and length of a curve.	**EK 3.4D1:** Areas of certain regions in the plane can be calculated with definite integrals. (BC) Areas bounded by polar curves can be calculated with definite integrals	**Lesson 5.3, 7.1** **Polar Lesson 10.5**	**1**
		EK 3.4D2: Volumes of solids with known cross sections, including discs and washers, can be calculated with definite integrals.	**Lesson 7.2, 7.3**	**1**
		EK 3.4D3: (BC) The length of a planar curve defined by a function or by a parametrically defined curve can be calculated using a definite integral.	**Lesson 10.5**	**1**
	LO 3.4E: Use the definite integral to solve problems in various contexts.	**EK 3.4E1:** The definite integral can be used to express information about accumulation and net change in many applied contexts.	**Lesson 5.4, 7.1**	**1**

EU 3.5: Antidifferentiation is an underlying concept involved in solving separable differential equations. Solving separable differential equations involves determining a function or relation given its rate of change.	**LO 3.5A:** Analyze differential equations to obtain general and specific solutions.	**EK 3.5A1:** Antidifferentiation can be used to find specific solutions to differential equations with given initial conditions, including applications to motion along a line, exponential growth and decay, **(BC)** and logistic growth.	**Lesson 6.1, 6.3, 6.4**	**1**
		EK 3.5A2: Some differential equations can be solved by separation of variables.	**Lesson 6.3**	**1**
		EK 3.5A3: Solutions to differential equations may be subject to domain restrictions.	**Lesson 6.2, 6.3, 6.5** **Most of the solution work was well presented. Domain restrictions were not explicit.**	**.5**
		EK 3.5A4: The function F defined by $F(x)=c+\int_a^x f(t)dt$ is a general solution to the differential equation $\frac{dy}{dx}=f(x)$, and $F(x)=y_0+\int_a^x f(t)dt$ is a particular solution to the differential equation $\frac{dy}{dx}=f(x)$ satisfying $F(a)=y_0$.	**Lesson 5.1, 6.1**	**1**
	LO 3.5B: Interpret, create and solve differential equations from problems in context.	**EK 3.5B1:** The model for exponential growth and decay that arises from the statement "The rate of change of a quantity is proportional to the size of the quantity" is $\frac{dy}{dt}=ky$.	**Lesson 6.2**	**1**
		EK 3.5B2: (BC) The model for logistic growth that arises from the statement "The rate of change of a quantity is jointly proportional to the size of the quantity and the difference between the quantity and the carrying capacity" is $\frac{dy}{dt}=ky(a-y)$.	**Lesson 6.4**	**1**

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Big Idea 4: Series (BC) The AP Calculus BC curriculum includes the study of series of numbers, power series, and various methods to determine convergence or divergence of a series. Students should be familiar with Maclaurin series for common functions and general Taylor series representations. Other topics include the radius and interval of convergence and operations on power series. The technique of using power series to approximate an arbitrary function near a specific value allows for an important connection to the tangent-line problem and is a natural extension that helps achieve a better approximation. The concept of approximation is a common theme throughout AP Calculus, and power series provide a unifying, comprehensive conclusion.				
Enduring Understandings (Students will understand that…)	**Learning Objectives** (Students will be able to…)	**Essential Knowledge** (Students will know that…)		
EU 4.1: The sum of an infinite number of real numbers may converge.	**LO 4.1A:** Determine whether a series converges or diverges.	**EK 4.1A1:** The nth partial sum is defined as the sum of the first n terms of a sequence.	**Lesson 9.2**	1
		EK 4.1A2: An infinite series of numbers converges to a real number S (or has sum S), if and only if the limit of its sequence of partial sums exists and equals S.	**Lesson 9.2**	1
		EK 4.1A3: Common series of numbers include geometric series, the harmonic series, and p-series.	**Lesson 9.2, 9.3, 9.4**	1
		EK 4.1A4: A series may be absolutely convergent, conditionally convergent, or divergent.	**Lesson 9.2, 9.5**	1
		EK 4.1A5: If a series converges absolutely, then it converges.	**Lesson 9.5**	1

		EK 4.1A6: In addition to examining the li f the sequence of partial sums of the series, methods for determining whether a series of numbers converges or diverges are the nth term test, the comparison test, the limit comparison test, the integral test, the ratio test, and the alternating series test. **EXCLUSION STATEMENT (EK 4.1A6):** *Other methods for determining convergence or divergence of a series of numbers are not assessed on the AP Calculus AB or BC Exam. However, teachers may include these topics in the course if time permits.*	**Lesson 9.2. 9.4, 9.6**	**1**
	LO 4.1B: Determine or estimate the sum of a series.	**EK 4.1B1:** If a is a real number and r is a real number such that $\lvert r\rvert < 1$, then the geometric series $\sum_{n=0}^{\infty} ar^n = \frac{a}{1-r}$.	**Lesson 9.2**	**1**
		EK 4.1B2: If an alternating series converges by the alternating series test, then the alternating series error bound can be used to estimate how close a partial sum is to the value of the infinite series.	**Lesson 9.5**	**1**
		EK 4.1B3: If a series converges absolutely, then any series obtained from it by regrouping or rearranging the terms has the same value.	**Lesson 9.5**	**1**

EU 4.2: A function can be represented by an associated power series over the interval of convergence for the power series.	**LO 4.2A:** Construct and use Taylor polynomials.	**EK 4.2A1:** The coefficient of the nth-degree term in a Taylor polynomial centered at $x = a$ for the function f is $\frac{f^{(n)}(a)}{n!}$.	**Lesson 9.7**	**1**
		EK 4.2A2: Taylor polynomials for a function f centered at $x = a$ can be used to approximate function values of f near $x = a$.	**Lesson 9.7**	**1**
		EK 4.2A3: In many cases, as the degree of a Taylor polynomial increases, the nth-degree polynomial will converge to the original function over some interval.	**Lesson 9.10**	**1**
		EK 4.2A4: The Lagrange error bound can be used to bound the error of a Taylor polynomial approximation to a function.	**Lesson 9.7**	**1**
		EK 4.2A5: In some situations where the signs of a Taylor polynomial are alternating, the alternating series error bound can be used to bound the error of a Taylor polynomial approximation to the function.	**Did not see this reference**	**0**
	LO 4.2B: Write a power series representing a given function.	**EK 4.2B1:** A power series is a series of the form $\sum_{n=0}^{\infty} a_n(x-r)^n$ where n is a non-negative integer, $\{a_n\}$ is a sequence of real numbers, and r is a real number.	**Lesson 9.8**	**1**
		EK 4.2B2: The Maclaurin series for $\sin(x)$, $\cos(x)$, and e^x provide the foundation for constructing the Maclaurin series for other functions.	**Lesson 9.7**	**1**

		EK 4.2B3: The Maclaurin series for $\frac{1}{1-x}$ is a geometric series.	**Lesson 9.9** p. 657	1
		EK 4.2B4: A Taylor polynomial for $f(x)$ is a partial sum of the Taylor series for $f(x)$.	**Lesson 9.10** p. 666 bottom of the page. The reference is easy to miss	1
		EK 4.2B5: A power series for a given function can be derived by various methods (e.g., algebraic processes, substitutions, using properties of geometric series, and operations on known series such as term-byterm integration or term-by-term differentiation).	**Lesson 9.8, 9,10**	1
	LO 4.2C: Determine the radius and interval of convergence of a power series.	**EK 4.2C1:** If a power series converges, it either converges at a single point or has an interval of convergence.	**Lesson 9.8**	1
		EK 4.2C2: The ratio test can be used to determine the radius of convergence of a power series.	**Lesson 9.8**	1
		EK 4.2C3: If a power series has a positive radius of convergence, then the power series is the Taylor series of the function to which it converges over the open interval.	**Lesson 9.10**	1
		EK 4.2C4: The radius of convergence of a power series obtained by term-by-term differentiation or term-by-term integration is the same as the radius of convergence of the original power series.	**Lesson 9.8**	1

Indicators of Quality:

Indicators of Quality	Evidence- Give specific examples.	Rating: (Reviewer only.)
1. Lessons are thoughtfully structured and support the teacher in leading the class through the learning paths at hand, with active participation by all students in their own learning and in the learning of their classmates.	Evidence-Lessons have content objectives attached to them. Each section is tagged with the learning objectives to help teachers and students. Students have plenty of opportunities to try a wide variety of problems.	(Reviewer only.) __x____ Yes _____ No
2. The underlying design of the materials includes both problems and exercises. (In solving problems, students learn new mathematics, whereas in working exercises, students apply what they have already learned to build mastery.) Each problem or exercise has a purpose. NOTE: This Criterion does not require that the problems and exercises be labeled as such.	Evidence-Lessons have problems and chapter structure the moves from simple to complex. Each section starts with mechanical problems and moves to verbal explanations and extenders.	(Reviewer only.) ___x___ Yes _____ No
3. Design of assignments is not haphazard: exercises are given in intentional sequences in order to strengthen students' mathematical understanding.	Evidence-Lessons and ideas move from simple to complex within and between chapters. Material from chapters 1 and 2 are reused extensively in chapters 3, 4, and 5. Student questions become increasingly more abstract and connect more	(Reviewer only.) __x____ Yes _____ No
4. There are separate teacher materials that support and reward teacher study including, but not limited to: discussion of the mathematics of the units and the mathematical point of each lesson as it relates to the organizing concepts of the unit, discussion on student ways of thinking and anticipating a variety of students responses, guidance on lesson flow, guidance on questions that prompt students thinking, and discussion of desired mathematical behaviors being elicited among students.	Evidence- The teacher binder has daily quizzes and teaching tips for new teachers and tips for new teachers addresses common misconceptions and ways to teach students to maximize their learning. The supplementary materials are include AP teaching tips.	(Reviewer only.) ___x___ Yes _____ No

5. Manip[illegible]ves suggested in the materials are faithful representations of the mathematical objects they represent and are connected to written methods.	Evidence- There [illegible]calculator explorations embedded in the student work that demonstrate the concepts and allow students to play with ideas. Application problems make ideas more concrete.	(Reviewer only.) ____x__ Yes _____ No
6. Materials include a variety of curriculum-embedded assessments. Examples include pre-, formative, summative, and self-assessment resources.	Evidence- Students have formal assessments of many types. They also have more informal assessments in the form of the "How do you see it" activities and quizzes in the teacher resource binder as well as AP practice questions and Putnam practice questions to extend assessment for the gifted student.	(Reviewer only.) ____x__ Yes _____ No
7. Assessments contain aligned rubrics, answer keys, and scoring guidelines that provide sufficient guidance for interpreting student performance.	Evidence- Did not see rubrics in the traditional text work. Rubrics are available in the " Five steps to a 5" resource book for the free response questions.	(Reviewer only.) _____ Yes _____x_ No
8. Materials assess student proficiency using methods that are accessible and unbiased, including the use of course-level language in student prompts.	Evidence- Questions do not require any prior knowledge that has not been addressed in the content	(Reviewer only.) _____x_ Yes _____ No
9. Materials are carefully evaluated by qualified individuals, whose names are listed, in an effort to ensure freedom from mathematical errors and course-level appropriateness.	Evidence- There is an extensive list of reviewers. Authors of the text have been writing textbooks for more than 2 decades	(Reviewer only.) ____x__ Yes _____ No
10. The visual design supports students in engaging thoughtfully with the subject. Navigation through the text is clear.	Evidence- The book has a pleasing layout. Concepts and vocabulary are easy to find. The text is broken into sections by graphs and pictures and is user friendly.	(Reviewer only.) _____x_ Yes _____ No

MENTS:

STRENGTHS	WEAKNESSES
• The textbook is beautiful and flows well • Good pointers and extenders in the teacher binder. • Text flow is logical. • Lesson progress from simple to complex. • Concepts appear to be in a usable order • Includes opportunities for students to write. • Great additional resources	• Less conceptual and more mechanical • Fewer graphs, more mechanical. • Text is dense for some learners. • It does not include enough table problems.

IDAHO STATE DEPARTMENT OF EDUCATION

Advanced Placement Course: Calculus AB & BC

Content Area: AP Calculus AB + BC

Course Title: Mathematics

Title of Material: Calculus: Early Transcendental Functions, 6e

Author: Larson

Publisher: Cengage

ISBN #: 9781285775890 **Copyright** 2015

Reviewers: CM SO

Meets Content Standards Alignment: X Yes _____ No

Meets Materials Analysis Evaluation: X Yes _____ No

95% Core Program

_____ Other Program

_____ Resource/Supplemental

_____ Not Recommended

Advanced Placement:

- ☐ AP Capstone
- ☐ Arts
- ☐ English
- ☐ History & Social Science
- ☐ Math & Computer Science
- ☐ Sciences
- ☐ World Languages & Cultures

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Standards Alignment Evaluation Rubric

0 = No Alignment– **Not Evident:** Content as described in the Standards is **not evident.**

.5 = Partial Alignment- **Partially Evident:** Content as described in the Standards is **partially evident** and there are few gaps.

1 = High Alignment – **Clearly Evident:** Content is fully aligned as described in the Standards and repeatedly included to guarantee extensive opportunities for students to work with the content. Alignment is **clearly evident.**

N/A = Not applicable for standard

Note: In the Concept Outline, subject matter that is included only in the BC course is indicated with blue shading.

<table>
<tr><td colspan="3">Advanced Placement</td><td>Calculus AB & BC</td><td></td></tr>
<tr><td colspan="3">Standards and Learning Indicators</td><td>Publisher/Provider: List units/lessons with specific examples of where standards are Introduced/Taught/Assessed.</td><td>Point Value 0/.5/1 (Reviewer)</td></tr>
<tr><td colspan="5">Big Idea 1: Limits
Many calculus concepts are developed by first considering a discrete model and then the consequences of a limiting case. Therefore, the idea of limits is essential for discovering and developing important ideas, definitions, formulas, and theorems in calculus. Students must have a solid, intuitive understanding of limits and be able to compute various limits, including one-sided limits, limits at infinity, the limit of a sequence, and infinite limits. They should be able to work with tables and graphs in order to estimate the limit of a function at a point. Students should know the algebraic properties of limits and techniques for finding limits of indeterminate forms, and they should be able to apply limits to understand the behavior of a function near a point. Students must also understand how limits are used to determine continuity, a fundamental property of functions.</td></tr>
<tr><td>Enduring Understandings
(Students will understand that…)</td><td>Learning Objectives
(Students will be able to…)</td><td>Essential Knowledge
(Students will know that…)</td><td></td><td></td></tr>
</table>

EU 1.1: The concept of a limit can be used to understand the behavior of functions.	**LO 1.1A (a):** Express limits symbolically using correct notation. **LO 1.1A (b):** Interpret limits expressed symbolically.	**EK 1.1A1:** Given a function f, the limit of $f(x)$ as x approaches c is a real number R if $f(x)$ can be made arbitrarily close to R by taking x sufficiently close to c (but not equal to c). If the limit exists and is a real number, then the common notation is $\lim_{x \to c} f(x) = R$. **EXCLUSION STATEMENT (EK 1.1A1):** The epsilon-delta definition of a limit is not assessed on the AP Calculus AB or BC Exam. However, teachers may include this topic in the course if time permits.	**Lesson 2.2 Epsilon-Delta here also**	1
		EK 1.1A2: The concept of a limit can be extended to include one-sided limits, limits at infinity, and infinite limits.	**Lesson 2.4**	1
		EK 1.1A3: A limit might not exist for some functions at particular values of . Some ways that the limit might not exist are if the function is unbounded, if the function is oscillating near this value, or if the limit from the left does not equal the limit from the right. **EXAMPLES OF LIMITS THAT DO NOT EXIST:** $\lim_{x \to 0} \frac{1}{x^2} = \infty$ $\lim_{x \to 0} \sin\left(\frac{1}{x}\right)$ *does not exist* $\lim_{x \to 0} \frac{\lfloor x \rfloor}{x}$ *does not exist* $\lim_{x \to 0} \frac{1}{x}$ *does not exist*	**Lesson 2.4, 2.5 and Lesson 4.5**	1
	LO 1.1B: Estimate limits of functions	**EK 1.1B1:** Numerical and graphical information can be used to estimate limits.	**Lesson 2.2**	1

	LO 1.1C: Determine limits of functions.	**EK 1.1C1:** Limits of sums, differences, products, quotients, and composite functions can be found using the basic theorems of limits and algebraic rules.	**Lesson 2.3 Lesson 2.5**	1
		EK 1.1C2: The limit of a function may be found by using algebraic manipulation, alternate forms of trigonometric functions, or the squeeze theorem.	**Lesson 2.3 Lesson 2.5**	1
		EK 1.1C3: Limits of the indeterminate forms $\frac{0}{0}$ and $\frac{\infty}{\infty}$ may be evaluated using L'Hospital's Rule.	**Lesson 2.3 Lesson 8.7 BC**	1
	LO 1.1D: Deduce and interpret behavior of functions using limits.	**EK 1.1D1:** Asymptotic and unbounded behavior of functions can be explained and described using limits.	**Lesson 2.5**	1
		EK 1.1D2: Relative magnitudes of functions and their rates of change can be compared using limits.	**Did not find any explicit treatment of this topic in limits or in L'Hopital's Rule 8.7**	0
EU 1.2: Continuity is a key property of functions that is defined using limits	**LO 1.2A:** Analyze functions for intervals of continuity or points of discontinuity.	**EK 1.2A1:** A function f is continuous at $x = c$ provided that $f(c)$ exists, $\lim_{x \to c} f(x)$ exists, and $\lim_{x \to c} f(x) = f(c)$.	**Lesson 2.4**	1
		EK 1.2A2: Polynomial, rational, power, exponential, logarithmic, and trigonometric functions are continuous at all points in their domains.	**Lesson 2.4**	1

		EK 1.2A3: Types of discontinuities include removable discontinuities, jump discontinuities, and discontinuities due to vertical asymptotes.	**Lesson 2.4**	1
	LO 1.2B: Determine the applicability of important calculus theorems using continuity.	**EK 1.2B1:** Continuity is an essential condition for theorems such as the Intermediate Value Theorem, the Extreme Value Theorem, and the Mean Value Theorem.	**Lesson 2.4 Lesson 4.1, 4.2**	1

Standards and Learning Indicators			Publisher/Provider: List units/lessons with specific examples of where standards are Introduced/Taught/Assessed.	Point Value 0/.5/1 (Reviewer)
Big Idea 2: Derivatives Using derivatives to describe the rate of change of one variable with respect to another variable allows students to understand change in a variety of contexts. In AP Calculus, students build the derivative using the concept of limits and use the derivative primarily to compute the instantaneous rate of change of a function. Applications of the derivative include finding the slope of a tangent line to a graph at a point, analyzing the graph of a function (for example, determining whether a function is increasing or decreasing and finding concavity and extreme values), and solving problems involving rectilinear motion. Students should be able to use different definitions of the derivative, estimate derivatives from tables and graphs, and apply various derivative rules and properties. In addition, students should be able to solve separable differential equations, understand and be able to apply the Mean Value Theorem, and be familiar with a variety of real-world applications, including related rates, optimization, and growth and decay models.				
Enduring Understandings (Students will understand that…)	**Learning Objectives** (Students will be able to…)	**Essential Knowledge** (Students will know that…)		
EU 2.1: The derivative of a function is defined as the limit of a difference quotient and can be determined using a variety of strategies.	**LO 2.1A:** Identify the derivative of a function as the limit of a difference quotient.	**EK 2.1A1:** The difference quotients $\frac{f(a+h)-f(a)}{h}$ and $\frac{f(x)-f(a)}{x-a}$ express the average rate of change of a function over an interval.	**Lesson 3.1**	1

		EK 2.1A2: The instantaneous rate of change of a function at a point can be expressed by $\lim_{h\to 0}\frac{f(a+h)-f(a)}{h}$ or $\lim_{x\to a}\frac{f(x)-f(a)}{x-a}$, provided that the limit exists. These are common forms of the definition of the derivative and are denoted $f'(a)$.	**Lesson 3.1**	**1**
		EK 2.1A3: The derivative of f is the function whose value at x is $\lim_{h\to 0}\frac{f(x+h)-f(x)}{h}$ provided this limit exists.	**Lesson 3.1**	**1**
		EK 2.1A4: For $y=f(x)$, notations for the derivative include $\frac{dy}{dx}$, $f'(x)$, and y'.	**Lesson 3.1 More notation styles were included**	**1**
		EK 2.1A5: The derivative can be represented graphically, numerically, analytically, and verbally.	**Lesson 3.1**	**1**
	LO 2.1B: Estimate derivatives.	**EK 2.1B1: The derivative at a point can be estimated from information given in tables or graphs.**	**Lesson 3.1 Did not see any examples with tables**	**.5**
	LO 2.1C: Calculate derivatives.	**EK 2.1C1:** Direct application of the definition of the derivative can be used to find the derivative for selected functions, including polynomial, power, sine, cosine, exponential, and logarithmic functions.	**Lesson 3.3. 3.4, 3.6**	**1**
		EK 2.1C2: Specific rules can be used to calculate derivatives for classes of functions, including polynomial, rational, power, exponential, logarithmic, trigonometric, and inverse trigonometric.	**Lesson 3.3, 3.4, 3.6**	**1**

		EK 2.1C3: Sums, differences, products, and quotients of functions can be differentiated using derivative rules.	**Lesson 3.2, 3.3**	**1**
		EK 2.1C4: The chain rule provides a way to differentiate composite functions.	**Lesson 3.4**	**1**
		EK 2.1C5: The chain rule is the basis for implicit differentiation.	**Lesson 3.5**	**1**
		EK 2.1C6: The chain rule can be used to find the derivative of an inverse function, provided the derivative of that function exists.	**Lesson 3.6 Very nice presentation of this idea on p. 174**	**1**
		EK 2.1C7: (BC) Methods for calculating derivatives of realvalued functions can be extended to vector-valued functions, parametric functions, and functions in polar coordinates.	**Lesson 10.3, 10.4, Lesson 12.2**	**1**

	LO 2.1D: Determine higher order derivatives.	**EK 2.1D1:** Differentiating f' produces the second derivative f'', provided the derivative of f' exists; repeating this process produces higher order derivatives of f.	**Lesson 3.3**	1
		EK 2.1D2: Higher order derivatives are represented with a variety of notations. For $y = f(x)$, notations for the second derivative include $\frac{d^2y}{dx^2}$, $f''(x)$, and y''. Higher order derivatives can be denoted $\frac{d^ny}{dx^n}$ or $f^{(n)}(x)$.	**Lesson 3.3**	1
EU 2.2: A function's derivative, which is itself a function, can be used to understand the behavior of the function.	**LO 2.2A:** Use derivatives to analyze properties of a function.	**EK 2.2A1:** First and second derivatives of a function can provide information about the function and its graph including intervals of increase or decrease, local (relative) and global (absolute) extrema, intervals of upward or downward concavity, and points of inflection.	**Lesson 4.3, 4.4**	1
		EK 2.2A2: Key features of functions and their derivatives can be identified and related to their graphical, numerical, and analytical representations.	**Lesson 4.3, 4.4, 4.5**	1
		EK 2.2A3: Key features of the graphs of f, f', and f'' are related to one another.	**Lesson 4.6**	1
		EK 2.2A4: (BC) For a curve given by a polar equation $r = f(\theta)$, derivatives of r, x, and y with respect to θ and first and second derivatives of y with respect to x can provide information about the curve.	**Lesson 10.4** **No second derivative formula or applications for polar equations**	.5

	LO 2.2B: Recognize the connection between differentiability and continuity.	**EK 2.2B1:** A continuous function m[illegible]ail to be differentiable at a point in its domain.	**Lesson 3.1**	**1**
		EK 2.2B2: If a function is differentiable at a point, then it is continuous at that point.	**Lesson 3.1**	**1**
EU 2.3: The derivative has multiple interpretations and applications including those that involve instantaneous rates of change.	**LO 2.3A:** Interpret the meaning of a derivative within a problem.	**EK 2.3A1:** The unit for $f'(x)$ is the unit for f divided by the unit for x.	**Lesson 2.4**	**1**
		EK 2.3A2: The derivative of a function can be interpreted as the instantaneous rate of change with respect to its independent variable.	**Lesson 3.1 No explicit reference is made to independent variables. The text only references the rate of change of one variable to another**	**.5**
	LO 2.3B: Solve problems involving the slope of a tangent line.	**EK 2.3B1:** The derivative at a point is the slope of the line tangent to a graph at that point on the graph.	**Lesson 3.1**	**1**
		EK 2.3B2: The tangent line is the graph of a locally linear approximation of the function near the point of tangency.	**Lesson 3.8 and 4.8**	**1**
	LO 2.3C: Solve problems involving related rates, optimization, rectilinear motion, **(BC)** and planar motion.	**EK 2.3C1:** The derivative can be used to solve rectilinear motion problems involving position, speed, velocity, and acceleration.	**Lesson 3.2, 3.7, 4.2**	**1**

		EK 2.3C2: The derivative can be u to solve related rates problems, that is, finding a rate at which one quantity is changing by relating it to other quantities whose rates of change are known.	**Lesson 3.7**	1
		EK 2.3C3: The derivative can be used to solve optimization problems, that is, finding a maximum or minimum value of a function over a given interval.	**Lesson 4.7**	1
		EK 2.3C4: (BC) Derivatives can be used to determine velocity, speed, and acceleration for a particle moving along curves given by parametric or vector-valued functions.	**Lesson 12.3**	1
	LO 2.3D: Solve problems involving rates of change in applied contexts.	**EK 2.3D1:** The derivative can be used to express information about rates of change in applied contexts.	**Lesson 3.2, 3.7, 4.7**	1
	LO 2.3E: Verify solutions to differential equations.	**EK 2.3E1:** Solutions to differential equations are functions or families of functions.	**Lesson 6.1, 6.3, 6.4, 6.5**	1
		EK 2.3E2: Derivatives can be used to verify that a function is a solution to a given differential equation.	**Lesson 6.1, 6.5**	1
	LO 2.3F: Estimate solutions to differential equations.	**EK 2.3F1:** Slope fields provide visual clues to the behavior of solutions to first order differential equations.	**Lesson 6.1, 6.5, 6.6**	1

		EK 2.3F2: (BC) For differential equations, Euler's method provides a procedure for approximating a solution or a point on a solution curve.	**Lesson 6.1**	1
EU 2.4: The Mean Value Theorem connects the behavior of a differentiable function over an interval to the behavior of the derivative of that function at a particular point in the interval.	**LO 2.4A:** Apply the Mean Value Theorem to describe the behavior of a function over an interval.	**EK 2.4A1:** If a function f is continuous over the interval $[a, b]$ and differentiable over the interval (a, b), the Mean Value Theorem guarantees a point within that open interval where the instantaneous rate of change equals the average rate of change over the interval.	**Lesson 4.2**	1

Standards and Learning Indicators			Publisher/Provider: List units/lessons with specific examples of where standards are Introduced/Taught/Assessed.	Point Value 0/.5/1 (Reviewer)
Big Idea 3: Integrals and the Fundamental Theorem of Calculus Integrals are used in a wide variety of practical and theoretical applications. AP Calculus students should understand the definition of a definite integral involving a Riemann sum, be able to approximate a definite integral using different methods, and be able to compute definite integrals using geometry. They should be familiar with basic techniques of integration and properties of integrals. The interpretation of a definite integral is an important skill, and students should be familiar with area, volume, and motion applications, as well as with the use of the definite integral as an accumulation function. It is critical that students grasp the relationship between integration and differentiation as expressed in the Fundamental Theorem of Calculus — a central idea in AP Calculus. Students should be able to work with and analyze functions defined by an integral.				
Enduring Understandings (Students will understand that…)	**Learning Objectives** (Students will be able to…)	**Essential Knowledge** (Students will know that…)		
EU 3.1: Antidifferentiation is the inverse process of differentiation.	**LO 3.1A:** Recognize antiderivatives of basic functions.	**EK 3.1A1:** An antiderivative of a function f is a function g whose derivative is f.	**Lesson 5.1**	**1**
		EK 3.1A2: Differentiation rules provide the foundation for finding antiderivatives.	**Lesson 5.1**	**1**
EU 3.2: The definite integral of a function over an interval is the limit of a Riemann sum over that interval and can be calculated using a variety of strategies	**LO 3.2A(a):** Interpret the definite integral as the limit of a Riemann sum.	**EK 3.2A1:** A Riemann sum, which requires a partition of an interval , is the sum of products, each of which is the value of the function at a point in a subinterval multiplied by the length of that subinterval of the partition.	**Lesson 5.3**	**1**

	LO 3.2A(b): Express the limit of a Riemann sum in integral notation.	**EK 3.2A2:** The definite integral of a continuous function f over the interval $[a, b]$, denoted by $\int_a^b f(x)dx$, is the limit of Riemann sums as the widths of the subintervals approach 0. That is, $\int_a^b f(x)dx = \lim_{\max \Delta x_i \to 0} \sum_{i=1}^{n} f(x_i^*)\Delta x_i$ where x_i^* is a value in the ith subinterval, Δx_i is the width of the ith subinterval, n is the number of subintervals, and $\max \Delta x_i$ is the width of the largest subinterval. Another form of the definition is $\int_a^b f(x)dx = \lim_{n \to \infty} \sum_{i=1}^{n} f(x_i^*)\Delta x_i$, where $\Delta x_i = \frac{b-a}{n}$ and x_i^* is a value in the ith subinterval.	**Lesson 5.3**	**1**
		EK 3.2A3: The information in a definite integral can be translated into the limit of a related Riemann sum, and the limit of a Riemann sum can be written as a definite integral.	**Lesson 5.3**	**1**
	LO 3.2B: Approximate a definite integral.	**EK 3.2B1:** Definite integrals can be approximated for functions that are represented graphically, numerically, algebraically, and verbally.	**Lesson 5.3, 5.4, 5.6**	**1**
		EK 3.2B2: Definite integrals can be approximated using a left Riemann sum, a right Riemann sum, a midpoint Riemann sum, or a trapezoidal sum; approximations can be computed using either uniform or nonuniform partitions.	**Lesson 5.2, 5.6**	**1**

	LO 3.2C: Calculate a definite integral using areas and properties of definite integrals.	**EK 3.2C1:** In some cases, a definite integral can be evaluated by using geometry and the connection between the definite integral and area.	**Lesson 5.3**	**1**
		EK 3.2C2: Properties of definite integrals include the integral of a constant times a function, the integral of the sum of two functions, reversal of limits of integration, and the integral of a function over adjacent intervals.	**Lesson 5.3, 5.4, 8.2**	**1**
		EK 3.2C3: The definition of the definite integral may be extended to functions with removable or jump discontinuities.	**Did not see this.**	**0**
	LO 3.2D: (BC) Evaluate an improper integral or show that an improper integral diverges.	**EK 3.2D1:** (BC) An improper integral is an integral that has one or both limits infinite or has an integrand that is unbounded in the interval of integration.	**Lesson 8.8**	**1**
		EK 3.2D2: (BC) Improper integrals can be determined using limits of definite integrals.	**Lesson 8.8**	**1**

EU 3.3: The Fundamental Theorem of Calculus, which has two distinct formulations, connects differentiation and integration.	**LO 3.3A:** Analyze functions defined by an integral.	**EK 3.3A1:** The definite integral can be used to define new functions; for example, $f(x)=\int_a^x e^{-t}\,dt$.	**Lesson 5.4**	1
		EK 3.3A2: If f is a continuous function on the interval $[a, b]$, then $\frac{d}{dx}\left(\int_a^x f(t)dt\right)=f(x)$, where x is between a and b.	**Lesson 5.4**	1
		EK 3.3A3: Graphical, numerical, analytical, and verbal representations of a function f provide information about the function g defined as $g(x)=\int_a^x f(t)dt$.	**Lesson 5.4**	1
	LO 3.3B(a): Calculate antiderivatives.	**EK 3.3B1:** The function defined by $F(x)=\int_a^x f(t)dt$ is an antiderivative of f.	**Lesson 5.1**	1
	LO 3.3B(b): Evaluate definite integrals.	**EK 3.3B2:** If f is continuous on the interval $[a, b]$ and F is an antiderivative of f, then $\int_a^b f(x)dx=F(b)-F(a)$.	**Lesson 5.4**	1
		EK 3.3B3: The notation $\int f(x)dx=F(x)+C$ means that $F'(x)=f(x)$, and $\int f(x)dx$ is called an indefinite integral of the function f.	**Lesson 5.1**	1
		EK 3.3B4: Many functions do not have closed form antiderivatives.	**Lesson 5.1 The terminology closed form is missing.**	1

		EK 3.3B5: Techniques for finding antiderivatives include algebraic manipulation such as long division and completing the square, substitution of variables, (BC) integration by parts, and nonrepeating linear partial fractions.	**Lesson 5.5 Lesson 8.2, 8.5**	**1**
EU 3.4: The definite integral of a function over an interval is a mathematical tool with many interpretations and applications involving accumulation.	**LO 3.4A:** Interpret the meaning of a definite integral within a problem.	**EK 3.4A1:** A function defined as an integral represents an accumulation of a rate of change.	**Lesson 7.1**	**1**
		EK 3.4A2: The definite integral of the rate of change of a quantity over an interval gives the net change of that quantity over that interval.	**Lesson 5.4**	**1**
		EK 3.4A3: The limit of an approximating Riemann sum can be interpreted as a definite integral.	**Lesson 5.3**	**1**
	LO 3.4B: Apply definite integrals to problems involving the average value of a function.	**EK 3.4B1:** The average value of a function f over an interval $[a, b]$ is $\frac{1}{b-a}\int_a^b f(x)dx$.	**Lesson 5.4**	**1**
	LO 3.4C: Apply definite integrals to problems involving motion.	**EK 3.4C1:** For a particle in rectilinear motion over an interval of time, the definite integral of velocity represents the particle's displacement over the interval of time, and the definite integral of speed represents the particle's total distance traveled over the interval of time.	**Lesson 5.1, 5.4**	**1**

		EK 3.4C2: (BC) The definite integral can be used to determine displacement, distance, and position of a particle moving along a curve given by parametric or vector-valued functions.	**Lesson 10.2, 10.5, 12.3**	**.5**
	LO 3.4D: Apply definite integrals to problems involving area, volume, **(BC)** and length of a curve.	**EK 3.4D1:** Areas of certain regions in the plane can be calculated with definite integrals. (BC) Areas bounded by polar curves can be calculated with definite integrals	**Lesson 5.3, 7.1** **Polar Lesson 10.5**	**1**
		EK 3.4D2: Volumes of solids with known cross sections, including discs and washers, can be calculated with definite integrals.	**Lesson 7.2, 7.3**	**1**
		EK 3.4D3: (BC) The length of a planar curve defined by a function or by a parametrically defined curve can be calculated using a definite integral.	**Lesson 10.5**	**1**
	LO 3.4E: Use the definite integral to solve problems in various contexts.	**EK 3.4E1:** The definite integral can be used to express information about accumulation and net change in many applied contexts.	**Lesson 5.4, 7.1**	**1**

EU 3.5: Antidifferentiation is an underlying concept involved in solving separable differential equations. Solving separable differential equations involves determining a function or relation given its rate of change.	**LO 3.5A:** Analyze differential equations to obtain general and specific solutions.	**EK 3.5A1:** Antidifferentiation can be used to find specific solutions to differential equations with given initial conditions, including applications to motion along a line, exponential growth and decay, **(BC)** and logistic growth.	**Lesson 6.1, 6.3, 6.4**	**1**
		EK 3.5A2: Some differential equations can be solved by separation of variables.	**Lesson 6.3**	**1**
		EK 3.5A3: Solutions to differential equations may be subject to domain restrictions.	**Lesson 6.2, 6.3, 6.5** **Most of the solution work was well presented. Domain restrictions were not explicit.**	**.5**
		EK 3.5A4: The function F defined by $F(x)=c+\int_a^x f(t)dt$ is a general solution to the differential equation $\frac{dy}{dx}=f(x)$, and $F(x)=y_0+\int_a^x f(t)dt$ is a particular solution to the differential equation $\frac{dy}{dx}=f(x)$ satisfying $F(a)=y_0$.	**Lesson 5.1, 6.1**	**1**
	LO 3.5B: Interpret, create and solve differential equations from problems in context.	**EK 3.5B1:** The model for exponential growth and decay that arises from the statement "The rate of change of a quantity is proportional to the size of the quantity" is $\frac{dy}{dt}=ky$.	**Lesson 6.2**	**1**
		EK 3.5B2: (BC) The model for logistic growth that arises from the statement "The rate of change of a quantity is jointly proportional to the size of the quantity and the difference between the quantity and the carrying capacity" is $\frac{dy}{dt}=ky(a-y)$.	**Lesson 6.4**	**1**

Standards and Learning Indicators			Publisher/Provider: List units/lessons with specific examples of where standards are Introduced/Taught/Assessed.	Point Value 0/.5/1 (Reviewer)
Big Idea 4: Series (BC) The AP Calculus BC curriculum includes the study of series of numbers, power series, and various methods to determine convergence or divergence of a series. Students should be familiar with Maclaurin series for common functions and general Taylor series representations. Other topics include the radius and interval of convergence and operations on power series. The technique of using power series to approximate an arbitrary function near a specific value allows for an important connection to the tangent-line problem and is a natural extension that helps achieve a better approximation. The concept of approximation is a common theme throughout AP Calculus, and power series provide a unifying, comprehensive conclusion.				
Enduring Understandings (Students will understand that…)	**Learning Objectives** (Students will be able to…)	**Essential Knowledge** (Students will know that…)		
EU 4.1: The sum of an infinite number of real numbers may converge.	**LO 4.1A:** Determine whether a series converges or diverges.	**EK 4.1A1:** The nth partial sum is defined as the sum of the first n terms of a sequence.	**Lesson 9.2**	1
		EK 4.1A2: An infinite series of numbers converges to a real number S (or has sum S), if and only if the limit of its sequence of partial sums exists and equals S.	**Lesson 9.2**	1
		EK 4.1A3: Common series of numbers include geometric series, the harmonic series, and p-series.	**Lesson 9.2, 9.3, 9.4**	1
		EK 4.1A4: A series may be absolutely convergent, conditionally convergent, or divergent.	**Lesson 9.2, 9.5**	1
		EK 4.1A5: If a series converges absolutely, then it converges.	**Lesson 9.5**	1

		EK 4.1A6: In addition to examining the limit of the sequence of partial sums of the series, methods for determining whether a series of numbers converges or diverges are the nth term test, the comparison test, the limit comparison test, the integral test, the ratio test, and the alternating series test. **EXCLUSION STATEMENT (EK 4.1A6):** *Other methods for determining convergence or divergence of a series of numbers are not assessed on the AP Calculus AB or BC Exam. However, teachers may include these topics in the course if time permits.*	**Lesson 9.2. 9.4, 9.6**	**1**
	LO 4.1B: Determine or estimate the sum of a series.	**EK 4.1B1:** If a is a real number and r is a real number such that $\lvert r\rvert < 1$, then the geometric series $\sum_{n=0}^{\infty} ar^n = \frac{a}{1-r}$.	**Lesson 9.2**	**1**
		EK 4.1B2: If an alternating series converges by the alternating series test, then the alternating series error bound can be used to estimate how close a partial sum is to the value of the infinite series.	**Lesson 9.5**	**1**
		EK 4.1B3: If a series converges absolutely, then any series obtained from it by regrouping or rearranging the terms has the same value.	**Lesson 9.5**	**1**

EU 4.2: A function can be represented by an associated power series over the interval of convergence for the power series.	**LO 4.2A:** Construct and use Taylor polynomials.	**EK 4.2A1:** The coefficient of the nth-degree term in a Taylor polynomial centered at $x=a$ for the function f is $\frac{f^{(n)}(a)}{n!}$.	**Lesson 9.7**	**1**
		EK 4.2A2: Taylor polynomials for a function f centered at $x=a$ can be used to approximate function values of f near $x=a$.	**Lesson 9.7**	**1**
		EK 4.2A3: In many cases, as the degree of a Taylor polynomial increases, the nth-degree polynomial will converge to the original function over some interval.	**Lesson 9.10**	**1**
		EK 4.2A4: The Lagrange error bound can be used to bound the error of a Taylor polynomial approximation to a function.	**Lesson 9.7**	**1**
		EK 4.2A5: In some situations where the signs of a Taylor polynomial are alternating, the alternating series error bound can be used to bound the error of a Taylor polynomial approximation to the function.	**Did not see this reference**	**0**
	LO 4.2B: Write a power series representing a given function.	**EK 4.2B1:** A power series is a series of the form $\sum_{n=0}^{\infty} a_n(x-r)^n$ where n is a non-negative integer, $\{a_n\}$ is a sequence of real numbers, and r is a real number.	**Lesson 9.8**	**1**
		EK 4.2B2: The Maclaurin series for $\sin(x)$, $\cos(x)$, and e^x provide the foundation for constructing the Maclaurin series for other functions.	**Lesson 9.7**	**1**

		EK 4.2B3: The Maclaurin series for $\frac{1}{1-x}$ is a geometric series.	**Lesson 9.9 p. 657**	1
		EK 4.2B4: A Taylor polynomial for $f(x)$ is a partial sum of the Taylor series for $f(x)$.	**Lesson 9.10** p. 666 bottom of the page. The reference is easy to miss	1
		EK 4.2B5: A power series for a given function can be derived by various methods (e.g., algebraic processes, substitutions, using properties of geometric series, and operations on known series such as term-byterm integration or term-by-term differentiation).	**Lesson 9.8, 9,10**	1
	LO 4.2C: Determine the radius and interval of convergence of a power series.	**EK 4.2C1:** If a power series converges, it either converges at a single point or has an interval of convergence.	**Lesson 9.8**	1
		EK 4.2C2: The ratio test can be used to determine the radius of convergence of a power series.	**Lesson 9.8**	1
		EK 4.2C3: If a power series has a positive radius of convergence, then the power series is the Taylor series of the function to which it converges over the open interval.	**Lesson 9.10**	1
		EK 4.2C4: The radius of convergence of a power series obtained by term-by-term differentiation or term-by-term integration is the same as the radius of convergence of the original power series.	**Lesson 9.8**	1

Indicators of Quality:

Indicators of Quality	Evidence- Give specific examples.	Rating: (Reviewer only.)
1. Lessons are thoughtfully structured and support the teacher in leading the class through the learning paths at hand, with active participation by all students in their own learning and in the learning of their classmates.	Evidence-Lessons have content objectives attached to them. Each section is tagged with the learning objectives to help teachers and students. Students have plenty of opportunities to try a wide variety of problems.	(Reviewer only.) __x____ Yes _____ No
2. The underlying design of the materials includes both problems and exercises. (In solving problems, students learn new mathematics, whereas in working exercises, students apply what they have already learned to build mastery.) Each problem or exercise has a purpose. NOTE: This Criterion does not require that the problems and exercises be labeled as such.	Evidence-Lessons have problems and chapter structure the moves from simple to complex. Each section starts with mechanical problems and moves to verbal explanations and extenders.	(Reviewer only.) ___x___ Yes _____ No
3. Design of assignments is not haphazard: exercises are given in intentional sequences in order to strengthen students' mathematical understanding.	Evidence-Lessons and ideas move from simple to complex within and between chapters. Material from chapters 1 and 2 are reused extensively in chapters 3, 4, and 5. Student questions become increasingly more abstract and connect more	(Reviewer only.) __x____ Yes _____ No
4. There are separate teacher materials that support and reward teacher study including, but not limited to: discussion of the mathematics of the units and the mathematical point of each lesson as it relates to the organizing concepts of the unit, discussion on student ways of thinking and anticipating a variety of students responses, guidance on lesson flow, guidance on questions that prompt students thinking, and discussion of desired mathematical behaviors being elicited among students.	Evidence- The teacher binder has daily quizzes and teaching tips for new teachers and tips for new teachers addresses common misconceptions and ways to teach students to maximize their learning. The supplementary materials are include AP teaching tips.	(Reviewer only.) ___x___ Yes _____ No

5. Manip[illegible]ves suggested in the materials are faithful representations of the mathematical objects they represent and are connected to written methods.	Evidence- There [illegible]calculator explorations embedded in the student work that demonstrate the concepts and allow students to play with ideas. Application problems make ideas more concrete.	(Reviewer only.) ____x__ Yes _____ No
6. Materials include a variety of curriculum-embedded assessments. Examples include pre-, formative, summative, and self-assessment resources.	Evidence- Students have formal assessments of many types. They also have more informal assessments in the form of the "How do you see it" activities and quizzes in the teacher resource binder as well as AP practice questions and Putnam practice questions to extend assessment for the gifted student.	(Reviewer only.) ____x__ Yes _____ No
7. Assessments contain aligned rubrics, answer keys, and scoring guidelines that provide sufficient guidance for interpreting student performance.	Evidence- Did not see rubrics in the traditional text work. Rubrics are available in the " Five steps to a 5" resource book for the free response questions.	(Reviewer only.) _____ Yes ____x_ No
8. Materials assess student proficiency using methods that are accessible and unbiased, including the use of course-level language in student prompts.	Evidence- Questions do not require any prior knowledge that has not been addressed in the content	(Reviewer only.) ____x_ Yes _____ No
9. Materials are carefully evaluated by qualified individuals, whose names are listed, in an effort to ensure freedom from mathematical errors and course-level appropriateness.	Evidence- There is an extensive list of reviewers. Authors of the text have been writing textbooks for more than 2 decades	(Reviewer only.) ____x__ Yes _____ No
10. The visual design supports students in engaging thoughtfully with the subject. Navigation through the text is clear.	Evidence- The book has a pleasing layout. Concepts and vocabulary are easy to find. The text is broken into sections by graphs and pictures and is user friendly.	(Reviewer only.) ____x_ Yes _____ No

C MENTS:

STRENGTHS	WEAKNESSES
• The textbook is beautiful and flows well • Good pointers and extenders in the teacher binder. • Text flow is logical. • Lesson progress from simple to complex. • Concepts appear to be in a usable order • Includes opportunities for students to write. • Great additional resources	• Less conceptual and more mechanical • Fewer graphs, more mechanical. • Text is dense for some learners. • It does not include enough table problems.

2015-16 Mathematics Interim Review Recommendation & Summary

Publisher Name:	Cengage Learning Inc
Title:	College Prep Algebra
ISBN #	978-1-285-18262-9
Grade Level(s) or Course:	9-11th grade
Reviewer ID:	K.C. and C.H.

RECOMMENDED AS:

___X_____**Core Mathematics Program-** a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials. Substantial evidence clearly supports the designation of this program as Core.

_____**Other Mathematics Program-** a program that substantially, but partially, meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for supplemental materials. Substantial evidence clearly supports the designation of this program as Other.

_____**Component Mathematics Program-** a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs. Substantial evidence clearly supports the designation of this program as Component.

_____**Intervention Program-** a program designed and intended to target and support students' specific needs. Substantial evidence clearly supports the designation of this program as Intervention.

_____ **Does not meet criteria** for recommendation as a Curricular Material or Online Resource for Mathematics.

EVIDENCE SUMMARY:

FOCUS-
Students spend well over 50% of their time on the Widely Applicable Prerequisites. The text covers all required CCSSM for Algebra 1 and Algebra 2. All lessons are directed towards or pertaining to the required standards. The mathematical language in the text is consistent with the language of the CCSSM.

COHERENCE-
Knowledge acquired from previous courses are applied throughout the text. Appropriate connections are made between domains, clusters and standards. Lesson throughout the text are scaffolded and gradually increase in difficulty.

RIGOR-
There are an extensive number of procedural problems that focus on specific concepts that lead into the real-life conceptual problems that are provided towards the end of each lesson. The modeling problems vary in difficulty and require high level critical thinking and problem solving from students.

CONCEPTUAL UNDERSTANDING-
The "Concept Summary Check" provides problems at the end of each lesson requires student to show in depth understanding of the concepts. The "Concept Summary" helps clarify the lesson as a whole and explains the What, How and Why of each lesson.

MATHEMATICAL PRACTICES-
All mathematical practices are covered throughout the text. However, MP5 and MP8 are weak. Also, the Mathematical practices are not explicitly marked throughout the text. The Mathematical Practices are applied appropriately and help enrich the standards when they require it.

ACCESSIBILITY OF STANDARDS TO ALL STUDENTS-
The scaffolding of this text allows for easy accessibility for any level of learner. The problems and exercises gradually increase in difficulty throughout each lesson making every lesson attainable for students. There are online resources that provide tutorials in English and Spanish. However there are no ELL accommodations within the text itself.

OTHER:
Strengths:
- Helpful teachers notes in the margins of the margin of the teachers edition including common misconceptions by students.
- Extensive number of procedural and conceptual problems in each lesson.
- Many examples with different levels of difficulties
- Quality scaffolding in each lesson
- Hard cover, colorful, quality graphics, good text to graphic ratio
- Extensive online resources
- Quality modeling and conceptual problems
- Highlights vocab
- Students spend well over 50% of their time on WAPs

Weaknesses:

- Doesn't cover F-BF.2
- Doesn't cover S-IC.1
- Doesn't cover F-LE.1
- No ELL accommodations throughout text
- Weak on Mathematical Practice 5 and 8
- Mathematical Practices aren't identified
- Connections between clusters and domains is lacking

2015-1 Interim Mathematics Review

Mathematics Evaluation Tool – High School

Publisher: Cengage Learning Inc.

Title of Material: College Prep Algebra, 1e

Author: Ron Larson

ISBN #: 978-1-285-18262-9 **Copyright** 2014

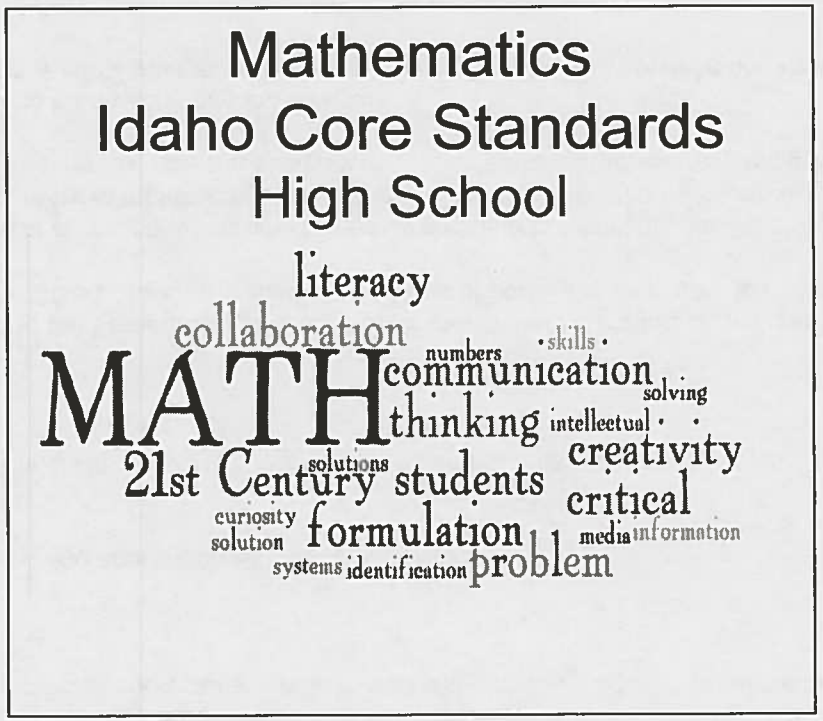
Reviewer ID: K.C. and C.H.

Core Mathematics Program- a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Core.

Other Mathematics Program- a program that substantially, but partially, meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Other.

Component Mathematics Program- a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs.
Substantial evidence clearly supports the designation of this program as Component.

Intervention Program- a program designed and intended to target and support students' specific needs.
Substantial evidence clearly supports the designation of this program as Intervention.



- Evaluation Form adapted from Instructional Materials Evaluation Toolkit (IMET).

The IMET was developed by Student Achievement Partners. Educators may use or adapt. http://creativecommons.org/licenses/by/3.0/ Download this tool at http://achievethecore.org/IMET

Instructional Materials Evaluation Tool

Mathematics, High School

What Are the Purposes of the IMET?

This Math IMET is designed to help educators determine whether instructional materials are aligned to the Shifts and major features of the Common Core State Standards (CCSS). The substantial instructional Shifts (http://www.corestandards.org/other-resources/key-shifts-in-mathematics/) at the heart of the Common Core State Standards are:

- **Focus** strongly where the Standards focus
- **Coherence**: Think across grades and link to major topics within the grade
- **Rigor**: In major topics, pursue conceptual understanding, procedural skill and fluency, and application with equal intensity.

The IMET draws directly from the following documents:

- Common Core State Standards for Mathematics (www.corestandards.org/Math)
- Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013) (http://www. corestandards.org/wp-content/uploads/Math_Publishers_Criteria_ HS_Spring_2013_FINAL1.pdf)

When to use the IMET

1. Purchasing materials: Many factors go into local purchasing decisions. Alignment to the Standards is a critical factor to consider. This tool is designed to evaluate alignment of instructional materials to the Shifts and the major features of the CCSS. It also provides suggestions of additional indicators to consider in the materials evaluation and purchasing process
2. Evaluating materials currently in use: The IMET can be used to analyze the degree of alignment of existing materials and help to highlight specific, concrete flaws in alignment. Even where materials and tools currently in use fail to meet one or more of these criteria, the pattern of failure is likely to be informative. States and districts can use the evaluation to create a thoughtful plan to modify or combine existing resources in such a way that students' actual learning experiences approach the focus, coherence, and rigor of the Standards.
3. Developing programs: Those developing new programs can use this tool as guidance for creating aligned curricula.

Please note this tool was designed for evaluating comprehensive curricula (including any supplemental or ancillary materials), but it was not designed for the evaluation of standalone supplemental materials.

Who Uses the IMET?

Evaluating instructional materials requires both subject-matter and pedagogical expertise. Evaluators should be well versed in the Standards (www.corestandards.org/Math) for all grades in which materials are being evaluated. This includes understanding the Widely Applicable Prerequisites (www.achievethecore.org/prerequisites), how the content fits into the progressions in the Standards (www. achievethecore.org/progressions), and the expectations of the Standards with respect to conceptual understanding, procedural skill and fluency, and application. Evaluators also should be familiar with the substantial instructional Shifts (http://www.corestandards.org/other-resources/key-shifts-in-mathematics/) of Focus, Coherence and Rigor that are listed above.

Getting Started

Prior to Evaluation

Assemble all of the materials necessary for the evaluation. It is essential for evaluators to have materials for all grades covered by the program, as some criteria cannot be rated without having access to each grade. In addition, each evaluator should have a reference copy of the Common Core State Standards for Mathematics (CCSSM) and the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).

Before conducting the evaluation itself, it is important to develop a protocol for the evaluation process. The protocol should include having evaluators study the Publishers' Criteria and the IMET. It will also be helpful for evaluators to get a sense of each program overall before beginning the process. At a minimum, this would include reading the front matter of the text, looking at the table of contents and paging through multiple chapters.

Sections 1-3 below should be completed to produce a comprehensive picture of the strengths and weaknesses of the materials under evaluation. Information about areas in need of improvement or supplementation should be shared with internal and external stakeholders.

Navigating the Tool

Begin with Section 1: Non-Negotiable Alignment Criteria

- The Non-Negotiable Alignment Criteria must each be met in full for materials to be considered aligned to the Shifts and the major features of the Common Core State Standards. Each Non-Negotiable Alignment Criterion has one or more metrics associated with it; every one of these metrics must be met in order for the criterion as a whole to be met.

- Examine the relevant materials and use evidence to rate the materials against each criterion and its associated metric(s).

- Record and explain the evidence upon which the rating is based.

Continue to Section 2: Alignment Criteria

- The Alignment Criteria must each be met for materials to be considered aligned to the Shifts and the major features of the Common Core State Standards. Each Alignment Criterion has one or more metric associated with it; a specific number of these metrics must be met or partially met in order for the criterion as a whole to be met.

- Examine the materials in relation to these criteria, assigning each metric a point value. Rate the criterion as "Meets" or "Does Note Meet" based on the number of points assigned. The more points the materials receive on the alignment Criteria, the better they are aligned.

- Record and explain the evidence upon which the rating is based.

Proceed to Section 4: Indicators of Quality

- Indicators of Quality are important considerations that will help evaluators better understand the overall quality of instructional materials. These considerations are not criteria for alignment to the CCSS, but they provide valuable information about additional program characteristics. Evaluators may want to add their own indicators to the examples provided.

Directions for Non-Negotiable 1

Focus and Coherence

Criterion	Evidence- Give specific examples.	Rating: (Reviewer only.)
Non-Negotiable 1: Focus and Coherence- Materials must focus coherently on the Widely Applicable Prerequisites in a way that is consistent with the progressions in the Standards. Focus and coherence are the two major evidence-based design principles of the Common Core State Standards for Mathematics (CCSSM, p. 3). Focus is necessary in order to fulfill the ambitious promise the states have made to their students by adopting the Standards: greater achievement at the college and career-ready level; greater depth of understanding of mathematics; and a rich classroom environment in which reasoning, sense-making, applications, and a range of mathematical practices flourish. In high school courses, narrowing and deepening the curriculum creates a structure that ties topics together. Thus, materials must focus coherently on the Widely Applicable Prerequisites in a way that is consistent with the progressions in the Standards.	Focus and coherence are the two major evidence-based design principles of the Common Core State Standards for Mathematics (CCSSM, p. 3). Focus is necessary in order to fulfill the ambitious promise the states have made to their students by adopting the Standards: greater achievement at the college and career-ready level; greater depth of understanding of mathematics; and a rich classroom environment in which reasoning, sense-making, applications, and a range of mathematical practices flourish. In high school courses, narrowing and deepening the curriculum creates a structure that ties topics together. Thus, materials must focus coherently on the Widely Applicable Prerequisites in a way that is consistent with the progressions in the Standards. **Required Materials:** • Common Core State Standards for Mathematics (www.corestandards.org/wpcontent/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_HS_Spring_2013_FINAL1.pdf) • Widely Applicable Prerequisites for College and Careers (http://achievethecore.org/prerequisites) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion:** Non-Negotiable 1 is rated as Meets or Does Not Meet. To rate Non-Negotiable 1, first rate Metrics 1A–1H. Each of these eight metrics must be rated as Meets in order for Non-Negotiable 1 to be rated as Meets. Rate each metric 1A–1H as Meets or Does Not Meet/Insufficient Evidence. If the evidence examined shows that the Criterion is met, then mark the Criterion as Meets. If the evidence examined shows that the Criterion is not met—or if there is insufficient evidence to make a determination—then mark the Criterion as Does Not Meet/Insufficient Evidence. Support all ratings with evidence.

Metric NN1A: **In any single course, students spend at least 50% of their time on Widely Applicable Prerequisites.** **How to Find the Evidence:** Familiarize yourself with the Widely Applicable Prerequisites. Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, lessons, homework assignments, and assessments. (Evaluate both student and teacher materials.) Consider time spent on the Widely Applicable Prerequisites and judge qualitatively whether students and teachers using the materials as designed will devote the majority of time to the Widely Applicable Prerequisites For context, read Criterion #1 in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** **Judging from table of contents and looking through the text it is apparent that the students spend more than 50% of their time on the Widely Applicable Prerequisites. All of the WAP for Algebra 2 are covered and are applied in multiple chapters and lessons.** **Examples:** **N-RN.1, N-RN.2: Chapter 9.1 and 9.2** **N-RN.3: Chapter 9.3** **N-Q: Chapter 9.3** **F-IF: Chapters 4.2, 4.5, 4.6, 10.4, 7.1, 11.1, 11.3** **F-BF: Chapter 4.5**	**__X__Meets** **____Does Not Meet Insufficient Evidence**
Metric NN1B: **Student work in Geometry involves significant work with applications/modeling and problems that use algebra skills.** **How to Find the Evidence:** Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, lessons, homework assignments, and assessments. (Evaluate both student and teacher materials. NOTE: Since Geometry contains relatively fewer Widely Applicable Prerequisites, this Criterion is important to help foster students' college and career readiness. Problems that use algebra skills might include, for example, algebraic geometry problems in a coordinate setting, or problems of measurement involving unknown quantities.	**Evidence-** **Even though this isn't a Geometry based text, many Geometry concepts are covered throughout the text. Area, perimeter, volume, and other Geometry concepts appear in conceptual problems throughout the lessons.** **Examples:** **Lesson 3.5 Geometric and Scientific Applications** **Lesson 8.5 Use of Area of a Triangle** **Lesson 6.2 Volume** **Lesson 12.1 Circles** **Lesson 4.4 Parallel and Perpendicular Lines**	**__X__Meets** **____Does Not Meet Insufficient Evidence**

Metric NN1C: **There are problems at a level of sophistication appropriate to high school (beyond mere review of middle school topics) that involve the application of knowledge and skills from grades 6-8.** **How to Find the Evidence:** Evaluate lessons, chapter/unit assessments, and homework assignments. NOTE: Problems should include application of the following topics from grades 6-8: • Ratios and proportional relationships. • Percentage and unit conversions, e.g., in the context of complex measurement problems involving quantities with derived or compound units (such as mg/mL, kg/ m3, acre-feet, etc.). • Basic function concepts, e.g., by interpreting the features of a graph in the context of an applied problem. • Concepts and skills of geometric measurement e.g., when analyzing a diagram or schematic. • Concepts and skills of basic statistics and probability (see grades 6–8.SP) • Performing rational number arithmetic fluently. For context, read Table 1 on Page 8 of the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** **Each chapter and lesson requires the use of previous knowledge acquired in grades in grades 6-8 and other previous courses. Concepts such as ratios, proportions, real number operations, area, volume, and other important concepts learning in previous grades can be found throughout the text.** **Examples:** **Lesson 3.4: Ratios with Units** **Lesson 3.3: Application of Percentage** **Lesson 3.5: Mixture Problems** **Lesson 9.3: Perimeter** **Chapter 1: Real Number System** **All Chapters: Rational Number Operations**	**__X__Meets** **____Does Not Meet Insufficient Evidence**
Metric NN1D: **Materials base courses on the content specified in the Standards.** **How to Find the Evidence:** Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, and lessons in both student and teacher materials. For context, read Criterion #3a in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** **This text covers all of the required standards for Algebra 1 and Algebra 2 as well as multiple Geometry standards. Looking at the table of contents and throughout the text the material is all directed towards teaching the standards. No lessons or concepts are out of place.** **N-RN: Chapters 9.1, 9.2** **N-CN: Chapter 9.6** **N-Q: Chapters 6.5, 7.5, 7.6** **A-SSE: Chapters 2.1, 5.3, 9.1** **F-IF: Chapters 4.3, 7.1, 11.1**	**__X__Meets** **____Does Not Meet Insufficient Evidence**
Metric NN1E: **Materials give all students extensive work with course-level problems.** **How to Find the Evidence:** Evaluate both student and teacher materials. If the materials provide resources for differentiated learning, consider whether lower-performing students have opportunities to engage with course-level problems. Also consider whether higher-performing students are given opportunities to learn current course-level content in greater depth. For conte[illegible]ad Criterion #3b in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** **In each lesson there are multiple sections of problems called "Exercises Within Reach" and these sections of problems provide scaffolding and include an extensive number of course-level problems for students. There are also tutorial videos online in English and Spanish for lower performing students. Application problems are also included that require students to have a more in depth understanding. Example: Lesson 9.6 (pg 484) there are seven sections of problems sprinkled throughout the lesson. There are a to[illegible]f 128 problems in that one section.**	**__X__Meets** **____Does Not Meet Insufficient Evidence**

Metric NN1F: **Materials relate course-level concepts explicitly to prior knowledge from earlier grades or courses. The materials are designed so that prior knowledge becomes reorganized and extended to accommodate the new knowledge.** **How to Find the Evidence:** Evaluate student and teacher materials, looking for problems that involve extending the knowledge learned in earlier grades and courses. NOTE: An example of evaluating this Criterion might be to look at whether materials connect the equation of a circle with the distance formula and the Pythagorean theorem. For context, read Criterion #3c in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** **This text does a great job of having a logical progression of lessons that relate to knowledge acquired in previous courses. At the beginning of many lessons the text refers to a previous knowledge learned in the text. For example, in Lesson 10.1 (pg 502) the text refers to a prior concept learned in Lesson 6.5.** **Also, complex numbers are covered which requires knowledge of the number system. And graphing logarithmic and exponential functions requires function notation knowledge.**	**_X___Meets** **____Does Not Meet Insufficient Evidence**
Metric NN1G: **Materials include learning objectives that are visibly shaped by CCSSM cluster and domain headings.** **How to Find the Evidence:** Select several clusters from the course being evaluated. Evaluate teacher and student materials in relation to these clusters. For context, read Criterion #4a in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** **Learning Objectives can be found at the beginning of each section and reflect the language of the CCSSM cluster and domain headings. Also, in the Chapter Summary at the end of each chapter, in the What Did You Learn column, the language of the CCSSM standards are evident.**	**__X__Meets** **____Does Not Meet Insufficient Evidence**
Metric NN1H: **Materials include problems and activities that serve to connect two or more clusters in a domain, or two or more domains in a category, or two or more categories, in cases where these connections are natural and important.** **How to Find the Evidence:** In the course being evaluated, choose two or more clusters, two or more domains, or two or more categories for which connections are natural and important. Evaluate the units, chapters, and lessons that deal with the chosen topics, looking for problems and activities that serve to connect the chosen clusters or domains. NOTE: An example of evaluating this Criterion might be to look at whether materials include problems in which students analyze a situation by building a function, graphing it, and using it to create and solve an equation. For context, read Criterion #4b in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** **This text makes many connections between categories, domains, clusters and standards.** **Examples:** **Lesson 2.2 covers both A-SSE.1a and A-SSE.3** **Lesson 7.5 covers A-REI.1 and A-REI.2** **Lesson 4.1 covers N-Q.A.1, A-CED.A.2, A-SSE.1, N-Q.A.1 and A-CED.A.2**	**__X__Meets** **____Does Not Meet Insufficient Evidence**

Non-Negotiable 1: Focus and Coherence- Materials must focus coherently on the Widely Applicable Prerequisites in a way that is consistent with the progressions in the Standards.

Metric NN 1: If all metrics 1A–1H were rated as Meets, then rate Non-Negotiable 1 as Meets. If one or more metrics were rated as Does Not Meet/Insufficient Evidence, then rate Non-Negotiable 1 as Does Not Meet. Check the final rating.
Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)**

Before moving to Alignment Criterion 1, record the final Meets or Does Not Meet rating in the Evaluation Summary.

__X__Meets

____Does Not Meet

Strengths/Weaknesses

Strengths:

- **Covers all standards**
- **Extensive practice problems**
- **Appropriate level of difficulty**
- **Chapter Summary helpful**
- **Easily followed examples**

Weaknesses:

- **Does not cover recursive and explicit**
- **Doesn't distinguish between linear and exponential**
- **Standards aren't explicitly marked**

Now continue by evaluating Alignment Criterion 1 for Rigor and Balance.

Directions for Alignment Criterion 1

Rigor and Balance

Alignment Criterion 1: **Rigor and Balance- Materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.** The Standards set expectations for attention to all three aspects of rigor: conceptual understanding, procedural skill and fluency, and applications. Thus, materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.	The Standards set expectations for attention to all three aspects of rigor: conceptual understanding, procedural skill and fluency, and applications. Thus, materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations. • Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_HS_Spring_2013_FINAL1.pdf) • Widely Applicable Prerequisites for College and Careers (http://achievethecore.org/prerequisites) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion:** Alignment Criterion 1 is rated as Meets or Does Not Meet. To rate Alignment Criterion 1, first rate metrics 1A, 1B, and 1C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). For each metric, guiding questions are provided to aid in gathering evidence. Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 1 if the materials rate 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as rigor and balance, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.
AC Metric 1A: **The materials support the development of students' conceptual understanding of key mathematical concepts, especially where called for in specific content Standards or cluster headings.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Widely Applicable Prerequisites that relate specifically to conceptual understanding to use throughout the questions associated with this metric. NOTE: Some examples of clusters or Standards that call for conceptual understanding include: N-RN.A.1, A-APR.B, A-REI.A.1, A-REI.D.10, A.REI.D.11, F.IF.A.1, F-LE.A.1, G.SRT.A.2, G-SRT.C.6, S-ID.C.7 For context, read Criterion #2a in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	• Choose a cluster/Standard from the Widely Applicable Prerequisites that is aligned to each aspect of rigor and use it to evaluate these metrics. It is most helpful if the same clusters and Standards are chosen for all of the programs being evaluated. (Guidance in choosing clusters/Standards is included in "How to Find the Evidence" below.)	**Use the questions for AC Metric 1A to evaluate Metric 1A. Record evidence for each question and rate Metric 1A.** **__X__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Is conceptual understanding attended to thoroughly where the Standards set explicit expectations for understanding or interpreting? Evaluate lessons, chapter/unit assessments and homework assignments, paying attention to work aligned to Standards that explicitly call for understanding or interpreting.	**Evidence-** **Conceptual Understanding is attended to at the end of every lesson in the Concept Summary section. It explains the What, How and Why of each lesson.**	
Do the materials feature high-quality conceptual problems and conceptual discussion questions? Evaluate lessons, chapter/unit assessments, and homework assignments. NOTE: Examples of conceptual problems might include such questions as "What is the maximum value of the function f(t) = 5 – t2 ?" or "Is √2 a polynomial? How about ½(x + √2)+ ½ (-x + √2)?"	**Evidence-** **High-quality real-life application problems can be found in each lesson in the Extra Practice and Explaining Concepts portions of each lesson. Also suggested discussion prompts for teachers can be found in the margin at the beginning of some lessons. At the end of each the Concept Summary Check also assesses their conceptual understanding.**	

Do the materials feature opportunities to identify correspondences across mathematical representations? Evaluate lessons, chapter/unit assessments and homework assignments. NOTE: An example of evaluating this metric might include looking at whether materials support students in identifying correspondences among the expression that defines a function, the graph that shows the relationship, and the behavior of the phenomenon being modeled (if any).	**Evidence-** **Many places in this text require students to make connections between finding solutions algebraically versus graphically. For example, in Lesson 4.6 students are asked to find the solutions to linear inequalities both algebraically and graphically and relate them together.**	
AC Metric 1B: **The materials are designed so that students attain the fluencies and procedural skills required by the Standards.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Widely Applicable Prerequisites that relate specifically to fluency and procedural skill to use throughout the questions associated with this metric. NOTE: Some examples of Standards that call for procedural skill and fluency include: A-SSE.A.1b, A-SSE.2, A-APR.A.1, A-APR.C.6, F-BF.B.3, G-GPE.B.4, G-GPE.B.5, G-GPE.B.7, G-CO.A.1, G-SRT.B.5 For context, read Criterion #2b in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).		**Use the questions for AC Metric 1B to evaluate Metric 1B. Record evidence for each question and rate Metric 1B.** **__X__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Is progress toward fluency and procedural skill interwoven with the student's developing conceptual understanding of the skills in question? Evaluate lessons, chapter/unit assessments, daily routines, and homework assignments for evidence that the development of fluency and procedural skill is supported by conceptual understanding.	**Evidence-** **This text provides many procedural problems in each lesson. At the end of each example procedural problems are given to practice each specific skill. Then at the conclusion of the lesson conceptual problems can be found and are used to relate the skills learned in the procedural problems to real world modeling problems.**	
Are purely procedural problems and exercises present that include cases in which opportunistic strategies are valuable and generic cases that require efficient and general procedures present? Evaluate lessons, chapter/unit assessments, daily routines, and homework assignments. NOTE: Problems in which opportunistic strategies are valuable might include such examples as solving x2 + 5 = 49 + 5 or (3x – 2)2 = 6x – 4. Generic cases that require efficient and general procedures might include such problems as solving c + 8 – c2 = 3(c – 1)2 – 5).	**Evidence-** **Purely procedural problems are provided in each section and increase in difficulty throughout the section to allow students to gain confidence and they proceed through each concept.**	

AC Metric 1C: **The materials are designed so that teachers and students spend sufficient time working with engaging applications, without losing focus on the Widely Applicable Prerequisites.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Widely Applicable Prerequisites that relate specifically to application to use throughout the questions associated with this metric. NOTE: Some examples of clusters or Standards that call for application include: N-Q.A, A-SSE.B.3, A-REI.D.11, F-IF.B, F-IF.C.7, F-BF.A.1, G-SRT.C.8, S-ID.A.2, S-IC.A.1 For context, read Criterion #2c in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).		**Use the questions for AC Metric 1C to evaluate Metric 1C. Record evidence for each question and rate Metric** **__X__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Are there single- and multi-step contextual problems, including non-routine problems, that develop the mathematics of the course, afford opportunities for practice, and engage students in problem solving? Do the problems attend thoroughly to those places in the content Standards where expectations for multi-step and real-world problems are explicit? Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** **Single and multi-step contextual problems can be found throughout each lesson.** **Examples:** **Lesson 10.2**	
Do application problems particularly stress applying the Widely Applicable Prerequisites? Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** **Application problems throughout the text pertain to the WAP.** **Examples:** **Lesson 10.1 and 10.2: A-SSE.3.a.b.c** **Lesson 2.1: N-Q.1, N-Q.2, N-Q.3**	
Are there ample opportunities for students to engage with modeling problems? Do materials require students to use both individual parts of the modeling cycle as well as the full modeling cycle? Read the pages on High School—Modeling in the Standards for Mathematics (pp. 72 and 73). Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** **There are many problems throughout the text that require students to use modeling skills.** **Example:** **Lesson 3.7 Page 157 Example 10**	

Alignment Criterion 1: Materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.

AC 1: Materials must earn at least 5 of 6 points to meet this Alignment Criterion. If materials earn less than 5 points, the Criterion has not been met. Check the final rating.
Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)**

Before moving to Alignment Criterion 2, record the final Meets or Does Not Meet rating in the Evaluation Summary.

__X__Meets

____Does Not Meet

Strengths/Weaknesses:

Strengths:

- **Quality modeling/real-life application problems**
- **Lessons are scaffolded**
- **Concept Summary**

Weaknesses:

- **Hard to find cluster connections**

Alignment Criterion 2:
Standards for Mathematical Practice- Materials must demonstrate authentic connections between content Standards and practice Standards.

The Standards require that designers of instructional materials connect the mathematical practices to mathematical content in instruction. Thus, materials must demonstrate authentic connections between content Standards and practice Standards.

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Required Materials:

- Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf)
- Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_HS_Spring_2013_FINAL1.pdf)
- Widely Applicable Prerequisites for College and Careers (http://achievethecore.org/prerequisites)
- From the materials being evaluated: teacher guides, student texts and workbooks

Rating this Criterion:

Alignment Criterion 2 is rated as Meets or Does Not Meet.

To rate Alignment Criterion 2, first rate metrics 2A, 2B, and 2C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). For each metric, guiding questions are provided to aid in gathering evidence.
Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 2 if the materials rate 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as mathematical practices, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.

AC Metric 2A: **Materials address the practice Standards in such a way as to enrich the Widely Applicable Prerequisites; practices strengthen the focus of the course instead of detracting from it, in both teacher and student materials.** **How to Find the Evidence:** Familiarize yourself with the Widely Applicable Prerequisites. Evaluate teacher and student materials for evidence that the mathematical practices support and connect to the focus of the course. NOTE: An example of evaluating this Criterion might include looking at whether materials use regularity in repeated reasoning to illuminate formal algebra as well as functions, particularly recursive definitions of functions. For context, read Criterion #6 in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** **Throughout the text when problems cover the Mathematical Practices it is specifically in a meaningful way that helps enrich the WAP.** **Example:** **Lesson 11.1 Page 569 #74 covers MP1, MP2, and MP4 and N-Q.2, A-CED.1 and F-BF.1**	**__X__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
AC Metric 2B: **Materials attend to the full meaning of each practice Standard.** **How to Find the Evidence:** For context, read Criterion #7 in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).		**Use the questions for AC Metric 2B to evaluate Metric 2B. Record evidence for each question and rate Metric 2B.** **____Meets (2)** **__X__Partially Meets (1)** **____Does Not Meet (0)**
Over the course of any given year of instruction, is each mathematical practice Standard meaningfully present in the form of assignments, activities, or problems that stimulate students to develop the habits of mind described in the practice Standard? Evaluate lessons, chapter/ unit assessments, and homework assignments for evidence of each mathematical practice being meaningfully present in instruction.	**Evidence-** **Throughout the text most Mathematical Practices are meaningfully present.** **MP5 is very weak. Only the use of a graphing calculator as a manipulative is represented.** **MP8 is not present. Students are not required to verbalize or journal about their findings.**	
Are teacher-directed materials that explain the role of the practice Standards in the classroom and in students' mathematical development included? Are alignments to practice Standards accurate? Evaluate teacher materials, paying attention to explanations of the role of the practice Standards in the classroom and in students' mathematical development. Evaluate documents aligning lessons to practice Standards for accuracy. NOTE: Examples to look for when evaluating this metric might include the following: a highly scaffolded problem should not be aligned to MP.1; or a problem that directs a student to use a calculator should not be aligned to MP.5; or a problem about merely extending a pattern should not be aligned to MP.8.	**Evidence-** **In the teacher-directed materials the Mathematical Practices are not clearly addressed or marked.**	

AC Metric 2C: **Materials support the Standards' emphasis on mathematical reasoning.** **How to Find the Evidence:** For context, read Criterion #8 in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).		**Use the questions for AC Metric 2C to evaluate Metric 2C. Record evidence for each question and rate Metric 2C.** **__X__Meets (2)** **_____Partially Meets (1)** **_____Does Not Meet (0)**
Do the materials support students in constructing viable arguments and critiquing the arguments of others concerning course-level mathematics that is detailed in the content Standards? Read Standard for Mathematical Practice 3. Evaluate teacher and student materials to ensure that students are given opportunities to reason with grade-level mathematics.	**Evidence-** **Mathematical Practice 3 is covered by the problems that are at the end of each section in the Extra Practice and Explaining Concepts Exercises. The exercises provide opportunities for students to make predictions, use prior learning, explain thought processes and express alternate perspectives.**	
Do the materials support students in producing not only answers and solutions, but also, in a course-appropriate way, arguments, explanations, diagrams, mathematical models, etc., especially in the Widely Applicable Prerequisites? Familiarize yourself with the Widely Applicable Prerequisites. Evaluate teacher and student materials to understand the types of work students are expected to produce.	**Evidence-** **In the Explaining Concepts portion of each section Reasoning, Number Sense, Analyzing, Writing, Think About It and Analyzing Errors are provided and support students in critical thinking and providing arguments.**	
Do materials explicitly attend to the specialized language of mathematics? Is the language of argument, problem solving, and mathematical explanations taught rather than assumed? Evaluate teacher and student materials, paying attention to how mathematical language is taught. NOTE: An example of evaluating this Criterion might include looking at whether students are supported in: basing arguments on definitions; using the method of providing a counter example; or recognizing that examples alone do not establish a general statement.	**Evidence-** **This text supports the correct the use of mathematical terminology. Definitions and algebraic properties can be found in boxes throughout each lesson. Also vocabulary is provided and highlighted throughout each section.**	

Alignment Criterion 2: Materials must demonstrate authentic connections between content Standards and practice Standards.

AC 2: Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 points, the Criterion has not been met. Check the final rating.
Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewers only.)**

Before moving to Alignment Criterion 3, record the final Meets or Does Not Meet rating in the Evaluation Summary.

__X__Meets

____Does Not Meet

Strengths/Weaknesses:

Strengths:

- **The Explaining Concepts portion of each lesson is useful**

Weaknesses:

- **MP8 weak**
- **MP5 weak**
- **MPs not labeled and hard to find**

Alignment Criterion 3:
Access to the Standards for All Students- Materials must provide supports for English Language Learners and other special populations.

Because Standards are for all students, alignment requires thoughtful support to ensure all students are able to meet the Standards. Thus, aligned materials must provide supports for English Language Learners and other special populations.

Because Standards are for all students, alignment requires thoughtful support to ensure all students are able to meet the Standards. Thus, aligned materials must provide supports for English Language Learners and other special populations.

Required Materials:

- Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf)
- Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math Publishers_Criteria_HS_Spring_2013_FINAL1.pdf)
- From the materials being evaluated: teacher guides, student texts and workbooks

Rating this Criterion:

Alignment Criterion 3 is rated as Meets or Does Not Meet.

To rate Alignment Criterion 3, first rate metrics 3A, 3B, and 3C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 3 if the materials rate 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as support for special population, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.

AC Metric 3A:
Support for English Language Learners and other special populations is thoughtful and helps those students meet the same Standards as all other students. The language in which problems are posed is carefully considered.

How to Find the Evidence:

Evaluate teacher and student materials, paying attention to supports offered for special populations.

Evidence-
Within the text itself there isn't a Spanish-English Glossary or any other ELL or special population accommodations. However, online they do provide tutorials in Spanish and English.

____Meets (2)

_X___Partially Meets (1)

____Does Not Meet (0)

AC Metric 3B: **Materials provide appropriate level and type of scaffolding, differentiation, intervention, and support for a broad range of learners with gradual removal of supports, when needed, to allow students to demonstrate their mathematical understanding independently.** **How to Find the Evidence:** Evaluate teacher and student materials, paying attention to whether materials provide differentiation that will lead all learners to engage with on-grade-level content.	**Evidence-** **"The Exercises Within Reach" sections are quick, easy, procedural problems that are provided in multiple places throughout the lesson. In the "Extra Practice" section multi-step real-world application problems are provided. Also the Concept Summary portion of each lesson helps summarize the overall concept.**	**__X__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
AC Metric 3C: **Design of lessons recommends and facilitates a mix of instructional approaches for a variety of learners such as using multiple representations (e.g., including models, using a range of questions, checking for understanding, flexible grouping, pair-share).** **How to Find the Evidence:** Evaluate teacher materials, noting instructional approaches suggested for whole class and differentiated lessons and activities.	**Evidence-** **In the teachers notes in the margin, common misconceptions are given and teachers have the opportunity to discuss those with students. Also some discussion topics are suggested. Checks for Understanding help guide students gradually through the lesson. Tutorial videos and worked out solutions are also available online. Finally, the instructors resource binder has ideas with differentiated learning styles.**	**__X__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Alignment Criterion 3: Materials must provide supports for English Language Learners and other special populations. **AC 3** Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 points, the Criterion has not been met. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewers only.)** **Move to the Evaluation Summary and record the final Meets or Does Not Meet rating .**		**__X__Meets** **____Does Not Meet** **Strengths/Weaknesses:** **Strengths:** **- Teachers notes throughout TE are helpful** **- Great online resources** **- Scaffolding of each lesson is great** **Weaknesses:** **- No second language accommodations throughout the text**

Once an evaluation for alignment to the Shifts and major features of the CCSS has been conducted using Sections 1-3, it's important to evaluate for overall quality and best practices. A starting list of Indicators of Quality are suggested below. States, districts and others evaluating instructional materials are encouraged to add to this list to ensure materials reflect local contexts. For background information on some of the Indicators of Quality in this section, refer to pp.16–18 in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).

Indicators of Quality	Evidence- Give specific examples.	Rating: (Reviewer only.)
1. Lessons are thoughtfully structured and support the teacher in leading the class through the learning paths at hand, with active participation by all students in their own learning and in the learning of their classmates.	Evidence- Each lesson is scaffolded and broken down in to smaller manageable pieces.	(Reviewer only.) ___X___ Yes _____ No
2. The underlying design of the materials includes both problems and exercises. (In solving problems, students learn new mathematics, whereas in working exercises, students apply what they have already learned to build mastery.) Each problem or exercise has a purpose. NOTE: This Criterion does not require that the problems and exercises be labeled as such.	Evidence- The exercises and problems gradually increase in difficulty and there are quality conceptual problems that build mastery at the end of each lesson. All problems and exercises are serving the purpose of learning math and covering the standards and mathematical practices.	(Reviewer only.) ___X___ Yes _____ No
3. Design of assignments is not haphazard: exercises are given in intentional sequences in order to strengthen students' mathematical understanding.	Evidence- Throughout each lesson exercises are provided at the end of each example to practice that specific content. Then all of the individual skills acquired through the lesson lead up to the overall understanding of the concept in each lesson.	(Reviewer only.) __X____ Yes _____ No
4. There are separate teacher materials that support and reward teacher study including, but not limited to: discussion of the mathematics of the units and the mathematical point of each lesson as it relates to the organizing concepts of the unit, discussion on student ways of thinking and anticipating a variety of students responses, guidance on lesson flow, guidance on questions that prompt students thinking, and discussion of desired mathematical behaviors being elicited among students.	Evidence- The Teachers Edition has helpful notes in the margin. There is a complete solutions manual. Online materials include tutorials. Test Prep Guide provided. And a CD is included with PowerPoint Presentations and Examview.	(Reviewer only.) __X____ Yes _____ No
5. Manipulatives suggested in the materials are faithful representations of the mathematical objects they represent and are connected to written methods.	Evidence- Only graphing calculators are suggested in certain lessons.	(Reviewer only.) _____ Yes ___X___ No

6. Materials include a variety of curriculum-embedded assessments. Examples include pre-, formative, summative, and self-assessment resources.	**Evidence-** **An ExamView Test Generator was included. There are cumulative review questions throughout the text. And a chapter test at the end of each lesson.**	**(Reviewer only.)** **___X___ Yes** **_____ No**
7. Assessments contain aligned rubrics, answer keys, and scoring guidelines that provide sufficient guidance for interpreting student performance.	**Evidence-** **Complete solutions manual included and solutions to exercises in Teachers Edition.**	**(Reviewer only.)** **__X____ Yes** **_____ No**
8. Materials assess student proficiency using methods that are accessible and unbiased, including the use of course-level language in student prompts.	**Evidence-** **The tests include a variety of problems with varying levels of difficulty.**	**(Reviewer only.)** **__X____ Yes** **_____ No**
9. Materials are carefully evaluated by qualified individuals, whose names are listed, in an effort to ensure freedom from mathematical errors and course-level appropriateness.	**Evidence-** **This information can be found in the preface.**	**(Reviewer only.)** **__X____ Yes** **_____ No**
10. The visual design supports students in engaging thoughtfully with the subject. Navigation through the text is clear.	**Evidence-** **Colorful, great graphics, well organized, table of contents, index, examples are easy to follow.**	**(Reviewer only.)** **___X___ Yes** **_____ No**

Reviewer IMET Evaluation Summary **Title/Level: _College Prep Algebra 1e_____**

Publisher: _Cengage Learning Inc._____ Copyright: ___2014_____

ISBN:_978-1-285-18262-9_____

Reviewer ID # _K.C. and C.H._____ Date Review Completed:_3/8/16_____

Non-Negotiable Criteria-The Non-Negotiable must be met in order for the Non-Negotiable Alignment Criteria to be met overall.

Non- Negotiable 1: Focus and Coherence

___X__ Meets

_____ Does Not Meet

Non-Negotiable Overall:

__X___ Meets _____ Does Not Meet

Alignment Criteria- Each Alignment Criterion must be met with a sufficient number of points in order for Alignment Criteria to be labeled as "Meets" overall. The more points the materials receive on the Alignment Criteria, the better they are aligned.

Alignment Criterion 1: Rigor and Balance	Alignment Criterion 2: Standards of Mathematical Practice	Alignment Criterion 3: Access to Standards for All Learners
Points: ___6__ of 6 possible. (Materials must receive at least 5 of 6 points to align.)	**Points: __5___ of 6 possible.** (Materials must receive at least 5 of 6 points to align.)	**Points: __5___ of 6 possible.** (Materials must receive at least 5 of 6 points to align.)
___X____ Meets	**___X____ Meets**	**____X___ Meets**
_____ Does Not Meet	**_____ Does Not Meet**	**_____ Does Not Meet**

Alignment Criteria Overall:

__X___ Meets _____ Does Not Meet

If the materials meet the Non-Negotiable Criterion and each Alignment Criterion, they are aligned to the Shifts and major features of the Core Standards. **Do the materials meet every Non-Negotiable and Alignment Criterion? __X___ Yes _____ No**

What are the specific areas of strength and weakness based on this evaluation? Publishers or others modifying or developing assessments can use this information to make improvements and/or to remedy gaps in the alignment of assessment materials.

Strengths:

- Helpful teachers notes in the margins of the margin of the teachers edition including common misconceptions by students.
- Extensive number of procedural and conceptual problems in each lesson.
- Many examples with different levels of difficulties
- Quality scaffolding in each lesson
- Hard cover, colorful, quality graphics, good text to graphic ratio
- Extensive online resources
- Quality modeling and conceptual problems
- Highlights vocab
- Students spend well over 50% of their time on WAPs

Weaknesses:

- Doesn't cover F-BF.2
- Doesn't cover S-IC.1
- Doesn't cover F-LE.1
- No ELL accommodations throughout text
- Weak on Mathematical Practice 5 and 8
- Mathematical Practices aren't identified
- Connections between clusters and domains is lacking

2015-16 Mathematics Interim Review Recommendation & Summary

Publisher Name:	Cengage Learning Inc,
Title:	Financial Algebra
ISBN #	9781285444857
Grade Level(s) or Course:	10-12
Reviewer ID:	KC TT

RECOMMENDED AS:

_____**Core Mathematics Program-** a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials. Substantial evidence clearly supports the designation of this program as Core.

____X____**Other Mathematics Program-** a program that substantially, but partially, meets the *focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for* supplemental materials. Substantial evidence clearly supports the designation of this program as Other.

_____**Component Mathematics Program-** a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs. Substantial evidence clearly supports the designation of this program as Component.

_____**Intervention Program-** a program designed and intended to target and support students' specific needs. Substantial evidence clearly supports the designation of this program as Intervention.

_____ **Does not meet criteria** for recommendation as a Curricular Material or Online Resource for Mathematics.

2015-1[illegible]terim Mathematics Review

Mathematics Evaluation Tool – High School

Publisher: Cengage Learning, Inc.

Title of Material: Financial Algebra

Author: Robert Gerver and Richard Sgroi

ISBN #: 9781285444857 **Copyright** 2014

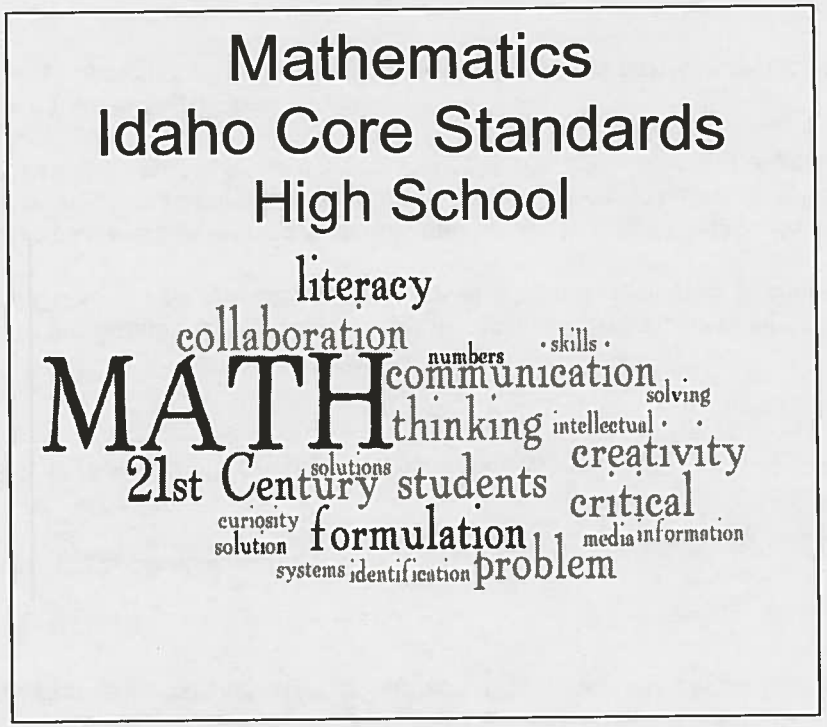
Reviewer ID: K.C. and T.T.

Core Mathematics Program- a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Core.

Other Mathematics Program- a program that substantially, but partially, meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Other.

Component Mathematics Program- a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs.
Substantial evidence clearly supports the designation of this program as Component.

Intervention Program- a program designed and intended to target and support students' specific needs.
Substantial evidence clearly supports the designation of this program as Intervention.



- Evaluation Form adapted from Instructional Materials Evaluation Toolkit (IMET).

The IMET was developed by Student Achievement Partners. Educators may use or adapt. http://creativecommons.org/licenses/by/3.0/ Download this tool at http://achievethecore.org/IMET

Instructional Materials Evaluation Tool

Mathematics, High School

What Are the Purposes of the IMET?

This Math IMET is designed to help educators determine whether instructional materials are aligned to the Shifts and major features of the Common Core State Standards (CCSS). The substantial instructional Shifts (http://www.corestandards.org/other-resources/key-shifts-in-mathematics/) at the heart of the Common Core State Standards are:

- **Focus** strongly where the Standards focus
- **Coherence**: Think across grades and link to major topics within the grade
- **Rigor**: In major topics, pursue conceptual understanding, procedural skill and fluency, and application with equal intensity.

The IMET draws directly from the following documents:

- Common Core State Standards for Mathematics (www.corestandards.org/Math)
- Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013) (http://www. corestandards.org/wp-content/uploads/Math_Publishers_Criteria_ HS_Spring_2013_FINAL1.pdf)

When to use the IMET

1. Purchasing materials: Many factors go into local purchasing decisions. Alignment to the Standards is a critical factor to consider. This tool is designed to evaluate alignment of instructional materials to the Shifts and the major features of the CCSS. It also provides suggestions of additional indicators to consider in the materials evaluation and purchasing process
2. Evaluating materials currently in use: The IMET can be used to analyze the degree of alignment of existing materials and help to highlight specific, concrete flaws in alignment. Even where materials and tools currently in use fail to meet one or more of these criteria, the pattern of failure is likely to be informative. States and districts can use the evaluation to create a thoughtful plan to modify or combine existing resources in such a way that students' actual learning experiences approach the focus, coherence, and rigor of the Standards.
3. Developing programs: Those developing new programs can use this tool as guidance for creating aligned curricula.

Please note this tool was designed for evaluating comprehensive curricula (including any supplemental or ancillary materials), but it was not designed for the evaluation of standalone supplemental materials.

Who Uses the IMET?

Evaluating instructional materials requires both subject-matter and pedagogical expertise. Evaluators should be well versed in the Standards (www.corestandards.org/Math) for all grades in which materials are being evaluated. This includes understanding the Widely Applicable Prerequisites (www.achievethecore.org/prerequisites), how the content fits into the progressions in the Standards (www. achievethecore.org/progressions), and the expectations of the Standards with respect to conceptual understanding, procedural skill and fluency, and application. Evaluators also should be familiar with the substantial instructional Shifts (http://www.corestandards.org/other-resources/key-shifts-in-mathematics/) of Focus, Coherence and Rigor that are listed above.

Getting Started

Prior to Evaluation

Assemble all of the materials necessary for the evaluation. It is essential for evaluators to have materials for all grades covered by the program, as some criteria cannot be rated without having access to each grade. In addition, each evaluator should have a reference copy of the Common Core State Standards for Mathematics (CCSSM) and the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).

Before conducting the evaluation itself, it is important to develop a protocol for the evaluation process. The protocol should include having evaluators study the Publishers' Criteria and the IMET. It will also be helpful for evaluators to get a sense of each program overall before beginning the process. At a minimum, this would include reading the front matter of the text, looking at the table of contents and paging through multiple chapters.

Sections 1-3 below should be completed to produce a comprehensive picture of the strengths and weaknesses of the materials under evaluation. Information about areas in need of improvement or supplementation should be shared with internal and external stakeholders.

Navigating the Tool

Begin with Section 1: Non-Negotiable Alignment Criteria

- The Non-Negotiable Alignment Criteria must each be met in full for materials to be considered aligned to the Shifts and the major features of the Common Core State Standards. Each Non-Negotiable Alignment Criterion has one or more metrics associated with it; every one of these metrics must be met in order for the criterion as a whole to be met.

- Examine the relevant materials and use evidence to rate the materials against each criterion and its associated metric(s).

- Record and explain the evidence upon which the rating is based.

Continue to Section 2: Alignment Criteria

- The Alignment Criteria must each be met for materials to be considered aligned to the Shifts and the major features of the Common Core State Standards. Each Alignment Criterion has one or more metric associated with it; a specific number of these metrics must be met or partially met in order for the criterion as a whole to be met.

- Examine the materials in relation to these criteria, assigning each metric a point value. Rate the criterion as "Meets" or "Does Note Meet" based on the number of points assigned. The more points the materials receive on the alignment Criteria, the better they are aligned.

- Record and explain the evidence upon which the rating is based.

Are there single- and multi-step contextual problems, including non-routine problems, that develop the mathematics of the course, afford opportunities for practice, and engage students in problem solving? Do the problems attend thoroughly to those places in the content Standards where expectations for multi-step and real-world problems are explicit? Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** Every chapter lesson is based around the idea of some single step, then multi stop problems. Everything in this text is applicable in the real-world, therefore contextual problems are very important. Ex: p.149 #12, p.295 #14	
Do application problems particularly stress applying the Widely Applicable Prerequisites? Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** All of the lessons are designed for application problems, and these tie into the WAP. Example 5-5 where slope is practice, then used in various calculations and functions to make evaluations.	
Are there ample opportunities for students to engage with modeling problems? Do materials require students to use both individual parts of the modeling cycle as well as the full modeling cycle? Read the pages on High School—Modeling in the Standards for Mathematics (pp. 72 and 73). Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** Some problems just require students to compute the answer. But often the full modeling cycle is used in the longer multi-step problems and require students to formulate, compute, interpret, validate, and report.	
Alignment Criterion 1: Materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations. **AC 1:** Materials must earn at least 5 of 6 points to meet this Alignment Criterion. If materials earn less than 5 points, the Criterion has not been met. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)** **Before moving to Alignment Criterion 2, record the final Meets or Does Not Meet rating in the Evaluation Summary.**	**__X__Meets** **____Does Not Meet** **Strengths/Weaknesses:** Numerous opportunities for practice with both procedural and contextual problems.	

Alignment Criterion 2: **Standards for Mathematical Practice- Materials must demonstrate authentic connections between content Standards and practice Standards.** The Standards require that designers of instructional materials connect the mathematical practices to mathematical content in instruction. Thus, materials must demonstrate authentic connections between content Standards and practice Standards.	The Standards require that designers of instructional materials connect the mathematical practices to mathematical content in instruction. Thus, materials must demonstrate authentic connections between content Standards and practice Standards. **Required Materials**: • Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_HS_Spring_2013_FINAL1.pdf) • Widely Applicable Prerequisites for College and Careers (http://achievethecore.org/prerequisites) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion:** Alignment Criterion 2 is rated as Meets or Does Not Meet. To rate Alignment Criterion 2, first rate metrics 2A, 2B, and 2C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). For each metric, guiding questions are provided to aid in gathering evidence. Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 2 if the materials rate 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as mathematical practices, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.
AC Metric 2A: **Materials address the practice Standards in such a way as to enrich the Widely Applicable Prerequisites; practices strengthen the focus of the course instead of detracting from it, in both teacher and student materials.** **How to Find the Evidence:** Familiarize yourself with the Widely Applicable Prerequisites. Evaluate teacher and student materials for evidence that the mathematical practices support and connect to the focus of the course. NOTE: An example of evaluating this Criterion might include looking at whether materials use regularity in repeated reasoning to illuminate formal algebra as well as functions, particularly recursive definitions of functions. For context, read Criterion #6 in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** All of the WAPs and practice standards are integrated into the curriculum in a meaningful and purposeful way. The WAPs and MPs work to enhance the financial concepts.	**__X__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
AC Metric 2B: **Materials attend to the full meaning of each practice Standard.** **How to Find the Evidence:** For context, read Criterion #7 in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).		**Use the questions for AC Metric 2B to evaluate Metric 2B. Record evidence for each question and rate Metric 2B.** **____Meets (2)** **__X__Partially Meets (1)** **____Does Not Meet (0)**

Over the course of any given year of instruction, is each mathematical practice Standard meaningfully present in the form of assignments, activities, or problems that stimulate students to develop the habits of mind described in the practice Standard? Evaluate lessons, chapter/ unit assessments, and homework assignments for evidence of each mathematical practice being meaningfully present in instruction.	**Evidence-** The text integrates all eight MPs throughout each lesson. This can be found in the following aspects of the book: Skills and strategies, Examine the Question, Class Discussing. Check your Understanding, Really? Section, and You Write The Story.	
Are teacher-directed materials that explain the role of the practice Standards in the classroom and in students' mathematical development included? Are alignments to practice Standards accurate? Evaluate teacher materials, paying attention to explanations of the role of the practice Standards in the classroom and in students' mathematical development. Evaluate documents aligning lessons to practice Standards for accuracy. NOTE: Examples to look for when evaluating this metric might include the following: a highly scaffolded problem should not be aligned to MP.1; or a problem that directs a student to use a calculator should not be aligned to MP.5; or a problem about merely extending a pattern should not be aligned to MP.8.	**Evidence-** It is apparent that the mathematical practices are applied throughout, they are not mentioned or noted anywhere.	
AC Metric 2C: **Materials support the Standards' emphasis on mathematical reasoning.** **How to Find the Evidence:** For context, read Criterion #8 in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).		**Use the questions for AC Metric 2C to evaluate Metric 2C. Record evidence for each question and rate Metric 2C.** **__X__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Do the materials support students in constructing viable arguments and critiquing the arguments of others concerning course-level mathematics that is detailed in the content Standards? Read Standard for Mathematical Practice 3. Evaluate teacher and student materials to ensure that students are given opportunities to reason with grade-level mathematics.	**Evidence-** Argument construction and critiquing of arguments is weak. Some exercises require students to look at the work of others and argue whether or not they agree or disagree with the answer. Also, the class discussion notes in the margin suggest discussion prompts to teachers. It is up to the teacher's discretion to have discussion and require students to construct viable arguments.	
Do the materials support students in producing not only answers and solutions, but also, in a course-appropriate way, arguments, explanations, diagrams, mathematical models, etc., especially in the Widely Applicable Prerequisites? Familiarize yourself with the Widely Applicable Prerequisites. Evaluate teacher and student materials to understand the types of work students are expected to produce.	**Evidence-** This text supports students in using a variety of solution finding strategies. In multiple places, students are asked to create a chart of diagram, and then make mathematical conclusions from it.	

Do materials explicitly attend to the specialized language of mathematics the language of argument, problem solving, and mathematical explanations taught rather than assumed? Evaluate teacher and student materials, paying attention to how mathematical language is taught. NOTE: An example of evaluating this Criterion might include looking at whether students are supported in: basing arguments on definitions; using the method of providing a counter example; or recognizing that examples alone do not establish a general statement.	**Evidence-** The specialized language of mathematics and finance can be found in throughout the readings of the text. Vocabulary words are clearly noted and defined within the lesson. Assessments attend to the arguments and evaluations quite readily. For example, see ch 5, p.282	
Alignment Criterion 2: Materials must demonstrate authentic connections between content Standards and practice Standards. **AC 2:** Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 points, the Criterion has not been met. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewers only.)** **Before moving to Alignment Criterion 3, record the final Meets or Does Not Meet rating in the Evaluation Summary.**		**__X__Meets** **____Does Not Meet** **Strengths/Weaknesses:** Provides many real world mathematical application problems Does no note Mathematical Practices. Weak on requiring students to make mathematical arguments.
Alignment Criterion 3: **Access to the Standards for All Students- Materials must provide supports for English Language Learners and other special populations.** Because Standards are for all students, alignment requires thoughtful support to ensure all students are able to meet the Standards. Thus, aligned materials must provide supports for English Language Learners and other special populations.	Because Standards are for all students, alignment requires thoughtful support to ensure all students are able to meet the Standards. Thus, aligned materials must provide supports for English Language Learners and other special populations. **Required Materials:** • Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math Publishers_Criteria_HS_Spring_2013_FINAL1.pdf) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion:** Alignment Criterion 3 is rated as Meets or Does Not Meet. To rate Alignment Criterion 3, first rate metrics 3A, 3B, and 3C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 3 if the materials rate 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as support for special population, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.

AC Metric 3A: **Support for English Language Learners and other special populations is thoughtful and helps those students meet the same Standards as all other students. The language in which problems are posed is carefully considered.** **How to Find the Evidence:** Evaluate teacher and student materials, paying attention to supports offered for special populations.	**Evidence-** The lessons are clearly scaffolded and broken down to accommodate lower level students. There are notes in the margin of the TE that offer suggestions to the teacher to help explain the readings to struggling students. Could use more ELL accommodations. Ex: Spanish glossary or footnotes.	**____Meets (2)** **__X__Partially Meets (1)** **____Does Not Meet (0)**
AC Metric 3B: **Materials provide appropriate level and type of scaffolding, differentiation, intervention, and support for a broad range of learners with gradual removal of supports, when needed, to allow students to demonstrate their mathematical understanding independently.** **How to Find the Evidence:** Evaluate teacher and student materials, paying attention to whether materials provide differentiation that will lead all learners to engage with on-grade-level content.	**Evidence-** As previously mentioned, the lessons are well scaffolded by the frequent Checks for Understanding. The gradual increase in difficulty of the practice problems allow teachers the opportunity to differentiate assignments depending on the level of students' understanding.	**__X__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
AC Metric 3C: **Design of lessons recommends and facilitates a mix of instructional approaches for a variety of learners such as using multiple representations (e.g., including models, using a range of questions, checking for understanding, flexible grouping, pair-share).** **How to Find the Evidence:** Evaluate teacher materials, noting instructional approaches suggested for whole class and differentiated lessons and activities.	**Evidence-** Lessons are scaffolded in a way to reach a variety of learners. Annotations in the margin leave it up to the teacher's discretion to mix instructional approach as also noted in the publisher's own explanation.	**____Meets (2)** **__X__Partially Meets (1)** **____Does Not Meet (0)**
Alignment Criterion 3: Materials must provide supports for English Language Learners and other special populations. **AC 3** Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 points, the Criterion has not been met. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewers only.)** **Move to the Evaluation Summary and record the final Meets or Does Not Meet rating .**		**____Meets** **__X__Does Not Meet** **Strengths/Weaknesses:** Scaffolding is strong. ELL is lacking. Support for differing instructional approach is missing.

Once an evaluation for alignment to the Shifts and major features of the CCSS has been conducted using Sections 1-3, it's important to evaluate for overall quality and best p[illegible]ces. A starting list of Indicators of Quality are suggested below. S[illegible]s, districts and others evaluating instructional materials are encou[illegible]d to add to this list to ensure materials reflect local contexts. For background information on some of the Indicators of Quality in this section, refer to pp.16–18 in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).

Indicators of Quality	Evidence- Give specific examples.	Rating: (Reviewer only.)
1. Lessons are thoughtfully structured and support the teacher in leading the class through the learning paths at hand, with active participation by all students in their own learning and in the learning of their classmates.	**Evidence-** **Lessons are well structured and scaffolded and include discussion questions, checks for understanding, warm-up problems, and an extensive number of practice problems.**	**(Reviewer only.)** **___X___ Yes** **_____ No**
2. The underlying design of the materials includes both problems and exercises. (In solving problems, students learn new mathematics, whereas in working exercises, students apply what they have already learned to build mastery.) Each problem or exercise has a purpose. **NOTE: This Criterion does not require that the problems and exercises be labeled as such.**	**Evidence-** **The skills and strategies sections work out examples, checks for understanding help build mastery, and problem sets provide individual practice.**	**(Reviewer only.)** **___X___ Yes** **_____ No**
3. Design of assignments is not haphazard: exercises are given in intentional sequences in order to strengthen students' mathematical understanding.	**Evidence-** **Problems gradually increase in difficulty. Lessons connect concepts correctly.**	**(Reviewer only.)** **___X___ Yes** **_____ No**
4. There are separate teacher materials that support and reward teacher study including, but not limited to: discussion of the mathematics of the units and the mathematical point of each lesson as it relates to the organizing concepts of the unit, discussion on student ways of thinking and anticipating a variety of students responses, guidance on lesson flow, guidance on questions that prompt students thinking, and discussion of desired mathematical behaviors being elicited among students.	**Evidence-** There is limited access to support materials. You would have to study more outside the provided materials to take these lessons further. Even their own evidence for this is lacking.	**(Reviewer only.)** **_____ Yes** **___X___ No**
5. Manipulatives suggested in the materials are faithful representations of the mathematical objects they represent and are connected to written methods.	**Evidence-** **Text creates connections between the math and necessary tools such as graphs, calculators, Excel, and Powerpoint.**	**(Reviewer only.)** **___X___ Yes** **_____ No**

6. Materials include a variety of curriculum-embedded assessme Examples include pre-, formative, summative, and self-assessment resources.	**Evidence-** **Besides checks understanding in each lesson, there are assessments in the text as well as those provided in supplementary materials. Exam View CD is included.**	**(Reviewer only.)** **___X___ Yes** **_____ No**
7. Assessments contain aligned rubrics, answer keys, and scoring guidelines that provide sufficient guidance for interpreting student performance.	**Evidence-** Answer keys and solutions are provided, however there are no rubrics or scoring guidelines.	**(Reviewer only.)** **_____ Yes** **____X__ No**
8. Materials assess student proficiency using methods that are accessible and unbiased, including the use of course-level language in student prompts.	**Evidence-** **Vocabulary is clear and appropriate to the level of students. Directions are clear and easy to understand.**	**(Reviewer only.)** **___X___ Yes** **_____ No**
9. Materials are carefully evaluated by qualified individuals, whose names are listed, in an effort to ensure freedom from mathematical errors and course-level appropriateness.	**Evidence-** **Authors are accredited and book has been reviewd by other qualified educators.**	**(Reviewer only.)** **___X___ Yes** **_____ No**
10. The visual design supports students in engaging thoughtfully with the subject. Navigation through the text is clear.	**Evidence-** **Engaging and useful diagrams, pictures and graphs are provided in the text. It is very colorful and organized**	**(Reviewer only.)** **___X___ Yes** **_____ No**

Reviewer IMET Evaluation Summary **Title/Level: ____Financial Algebra_____**

Publisher: ___Cengage Learning_____ **Copyright: ___2014____** **ISBN:__9781285444857_____**

Reviewer ID # _____Date Review Completed:____8 March 2016_____

Non-Negotiable Criteria-The Non-Negotiable must be met in order for the Non-Negotiable Alignment Criteria to be met overall.

Non- Negotiable 1: Focus and Coherence

___X__ Meets

_____ Does Not Meet

Non-Negotiable Overall:

___X__ Meets **_____ Does Not Meet**

Alignment Criteria- Each Alignment Criterion must be met with a sufficient number of points in order for Alignment Criteria to be labeled as "Meets" overall. The more points the materials receive on the Alignment Criteria, the better they are aligned.

Alignment Criterion 1: Rigor and Balance	Alignment Criterion 2: Standards of Mathematical Practice	Alignment Criterion 3: Access to Standards for All Learners
Points: ___6__ of 6 possible. (Materials must receive at least 5 of 6 points to align.)	**Points: ___5__ of 6 possible.** (Materials must receive at least 5 of 6 points to align.)	**Points: __4___ of 6 possible.** (Materials must receive at least 5 of 6 points to align.)
____X___ Meets	**____X___ Meets**	**_____ Meets**
_____ Does Not Meet	**_____ Does Not Meet**	**___X____ Does Not Meet**

Alignment Criteria Overall:

_____ Meets **___X__ Does Not Meet**

If the materials meet the Non-Negotiable Criterion and each Alignment Criterion, they are aligned to the Shifts and major features o. the Cor andards. **Do the materials meet every Non-Negotia and Alignment Criterion? _____ Yes ___X__ N**

What are the specific areas of strength and weakness based on this evaluation? Publishers or others modifying or developing assessments can use this information to make improvements and/or to remedy gaps in the alignment of assessment materials.

Strengths:

- All standards are met
- More than 50% of the students time is spent on the Widely Applicable Prerequisites
- Connections are made in a purposeful and logical way
- Table of Contents are extremely helpful.
- Numerous opportunities for practice with both procedural and contextual problems.
- Provides many real world mathematical application problems
- Scaffolding within lessons is strong
- General format of book is very engaging and exceptional

Weaknesses:

- Does no note Mathematical Practices
- Weak on requiring students to make mathematical arguments
- ELL accommodations are lacking
- Support for differing instructional approach is missing

Note:

- We believe this curriculum could be very affective as a 4th year course at the high school level if the book is supplemented with resources that are lacking or missing

IDAHO STATE DEPARTMENT OF EDUCATION

Advanced Placement Course: Statistics

Content Area: AP Mathematics

Course Title: AP Statistics

Title of Material: Intro to Statistics + Data 5E AP

Author: Peck, Olson / Devore

Publisher: Cengage

ISBN #: 9781305526724 Copyright 2016

Reviewers: JH + SO

Meets Content Standards Alignment: X Yes _____ No

Meets Materials Analysis Evaluation: X Yes _____ No

98 Core Program

_____ Other Program

_____ Resource/Supplemental

_____ Not Recommended

Advanced Placement:

- ☐ AP Capstone
- ☐ Arts
- ☐ English
- ☐ History & Social Science
- ☒ Math & Computer Science
- ☐ Sciences
- ☐ World Languages & Cultures

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Standards Alignment Evaluation Rubric

0 = No Alignment– **Not Evident:** Content as described in the Standards is **not evident**.

.5 = Partial Alignment- **Partially Evident:** Content as described in the Standards is **partially evident** and there are few gaps.

1 = High Alignment – **Clearly Evident:** Content is fully aligned as described in the Standards and repeatedly included to guarantee extensive opportunities for students to work with the content. Alignment is **clearly evident**.

N/A = Not applicable for standard

Advanced Placement		**Statistics**	
Standards and Learning Indicators		**Publisher/Provider: List units/lessons with specific examples of where standards are Introduced/Taught/Assessed.**	**Point Value 0/.5/1 (Reviewer)**
Exploring Data			
Describing patterns and departures from patterns			
A. Constructing and interpreting graphical displays of distributions of univariate data (dotplot, stemplot, histogram, cumulative frequency plot)	1. Center and spread	**Chapter 1, Chapter 3**	**1**
	2. Clusters and gaps	**Chapter 1, Chapter 3**	**1**
	3. Outliers and other unusual features	**Chapter 1, Chapter 3, 4.1, 4.3**	**1**
	4. Shape	**Chapter 3**	**1**

B. Summarizi istributions of univariate data	1. Measuring center: median, mean	**Lesson 4.1**	**1**
	2. Measuring spread: range, interquartile range, standard deviation	**Lesson 4.2**	**1**
	3. Measuring position: quartiles, percentiles, standardized scores (z-scores)	**Lesson 4.2, Lesson 4.3, Lesson 4.4**	**1**
	4. Using boxplots	**Lesson 4.3, Lesson 4.4, Lesson 4.5**	**1**
	5. The effect of changing units on summary measures	**Absent**	**0**
C. Comparing distributions of univariate data (dotplots, back-to-back stemplots, parallel boxplots)	1. Comparing center and spread: within group, between group variation	**Chapter 1, Lesson 3, Chapter 5**	**1**
	2. Comparing clusters and gaps	**Chapter 1, Chapter 3, Lesson 2.2**	**1**
	3. Comparing outliers and other unusual features	**Chapter 1, Chapter 3, Lesson 4.1, Lesson 4.3**	**1**
	4. Comparing shapes	**Chapter 1, Chapter 3**	**1**
D. Exploring bivariate data	1. Analyzing patterns in scatterplots	**Lesson 3.4, Lesson 3.5**	**1**
	2. Correlation and linearity	**Lesson 5.1, Lesson 5.5**	**1**
	3. Least-squares regression line	**Chapter 5**	**1**
	4. Residual plots, outliers and influential points	**Lesson 5.3**	**1**
	5. Transformations to achieve linearity: logarithmic and power transformations	**Lesson 5.4**	**1**

E. Exploring categorical data	1. Frequency tables and bar charts	**Chapter 1, Lesson 3.1 Lesson 3.5, Lesson 6.2**	**1**
	2. Marginal and joint frequencies for two-way tables	**Lesson 6.4**	**1**
	3. Conditional relative frequencies and association	**Lesson 6.4**	**1**
	4. Comparing distributions using bar charts	**Lesson 3.1**	**1**
Sampling and Experimentation			
Planning and conducting a study			**1**
A. Overview of methods of data collection	1. Census	**Chapter 1**	**1**
	2. Sample survey	**Chapter 1**	**1**
	3. Experiment	**Chapter 1, Lesson 2.3, Lesson 2.4, Lesson 2.5**	**1**
	4. Observational study	**Lesson 2.1**	**1**
B. Planning and conducting surveys	1. Characteristics of a well-designed and well-conducted survey	**Lesson 2.2, Lesson 2.5**	**1**
	2. Populations, samples and random selection	**Lesson 2.2, Lesson 2.5**	**1**
	3. Sources of bias in sampling and surveys	**Lesson 2.2, Lesson 2.5**	**1**
	4. Sampling methods, including simple random sampling, stratified random sampling and cluster sampling	**Lesson 2.2**	**1**

C. Planning a onducting experiments	1. Characteristics of a well-designed and we conducted experiment	**Chapter 2**	**1**
	2. Treatments, control groups, experimental units, random assignments and replication	**Lesson 2.3, Lesson 2.4, Lesson 2.5**	**1**
	3. Sources of bias and confounding, including placebo effect and blinding	**Lesson 2.3, Lesson 2.4, Lesson 2.5**	**1**
	4. Completely randomized design	**Lesson 2.3, Lesson 2.4**	**1**
	5. Randomized block design, including matched pairs design	**Lesson 2.3, Lesson 2.4**	**.5**
D. Generalizability of results and types of conclusions that can be drawn from observational studies, experiments and surveys		**Chapter 2**	**1**
Anticipating Patterns1			
Exploring random phe1nomena using probability and simulation			
A. Probability	1. Interpreting probability, including long-run relative frequency interpretation	**Lesson 6.1, Lesson 6.2, Lesson 6.3**	**1**
	2. "Law of Large Numbers" concept	**Lesson 6.2, Lesson 6.3**	**1**
	3. Addition rule, multiplication rule, conditional probability and independence	**Lesson 6.3, Lesson 6.4, Lesson 6.5, Lesson 6.6**	**1**
	4. Discrete random variables and their probability distributions, including binomial and geometric	**Lesson 7.1, Lesson 7.2, Lesson 7.5, Lesson 7.6**	**1**
	5. Simulation of random behavior and probability distributions	**Lesson 6.7**	**1**
	6. Mean (expected value) and standard deviation of a random variable, and linear transformation of a random variable	**Lesson 7.1, Lesson 7.2, Lesson 7.3, Lesson 7.4**	**1**
B. Combining independent random variables	1. Notion of independence versus dependence	**Lesson 6.5, Lesson 6.6**	**1**

	2. Mean and standard deviation for sums and differences of independent random variables	**Lesson 7.1, Lesson 7.2, Lesson 7.3, Lesson 7.4**	**1**
C. The normal distribution	1. Properties of the normal distribution	**Lesson 7.6**	**1**
	2. Using tables of the normal distribution	**Lesson 7.6**	**1**
	3. The normal distribution as a model for measurements	**Lesson 7.6**	**1**
D. Sampling distributions	1. Sampling distribution of a sample proportion	**Lesson 8.3**	**1**
	2. Sampling distribution of a sample mean	**Lesson 8.2**	**1**
	3. Central Limit Theorem	**Lesson 8.2**	**1**
	4. Sampling distribution of a difference between two independent sample proportions	**Lesson 11.3, Chapter 10**	**1**
	5. Sampling distribution of a difference between two independent sample means	**Lesson 11.1**	**1**
	6. Simulation of sampling	**Lesson 8.3**	**1**
	7. T-distribution	**Lesson 9.3**	**1**
	8. Chi-square distribution	**Lesson 12.1, Lesson 12.2**	**1**

Statistical Inference			
Estimating population parameters and testing hypotheses			**1**
A. Estimation (point estimators and confidence intervals)	1. Estimating population parameters and margins of error	**Lesson 9.1, Lesson 9.2, Lesson 9.4**	**1**
	2. Properties of point estimators, including unbiasedness and variability	**Lesson 9.1, Lesson 9.2**	**1**
	3. Logic of confidence intervals, meaning of confidence level and confidence intervals, and properties of confidence intervals	**Lesson 9.2, Lesson 9.3**	**1**
	4. Large sample confidence interval for a proportion	**Lesson 9.2, Lesson 9.3**	**1**
	5. Large sample confidence interval for a difference between two proportions	**Lesson 11.3, Lesson 11.4**	**1**
	6. Confidence interval for a mean	**Lesson 9.3**	**1**
	7. Confidence interval for a difference between two means (unpaired and paired)	**Lesson 11.1, Lesson 11.2**	**1**
	8. Confidence interval for the slope of a least-squares regression line	**Lesson 13.1, Lesson 13.2**	**1**
B. Tests of significance	1. Logic of significance testing, null and alternative hypotheses; p-values; one- and two-sided tests; concepts of Type I and Type II errors; concept of power	**Lesson 10.1, Lesson 10.2, Lesson 10.3**	**1**
	2. Large sample test for a proportion	**Lesson 10.3, Lesson 10.4**	**1**
	3. Large sample test for a difference between two proportions	**Lesson 11.2, Lesson 11.3, Lesson 11.4**	**1**
	4. Test for a mean	**Lesson 10.4, 10.5**	**1**
	5. Test for a difference between two means (unpaired and paired)	**Lesson 11.1, 11.2**	**1**

Indicators of Quality:

Indicators of Quality	Evidence- Give specific examples.	Rating: (Reviewer only.)
1. Lessons are thoughtfully structured and support the teacher in leading the class through the learning paths at hand, with active participation by all students in their own learning and in the learning of their classmates.	Evidence- Each lesson begins with an introduction, learning objectives, examples and exercises. Each chapter has an activity to engage students in the current topic.	(Reviewer only.) __x____ Yes _____ No
2. The underlying design of the materials includes both problems and exercises. (In solving problems, students learn new mathematics, whereas in working exercises, students apply what they have already learned to build mastery.) Each problem or exercise has a purpose. NOTE: This Criterion does not require that the problems and exercises be labeled as such.	Evidence- The course is laid out with a logical progression with data analysis. It starts with collecting data and analyzing variability and descriptive statistics and then drawing conclusions that recognizes variability in the data (tests).	(Reviewer only.) ____x__ Yes _____ No
3. Design of assignments is not haphazard: exercises are given in intentional sequences in order to strengthen students' mathematical understanding.	Evidence- Design is created from simple to complex. The book intentionally builds the skills early that it applies at the end of the book.	(Reviewer only.) __x____ Yes _____ No
4. There are separate teacher materials that support and reward teacher study including, but not limited to: discussion of the mathematics of the units and the mathematical point of each lesson as it relates to the organizing concepts of the unit, discussion on student ways of thinking and anticipating a variety of students responses, guidance on lesson flow, guidance on questions that prompt students thinking, and discussion of desired mathematical behaviors being elicited among students.	Evidence- Teacher book has a great deal of support and teaching tips. The forward gives a strong overview of the presentation of the concepts to build to the big ideas. Early sections build student intuition using graphics and then apply calculations in later sections. Teachers are encouraged and given software to teach the manipulation of the data.	(Reviewer only.) ___x___ Yes _____ No
5. Manipulatives suggested in the materials are faithful representations of the mathematical objects they represent and are connected to written methods.	Evidence- Teachers do simulation with technology and the book suggests various lab activities to demonstrate some concepts. Applets links are also included in the teacher's book.	(Reviewer only.) ___x___ Yes _____ No

6. Materials include a variety of curriculum-embedded assessments. Examples include pre-, formative, summative, and self-assessment resources.	Evidence- Students can check their understanding with review exercises. There is a test bank included and online assessments. More assessments are in the instructor's resource binder.	(Reviewer only.) ____x__ Yes _____ No
7. Assessments contain aligned rubrics, answer keys, and scoring guidelines that provide sufficient guidance for interpreting student performance.	Evidence- Rubrics are included in the AP preparatory material for free response questions.	(Reviewer only.) ___x___ Yes _____ No
8. Materials assess student proficiency using methods that are accessible and unbiased, including the use of course-level language in student prompts.	Evidence- Questions are asked using the vocabulary that is used in assignments. Questions reflect concepts in the taught curriculum.	(Reviewer only.) ___x___ Yes _____ No
9. Materials are carefully evaluated by qualified individuals, whose names are listed, in an effort to ensure freedom from mathematical errors and course-level appropriateness.	Evidence- p. xxiii and xxiv	(Reviewer only.) ____x__ Yes _____ No
10. The visual design supports students in engaging thoughtfully with the subject. Navigation through the text is clear.	Evidence- The book is visually engaging. The beginning of the text has many graphical representations. Formulas were very easy to find and boxed for easy reference.	(Reviewer only.) ____x__ Yes _____ No

COMMENTS:

STRENGTHS	WEAKNESSES
• Very graphical • Text is broken into many small sections • Formulas and rules are easy to find in colored boxes • Plenty of student problems in each chapter • Organized and accessible for the ordinary student and support the development of conceptual understanding • Analysis emphasized and higher order thinking • Engaging problems	• Difficult to find some concepts in text • Some topics not well represented in exercises

2015-16 Mathematics Interim Review Recommendation & Summary

Publisher Name:	Cengage
Title:	PreCalculus with Limits 3rd edition
ISBN #	978-1-133-96288-5 copyright 2014
Grade Level(s) or Course:	9-12
Reviewer ID:	*SO and KB*

RECOMMENDED AS:

x

_____**Core Mathematics Program-** a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials. Substantial evidence clearly supports the designation of this program as Core.

_____**Other Mathematics Program-** a program that substantially, but partially, meets the *focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for* supplemental materials. Substantial evidence clearly supports the designation of this program as Other.

_____**Component Mathematics Program-** a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs. Substantial evidence clearly supports the designation of this program as Component.

_____**Intervention Program-** a program designed and intended to target and support students' specific needs. Substantial evidence clearly supports the designation of this program as Intervention.

_____ **Does not meet criteria** for recommendation as a Curricular Material or Online Resource for Mathematics.

EVIDENCE SUMMARY:

FOCUS-
NN1:

- Clear objectives
- Summaries tie objectives together.
- Helpful hints for teachers and remediation for students.

COHERENCE-

NN1:

- Clear objectives
- Summaries tie objectives together.
- Helpful hints for teachers and remediation

RIGOR-
AC-1

- Deep spiral of WAP skills.
- Ample opportunities for practice.
- Ample opportunity to construct viable arguments and justify the use of a particular model.
- Conjecture proofs allow students to explore ideas.

CONCEPTUAL UNDERSTANDING-
AC-1

- Deep spiral of WAP skills.
- Ample opportunities for practice.
- Ample opportunity to construct viable arguments and justify the use of a particular model.
- Conjecture proofs allow students to explore ideas.

MATHEMATICAL PRACTICES-
AC-2

- **Focus is on best mathematical practices.**
- **Repetition of applied problems allow students enough practice to master this process.**

ACCESSIBILITY OF STANDARDS TO ALL STUDENTS-
AC-3

- Supports for Spanish speaking students.
- Various levels of problems for all learners

OTHER:
Strengths:
This curriculum has done a good job of supporting the ideas that are needed to meet the new standards. The WAP are represented in all facets of the text and conceptual understanding and *real life applications are present throughout.*
Weaknesses:
Some of the textbook is old school. There could be more places to pursue " we do" problems and differentiation in higher cognitive problems.

2015-16 Interim Mathematics Review

Mathematics Evaluation Tool Grades K-8

Publisher: Cengage

Title of Material: Precalculus w/ Limits 3rd Ed.

Author: Ron Larson

ISBN #: 9781133962885 **Copyright** 2014

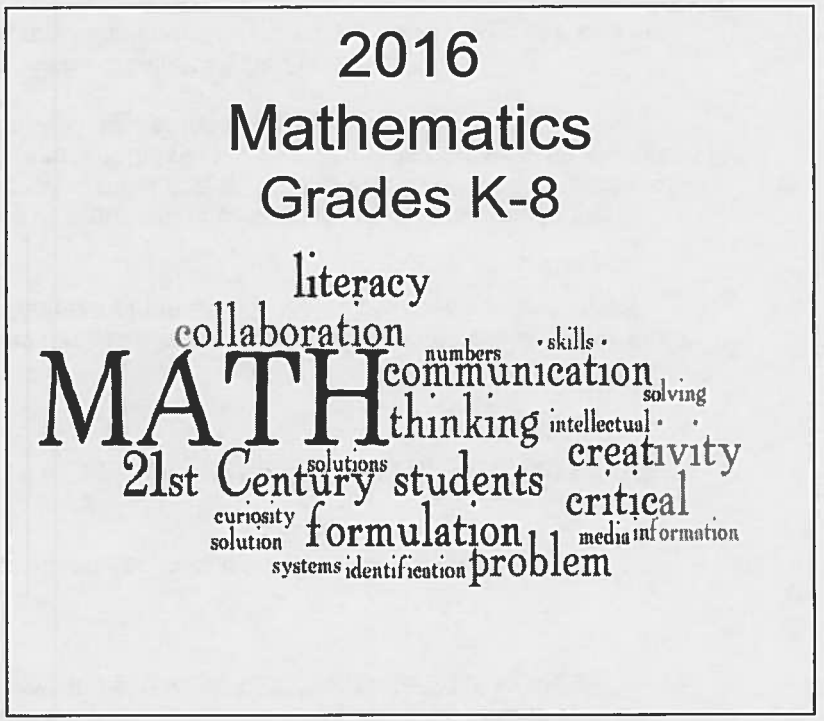
Reviewer ID: SO + KB

Core Mathematics Program- a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Core.

Other Mathematics Program- a program that substantially, but partially, meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Other.

Component Mathematics Program- a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs.
Substantial evidence clearly supports the designation of this program as Component.

Intervention Program- a program designed and intended to target and support students' specific needs.
Substantial evidence clearly supports the designation of this program as Intervention.



- Evaluation Form adapted from Instructional Materials Evaluation Toolkit (IMET).

The IMET was developed by Student Achievement Partners. Educators may use or adapt. http://creativecommons.org/licenses/by/3.0/ Download this tool at http://achievethecore.org/IMET

Instructional Materials Evaluation Tool

Mathematics, High School

What Are the Purposes of the IMET?

This Math IMET is designed to help educators determine whether instructional materials are aligned to the Shifts and major features of the Common Core State Standards (CCSS). The substantial instructional Shifts (http://www.corestandards.org/other-resources/key-shifts-in-mathematics/) at the heart of the Common Core State Standards are:

- **Focus** strongly where the Standards focus
- **Coherence**: Think across grades and link to major topics within the grade
- **Rigor**: In major topics, pursue conceptual understanding, procedural skill and fluency, and application with equal intensity.

The IMET draws directly from the following documents:

- Common Core State Standards for Mathematics (www.corestandards.org/Math)
- Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013) (http://www. corestandards.org/wp-content/uploads/Math_Publishers_Criteria_ HS_Spring_2013_FINAL1.pdf)

When to use the IMET

1. Purchasing materials: Many factors go into local purchasing decisions. Alignment to the Standards is a critical factor to consider. This tool is designed to evaluate alignment of instructional materials to the Shifts and the major features of the CCSS. It also provides suggestions of additional indicators to consider in the materials evaluation and purchasing process
2. Evaluating materials currently in use: The IMET can be used to analyze the degree of alignment of existing materials and help to highlight specific, concrete flaws in alignment. Even where materials and tools currently in use fail to meet one or more of these criteria, the pattern of failure is likely to be informative. States and districts can use the evaluation to create a thoughtful plan to modify or combine existing resources in such a way that students' actual learning experiences approach the focus, coherence, and rigor of the Standards.
3. Developing programs: Those developing new programs can use this tool as guidance for creating aligned curricula.

Please note this tool was designed for evaluating comprehensive curricula (including any supplemental or ancillary materials), but it was not designed for the evaluation of standalone supplemental materials.

Who Uses the IMET?

Evaluating instructional materials requires both subject-matter and pedagogical expertise. Evaluators should be well versed in the Standards (www.corestandards.org/Math) for all grades in which materials are being evaluated. This includes understanding the Widely Applicable Prerequisites (www.achievethecore.org/prerequisites), how the content fits into the progressions in the Standards (www. achievethecore.org/progressions), and the expectations of the Standards with respect to conceptual understanding, procedural skill and fluency, and application. Evaluators also should be familiar with the substantial instructional Shifts (http://www.corestandards.org/other-resources/key-shifts-in-mathematics/) of Focus, Coherence and Rigor that are listed above.

Getting Started

Prior to Evaluation

Assemble all of the materials necessary for the evaluation. It is essential for evaluators to have materials for all grades covered by the program, as some criteria cannot be rated without having access to each grade. In addition, each evaluator should have a reference copy of the Common Core State Standards for Mathematics (CCSSM) and the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).

Before conducting the evaluation itself, it is important to develop a protocol for the evaluation process. The protocol should include having evaluators study the Publishers' Criteria and the IMET. It will also be helpful for evaluators to get a sense of each program overall before beginning the process. At a minimum, this would include reading the front matter of the text, looking at the table of contents and paging through multiple chapters.

Sections 1-3 below should be completed to produce a comprehensive picture of the strengths and weaknesses of the materials under evaluation. Information about areas in need of improvement or supplementation should be shared with internal and external stakeholders.

Navigating the Tool

Begin with Section 1: Non-Negotiable Alignment Criteria

- The Non-Negotiable Alignment Criteria must each be met in full for materials to be considered aligned to the Shifts and the major features of the Common Core State Standards. Each Non-Negotiable Alignment Criterion has one or more metrics associated with it; every one of these metrics must be met in order for the criterion as a whole to be met.

- Examine the relevant materials and use evidence to rate the materials against each criterion and its associated metric(s).

- Record and explain the evidence upon which the rating is based.

Continue to Section 2: Alignment Criteria

- The Alignment Criteria must each be met for materials to be considered aligned to the Shifts and the major features of the Common Core State Standards. Each Alignment Criterion has one or more metric associated with it; a specific number of these metrics must be met or partially met in order for the criterion as a whole to be met.

- Examine the materials in relation to these criteria, assigning each metric a point value. Rate the criterion as "Meets" or "Does Note Meet" based on the number of points assigned. The more points the materials receive on the alignment Criteria, the better they are aligned.

- Record and explain the evidence upon which the rating is based.

Proceed to Section 4: Indicators of Quality

- Indicators of Quality are important considerations that will help evaluators better understand the overall quality of instructional materials. These considerations are not criteria for alignment to the CCSS, but they provide valuable information about additional program characteristics. Evaluators may want to add their own indicators to the examples provided.

Directions for Non-Negotiable 1

Focus and Coherence

Criterion	Evidence- Give specific examples.	Rating: (Reviewer only.)
Non-Negotiable 1: Focus and Coherence- Materials must focus coherently on the Widely Applicable Prerequisites in a way that is consistent with the progressions in the Standards. Focus and coherence are the two major evidence-based design principles of the Common Core State Standards for Mathematics (CCSSM, p. 3). Focus is necessary in order to fulfill the ambitious promise the states have made to their students by adopting the Standards: greater achievement at the college and career-ready level; greater depth of understanding of mathematics; and a rich classroom environment in which reasoning, sense-making, applications, and a range of mathematical practices flourish. In high school courses, narrowing and deepening the curriculum creates a structure that ties topics together. Thus, materials must focus coherently on the Widely Applicable Prerequisites in a way that is consistent with the progressions in the Standards.	Focus and coherence are the two major evidence-based design principles of the Common Core State Standards for Mathematics (CCSSM, p. 3). Focus is necessary in order to fulfill the ambitious promise the states have made to their students by adopting the Standards: greater achievement at the college and career-ready level; greater depth of understanding of mathematics; and a rich classroom environment in which reasoning, sense-making, applications, and a range of mathematical practices flourish. In high school courses, narrowing and deepening the curriculum creates a structure that ties topics together. Thus, materials must focus coherently on the Widely Applicable Prerequisites in a way that is consistent with the progressions in the Standards. **Required Materials:** • Common Core State Standards for Mathematics (www.corestandards.org/wpcontent/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_HS_Spring_2013_FINAL1.pdf) • Widely Applicable Prerequisites for College and Careers (http://achievethecore.org/prerequisites) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion:** Non-Negotiable 1 is rated as Meets or Does Not Meet. To rate Non-Negotiable 1, first rate Metrics 1A–1H. Each of these eight metrics must be rated as Meets in order for Non-Negotiable 1 to be rated as Meets. Rate each metric 1A–1H as Meets or Does Not Meet/Insufficient Evidence. If the evidence examined shows that the Criterion is met, then mark the Criterion as Meets. If the evidence examined shows that the Criterion is not met—or if there is insufficient evidence to make a determination—then mark the Criterion as Does Not Meet/Insufficient Evidence. Support all ratings with evidence.

Metric NN1A: **In any single course, students spend at least 50% of their time on Widely Applicable Prerequisites.** **How to Find the Evidence:** Familiarize yourself with the Widely Applicable Prerequisites. Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, lessons, homework assignments, and assessments. (Evaluate both student and teacher materials.) Consider time spent on the Widely Applicable Prerequisites and judge qualitatively whether students and teachers using the materials as designed will devote the majority of time to the Widely Applicable Prerequisites For context, read Criterion #1 in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** **Skills were evident in Appendix and real life problems and algebra. It meets or exceeds WAP**	**__x__Meets** **____Does Not Meet Insufficient Evidence**
Metric NN1B: **Student work in Geometry involves significant work with applications/modeling and problems that use algebra skills.** **How to Find the Evidence:** Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, lessons, homework assignments, and assessments. (Evaluate both student and teacher materials. NOTE: Since Geometry contains relatively fewer Widely Applicable Prerequisites, this Criterion is important to help foster students' college and career readiness. Problems that use algebra skills might include, for example, algebraic geometry problems in a coordinate setting, or problems of measurement involving unknown quantities.	**Evidence-** Geometry evidence from ratios and proportions, percentage and conversions related through functions. Book uses 1.3 parallel perpendicular. Graphs throughout the book. Chapter 10 review graphs of conics. Chapter 2 higher order end behavior. Trigonometry uses prior knowledge from geometry. Special right triangles. Meets or exceeds.	**__x__Meets** **____Does Not Meet Insufficient Evidence**

Metric NN1C: **There are problems at a level of sophistication appropriate to high school (beyond mere review of middle school topics) that involve the application of knowledge and skills from grades 6-8.** **How to Find the Evidence:** Evaluate lessons, chapter/unit assessments, and homework assignments. NOTE: Problems should include application of the following topics from grades 6-8: • Ratios and proportional relationships. • Percentage and unit conversions, e.g., in the context of complex measurement problems involving quantities with derived or compound units (such as mg/mL, kg/ m3, acre-feet, etc.). • Basic function concepts, e.g., by interpreting the features of a graph in the context of an applied problem. • Concepts and skills of geometric measurement e.g., when analyzing a diagram or schematic. • Concepts and skills of basic statistics and probability (see grades 6–8.SP) • Performing rational number arithmetic fluently. For context, read Table 1 on Page 8 of the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** At the end of each section there are real life problems that build or extend conceptual learning. Chapter 13 extends concepts of statistics, data and probability. Throughout the text, there is an opportunity for students to practice rational number skills and maintain prior learning.	**___x_Meets** **____Does Not Meet Insufficient Evidence**
Metric NN1D: **Materials base courses on the content specified in the Standards.** **How to Find the Evidence:** Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, and lessons in both student and teacher materials. For context, read Criterion #3a in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** The lesson plan guide offers content helpers and each chapter lists objectives based on precalculus content. The appendix covers the Widely Applicable Standards content.	**_x___Meets** **____Does Not Meet Insufficient Evidence**
Metric NN1E: **Materials give all students extensive work with course-level problems.** **How to Find the Evidence:** Evaluate both student and teacher materials. If the materials provide resources for differentiated learning, consider whether lower-performing students have opportunities to engage with course-level problems. Also consider whether higher-performing students are given opportunities to learn current course-level content in greater depth. For context, read Criterion #3b in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** Each section offers plenty of practice problems with various levels of rigor. Later problems in each section apply concepts and ask students to prove or explain them. Example of this: section 2.1 Quadratic functions.	**_x___Meets** **____Does Not Meet Insufficient Evidence**

Metric NN1F: **Materia elate course-level concepts explicitly to prior knowledge from earlier grades or courses. The materials are designed so that prior knowledge becomes reorganized and extended to accommodate the new knowledge.** **How to Find the Evidence:** Evaluate student and teacher materials, looking for problems that involve extending the knowledge learned in earlier grades and courses. NOTE: An example of evaluating this Criterion might be to look at whether materials connect the equation of a circle with the distance formula and the Pythagorean theorem. For context, read Criterion #3c in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** Prior concepts are evident throughout the text. For example: D nce formula is applied to vectors.	**_X___Meets** **____Does Not Meet Insufficient Evidence**
Metric NN1G: **Materials include learning objectives that are visibly shaped by CCSSM cluster and domain headings.** **How to Find the Evidence:** Select several clusters from the course being evaluated. Evaluate teacher and student materials in relation to these clusters. For context, read Criterion #4a in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** This is evident throughout the text. Learning objectives are evident in each section and the lesson plan guide. Each unit has a summary that identifies the essential skills that students should master in each section. In the appendix and throughout the text, the author has included boxes that describe common student misconceptions and how to avoid them. Good for new teachers.	**___x_Meets** **____Does Not Meet Insufficient Evidence**
Metric NN1H: **Materials include problems and activities that serve to connect two or more clusters in a domain, or two or more domains in a category, or two or more categories, in cases where these connections are natural and important.** **How to Find the Evidence:** In the course being evaluated, choose two or more clusters, two or more domains, or two or more categories for which connections are natural and important. Evaluate the units, chapters, and lessons that deal with the chosen topics, looking for problems and activities that serve to connect the chosen clusters or domains. NOTE: An example of evaluating this Criterion might be to look at whether materials include problems in which students analyze a situation by building a function, graphing it, and using it to create and solve an equation. For context, read Criterion #4b in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** The test includes applied problems and explorations. An example of this connection appears on page 129. The student connect algebra, functions and graphing in polynomial functions of higher degree.	**__x__Meets** **____Does Not Meet Insufficient Evidence**

Non-Negotiable 1: Focus and Coherence- Materials must focus coherently on the Widely Applicable Prerequisites in a way that is consistent with the progressions in the Standards. **Metric NN 1:** If all metrics 1A–1H were rated as Meets, then rate Non-Negotiable 1 as Meets. If one or more metrics were rated as Does Not Meet/Insufficient Evidence, then rate Non-Negotiable 1 as Does Not Meet. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)** **Before moving to Alignment Criterion 1, record the final Meets or Does Not Meet rating in the Evaluation Summary.**	**___x_Meets** **____Does Not Meet** **Strengths/Weaknesses** **Strengths:** • Clear objectives • Summaries tie objectives together. • Helpful hints for teachers and remediation for students. **Weaknesses:** • **Traditional layout** • **No "we dos"** • **Text is too busy**

Now continue by evaluating Alignment Criterion 1 for Rigor and Balance.

Directions for Alignment Criterion 1

Rigor and Balance

Alignment Criterion 1: **Rigor and Balance- Materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.** The Standards set expectations for attention to all three aspects of rigor: conceptual understanding, procedural skill and fluency, and applications. Thus, materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.	The Standards set expectations for attention to all three aspects of rigor: conceptual understanding, procedural skill and fluency, and applications. Thus, materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations. • Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_HS_Spring_2013_FINAL1.pdf) • Widely Applicable Prerequisites for College and Careers (http://achievethecore.org/prerequisites) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion:** Alignment Criterion 1 is rated as Meets or Does Not Meet. To rate Alignment Criterion 1, first rate metrics 1A, 1B, and 1C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). For each metric, guiding questions are provided to aid in gathering evidence. Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 1 if the materials rate 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as rigor and balance, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.
AC Metric 1A: **The materials support the development of students' conceptual understanding of key mathematical concepts, especially where called for in specific content Standards or cluster headings.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Widely Applicable Prerequisites that relate specifically to conceptual understanding to use throughout the questions associated with this metric. NOTE: Some examples of clusters or Standards that call for conceptual understanding include: N-RN.A.1, A-APR.B, A-REI.A.1, A-REI.D.10, A.REI.D.11, F.IF.A.1, F-LE.A.1, G.SRT.A.2, G-SRT.C.6, S-ID.C.7 For context, read Criterion #2a in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	• Choose a cluster/Standard from the Widely Applicable Prerequisites that is aligned to each aspect of rigor and use it to evaluate these metrics. It is most helpful if the same clusters and Standards are chosen for all of the programs being evaluated. (Guidance in choosing clusters/Standards is included in "How to Find the Evidence" below.)	**Use the questions for AC Metric 1A to evaluate Metric 1A. Record evidence for each question and rate Metric 1A.** **_x__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Is conceptual understanding attended to thoroughly where the Standards set explicit expectations for understanding or interpreting? Evaluate lessons, chapter/unit assessments and homework assignments, paying attention to work aligned to Standards that explicitly call for understanding or interpreting.	**Evidence-** Conceptual understanding is attended throughout the text starting with the clear objectives, common errors and following up with problems where students are expected to explain and interpret.	
Do the materials feature high-quality conceptual problems and conceptual discussion questions? Evaluate lessons, chapter/unit assessments, and homework assignments. NOTE: Examples of conceptual problems might include such questions as "What is the maximum value of the function f(t) = 5 – t2 ?" or "Is √2 a polynomial? How about ½(x + √2)+ ½ (-x + √2)?"	**Evidence-** These problems are in evidence in various locations. EX. P. 30 the Road grade problem. Students are expected to complete a multistep problem that not only expects solving but interpretation in context. Forensics example on p. A 57	

Do the materials feature opportunities to identify correspondences across m[illegible]atical representations? Evaluate lessons, chapter/unit assessments and homework assignments. NOTE: An example of evaluating this metric might include looking at whether materials support students in identifying correspondences among the expression that defines a function, the graph that shows the relationship, and the behavior of the phenomenon being modeled (if any).	**Evidence-** The problems [illegible]ntified in the prior section require graphical, numerical and algebraic work to complete the task. Students are expected to verbally give responses in the context of the problems. Also "How do you see it" also addresses the verbal component.	
AC Metric 1B: **The materials are designed so that students attain the fluencies and procedural skills required by the Standards.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Widely Applicable Prerequisites that relate specifically to fluency and procedural skill to use throughout the questions associated with this metric. NOTE: Some examples of Standards that call for procedural skill and fluency include: A-SSE.A.1b, A-SSE.2, A-APR.A.1, A-APR.C.6, F-BF.B.3, G-GPE.B.4, G-GPE.B.5, G-GPE.B.7, G-CO.A.1, G-SRT.B.5 For context, read Criterion #2b in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).		**Use the questions for AC Metric 1B to evaluate Metric 1B. Record evidence for each question and rate Metric 1B.** **___x_Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Is progress toward fluency and procedural skill interwoven with the student's developing conceptual understanding of the skills in question? Evaluate lessons, chapter/unit assessments, daily routines, and homework assignments for evidence that the development of fluency and procedural skill is supported by conceptual understanding.	**Evidence-** Bigger extended problems are multistep. The examples from above as well as problems as such as the Suspension Bridge p. 702, and online video and audio for self-check.	
Are purely procedural problems and exercises present that include cases in which opportunistic strategies are valuable and generic cases that require efficient and general procedures present? Evaluate lessons, chapter/unit assessments, daily routines, and homework assignments. NOTE: Problems in which opportunistic strategies are valuable might include such examples as solving x2 + 5 = 49 + 5 or (3x – 2)2 = 6x – 4. Generic cases that require efficient and general procedures might include such problems as solving c + 8 – c2 = 3(c – 1)2 – 5).	**Evidence-** Each section starts with purely procedural problems and progresses to varying degree of difficulty. These various levels allow for differentiation and enrichment. The problems move from concrete to abstract. On pages 32-34, the first problems are mechanical the later problems are analysis and relating the concepts in the How do you see it section	

AC Metric 1C: **The materials are designed so that teachers and students spend sufficient time working with engaging applications, without losing focus on the Widely Applicable Prerequisites.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Widely Applicable Prerequisites that relate specifically to application to use throughout the questions associated with this metric. NOTE: Some examples of clusters or Standards that call for application include: N-Q.A, A-SSE.B.3, A-REI.D.11, F-IF.B, F-IF.C.7, F-BF.A.1, G-SRT.C.8, S-ID.A.2, S-IC.A.1 For context, read Criterion #2c in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).		**Use the questions for AC Metric 1C to evaluate Metric 1C. Record evidence for each question and rate Metric 1C** **__x__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Are there single- and multi-step contextual problems, including non-routine problems, that develop the mathematics of the course, afford opportunities for practice, and engage students in problem solving? Do the problems attend thoroughly to those places in the content Standards where expectations for multi-step and real-world problems are explicit? Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** Real life examples from various sciences and other content area – they use CSI, epidemiology, Best Buy sales models and other concepts that are relatable and current.	
Do application problems particularly stress applying the Widely Applicable Prerequisites? Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** Yes. Lesson 3.5 and 7.6 are examples of the WAP being stressed in application problems.	
Are there ample opportunities for students to engage with modeling problems? Do materials require students to use both individual parts of the modeling cycle as well as the full modeling cycle? Read the pages on High School—Modeling in the Standards for Mathematics (pp. 72 and 73). Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** Each section has modeling problems. P 93 is an example of modeling.	

Alignment Criterion 1: Materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.

AC 1: Materials must earn at least 5 of 6 points to meet this Alignment Criterion. If materials earn less than 5 points, the Criterion has not been met. Check the final rating.
Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)**

Before moving to Alignment Criterion 2, record the final Meets or Does Not Meet rating in the Evaluation Summary.

__x__Meets

____Does Not Meet

Strengths/Weaknesses:
Strengths:

- Deep spiral of WAP skills.
- Ample opportunities for practice.
- Ample opportunity to construct viable arguments and justify the use of a particular model.
- Conjecture proofs allow students to explore ideas.
- Chapter review problems are very good and tie ideas together.

Weaknesses:

- **Conceptual problems could be more differentiated for at risk learners.**

Alignment Criterion 2: **Standards for Mathematical Practice- Materials must demonstrate authentic connections between content Standards and practice Standards.** The Standards require that designers of instructional materials connect the mathematical practices to mathematical content in instruction. Thus, materials must demonstrate authentic connections between content Standards and practice Standards.	The Standards require that designers of instructional materials connect the mathematical practices to mathematical content in instruction. Thus, materials must demonstrate authentic connections between content Standards and practice Standards. **Required Materials:** • Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_HS_Spring_2013_FINAL1.pdf) • Widely Applicable Prerequisites for College and Careers (http://achievethecore.org/prerequisites) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion:** Alignment Criterion 2 is rated as Meets or Does Not Meet. To rate Alignment Criterion 2, first rate metrics 2A, 2B, and 2C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). For each metric, guiding questions are provided to aid in gathering evidence. Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 2 if the materials rate 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as mathematical practices, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.
AC Metric 2A: **Materials address the practice Standards in such a way as to enrich the Widely Applicable Prerequisites; practices strengthen the focus of the course instead of detracting from it, in both teacher and student materials.** **How to Find the Evidence:** Familiarize yourself with the Widely Applicable Prerequisites. Evaluate teacher and student materials for evidence that the mathematical practices support and connect to the focus of the course. NOTE: An example of evaluating this Criterion might include looking at whether materials use regularity in repeated reasoning to illuminate formal algebra as well as functions, particularly recursive definitions of functions. For context, read Criterion #6 in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** Each section uses this WAP in a variety of ways. Citing a particular example doesn't make sense since this is everywhere. The authors paid a great deal of attention to the need to address these concepts in every context.	**__x__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
AC Metric 2B: **Materials attend to the full meaning of each practice Standard.** **How to Find the Evidence:** For context, read Criterion #7 in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).		**Use the questions for AC Metric 2B to evaluate Metric 2B. Record evidence for each question and rate Metric 2B.** **__x__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**

Over the course of any given year of instruction, is each mathematical practice Standard meaningfully present in the form of assignments, activities, or problems that stimulate students to develop the habits of mind described in the practice Standard? Evaluate lessons, chapter/ unit assessments, and homework assignments for evidence of each mathematical practice being meaningfully present in instruction.	**Evidence-** Students are given problems with the four representations. As they move through the text they develop skills to better describe problems and persevere with new abstractions. P. 85	
Are teacher-directed materials that explain the role of the practice Standards in the classroom and in students' mathematical development included? Are alignments to practice Standards accurate? Evaluate teacher materials, paying attention to explanations of the role of the practice Standards in the classroom and in students' mathematical development. Evaluate documents aligning lessons to practice Standards for accuracy. NOTE: Examples to look for when evaluating this metric might include the following: a highly scaffolded problem should not be aligned to MP.1; or a problem that directs a student to use a calculator should not be aligned to MP.5; or a problem about merely extending a pattern should not be aligned to MP.8.	**Evidence-** The teacher materials do not list the AP standards, but the materials provide the necessary learning for AP success. Teacher materials such as the lesson plan book and the companion contain information that identifies student learning.	
AC Metric 2C: **Materials support the Standards' emphasis on mathematical reasoning.** **How to Find the Evidence:** For context, read Criterion #8 in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).		**Use the questions for AC Metric 2C to evaluate Metric 2C. Record evidence for each question and rate Metric 2C.** **_x__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Do the materials support students in constructing viable arguments and critiquing the arguments of others concerning course-level mathematics that is detailed in the content Standards? Read Standard for Mathematical Practice 3. Evaluate teacher and student materials to ensure that students are given opportunities to reason with grade-level mathematics.	**Evidence-** Yes. See references in above sections.	
Do the materials support students in producing not only answers and solutions, but also, in a course-appropriate way, arguments, explanations, diagrams, mathematical models, etc., especially in the Widely Applicable Prerequisites? Familiarize yourself with the Widely Applicable Prerequisites. Evaluate teacher and student materials to understand the types of work students are expected to produce.	**Evidence-** Yes. See other citations and each section offers an exploration section. EX 1.5 on p. 59	
Do materials explicitly attend to the specialized language of mathematics? Is the language of argument, problem solving, and mathematical explanations taught rather than assumed? Evaluate teacher and student materials, paying attention to how mathematical language is taught. NOTE: An example of evaluating this Criterion might include looking at whether students are supported in: basing arguments on definitions; using the method of providing a counter example; or recognizing that examples alone do not establish a general statement.	**Evidence-** Each section contains proofs. Each learning section identifies necessary vocabulary and the needed context.	

Alignment Criterion 2: Materials must demonstrate authentic connections between content Standards and practice Standards

AC 2: Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 points, the Criterion has not been met. Check the final rating.
Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewers only.)**

Before moving to Alignment Criterion 3, record the final Meets or Does Not Meet rating in the Evaluation Summary.

___x_Meets

____Does Not Meet

Strengths/Weaknesses:
Strengths:

- **Focus is on best mathematical practices.**
- **Repetition of applied problems allow students enough practice to master this process.**

Weaknesses:

- **Differentiation could be stronger**

Alignment Criterion 3:
Access to the Standards for All Students- Materials must provide supports for English Language Learners and other special populations.

Because Standards are for all students, alignment requires thoughtful support to ensure all students are able to meet the Standards. Thus, aligned materials must provide supports for English Language Learners and other special populations.

Because Standards are for all students, alignment requires thoughtful support to ensure all students are able to meet the Standards. Thus, aligned materials must provide supports for English Language Learners and other special populations.

Required Materials:

- Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf)
- Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math Publishers_Criteria_HS_Spring_2013_FINAL1.pdf)
- From the materials being evaluated: teacher guides, student texts and workbooks

Rating this Criterion:

Alignment Criterion 3 is rated as Meets or Does Not Meet.

To rate Alignment Criterion 3, first rate metrics 3A, 3B, and 3C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 3 if the materials rate 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as support for special population, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.

AC Metric 3A: **Support for English Language Learners and other special populations is thoughtful and helps those students meet the same Standards as all other students. The language in which problems are posed is carefully considered.** **How to Find the Evidence:** Evaluate teacher and student materials, paying attention to supports offered for special populations.	**Evidence-** Tutorials in English and Spanish are available. www. LarsonPrecalculus.com Each section has audio in Spanish for the DVD No other languages have that stated support.	**_x___Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
AC Metric 3B: **Materials provide appropriate level and type of scaffolding, differentiation, intervention, and support for a broad range of learners with gradual removal of supports, when needed, to allow students to demonstrate their mathematical understanding independently.** **How to Find the Evidence:** Evaluate teacher and student materials, paying attention to whether materials provide differentiation that will lead all learners to engage with on-grade-level content.	**Evidence-** This class is paced to prepare students for the rigor of AP Calculus. Calcchat is also available to tutor students who struggle. The variety of levels of student problems allows teachers to differentiate instruction.	**___x_Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
AC Metric 3C: **Design of lessons recommends and facilitates a mix of instructional approaches for a variety of learners such as using multiple representations (e.g., including models, using a range of questions, checking for understanding, flexible grouping, pair-share).** **How to Find the Evidence:** Evaluate teacher materials, noting instructional approaches suggested for whole class and differentiated lessons and activities.	**Evidence-** The variety of levels of student problems allows teachers to differentiate instruction.	**__x__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**

Alignment Criterion 3: Materials must provide supports for English Language Learners and other special populations.	__x__Meets ____Does Not Meet
AC 3 Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 points, the Criterion has not been met. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewers only.)** **Move to the Evaluation Summary and record the final Meets or Does Not Meet rating .**	**Strengths/Weaknesses:** **Strengths:** • **Supports for Spanish speaking students.** • **Various levels of problems for all learners.** **Weaknesses:** • **No identified supports for other languages.**

Once an evaluation for alignment to the Shifts and major features of the CCSS has been conducted using Sections 1-3, it's important to evaluate for overall quality and best practices. A starting list of Indicators of Quality are suggested below. States, districts and others evaluating instructional materials are encouraged to add to this list to ensure materials reflect local contexts. For background information on some of the Indicators of Quality in this section, refer to pp.16–18 in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).

Indicators of Quality	Evidence- Give specific examples.	Rating: (Reviewer only.)
1. Lessons are thoughtfully structured and support the teacher in leading the class through the learning paths at hand, with active participation by all students in their own learning and in the learning of their classmates.	**Evidence-** Learning objectives throughout the book and the concept summaries at the end of each chapter tie the content to a structure. On line support systems are also available to teachers and students.	**(Reviewer only.)** **___x___ Yes** **_____ No**

2. The underlying design of the materials includes both problems and exercises. (In solving problems, students learn new mathematics, whereas in working exercises, students apply what they have already learned to build mastery.) Each problem or exercise has a purpose. **NOTE: This Criterion does not require that the problems and exercises be labeled as such.**	**Evidence-** • Vocabula • Check points • Summaries • Expanded objectives • Student guide and online support	**(Reviewer only.)** **___x___ Yes** **_____ No**
3. Design of assignments is not haphazard: exercises are given in intentional sequences in order to strengthen students' mathematical understanding.	**Evidence-** • Problems are arranged from simple to complex • Side example • Enhanced and extended exercises Examples How do you see it and applied problems	**(Reviewer only.)** **___x__ Yes** **_____ No**
4. There are separate teacher materials that support and reward teacher study including, but not limited to: discussion of the mathematics of the units and the mathematical point of each lesson as it relates to the organizing concepts of the unit, discussion on student ways of thinking and anticipating a variety of students responses, guidance on lesson flow, guidance on questions that prompt students thinking, and discussion of desired mathematical behaviors being elicited among students.	**Evidence-** • Teacher edition has guides for differentiated instruction, learning styles. • There is a lesson plan guide, the note taking guide, and digital supports.	**(Reviewer only.)** **_____x_ Yes** **_____ No**
5. Manipulatives suggested in the materials are faithful representations of the mathematical objects they represent and are connected to written methods.	**Evidence-** • Digital manipulatives. • Concrete real world examples give a visual example that allows a student to manipulate a seemingly abstract idea with a concept they already understand.	**(Reviewer only.)** **___x___ Yes** **_____ No**
6. Materials include a variety of curriculum-embedded assessments. Examples include pre-, formative, summative, and self-assessment resources.	**Evidence-** • We have a test bank. • Check points. • Students can self assess with odd problems and online.	**(Reviewer only.)** **____x__ Yes** **_____ No**
7. Assessments contain aligned rubrics, answer keys, and scoring guidelines that provide sufficient guidance for interpreting student performance.	**Evidence-** • Answer keys are present. • Student and instructor solution manuals show step by step work. • No rubrics	**(Reviewer only.)** **_____ Yes** **___x___ No**

8. Materials assess student proficiency using methods that are accessible and unbiased, including the use of course-level language in student prompts.	**Evidence-** Vocabulary is co[illegible]ent. They are not assessing anything that the students have not been exposed to in the material.	**(Reviewer only.)** __x____ **Yes** _____ **No**
9. Materials are carefully evaluated by qualified individuals, whose names are listed, in an effort to ensure freedom from mathematical errors and course-level appropriateness.	**Evidence-** There is a list of individuals with a variety of qualifications who are listed as those who reviewed these materials.	**(Reviewer only.)** ____x__ **Yes** _____ **No**
10. The visual design supports students in engaging thoughtfully with the subject. Navigation through the text is clear.	**Evidence-** The book is attractive and has many graphs and pictures. Students know where to find various types of information. Vocabulary is highlighted, rules are boxed and sections have objectives listed.	**(Reviewer only.)** ____x__ **Yes** _____ **No**

Reviewer IMET Evaluation Summary **Title/Level:** _____

Publisher: _____ **Copyright:** _____ **ISBN:**_____

Reviewer ID # _____ **Date Review Completed:**_____

Non-Negotiable Criteria-The Non-Negotiable must be met in order for the Non-Negotiable Alignment Criteria to be met overall.

Non- Negotiable 1: Focus and Coherence

____x_ Meets

_____ Does Not Meet

Non-Negotiable Overall:

__x___ Meets _____ Does Not Meet

Alignment Criteria- Each Alignment Criterion must be met with a sufficient number of points in order for Alignment Criteria to be labeled as "Meets" overall. The more points the materials receive on the Alignment Criteria, the better they are aligned.

Alignment Criterion 1: Rigor and Balance	Alignment Criterion 2: Standards of Mathematical Practice	Alignment Criterion 3: Access to Standards for All Learners
Points: ___6__ of 6 possible. (Materials must receive at least 5 of 6 points to align.)	Points: ___6__ of 6 possible. (Materials must receive at least 5 of 6 points to align.)	Points: ___6__ of 6 possible. (Materials must receive at least 5 of 6 points to align.)
_____x_ Meets	____x___ Meets	_____x__ Meets
_____ Does Not Meet	_____ Does Not Meet	_____ Does Not Meet

Alignment Criteria Overall:

___x__ Meets _____ Does Not Meet

If the materials meet the Non-Negotiable Criterion and each Alignment Criterion, they are aligned to the Shifts and major features of the Co[illegible]tandards. **Do the materials meet every Non-Negotia[illegible] and Alignment Criterion? __x___ Yes _____ N[illegible]**

What are the specific areas of strength and weakness based on this evaluation? Publishers or others modifying or developing assessments can use this information to make improvements and/or to remedy gaps in the alignment of assessment materials.

Strengths:
This curriculum has done a good job of supporting the ideas that are needed to meet the new standards. The WAP are represented in all facets of the text and conceptual understanding and real life applications are present throughout.
Weaknesses:
Some of the textbook is old school. There could be more places to pursue " we do" problems and differentiation in higher cognitive problems.

2015-16 Mathematics Interim Review Recommendation & Summary

Publisher Name:	Cengage Learning, Inc.
Title:	Pre Calculus: Mathematics for Calculus, Seventh Edition
ISBN #	978-1-305-11530-9
Grade Level(s) or Course:	11-12
Reviewer ID:	JHW CA

RECOMMENDED AS:

__X__ **Core Mathematics Program-** a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials. Substantial evidence clearly supports the designation of this program as Core.

_____ **Other Mathematics Program-** a program that substantially, but partially, meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for supplemental materials. Substantial evidence clearly supports the designation of this program as Other.

_____ **Component Mathematics Program-** a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs. Substantial evidence clearly supports the designation of this program as Component.

_____ **Intervention Program-** a program designed and intended to target and support students' specific needs. Substantial evidence clearly supports the designation of this program as Intervention.

_____ **Does not meet criteria** for recommendation as a Curricular Material or Online Resource for Mathematics.

EVIDENCE SUMMARY:

FOCUS-

Throughout the Pre-Calculus text, students spend at least 50% of their time on Widely Applicable Prerequisites. Review is discussed throughout the text.

COHERENCE-

The language is consistent throughout the text. The first chapter in the text is review of fundamentals which are needed to be successful throughout the course.

RIGOR-

The Pre-Calculus materials feature high-quality conceptual problems and conceptual discussion questions. The examples and exercises in the Pre-Calculus text contain single and multiple-step contextual problems, real-life situation problems

CONCEPTUAL UNDERSTANDING-

The Pre-Calculus materials feature high-quality conceptual problems. All exercises contain application problems. At the end of each chapter you will find a focus on Modeling section.

MATHEMATICAL PRACTICES-

The exercises in the Pre-Calculus text provide problems from the lesson that deal with concept, skill, application, discussion, discover, proofs and writting.

ACCESSIBILITY OF STANDARDS TO ALL STUDENTS-

The Pre-Calculus text allows for a variety of different learning styles. Language in which problems are posed is carefully considered. Standards are not specifically listed throughout the text, but are addressed.

OTHER:

The program is well written and easy to follow. Good assessments and teaching components to assist the teacher.

Consistency in lessons and exercises throughout the text.

Organized sequential lessons.
Real world applications and modeling problems.

The Pre-Calculus text does not directly list or address the practice standards; however it does present all of the practice standards within the lessons, exercises, and assessments.

2015-1 Interim Mathematics Review

Mathematics Evaluation Tool – High School

Publisher: Cengage Learning, Inc.

Title of Material: PreCalculus: Mathematics for Calculus, Seventh Edition

Author: James Stewart, Lothar Redlin, Saleem Watson

ISBN #: 978-1-305-11530-9 **Copyright** 2016

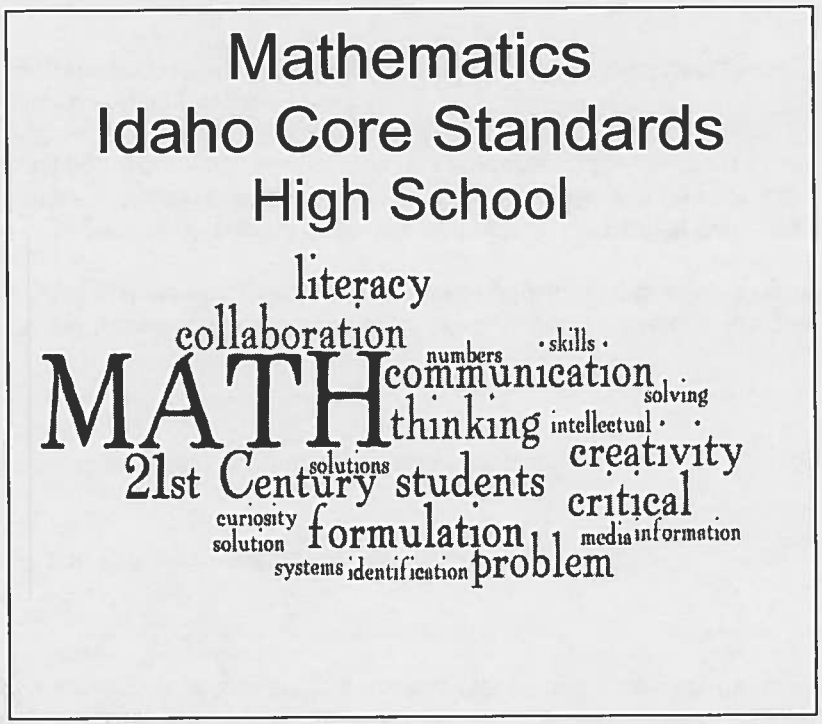
Reviewer ID: JHW CH

Core Mathematics Program- a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Core.

Other Mathematics Program- a program that substantially, but partially, meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Other.

Component Mathematics Program- a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs.
Substantial evidence clearly supports the designation of this program as Component.

Intervention Program- a program designed and intended to target and support students' specific needs.
Substantial evidence clearly supports the designation of this program as Intervention.



- Evaluation Form adapted from Instructional Materials Evaluation Toolkit (IMET).

The IMET was developed by Student Achievement Partners. Educators may use or adapt. http://creativecommons.org/licenses/by/3.0/ Download this tool at http://achievethecore.org/IMET

Instructional Materials Evaluation Tool

Mathematics, High School

What Are the Purposes of the IMET?

This Math IMET is designed to help educators determine whether instructional materials are aligned to the Shifts and major features of the Common Core State Standards (CCSS). The substantial instructional Shifts (http://www.corestandards.org/other-resources/key-shifts-in-mathematics/) at the heart of the Common Core State Standards are:

- **Focus** strongly where the Standards focus
- **Coherence**: Think across grades and link to major topics within the grade
- **Rigor**: In major topics, pursue conceptual understanding, procedural skill and fluency, and application with equal intensity.

The IMET draws directly from the following documents:

- Common Core State Standards for Mathematics (www.corestandards.org/Math)
- Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013) (http://www. corestandards.org/wp-content/uploads/Math_Publishers_Criteria_ HS_Spring_2013_FINAL1.pdf)

When to use the IMET

1. Purchasing materials: Many factors go into local purchasing decisions. Alignment to the Standards is a critical factor to consider. This tool is designed to evaluate alignment of instructional materials to the Shifts and the major features of the CCSS. It also provides suggestions of additional indicators to consider in the materials evaluation and purchasing process
2. Evaluating materials currently in use: The IMET can be used to analyze the degree of alignment of existing materials and help to highlight specific, concrete flaws in alignment. Even where materials and tools currently in use fail to meet one or more of these criteria, the pattern of failure is likely to be informative. States and districts can use the evaluation to create a thoughtful plan to modify or combine existing resources in such a way that students' actual learning experiences approach the focus, coherence, and rigor of the Standards.
3. Developing programs: Those developing new programs can use this tool as guidance for creating aligned curricula.

Please note this tool was designed for evaluating comprehensive curricula (including any supplemental or ancillary materials), but it was not designed for the evaluation of standalone supplemental materials.

Who Uses the IMET?

Evaluating instructional materials requires both subject-matter and pedagogical expertise. Evaluators should be well versed in the Standards (www.corestandards.org/Math) for all grades in which materials are being evaluated. This includes understanding the Widely Applicable Prerequisites (www.achievethecore.org/prerequisites), how the content fits into the progressions in the Standards (www. achievethecore.org/progressions), and the expectations of the Standards with respect to conceptual understanding, procedural skill and fluency, and application. Evaluators also should be familiar with the substantial instructional Shifts (http://www.corestandards.org/other-resources/key-shifts-in-mathematics/) of Focus, Coherence and Rigor that are listed above.

Getting Started

Prior to Evaluation

Assemble all of the materials necessary for the evaluation. It is essential for evaluators to have materials for all grades covered by the program, as some criteria cannot be rated without having access to each grade. In addition, each evaluator should have a reference copy of the Common Core State Standards for Mathematics (CCSSM) and the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).

Before conducting the evaluation itself, it is important to develop a protocol for the evaluation process. The protocol should include having evaluators study the Publishers' Criteria and the IMET. It will also be helpful for evaluators to get a sense of each program overall before beginning the process. At a minimum, this would include reading the front matter of the text, looking at the table of contents and paging through multiple chapters.

Sections 1-3 below should be completed to produce a comprehensive picture of the strengths and weaknesses of the materials under evaluation. Information about areas in need of improvement or supplementation should be shared with internal and external stakeholders.

Navigating the Tool

Begin with Section 1: Non-Negotiable Alignment Criteria

- The Non-Negotiable Alignment Criteria must each be met in full for materials to be considered aligned to the Shifts and the major features of the Common Core State Standards. Each Non-Negotiable Alignment Criterion has one or more metrics associated with it; every one of these metrics must be met in order for the criterion as a whole to be met.

- Examine the relevant materials and use evidence to rate the materials against each criterion and its associated metric(s).

- Record and explain the evidence upon which the rating is based.

Continue to Section 2: Alignment Criteria

- The Alignment Criteria must each be met for materials to be considered aligned to the Shifts and the major features of the Common Core State Standards. Each Alignment Criterion has one or more metric associated with it; a specific number of these metrics must be met or partially met in order for the criterion as a whole to be met.

- Examine the materials in relation to these criteria, assigning each metric a point value. Rate the criterion as "Meets" or "Does Note Meet" based on the number of points assigned. The more points the materials receive on the alignment Criteria, the better they are aligned.

- Record and explain the evidence upon which the rating is based.

Proceed to Section 4: Indicators of Quality

- Indicators of Quality are important considerations that will help evaluators better understand the overall quality of instructional materials. These considerations are not criteria for alignment to the CCSS, but they provide valuable information about additional program characteristics. Evaluators may want to add their own indicators to the examples provided.

Directions for Non-Negotiable 1

Focus and Coherence

Criterion	Evidence- Give specific examples.	Rating: (Reviewer only.)
Non-Negotiable 1: Focus and Coherence- Materials must focus coherently on the Widely Applicable Prerequisites in a way that is consistent with the progressions in the Standards. Focus and coherence are the two major evidence-based design principles of the Common Core State Standards for Mathematics (CCSSM, p. 3). Focus is necessary in order to fulfill the ambitious promise the states have made to their students by adopting the Standards: greater achievement at the college and career-ready level; greater depth of understanding of mathematics; and a rich classroom environment in which reasoning, sense-making, applications, and a range of mathematical practices flourish. In high school courses, narrowing and deepening the curriculum creates a structure that ties topics together. Thus, materials must focus coherently on the Widely Applicable Prerequisites in a way that is consistent with the progressions in the Standards.	Focus and coherence are the two major evidence-based design principles of the Common Core State Standards for Mathematics (CCSSM, p. 3). Focus is necessary in order to fulfill the ambitious promise the states have made to their students by adopting the Standards: greater achievement at the college and career-ready level; greater depth of understanding of mathematics; and a rich classroom environment in which reasoning, sense-making, applications, and a range of mathematical practices flourish. In high school courses, narrowing and deepening the curriculum creates a structure that ties topics together. Thus, materials must focus coherently on the Widely Applicable Prerequisites in a way that is consistent with the progressions in the Standards. **Required Materials:** • Common Core State Standards for Mathematics (www.corestandards.org/wpcontent/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_HS_Spring_2013_FINAL1.pdf) • Widely Applicable Prerequisites for College and Careers (http://achievethecore.org/prerequisites) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion:** Non-Negotiable 1 is rated as Meets or Does Not Meet. To rate Non-Negotiable 1, first rate Metrics 1A–1H. Each of these eight metrics must be rated as Meets in order for Non-Negotiable 1 to be rated as Meets. Rate each metric 1A–1H as Meets or Does Not Meet/Insufficient Evidence. If the evidence examined shows that the Criterion is met, then mark the Criterion as Meets. If the evidence examined shows that the Criterion is not met—or if there is insufficient evidence to make a determination—then mark the Criterion as Does Not Meet/Insufficient Evidence. Support all ratings with evidence.

Metric NN1A: **In any single course, students spend at least 50% of their time on Widely Applicable Prerequisites.** **How to Find the Evidence:** Familiarize yourself with the Widely Applicable Prerequisites. Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, lessons, homework assignments, and assessments. (Evaluate both student and teacher materials.) Consider time spent on the Widely Applicable Prerequisites and judge qualitatively whether students and teachers using the materials as designed will devote the majority of time to the Widely Applicable Prerequisites For context, read Criterion #1 in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** Throughout the Pre-Calculus text, students spend at least 50% of their time on Widely Applicable Prerequisites. Math concepts build on each other. **SE/TE:** 159-170, 212-213, 301-307, 331-334, 699-708.	**_X_ Meets** **____Does Not Meet Insufficient Evidence**
Metric NN1B: **Student work in Geometry involves significant work with applications/modeling and problems that use algebra skills.** **How to Find the Evidence:** Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, lessons, homework assignments, and assessments. (Evaluate both student and teacher materials. NOTE: Since Geometry contains relatively fewer Widely Applicable Prerequisites, this Criterion is important to help foster students' college and career readiness. Problems that use algebra skills might include, for example, algebraic geometry problems in a coordinate setting, or problems of measurement involving unknown quantities.	**Evidence-** Throughout the Pre-Calculus course, students work involves significant work with applications and modeling and problems that use algebra skills. **ST/TE:** 87, 90-91(#109-125), 105(#122-124), 116 (#87-94), 122(#47,48), 139-146, 188-190(#29-38), 237-244.	**_X_ Meets** **____Does Not Meet Insufficient Evidence**

Metric NN1C: **There are problems at a level of sophistication appropriate to high school (beyond mere review of middle school topics) that involve the application of knowledge and skills from grades 6-8.** **How to Find the Evidence:** Evaluate lessons, chapter/unit assessments, and homework assignments. NOTE: Problems should include application of the following topics from grades 6-8: • Ratios and proportional relationships. • Percentage and unit conversions, e.g., in the context of complex measurement problems involving quantities with derived or compound units (such as mg/mL, kg/ m3, acre-feet, etc.). • Basic function concepts, e.g., by interpreting the features of a graph in the context of an applied problem. • Concepts and skills of geometric measurement e.g., when analyzing a diagram or schematic. • Concepts and skills of basic statistics and probability (see grades 6–8.SP) • Performing rational number arithmetic fluently. For context, read Table 1 on Page 8 of the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** The first chapter in the Pre-Calculus text is review of fundamentals which are needed to be successful throughout the course. Review is also discussed throughout the text. **SE/TE:** 1-131, 147, 245, 329, 401, 471, 537, 587, 629, 679.	**__X__ Meets** **____Does Not Meet Insufficient Evidence**
Metric NN1D: **Materials base courses on the content specified in the Standards.** **How to Find the Evidence:** Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, and lessons in both student and teacher materials. For context, read Criterion #3a in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** The Pre-Calculus text covers the content specified in the standards. **SE/TE:** v-ix.	**__X__ Meets** **____Does Not Meet Insufficient Evidence**
Metric NN1E: **Materials give all students extensive work with course-level problems.** **How to Find the Evidence:** Evaluate both student and teacher materials. If the materials provide resources for differentiated learning, consider whether lower-performing students have opportunities to engage with course-level problems. Also consider whether higher-performing students are given opportunities to learn current course-level content in greater depth. For context, read Criterion #3b in the Publishers' Criteria for the Common State Standards for Mathematics, High School (Spring 2013).	**Evidence-** The Pre-Calculus text provides students extensive work with course-level problems. In the side margins of the lessons you will find side notes and boxed lessons to help the students understand the concepts. **SE/TE:** 410, 494, 540, 548, 596, 642, 668, 680.	**__X__ Meets** **____Does Not Meet Insufficient Evidence**

Metric NN1F: **Materials relate course-level concepts explicitly to prior knowledge from earlier grades or courses. The materials are designed so that prior knowledge becomes reorganized and extended to accommodate the new knowledge.** **How to Find the Evidence:** Evaluate student and teacher materials, looking for problems that involve extending the knowledge learned in earlier grades and courses. NOTE: An example of evaluating this Criterion might be to look at whether materials connect the equation of a circle with the distance formula and the Pythagorean theorem. For context, read Criterion #3c in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** The lessons in Pre-Calculus text are designed so that prior knowledge become reorganized and extended to accommodate the new knowledge. **SE/TE:** 65, 122, 190, 246, 370, 445.	**_X_Meets** **____Does Not Meet Insufficient Evidence**
Metric NN1G: **Materials include learning objectives that are visibly shaped by CCSSM cluster and domain headings.** **How to Find the Evidence:** Select several clusters from the course being evaluated. Evaluate teacher and student materials in relation to these clusters. For context, read Criterion #4a in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** Objectives can be found throughout the Pre-Calculus text. **SE/TE:** 1, 147, 245, 329, 401,471, 537, 587, 629, 679, 781, 841, 897, 949.	**_X_Meets** **____Does Not Meet Insufficient Evidence**
Metric NN1H: **Materials include problems and activities that serve to connect two or more clusters in a domain, or two or more domains in a category, or two or more categories, in cases where these connections are natural and important.** **How to Find the Evidence:** In the course being evaluated, choose two or more clusters, two or more domains, or two or more categories for which connections are natural and important. Evaluate the units, chapters, and lessons that deal with the chosen topics, looking for problems and activities that serve to connect the chosen clusters or domains. NOTE: An example of evaluating this Criterion might be to look at whether materials include problems in which students analyze a situation by building a function, graphing it, and using it to create and solve an equation. For context, read Criterion #4b in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** The Pre-Calculus text contains problems in cases where two or more clusters in a domain, or two or more domains in a category, or two or more categories where these connections are natural and important. **SE/TE:** 159-170, 212-213, 301-307, 331-334, 699-708.	**_X_Meets** **____Does Not Meet Insufficient Evidence**

Non-Negotiable 1: Focus and Coherence- Materials must focus coherently on the Widely Applicable Prerequisites in a way that is consistent with the progressions in the Standards.

Metric NN 1: If all metrics 1A–1H were rated as Meets, then rate Non-Negotiable 1 as Meets. If one or more metrics were rated as Does Not Meet/Insufficient Evidence, then rate Non-Negotiable 1 as Does Not Meet. Check the final rating.
Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)**

Before moving to Alignment Criterion 1, record the final Meets or Does Not Meet rating in the Evaluation Summary.

__X__Meets

____Does Not Meet

Strengths/Weaknesses
Students spend at least 50% of their time on Widely Applicable Prerequisites. Students use modeling and applications. Problems are at course level.

Now continue by evaluating Alignment Criterion 1 for Rigor and Balance.

Directions for Alignment Criterion 1

Rigor and Balance

Alignment Criterion 1:
Rigor and Balance- Materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.

The Standards set expectations for attention to all three aspects of rigor: conceptual understanding, procedural skill and fluency, and applications. Thus, materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.

The Standards set expectations for attention to all three aspects of rigor: conceptual understanding, procedural skill and fluency, and applications. Thus, materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.

- Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf)
- Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_HS_Spring_2013_FINAL1.pdf)
- Widely Applicable Prerequisites for College and Careers (http://achievethecore.org/prerequisites)
- From the materials being evaluated: teacher guides, student texts and workbooks

Rating this Criterion:
Alignment Criterion 1 is rated as Meets or Does Not Meet.
To rate Alignment Criterion 1, first rate metrics 1A, 1B, and 1C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). For each metric, guiding questions are provided to aid in gathering evidence.
Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 1 if the materials rate 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as rigor and balance, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.

AC Metric 1A: **The materials support the development of students' conceptual understanding of key mathematical concepts, especially where called for in specific content Standards or cluster headings.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Widely Applicable Prerequisites that relate specifically to conceptual understanding to use throughout the questions associated with this metric. NOTE: Some examples of clusters or Standards that call for conceptual understanding include: N-RN.A.1, A-APR.B, A-REI.A.1, A-REI.D.10, A.REI.D.11, F.IF.A.1, F-LE.A.1, G.SRT.A.2, G-SRT.C.6, S-ID.C.7 For context, read Criterion #2a in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	• Choose a cluster/Standard from the Widely Applicable Prerequisites that aligned to each aspect of rigor and use it to evaluate these metrics. It is most helpful if the same clusters and Standards are chosen for all of the programs being evaluated. (Guidance in choosing clusters/Standards is included in "How to Find the Evidence" below.)	**Use the questions for AC Metric 1A to evaluate Metric 1A. Record evidence for each question and rate Metric 1A.** **__X__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Is conceptual understanding attended to thoroughly where the Standards set explicit expectations for understanding or interpreting? Evaluate lessons, chapter/unit assessments and homework assignments, paying attention to work aligned to Standards that explicitly call for understanding or interpreting.	**Evidence-** In the Pre-Calculus text conceptual understanding is attended to thoroughly where the standards set explicit expectations for understanding or interpreting. Content standards have been incorporated throughout the text in examples, exercises, and assessments. **SE/TE:** 2-9, 10-12, 13-21, 21-24, 25-32, 33-35, 36-42, 43-44, 137-138.	
Do the materials feature high-quality conceptual problems and conceptual discussion questions? Evaluate lessons, chapter/unit assessments, and homework assignments. NOTE: Examples of conceptual problems might include such questions as "What is the maximum value of the function f(t) = 5 – t2 ?" or "Is √2 a polynomial? How about ½(x + √2)+ ½ (-x + √2)?"	**Evidence-** The Pre-Calculus materials feature high-quality conceptual problems and conceptual discussion questions. **SE/TE:** 159-165, 166-170, 170-178, 178-182.	
Do the materials feature opportunities to identify correspondences across mathematical representations? Evaluate lessons, chapter/unit assessments and homework assignments. NOTE: An example of evaluating this metric might include looking at whether materials support students in identifying correspondences among the expression that defines a function, the graph that shows the relationship, and the behavior of the phenomenon being modeled (if any).	**Evidence-** The lessons, exercises and assessment materials throughout the Pre-Calculus text feature opportunities to identify correspondences across mathematical representation. **SE/TE:** 159-170, 235-236, 246-254, 323-324, 330-338, 391, 402-409, 465.	

AC Metric 1B: **The materials are designed so that students attain the fluencies and procedural skills required by the Standards.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Widely Applicable Prerequisites that relate specifically to fluency and procedural skill to use throughout the questions associated with this metric. NOTE: Some examples of Standards that call for procedural skill and fluency include: A-SSE.A.1b, A-SSE.2, A-APR.A.1, A-APR.C.6, F-BF.B.3, G-GPE.B.4, G-GPE.B.5, G-GPE.B.7, G-CO.A.1, G-SRT.B.5 For context, read Criterion #2b in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).		**Use the questions for AC Metric 1B to evaluate Metric 1B. Record evidence for each question and rate Metric 1B.** __X__ **Meets (2)** ____ **Partially Meets (1)** ____ **Does Not Meet (0)**
Is progress toward fluency and procedural skill interwoven with the student's developing conceptual understanding of the skills in question? Evaluate lessons, chapter/unit assessments, daily routines, and homework assignments for evidence that the development of fluency and procedural skill is supported by conceptual understanding.	**Evidence-** The examples, exercises, and assessments in the Pre-Calculus text progress toward fluency and procedural skill interwoven with the students developing conceptual understanding of the skills in question. The exercises start out with concept problems and then progress to skills, applications, discuss, discover, prove, and write. **SE/TE:** 246-251, 251-253, 254-265, 265-268, 311-315, 316-317, 323-324.	
Are purely procedural problems and exercises present that include cases in which opportunistic strategies are valuable and generic cases that require efficient and general procedures present? Evaluate lessons, chapter/unit assessments, daily routines, and homework assignments. NOTE: Problems in which opportunistic strategies are valuable might include such examples as solving x2 + 5 = 49 + 5 or (3x – 2)2 = 6x – 4. Generic cases that require efficient and general procedures might include such problems as solving c + 8 – c2 = 3(c – 1)2 – 5).	**Evidence-** The examples and exercises in the Pre-Calculus text provide opportunistic strategies which are valuable and generic cases that require efficient and general procedural present. **SE/TE:** All exercises progress from concept problems, to skills problems, to applications, discussions, discover, prove and write.	
AC Metric 1C: **The materials are designed so that teachers and students spend sufficient time working with engaging applications, without losing focus on the Widely Applicable Prerequisites.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Widely Applicable Prerequisites that relate specifically to application to use throughout the questions associated with this metric. NOTE: Some examples of clusters or Standards that call for application include: N-Q.A, A-SSE.B.3, A-REI.D.11, F-IF.B, F-IF.C.7, F-BF.A.1, G-SRT.C.8, S-ID.A.2, S-IC.A.1 For context, read Criterion #2c in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).		**Use the questions for AC Metric 1C to evaluate Metric 1C. Record evidence for each question and rate Metric 1C.** __X__ **Meets (2)** ____ **Partially Meets (1)** ____ **Does Not Meet (0)**

Are there single- and multi-step contextual problems, including non-routine problems, that develop the mathematics of the course, afford opportunities for practice, and engage students in problem solving? Do the problems attend thoroughly to those places in the content Standards where expectations for multi-step and real-world problems are explicit? Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** The examples and exercises in the Pre-Calculus text contain single and multi-step contextual problems, real-life situation problems. Real-world applications from other fields also demonstrate the relevance of the field of mathematical study. **SE/TE:** 338, 342(#25), 350, 353(#96), 356, 360(#74), 366, 369(#98), 370(#102).	
Do application problems particularly stress applying the Widely Applicable Prerequisites? Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** The problems in the examples and exercises of the Pre-Calculus text stress applying the Widely Applicable Prerequisites. **SE/TE:** 159-170, 212-213, 301-307, 331-334, 699-708.	
Are there ample opportunities for students to engage with modeling problems? Do materials require students to use both individual parts of the modeling cycle as well as the full modeling cycle? Read the pages on High School—Modeling in the Standards for Mathematics (pp. 72 and 73). Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** Throughout the Pre-Calculus text examples and exercises model real-world situations. All exercises contain application problems. At the end of each chapter you will find a Focus on Modeling section. **SE/TE:** 477, 479-481(#75-94), 485-486, 489-490(#53-71), 517, 522-523(#39-53), 533-536.	
Alignment Criterion 1: Materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations. **AC 1:** Materials must earn at least 5 of 6 points to meet this Alignment Criterion. If materials earn less than 5 points, the Criterion has not been met. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)** **Before moving to Alignment Criterion 2, record the final Meets or Does Not Meet rating in the Evaluation Summary.**		**_X_ Meets** **____Does Not Meet** **Strengths/Weaknesses:** Sufficient amount of problems. Content standards have been incorporated throughout the text but are not specifically listed. Multiple conceptual problems and conceptual discussion questions.

Alignment Criterion 2: **Standards for Mathematical Practice- Materials must demonstrate authentic connections between content Standards and practice Standards.** The Standards require that designers of instructional materials connect the mathematical practices to mathematical content in instruction. Thus, materials must demonstrate authentic connections between content Standards and practice Standards.	The Standards require that designers of instructional materials connect the mathematical practices to mathematical content in instruction. Thus, materials must demonstrate authentic connections between content Standards and practice Standards. **Required Materials**: • Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_HS_Spring_2013_FINAL1.pdf) • Widely Applicable Prerequisites for College and Careers (http://achievethecore.org/prerequisites) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion:** Alignment Criterion 2 is rated as Meets or Does Not Meet. To rate Alignment Criterion 2, first rate metrics 2A, 2B, and 2C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). For each metric, guiding questions are provided to aid in gathering evidence. Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 2 if the materials rate 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as mathematical practices, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.
AC Metric 2A: **Materials address the practice Standards in such a way as to enrich the Widely Applicable Prerequisites; practices strengthen the focus of the course instead of detracting from it, in both teacher and student materials.** **How to Find the Evidence:** Familiarize yourself with the Widely Applicable Prerequisites. Evaluate teacher and student materials for evidence that the mathematical practices support and connect to the focus of the course. NOTE: An example of evaluating this Criterion might include looking at whether materials use regularity in repeated reasoning to illuminate formal algebra as well as functions, particularly recursive definitions of functions. For context, read Criterion #6 in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** Throughout the Pre-Calculus text the Widely Applicable Prerequisites as well as all of the standards for mathematical practice have been used. Throughout the text students are given real-life application problems and have to solve these problems using abstract and quantitative reasoning. Students are also asked to use technology, modeling, and written argument. **SE/TE:** 159-170, 212-213, 301-307, 331-334, 699, 708.	**__X__ Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
AC Metric 2B: **Materials attend to the full meaning of each practice Standard.** **How to Find the Evidence:** For context, read Criterion #7 in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).		**Use the questions for AC Metric 2B to evaluate Metric 2B. Record evidence for each question and rate Metric 2B.** **____Meets (2)** **__X__ Partially Meets (1)** **____Does Not Meet (0)**

Over the course of any given year of instruction, is each mathematical practice Standard meaningfully present in the form of assignments, activities, or problems that stimulate students to develop the habits of mind described in the practice Standard? Evaluate lessons, chapter/ unit assessments, and homework assignments for evidence of each mathematical practice being meaningfully present in instruction.	**Evidence-** The structure of Pre-Calculus lessons clearly distinguishes between examples and exercises. The guided problem solving provides examples focused on the lesson. The exercises provide problems from the lesson that deal with concept, skill, application, discussion, discover, proofs and writing. **SE/TE:** 295-307, 308-310, 311-315, 316-317, 330-335, 336-338.	
Are teacher-directed materials that explain the role of the practice Standards in the classroom and in students' mathematical development included? Are alignments to practice Standards accurate? Evaluate teacher materials, paying attention to explanations of the role of the practice Standards in the classroom and in students' mathematical development. Evaluate documents aligning lessons to practice Standards for accuracy. NOTE: Examples to look for when evaluating this metric might include the following: a highly scaffolded problem should not be aligned to MP.1; or a problem that directs a student to use a calculator should not be aligned to MP.5; or a problem about merely extending a pattern should not be aligned to MP.8.	**Evidence-** The Pre-Calculus text does not directly list or address the practice standards; however it does present all of the practice standards within the lessons, exercises, and assessments.	
AC Metric 2C: **Materials support the Standards' emphasis on mathematical reasoning.** **How to Find the Evidence:** For context, read Criterion #8 in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).		**Use the questions for AC Metric 2C to evaluate Metric 2C. Record evidence for each question and rate Metric 2C.** **__X__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Do the materials support students in constructing viable arguments and critiquing the arguments of others concerning course-level mathematics that is detailed in the content Standards? Read Standard for Mathematical Practice 3. Evaluate teacher and student materials to ensure that students are given opportunities to reason with grade-level mathematics.	**Evidence-** The Pre-Calculus text contains exercises that have students explore and produce an argument to support their solution. **SE/TE:** 148-159, 183-190, 190-197, 378-380, 588-593, 734-745.	
Do the materials support students in producing not only answers and solutions, but also, in a course-appropriate way, arguments, explanations, diagrams, mathematical models, etc., especially in the Widely Applicable Prerequisites? Familiarize yourself with the Widely Applicable Prerequisites. Evaluate teacher and student materials to understand the types of work students are expected to produce.	**Evidence-** Throughout the Pre-Calculus text there are Discovery Projects within the lessons. The Discovery Projects encourage students to use mathematical language to construct a viable argument while solving the problem. **SE/TE:** 361, 375, 382, 558, 590, 608, 645, 694.	
Do materials explicitly attend to the specialized language of mathematics? Is the language of argument, problem solving, and mathematical explanations taught rather than assumed? Evaluate teacher and student materials, paying attention to how mathematical language is taught. NOTE: An example of evaluating this Criterion might include looking at whether students are supported in: basing arguments on definitions; using the method of providing a counter example; or recognizing that examples alone do not establish a general statement.	**Evidence-** The lessons in the Pre-Calculus text explicitly attend to the specialized language of mathematics. Students are encouraged to use correct mathematical terminology throughout the exercises. **SE/TE:** 3, 5, 12(#93), 13, 14, 16, 18, 19, 25(#107), 184, 192, 198, 199, 201, 202, 203, 205, 210(#102-104).	

Alignment Criterion 2: Materials must demonstrate authentic connections between content Standards and practice Standards.

AC 2: Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 points, the Criterion has not been met. Check the final rating.
Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewers only.)**

Before moving to Alignment Criterion 3, record the final Meets or Does Not Meet rating in the Evaluation Summary.

__X_Meets

____Does Not Meet

Strengths/Weaknesses:
Students are asked to use technology, modeling, and written argument. The text consists of real world application problems. The text does not directly list or address the practice standards.

Alignment Criterion 3:
Access to the Standards for All Students- Materials must provide supports for English Language Learners and other special populations.

Because Standards are for all students, alignment requires thoughtful support to ensure all students are able to meet the Standards. Thus, aligned materials must provide supports for English Language Learners and other special populations.

Because Standards are for all students, alignment requires thoughtful support to ensure all students are able to meet the Standards. Thus, aligned materials must provide supports for English Language Learners and other special populations.

Required Materials:

- Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf)
- Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math Publishers_Criteria_HS_Spring_2013_FINAL1.pdf)
- From the materials being evaluated: teacher guides, student texts and workbooks

Rating this Criterion:
Alignment Criterion 3 is rated as Meets or Does Not Meet.
To rate Alignment Criterion 3, first rate metrics 3A, 3B, and 3C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 3 if the materials rate 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as support for special population, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.

AC Metric 3A:
Support for English Language Learners and other special populations is thoughtful and helps those students meet the same Standards as all other students. The language in which problems are posed is carefully considered.

How to Find the Evidence:

Evaluate teacher and student materials, paying attention to supports offered for special populations.

Evidence-
The Pre-Calculus course is a high level math course, therefore students must be highly motivated to take the course and be successful. The language in which problems are posed is carefully considered.
SE/TE: 127-130(#35-57), 353-354(#96-105), 619-620(#63-71), 798-799(#65-72), 958-961(#17-94).
TE: xi-xiv, xv-xvii.

__X_Meets (2)

____Partially Meets (1)

____Does Not Meet (0)

AC Metric 3B: **Materials provide appropriate level and type of scaffolding, differentiation, intervention, and support for a broad range of learners with gradual removal of supports, when needed, to allow students to demonstrate their mathematical understanding independently.** **How to Find the Evidence:** Evaluate teacher and student materials, paying attention to whether materials provide differentiation that will lead all learners to engage with on-grade-level content.	**Evidence-** The Pre-Calculus course is a high level math course, which requires student to be highly skilled and self motivated. The lessons and exercises contain levels of problems in a variety of forms: concepts, skills, skills plus, applications, discuss-discover-prove-write. **SE/TE:** 754-756, 796-799, 805-807, 813-816, 823-824, 829-831.	**__X__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
AC Metric 3C: **Design of lessons recommends and facilitates a mix of instructional approaches for a variety of learners such as using multiple representations (e.g., including models, using a range of questions, checking for understanding, flexible grouping, pair-share).** **How to Find the Evidence:** Evaluate teacher materials, noting instructional approaches suggested for whole class and differentiated lessons and activities.	**Evidence-** All levels of students have different types of learning styles. The Pre-Calculus text allows for a variety of different types of learning styles. The TE has additional in-class materials and alternate examples to help them reach all students. **TE:** 413, 416, 420-429, 432-434, 472-478, 482-487.	**__X__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Alignment Criterion 3: Materials must provide supports for English Language Learners and other special populations. **AC 3** Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 points, the Criterion has not been met. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewers only.)** **Move to the Evaluation Summary and record the final Meets or Does Not Meet rating .**		**__X__Meets** **____Does Not Meet** **Strengths/Weaknesses:** Language in which problems are posed is carefully considered. The lessons and exercises contain levels of problems in a variety of forms: concepts, skills, skills plus, applications, discuss-discover-prove-write.

Once an evaluation for alignment to the Shifts and major features of the CCSS has been conducted using Sections 1-3, it's important to evaluate for overall quality and best practices. A starting list of Indicators of Quality are suggested below. States, districts and others evaluating instructional materials are encouraged to add to this list to ensure materials reflect local contexts. For background information on some of the Indicators of Quality in this section, refer to pp.16–18 in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).

Indicators of Quality	Evidence- Give specific examples.	Rating: (Reviewer only.)
1. Lessons are thoughtfully structured and support the teacher in leading the class through the learning paths at hand, with active participation by all students in their own learning and in the learning of their classmates.	**Evidence-** Throughout the Pre-Calculus text chapters contain lessons which are thoughtfully structured and support the teacher in leading the class through the learning using key ideas, theorems, and problem solving examples, which encourage them to think. The TE contains a teacher note section and alternate examples in the margin.	**(Reviewer only.)** **__X__ Yes** **_____ No**
2. The underlying design of the materials includes both problems and exercises. (In solving problems, students learn new mathematics, whereas in working exercises, students apply what they have already learned to build mastery.) Each problem or exercise has a purpose. **NOTE: This Criterion does not require that the problems and exercises be labeled as such.**	**Evidence-** The lessons throughout the text are supported by examples with step by step solutions. The problems in the exercises are carefully chosen to meet the goals and objectives within the lesson and the problems have a wide range of difficulty. The layout of the text is very user-friendly. The lessons are consistent throughout the text with examples and exercise. The colors and pictures are inviting to the eye.	**(Reviewer only.)** **__X__ Yes** **_____ No**
3. Design of assignments is not haphazard: exercises are given in intentional sequences in order to strengthen students' mathematical understanding.	**Evidence-** The exercises throughout the Pre-Calculus text are given in intentional sequences with a plentiful amount of problems ranging from easy to difficult, which allows students to strengthen their mathematical understanding.	**(Reviewer only.)** **__X__ Yes** **_____ No**
4. There are separate teacher materials that support and reward teacher study including, but not limited to: discussion of the mathematics of the units and the mathematical point of each lesson as it relates to the organizing concepts of the unit, discussion on student ways of thinking and anticipating a variety of students responses, guidance on lesson flow, guidance on questions that prompt students thinking, and discussion of desired mathematical behaviors being elicited among students.	**Evidence-** There is an Instructors Guide for teacher, which contains points to stress, text discussion topics, suggested time to a lot for each lesson, exercise and solutions to group work, workshop and discussion suggestions, and suggested homework problems.	**(Reviewer only.)** **__X__ Yes** **_____ No**
5. Manipulatives suggested in the materials are faithful representations of the mathematical objects they represent and are connected to written methods.	**Evidence-** Where applicable, manipulatives are used appropriately to represent mathematical objects and are connected to written methods.	**(Reviewer only.)** **__X__ Yes** **_____ No**

6. Materials include a variety of curriculum-embedded assessments. Examples include pre-, formative, summative, and self-assessment resources.	**Evidence-** At the end of each chapter there is a Review section and Chapter Test, which will help students gauge their learning progress.	**(Reviewer only.)** __X__ **Yes** _____ **No**
7. Assessments contain aligned rubrics, answer keys, and scoring guidelines that provide sufficient guidance for interpreting student performance.	**Evidence-** In the back of the SE there are brief answers to the odd problems in the exercises, reviews, and chapter tests. In the back of the TE there are brief answers to all of the problems in the exercises, reviews, and tests. There is an additional Solution Manual available to students and teachers that provide step by step solutions to all problems in the text.	**(Reviewer only.)** __X__ **Yes** _____ **No**
8. Materials assess student proficiency using methods that are accessible and unbiased, including the use of course-level language in student prompts.	**Evidence-** In the Pre-Calculus text course-lever language is used in examples and exercises. Methods used to assess student proficiency are accessible and unbiased.	**(Reviewer only.)** __X__ **Yes** _____ **No**
9. Materials are carefully evaluated by qualified individuals, whose names are listed, in an effort to ensure freedom from mathematical errors and course-level appropriateness.	**Evidence-** This Pre-Calculus Editions has been reviewed by several instructors, all of whom are listed in the preface of the text.	**(Reviewer only.)** __X__ **Yes** _____ **No**
10. The visual design supports students in engaging thoughtfully with the subject. Navigation through the text is clear.	**Evidence-** The authors' attention to clarity and detail throughout the Pre-Calculus text is very apparent. Concepts are explained clearly throughout the text. Mathematical Modeling is introduced early in the text and is continuously reinforced, which provides students with a solid foundation in the principles of mathematical thinking.	**(Reviewer only.)** __X__ **Yes** _____ **No**

Reviewer IMET Evaluation Summary **Title/Level: Pre-calculus: Mathematics for Calculus, Seventh Edition**

Publisher: Cengage Learning, Inc. **Copyright: 2016**

ISBN: 978-1-305-11530-9

Reviewer ID # _____ **Date Review Completed:** _____

Non-Negotiable Criteria-The Non-Negotiable must be met in order for the Non-Negotiable Alignment Criteria to be met overall.

Non- Negotiable 1: Focus and Coherence

X Meets

_____ Does Not Meet

Non-Negotiable Overall:

X Meets **_____ Does Not Meet**

Alignment Criteria- Each Alignment Criterion must be met with a sufficient number of points in order for Alignment Criteria to be labeled as "Meets" overall. The more points the materials receive on the Alignment Criteria, the better they are aligned.

Alignment Criterion 1: Rigor and Balance	Alignment Criterion 2: Standards of Mathematical Practice	Alignment Criterion 3: Access to Standards for All Learners
Points: 6 of 6 possible. (Materials must receive at least 5 of 6 points to align.)	**Points: 5 of 6 possible.** (Materials must receive at least 5 of 6 points to align.)	**Points: 6 of 6 possible.** (Materials must receive at least 5 of 6 points to align.)
X Meets	**X Meets**	**X Meets**
_____ Does Not Meet	**_____ Does Not Meet**	**_____ Does Not Meet**

Alignment Criteria Overall:

X Meets **_____ Does Not Meet**

If the materials meet the Non-Negotiable Criterion and each Alignment Criterion, they are aligned to the Shifts and major features of the Core Standards. **Do the materials meet every Non-Negotiable and Alignment Criterion? __X__ Yes _____ No**

What are the specific areas of strength and weakness based on this evaluation? Publishers or others modifying or developing assessments can use this information to make improvements and/or to remedy gaps in the alignment of assessment materials.

Strengths:
The program is well written and easy to follow.
Good assessments and teaching components to assist the teacher.
Consistency in lessons and exercises throughout the text.
Organized sequential lessons.
Real world applications and modeling problems.

Weakness:
The Pre-Calculus text does not directly list or address the practice standards; however it does present all of the practice standards within the lessons, exercises, and assessments.

2015-16 Mathematics Interim Review Recommendation & Summary

Publisher Name:	Cengage Learning, Inc.
Title:	Pre Calculus: Mathematics for Calculus, Seventh Edition
ISBN #	978-1-305-11530-9
Grade Level(s) or Course:	11-12
Reviewer ID:	

RECOMMENDED AS:

__X__ **Core Mathematics Program-** a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials. Substantial evidence clearly supports the designation of this program as Core.

_____ **Other Mathematics Program-** a program that substantially, but partially, meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for supplemental materials. Substantial evidence clearly supports the designation of this program as Other.

_____ **Component Mathematics Program-** a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs. Substantial evidence clearly supports the designation of this program as Component.

_____ **Intervention Program-** a program designed and intended to target and support students' specific needs. Substantial evidence clearly supports the designation of this program as Intervention.

_____ **Does not meet criteria** for recommendation as a Curricular Material or Online Resource for Mathematics.

EVIDENCE SUMMARY:

FOCUS-

Throughout the Pre-Calculus text, students spend at least 50% of their time on Widely Applicable Prerequisites. Review is discussed throughout the text.

COHERENCE-

The language is consistent throughout the text. The first chapter in the text is review of fundamentals which are needed to be successful throughout the course.

RIGOR-

The Pre-Calculus materials feature high-quality conceptual problems and conceptual discussion questions. The examples and exercises in the Pre-Calculus text contain single and multiple-step contextual problems, real-life situation problem

CONCEPTUAL UNDERSTANDING-

The Pre-Calculus materials feature high-quality conceptual problems. All exercises contain application problems. At the end of each chapter you will find a Focus on Modeling section.

MATHEMATICAL PRACTICES-

The exercises in the Pre-Calculus text provide problems from the lesson that deal with concept, skill, application, discussion, discover, proofs and writting.

ACCESSIBILITY OF STANDARDS TO ALL STUDENTS-

The Pre-Calculus text allows for a variety of different learning styles. Language in which problems are posed is carefully considered. Standards are not specifically listed throughout the text, but are addressed.

OTHER:

The program is well written and easy to follow. Good assessments and teaching components to assist the teacher.

Consistency in lessons and exercises throughout the text.

Organized sequential lessons.
Real world applications and modeling problems.

The Pre-Calculus text does not directly list or address the practice standards; however it does present all of the practice standards within the lessons, exercises, and assessments.

2015-1 Interim Mathematics Review

Mathematics Evaluation Tool – High School

Publisher: Cengage Learning, Inc.

Title of Material: PreCalculus: Mathematics for Calculus, Seventh Edition

Author: James Stewart, Lothar Redlin, Saleem Watson

ISBN #: 978-1-305-11530-9 **Copyright** 2016

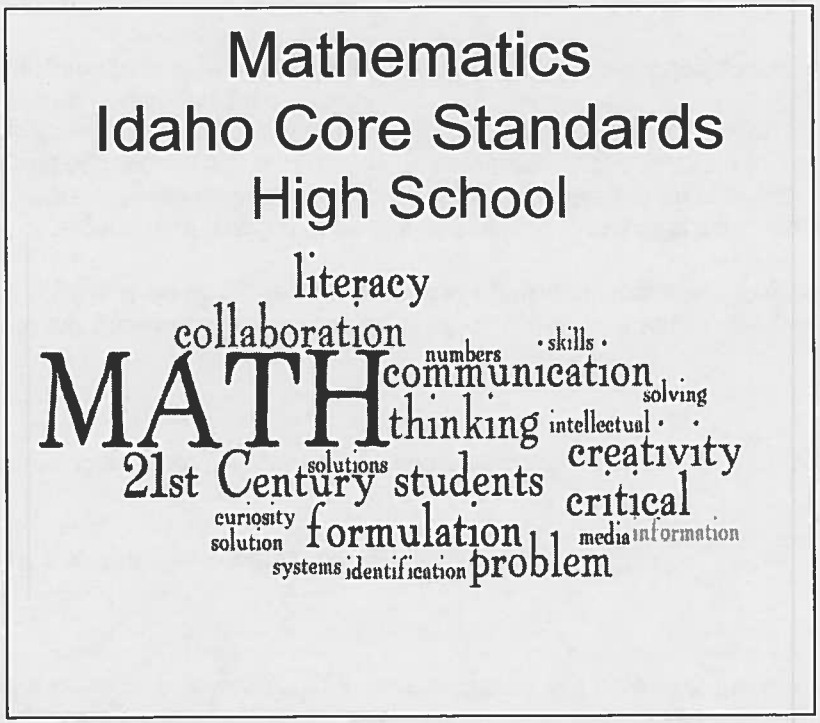
Reviewer ID: JHW CH

Core Mathematics Program- a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Core.

Other Mathematics Program- a program that substantially, but partially, meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Other.

Component Mathematics Program- a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs.
Substantial evidence clearly supports the designation of this program as Component.

Intervention Program- a program designed and intended to target and support students' specific needs.
Substantial evidence clearly supports the designation of this program as Intervention.



- Evaluation Form adapted from Instructional Materials Evaluation Toolkit (IMET).

The IMET was developed by Student Achievement Partners. Educators may use or adapt. http://creativecommons.org/licenses/by/3.0/ Download this tool at http://achievethecore.org/IMET

Instructional Materials Evaluation Tool

Mathematics, High School

What Are the Purposes of the IMET?

This Math IMET is designed to help educators determine whether instructional materials are aligned to the Shifts and major features of the Common Core State Standards (CCSS). The substantial instructional Shifts (http://www.corestandards.org/other-resources/key-shifts-in-mathematics/) at the heart of the Common Core State Standards are:

- **Focus** strongly where the Standards focus
- **Coherence**: Think across grades and link to major topics within the grade
- **Rigor**: In major topics, pursue conceptual understanding, procedural skill and fluency, and application with equal intensity.

The IMET draws directly from the following documents:

- Common Core State Standards for Mathematics (www.corestandards.org/Math)
- Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013) (http://www. corestandards.org/wp-content/uploads/Math_Publishers_Criteria_ HS_Spring_2013_FINAL1.pdf)

When to use the IMET

1. Purchasing materials: Many factors go into local purchasing decisions. Alignment to the Standards is a critical factor to consider. This tool is designed to evaluate alignment of instructional materials to the Shifts and the major features of the CCSS. It also provides suggestions of additional indicators to consider in the materials evaluation and purchasing process
2. Evaluating materials currently in use: The IMET can be used to analyze the degree of alignment of existing materials and help to highlight specific, concrete flaws in alignment. Even where materials and tools currently in use fail to meet one or more of these criteria, the pattern of failure is likely to be informative. States and districts can use the evaluation to create a thoughtful plan to modify or combine existing resources in such a way that students' actual learning experiences approach the focus, coherence, and rigor of the Standards.
3. Developing programs: Those developing new programs can use this tool as guidance for creating aligned curricula.

Please note this tool was designed for evaluating comprehensive curricula (including any supplemental or ancillary materials), but it was not designed for the evaluation of standalone supplemental materials.

Who Uses the IMET?

Evaluating instructional materials requires both subject-matter and pedagogical expertise. Evaluators should be well versed in the Standards (www.corestandards.org/Math) for all grades in which materials are being evaluated. This includes understanding the Widely Applicable Prerequisites (www.achievethecore.org/prerequisites), how the content fits into the progressions in the Standards (www. achievethecore.org/progressions), and the expectations of the Standards with respect to conceptual understanding, procedural skill and fluency, and application. Evaluators also should be familiar with the substantial instructional Shifts (http://www.corestandards.org/other-resources/key-shifts-in-mathematics/) of Focus, Coherence and Rigor that are listed above.

Getting Started

Prior to Evaluation

Assemble all of the materials necessary for the evaluation. It is essential for evaluators to have materials for all grades covered by the program, as some criteria cannot be rated without having access to each grade. In addition, each evaluator should have a reference copy of the Common Core State Standards for Mathematics (CCSSM) and the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).

Before conducting the evaluation itself, it is important to develop a protocol for the evaluation process. The protocol should include having evaluators study the Publishers' Criteria and the IMET. It will also be helpful for evaluators to get a sense of each program overall before beginning the process. At a minimum, this would include reading the front matter of the text, looking at the table of contents and paging through multiple chapters.

Sections 1-3 below should be completed to produce a comprehensive picture of the strengths and weaknesses of the materials under evaluation. Information about areas in need of improvement or supplementation should be shared with internal and external stakeholders.

Navigating the Tool

Begin with Section 1: Non-Negotiable Alignment Criteria

- The Non-Negotiable Alignment Criteria must each be met in full for materials to be considered aligned to the Shifts and the major features of the Common Core State Standards. Each Non-Negotiable Alignment Criterion has one or more metrics associated with it; every one of these metrics must be met in order for the criterion as a whole to be met.

- Examine the relevant materials and use evidence to rate the materials against each criterion and its associated metric(s).

- Record and explain the evidence upon which the rating is based.

Continue to Section 2: Alignment Criteria

- The Alignment Criteria must each be met for materials to be considered aligned to the Shifts and the major features of the Common Core State Standards. Each Alignment Criterion has one or more metric associated with it; a specific number of these metrics must be met or partially met in order for the criterion as a whole to be met.

- Examine the materials in relation to these criteria, assigning each metric a point value. Rate the criterion as "Meets" or "Does Note Meet" based on the number of points assigned. The more points the materials receive on the alignment Criteria, the better they are aligned.

- Record and explain the evidence upon which the rating is based.

Proceed to Section 4: Indicators of Quality

- Indicators of Quality are important considerations that will help evaluators better understand the overall quality of instructional materials. These considerations are not criteria for alignment to the CCSS, but they provide valuable information about additional program characteristics. Evaluators may want to add their own indicators to the examples provided.

Directions for Non-Negotiable 1 **Focus and Coherence**		
Criterion	**Evidence- Give specific examples.**	**Rating: (Reviewer only.)**
Non-Negotiable 1: Focus and Coherence- Materials must focus coherently on the Widely Applicable Prerequisites in a way that is consistent with the progressions in the Standards. Focus and coherence are the two major evidence-based design principles of the Common Core State Standards for Mathematics (CCSSM, p. 3). Focus is necessary in order to fulfill the ambitious promise the states have made to their students by adopting the Standards: greater achievement at the college and career-ready level; greater depth of understanding of mathematics; and a rich classroom environment in which reasoning, sense-making, applications, and a range of mathematical practices flourish. In high school courses, narrowing and deepening the curriculum creates a structure that ties topics together. Thus, materials must focus coherently on the Widely Applicable Prerequisites in a way that is consistent with the progressions in the Standards.	Focus and coherence are the two major evidence-based design principles of the Common Core State Standards for Mathematics (CCSSM, p. 3). Focus is necessary in order to fulfill the ambitious promise the states have made to their students by adopting the Standards: greater achievement at the college and career-ready level; greater depth of understanding of mathematics; and a rich classroom environment in which reasoning, sense-making, applications, and a range of mathematical practices flourish. In high school courses, narrowing and deepening the curriculum creates a structure that ties topics together. Thus, materials must focus coherently on the Widely Applicable Prerequisites in a way that is consistent with the progressions in the Standards. **Required Materials:** • Common Core State Standards for Mathematics (www.corestandards.org/wpcontent/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_HS_Spring_2013_FINAL1.pdf) • Widely Applicable Prerequisites for College and Careers (http://achievethecore.org/prerequisites) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion:** Non-Negotiable 1 is rated as Meets or Does Not Meet. To rate Non-Negotiable 1, first rate Metrics 1A–1H. Each of these eight metrics must be rated as Meets in order for Non-Negotiable 1 to be rated as Meets. Rate each metric 1A–1H as Meets or Does Not Meet/Insufficient Evidence. If the evidence examined shows that the Criterion is met, then mark the Criterion as Meets. If the evidence examined shows that the Criterion is not met—or if there is insufficient evidence to make a determination—then mark the Criterion as Does Not Meet/Insufficient Evidence. Support all ratings with evidence.

Metric NN1A: **In any single course, students spend at least 50% of their time on Widely Applicable Prerequisites.** **How to Find the Evidence:** Familiarize yourself with the Widely Applicable Prerequisites. Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, lessons, homework assignments, and assessments. (Evaluate both student and teacher materials.) Consider time spent on the Widely Applicable Prerequisites and judge qualitatively whether students and teachers using the materials as designed will devote the majority of time to the Widely Applicable Prerequisites For context, read Criterion #1 in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** Throughout the Pre-Calculus text, students spend at least 50% of their time on Widely Applicable Prerequisites. Math concepts build on each other. **SE/TE:** 159-170, 212-213, 301-307, 331-334, 699-708.	**_X_ Meets** **____Does Not Meet Insufficient Evidence**
Metric NN1B: **Student work in Geometry involves significant work with applications/modeling and problems that use algebra skills.** **How to Find the Evidence:** Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, lessons, homework assignments, and assessments. (Evaluate both student and teacher materials. NOTE: Since Geometry contains relatively fewer Widely Applicable Prerequisites, this Criterion is important to help foster students' college and career readiness. Problems that use algebra skills might include, for example, algebraic geometry problems in a coordinate setting, or problems of measurement involving unknown quantities.	**Evidence-** Throughout the Pre-Calculus course, students work involves significant work with applications and modeling and problems that use algebra skills. **ST/TE:** 87, 90-91(#109-125), 105(#122-124), 116 (#87-94), 122(#47,48), 139-146, 188-190(#29-38), 237-244.	**_X_ Meets** **____Does Not Meet Insufficient Evidence**

Metric NN1C: **There are problems at a level of sophistication appropriate to high school (beyond mere review of middle school topics) that involve the application of knowledge and skills from grades 6-8.** **How to Find the Evidence:** Evaluate lessons, chapter/unit assessments, and homework assignments. NOTE: Problems should include application of the following topics from grades 6-8: • Ratios and proportional relationships. • Percentage and unit conversions, e.g., in the context of complex measurement problems involving quantities with derived or compound units (such as mg/mL, kg/ m3, acre-feet, etc.). • Basic function concepts, e.g., by interpreting the features of a graph in the context of an applied problem. • Concepts and skills of geometric measurement e.g., when analyzing a diagram or schematic. • Concepts and skills of basic statistics and probability (see grades 6–8.SP) • Performing rational number arithmetic fluently. For context, read Table 1 on Page 8 of the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** The first chapter in the Pre-Calculus text is review of fundamentals which are needed to be successful throughout the course. Review is also discussed throughout the text. **SE/TE:** 1-131, 147, 245, 329, 401, 471, 537, 587, 629, 679.	**__X__Meets** **____Does Not Meet Insufficient Evidence**
Metric NN1D: **Materials base courses on the content specified in the Standards.** **How to Find the Evidence:** Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, and lessons in both student and teacher materials. For context, read Criterion #3a in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** The Pre-Calculus text covers the content specified in the standards. **SE/TE:** v-ix.	**__X__Meets** **____Does Not Meet Insufficient Evidence**
Metric NN1E: **Materials give all students extensive work with course-level problems.** **How to Find the Evidence:** Evaluate both student and teacher materials. If the materials provide resources for differentiated learning, consider whether lower-performing students have opportunities to engage with course-level problems. Also consider whether higher-performing students are given opportunities to learn current course-level content in greater depth. For context, read Criterion #3b in the Publishers' Criteria for the Common State Standards for Mathematics, High School (Spring 2013).	**Evidence-** The Pre-Calculus text provides students extensive work with course-level problems. In the side margins of the lessons you will find side notes and boxed lessons to help the students understand the concepts. **SE/TE:** 410, 494, 540, 548, 596, 642, 668, 680.	**__X__Meets** **____Does Not Meet Insufficient Evidence**

Metric NN1F: **Materials relate course-level concepts explicitly to prior knowledge from earlier grades or courses. The materials are designed so that prior knowledge becomes reorganized and extended to accommodate the new knowledge.** **How to Find the Evidence:** Evaluate student and teacher materials, looking for problems that involve extending the knowledge learned in earlier grades and courses. NOTE: An example of evaluating this Criterion might be to look at whether materials connect the equation of a circle with the distance formula and the Pythagorean theorem. For context, read Criterion #3c in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** The lessons in Pre-Calculus text are designed so that prior knowledge become reorganized and extended to accommodate the new knowledge. **SE/TE:** 65, 122, 190, 246, 370, 445.	**__X_Meets** **____Does Not Meet Insufficient Evidence**
Metric NN1G: **Materials include learning objectives that are visibly shaped by CCSSM cluster and domain headings.** **How to Find the Evidence:** Select several clusters from the course being evaluated. Evaluate teacher and student materials in relation to these clusters. For context, read Criterion #4a in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** Objectives can be found throughout the Pre-Calculus text. **SE/TE:** 1, 147, 245, 329, 401,471, 537, 587, 629, 679, 781, 841, 897, 949.	**__X_Meets** **____Does Not Meet Insufficient Evidence**
Metric NN1H: **Materials include problems and activities that serve to connect two or more clusters in a domain, or two or more domains in a category, or two or more categories, in cases where these connections are natural and important.** **How to Find the Evidence:** In the course being evaluated, choose two or more clusters, two or more domains, or two or more categories for which connections are natural and important. Evaluate the units, chapters, and lessons that deal with the chosen topics, looking for problems and activities that serve to connect the chosen clusters or domains. NOTE: An example of evaluating this Criterion might be to look at whether materials include problems in which students analyze a situation by building a function, graphing it, and using it to create and solve an equation. For context, read Criterion #4b in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** The Pre-Calculus text contains problems in cases where two or more clusters in a domain, or two or more domains in a category, or two or more categories where these connections are natural and important. **SE/TE:** 159-170, 212-213, 301-307, 331-334, 699-708.	**__X_Meets** **____Does Not Meet Insufficient Evidence**

Non-Negotiable 1: Focus and Coherence- Materials must focus coherently on the Widely Applicable Prerequisites in a way that is consistent with the progressions in the Standards.

Metric NN 1: If all metrics 1A–1H were rated as Meets, then rate Non-Negotiable 1 as Meets. If one or more metrics were rated as Does Not Meet/Insufficient Evidence, then rate Non-Negotiable 1 as Does Not Meet. Check the final rating.
Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)**

Before moving to Alignment Criterion 1, record the final Meets or Does Not Meet rating in the Evaluation Summary.

__X__Meets

____Does Not Meet

Strengths/Weaknesses
Students spend at least 50% of their time on Widely Applicable Prerequisites. Students use modeling and applications. Problems are at course level.

Now continue by evaluating Alignment Criterion 1 for Rigor and Balance.

Directions for Alignment Criterion 1

Rigor and Balance

Alignment Criterion 1:
Rigor and Balance- Materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.

The Standards set expectations for attention to all three aspects of rigor: conceptual understanding, procedural skill and fluency, and applications. Thus, materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.

The Standards set expectations for attention to all three aspects of rigor: conceptual understanding, procedural skill and fluency, and applications. Thus, materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.

- Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf)
- Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_HS_Spring_2013_FINAL1.pdf)
- Widely Applicable Prerequisites for College and Careers (http://achievethecore.org/prerequisites)
- From the materials being evaluated: teacher guides, student texts and workbooks

Rating this Criterion:
Alignment Criterion 1 is rated as Meets or Does Not Meet.
To rate Alignment Criterion 1, first rate metrics 1A, 1B, and 1C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). For each metric, guiding questions are provided to aid in gathering evidence.
Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 1 if the materials rate 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as rigor and balance, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.

AC Metric 1A: **The materials support the development of students' conceptual understanding of key mathematical concepts, especially where called for in specific content Standards or cluster headings.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Widely Applicable Prerequisites that relate specifically to conceptual understanding to use throughout the questions associated with this metric. NOTE: Some examples of clusters or Standards that call for conceptual understanding include: N-RN.A.1, A-APR.B, A-REI.A.1, A-REI.D.10, A.REI.D.11, F.IF.A.1, F-LE.A.1, G.SRT.A.2, G-SRT.C.6, S-ID.C.7 For context, read Criterion #2a in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	• Choose a cluster/Standard from the Widely Applicable Prerequisites that is aligned to each aspect of rigor and use it to evaluate these metrics. It is most helpful if the same clusters and Standards are chosen for all of the programs being evaluated. (Guidance in choosing clusters/Standards is included in "How to Find the Evidence" below.)	**Use the questions for AC Metric 1A to evaluate Metric 1A. Record evidence for each question and rate Metric 1A.** **__X__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Is conceptual understanding attended to thoroughly where the Standards set explicit expectations for understanding or interpreting? Evaluate lessons, chapter/unit assessments and homework assignments, paying attention to work aligned to Standards that explicitly call for understanding or interpreting.	**Evidence-** In the Pre-Calculus text conceptual understanding is attended to thoroughly where the standards set explicit expectations for understanding or interpreting. Content standards have been incorporated throughout the text in examples, exercises, and assessments. **SE/TE:** 2-9, 10-12, 13-21, 21-24, 25-32, 33-35, 36-42, 43-44, 137-138.	
Do the materials feature high-quality conceptual problems and conceptual discussion questions? Evaluate lessons, chapter/unit assessments, and homework assignments. NOTE: Examples of conceptual problems might include such questions as "What is the maximum value of the function $f(t) = 5 - t2$?" or "Is $\sqrt{2}$ a polynomial? How about $\frac{1}{2}(x + \sqrt{2}) + \frac{1}{2}(-x + \sqrt{2})$?"	**Evidence-** The Pre-Calculus materials feature high-quality conceptual problems and conceptual discussion questions. **SE/TE:** 159-165, 166-170, 170-178, 178-182.	
Do the materials feature opportunities to identify correspondences across mathematical representations? Evaluate lessons, chapter/unit assessments and homework assignments. NOTE: An example of evaluating this metric might include looking at whether materials support students in identifying correspondences among the expression that defines a function, the graph that shows the relationship, and the behavior of the phenomenon being modeled (if any).	**Evidence-** The lessons, exercises and assessment materials throughout the Pre-Calculus text feature opportunities to identify correspondences across mathematical representation. **SE/TE:** 159-170, 235-236, 246-254, 323-324, 330-338, 391, 402-409, 465.	

AC Metric 1B: **The materials are designed so that students attain the fluencies and procedural skills required by the Standards.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Widely Applicable Prerequisites that relate specifically to fluency and procedural skill to use throughout the questions associated with this metric. NOTE: Some examples of Standards that call for procedural skill and fluency include: A-SSE.A.1b, A-SSE.2, A-APR.A.1, A-APR.C.6, F-BF.B.3, G-GPE.B.4, G-GPE.B.5, G-GPE.B.7, G-CO.A.1, G-SRT.B.5 For context, read Criterion #2b in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).		**Use the questions for AC Metric 1B to evaluate Metric 1B. Record evidence for each question and rate Metric 1B.** **__X__ Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Is progress toward fluency and procedural skill interwoven with the student's developing conceptual understanding of the skills in question? Evaluate lessons, chapter/unit assessments, daily routines, and homework assignments for evidence that the development of fluency and procedural skill is supported by conceptual understanding.	**Evidence-** The examples, exercises, and assessments in the Pre-Calculus text progress toward fluency and procedural skill interwoven with the students developing conceptual understanding of the skills in question. The exercises start out with concept problems and then progress to skills, applications, discuss, discover, prove, and write. **SE/TE:** 246-251, 251-253, 254-265, 265-268, 311-315, 316-317, 323-324.	
Are purely procedural problems and exercises present that include cases in which opportunistic strategies are valuable and generic cases that require efficient and general procedures present? Evaluate lessons, chapter/unit assessments, daily routines, and homework assignments. NOTE: Problems in which opportunistic strategies are valuable might include such examples as solving x2 + 5 = 49 + 5 or (3x – 2)2 = 6x – 4. Generic cases that require efficient and general procedures might include such problems as solving c + 8 – c2 = 3(c – 1)2 – 5).	**Evidence-** The examples and exercises in the Pre-Calculus text provide opportunistic strategies which are valuable and generic cases that require efficient and general procedural present. **SE/TE:** All exercises progress from concept problems, to skills problems, to applications, discussions, discover, prove and write.	
AC Metric 1C: **The materials are designed so that teachers and students spend sufficient time working with engaging applications, without losing focus on the Widely Applicable Prerequisites.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Widely Applicable Prerequisites that relate specifically to application to use throughout the questions associated with this metric. NOTE: Some examples of clusters or Standards that call for application include: N-Q.A, A-SSE.B.3, A-REI.D.11, F-IF.B, F-IF.C.7, F-BF.A.1, G-SRT.C.8, S-ID.A.2, S-IC.A.1 For context, read Criterion #2c in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).		**Use the questions for AC Metric 1C to evaluate Metric 1C. Record evidence for each question and rate Metric 1C.** **__X__ Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**

Are there single- and multi-step contextual problems, including non-routine problems, that develop the mathematics of the course, afford opportunities for practice, and engage students in problem solving? Do the problems attend thoroughly to those places in the content Standards where expectations for multi-step and real-world problems are explicit? Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** The examples and exercises in the Pre-Calculus text contain single and multi-step contextual problems, real-life situation problems. Real-world applications from other fields also demonstrate the relevance of the field of mathematical study. **SE/TE:** 338, 342(#25), 350, 353(#96), 356, 360(#74), 366, 369(#98), 370(#102).	
Do application problems particularly stress applying the Widely Applicable Prerequisites? Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** The problems in the examples and exercises of the Pre-Calculus text stress applying the Widely Applicable Prerequisites. **SE/TE:** 159-170, 212-213, 301-307, 331-334, 699-708.	
Are there ample opportunities for students to engage with modeling problems? Do materials require students to use both individual parts of the modeling cycle as well as the full modeling cycle? Read the pages on High School—Modeling in the Standards for Mathematics (pp. 72 and 73). Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** Throughout the Pre-Calculus text examples and exercises model real-world situations. All exercises contain application problems. At the end of each chapter you will find a Focus on Modeling section. **SE/TE:** 477, 479-481(#75-94), 485-486, 489-490(#53-71), 517, 522-523(#39-53), 533-536.	
Alignment Criterion 1: Materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations. **AC 1:** Materials must earn at least 5 of 6 points to meet this Alignment Criterion. If materials earn less than 5 points, the Criterion has not been met. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)** **Before moving to Alignment Criterion 2, record the final Meets or Does Not Meet rating in the Evaluation Summary.**	**__X_Meets** **____Does Not Meet** **Strengths/Weaknesses:** Sufficient amount of problems. Content standards have been incorporated throughout the text but are not specifically listed. Multiple conceptual problems and conceptual discussion questions.	

Alignment Criterion 2: **Standards for Mathematical Practice- Materials must demonstrate authentic connections between content Standards and practice Standards.** The Standards require that designers of instructional materials connect the mathematical practices to mathematical content in instruction. Thus, materials must demonstrate authentic connections between content Standards and practice Standards.	The Standards require that designers of instructional materials connect the mathematical practices to mathematical content in instruction. Thus, materials must demonstrate authentic connections between content Standards and practice Standards. **Required Materials**: • Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_HS_Spring_2013_FINAL1.pdf) • Widely Applicable Prerequisites for College and Careers (http://achievethecore.org/prerequisites) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion:** Alignment Criterion 2 is rated as Meets or Does Not Meet. To rate Alignment Criterion 2, first rate metrics 2A, 2B, and 2C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). For each metric, guiding questions are provided to aid in gathering evidence. Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 2 if the materials rate 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as mathematical practices, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.
AC Metric 2A: **Materials address the practice Standards in such a way as to enrich the Widely Applicable Prerequisites; practices strengthen the focus of the course instead of detracting from it, in both teacher and student materials.** **How to Find the Evidence:** Familiarize yourself with the Widely Applicable Prerequisites. Evaluate teacher and student materials for evidence that the mathematical practices support and connect to the focus of the course. NOTE: An example of evaluating this Criterion might include looking at whether materials use regularity in repeated reasoning to illuminate formal algebra as well as functions, particularly recursive definitions of functions. For context, read Criterion #6 in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** Throughout the Pre-Calculus text the Widely Applicable Prerequisites as well as all of the standards for mathematical practice have been used. Throughout the text students are given real-life application problems and have to solve these problems using abstract and quantitative reasoning. Students are also asked to use technology, modeling, and written argument. **SE/TE:** 159-170, 212-213, 301-307, 331-334, 699, 708.	**__X_Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
AC Metric 2B: **Materials attend to the full meaning of each practice Standard.** **How to Find the Evidence:** For context, read Criterion #7 in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).		**Use the questions for AC Metric 2B to evaluate Metric 2B. Record evidence for each question and rate Metric 2B.** **____Meets (2)** **__X_Partially Meets (1)** **____Does Not Meet (0)**

Over the course of any given year of instruction, is each mathematical practice Standard meaningfully present in the form of assignments, activities, or problems that stimulate students to develop the habits of mind described in the practice Standard? Evaluate lessons, chapter/ unit assessments, and homework assignments for evidence of each mathematical practice being meaningfully present in instruction.	**Evidence-** The structure of Pre-Calculus lessons clearly distinguishes between examples and exercises. The guided problem solving provides examples focused on the lesson. The exercises provide problems from the lesson that deal with concept, skill, application, discussion, discover, proofs and writing. **SE/TE:** 295-307, 308-310, 311-315, 316-317, 330-335, 336-338.	
Are teacher-directed materials that explain the role of the practice Standards in the classroom and in students' mathematical development included? Are alignments to practice Standards accurate? Evaluate teacher materials, paying attention to explanations of the role of the practice Standards in the classroom and in students' mathematical development. Evaluate documents aligning lessons to practice Standards for accuracy. NOTE: Examples to look for when evaluating this metric might include the following: a highly scaffolded problem should not be aligned to MP.1; or a problem that directs a student to use a calculator should not be aligned to MP.5; or a problem about merely extending a pattern should not be aligned to MP.8.	**Evidence-** The Pre-Calculus text does not directly list or address the practice standards; however it does present all of the practice standards within the lessons, exercises, and assessments.	
AC Metric 2C: **Materials support the Standards' emphasis on mathematical reasoning.** **How to Find the Evidence:** For context, read Criterion #8 in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).		**Use the questions for AC Metric 2C to evaluate Metric 2C. Record evidence for each question and rate Metric 2C.** **__X__ Meets (2)** **____ Partially Meets (1)** **____ Does Not Meet (0)**
Do the materials support students in constructing viable arguments and critiquing the arguments of others concerning course-level mathematics that is detailed in the content Standards? Read Standard for Mathematical Practice 3. Evaluate teacher and student materials to ensure that students are given opportunities to reason with grade-level mathematics.	**Evidence-** The Pre-Calculus text contains exercises that have students explore and produce an argument to support their solution. **SE/TE:** 148-159, 183-190, 190-197, 378-380, 588-593, 734-745.	
Do the materials support students in producing not only answers and solutions, but also, in a course-appropriate way, arguments, explanations, diagrams, mathematical models, etc., especially in the Widely Applicable Prerequisites? Familiarize yourself with the Widely Applicable Prerequisites. Evaluate teacher and student materials to understand the types of work students are expected to produce.	**Evidence-** Throughout the Pre-Calculus text there are Discovery Projects within the lessons. The Discovery Projects encourage students to use mathematical language to construct a viable argument while solving the problem. **SE/TE:** 361, 375, 382, 558, 590, 608, 645, 694.	
Do materials explicitly attend to the specialized language of mathematics? Is the language of argument, problem solving, and mathematical explanations taught rather than assumed? Evaluate teacher and student materials, paying attention to how mathematical language is taught. NOTE: An example of evaluating this Criterion might include looking at whether students are supported in: basing arguments on definitions; using the method of providing a counter example; or recognizing that examples alone do not establish a general statement.	**Evidence-** The lessons in the Pre-Calculus text explicitly attend to the specialized language of mathematics. Students are encouraged to use correct mathematical terminology throughout the exercises. **SE/TE:** 3, 5, 12(#93), 13, 14, 16, 18, 19, 25(#107), 184, 192, 198, 199, 201, 202, 203, 205, 210(#102-104).	

Alignment Criterion 2: Materials must demonstrate authentic connections between content Standards and practice Standards.

AC 2: Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 points, the Criterion has not been met. Check the final rating.
Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewers only.)**

Before moving to Alignment Criterion 3, record the final Meets or Does Not Meet rating in the Evaluation Summary.

__X_Meets

____Does Not Meet

Strengths/Weaknesses:
Students are asked to use technology, modeling, and written argument. The text consists of real world application problems. The text does not directly list or address the practice standards.

Alignment Criterion 3:
Access to the Standards for All Students- Materials must provide supports for English Language Learners and other special populations.

Because Standards are for all students, alignment requires thoughtful support to ensure all students are able to meet the Standards. Thus, aligned materials must provide supports for English Language Learners and other special populations.

Because Standards are for all students, alignment requires thoughtful support to ensure all students are able to meet the Standards. Thus, aligned materials must provide supports for English Language Learners and other special populations.

Required Materials:

- Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf)
- Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math Publishers_Criteria_HS_Spring_2013_FINAL1.pdf)
- From the materials being evaluated: teacher guides, student texts and workbooks

Rating this Criterion:
Alignment Criterion 3 is rated as Meets or Does Not Meet.
To rate Alignment Criterion 3, first rate metrics 3A, 3B, and 3C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points).
Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 3 if the materials rate 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as support for special population, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.

AC Metric 3A:
Support for English Language Learners and other special populations is thoughtful and helps those students meet the same Standards as all other students. The language in which problems are posed is carefully considered.

How to Find the Evidence:

Evaluate teacher and student materials, paying attention to supports offered for special populations.

Evidence-
The Pre-Calculus course is a high level math course, therefore students must be highly motivated to take the course and be successful. The language in which problems are posed is carefully considered.
SE/TE: 127-130(#35-57), 353-354(#96-105), 619-620(#63-71), 798-799(#65-72), 958-961(#17-94).
TE: xi-xiv, xv-xvii.

__X_Meets (2)

____Partially Meets (1)

____Does Not Meet (0)

AC Metric 3B: **Materials provide appropriate level and type of scaffolding, differentiation, intervention, and support for a broad range of learners with gradual removal of supports, when needed, to allow students to demonstrate their mathematical understanding independently.** **How to Find the Evidence:** Evaluate teacher and student materials, paying attention to whether materials provide differentiation that will lead all learners to engage with on-grade-level content.	**Evidence-** The Pre-Calculus course is a high level math course, which requires student to be highly skilled and self motivated. The lessons and exercises contain levels of problems in a variety of forms: concepts, skills, skills plus, applications, discuss-discover-prove-write. **SE/TE:** 754-756, 796-799, 805-807, 813-816, 823-824, 829-831.	**__X__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
AC Metric 3C: **Design of lessons recommends and facilitates a mix of instructional approaches for a variety of learners such as using multiple representations (e.g., including models, using a range of questions, checking for understanding, flexible grouping, pair-share).** **How to Find the Evidence:** Evaluate teacher materials, noting instructional approaches suggested for whole class and differentiated lessons and activities.	**Evidence-** All levels of students have different types of learning styles. The Pre-Calculus text allows for a variety of different types of learning styles. The TE has additional in-class materials and alternate examples to help them reach all students. **TE:** 413, 416, 420-429, 432-434, 472-478, 482-487.	**__X__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Alignment Criterion 3: Materials must provide supports for English Language Learners and other special populations. **AC 3** Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 points, the Criterion has not been met. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewers only.)** **Move to the Evaluation Summary and record the final Meets or Does Not Meet rating .**		**__X__Meets** **____Does Not Meet** **Strengths/Weaknesses:** Language in which problems are posed is carefully considered. The lessons and exercises contain levels of problems in a variety of forms: concepts, skills, skills plus, applications, discuss-discover-prove-write.

Once an evaluation for alignment to the Shifts and major features of the CCSS has been conducted using Sections 1-3, it's important to evaluate for overall quality and best practices. A starting list of Indicators of Quality are suggested below. States, districts and others evaluating instructional materials are encouraged to add to this list to ensure materials reflect local contexts. For background information on some of the Indicators of Quality in this section, refer to pp.16–18 in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).

Indicators of Quality	Evidence- Give specific examples.	Rating: (Reviewer only.)
1. Lessons are thoughtfully structured and support the teacher in leading the class through the learning paths at hand, with active participation by all students in their own learning and in the learning of their classmates.	**Evidence-** Throughout the Pre-Calculus text chapters contain lessons which are thoughtfully structured and support the teacher in leading the class through the learning using key ideas, theorems, and problem solving examples, which encourage them to think. The TE contains a teacher note section and alternate examples in the margin.	**(Reviewer only.)** __X__ **Yes** _____ **No**
2. The underlying design of the materials includes both problems and exercises. (In solving problems, students learn new mathematics, whereas in working exercises, students apply what they have already learned to build mastery.) Each problem or exercise has a purpose. **NOTE: This Criterion does not require that the problems and exercises be labeled as such.**	**Evidence-** The lessons throughout the text are supported by examples with step by step solutions. The problems in the exercises are carefully chosen to meet the goals and objectives within the lesson and the problems have a wide range of difficulty. The layout of the text is very user-friendly. The lessons are consistent throughout the text with examples and exercise. The colors and pictures are inviting to the eye.	**(Reviewer only.)** __X__ **Yes** _____ **No**
3. Design of assignments is not haphazard: exercises are given in intentional sequences in order to strengthen students' mathematical understanding.	**Evidence-** The exercises throughout the Pre-Calculus text are given in intentional sequences with a plentiful amount of problems ranging from easy to difficult, which allows students to strengthen their mathematical understanding.	**(Reviewer only.)** __X__ **Yes** _____ **No**
4. There are separate teacher materials that support and reward teacher study including, but not limited to: discussion of the mathematics of the units and the mathematical point of each lesson as it relates to the organizing concepts of the unit, discussion on student ways of thinking and anticipating a variety of students responses, guidance on lesson flow, guidance on questions that prompt students thinking, and discussion of desired mathematical behaviors being elicited among students.	**Evidence-** There is an Instructors Guide for teacher, which contains points to stress, text discussion topics, suggested time to a lot for each lesson, exercise and solutions to group work, workshop and discussion suggestions, and suggested homework problems.	**(Reviewer only.)** __X__ **Yes** _____ **No**
5. Manipulatives suggested in the materials are faithful representations of the mathematical objects they represent and are connected to written methods.	**Evidence-** Where applicable, manipulatives are used appropriately to represent mathematical objects and are connected to written methods.	**(Reviewer only.)** __X__ **Yes** _____ **No**

6. Materials include a variety of curriculum-embedded assessments. Examples include pre-, formative, summative, and self-assessment resources.	**Evidence-** At the end of each chapter there is a Review section and Chapter Test, which will help students gauge their learning progress.	**(Reviewer only.)** __X__ **Yes** _____ **No**
7. Assessments contain aligned rubrics, answer keys, and scoring guidelines that provide sufficient guidance for interpreting student performance.	**Evidence-** In the back of the SE there are brief answers to the odd problems in the exercises, reviews, and chapter tests. In the back of the TE there are brief answers to all of the problems in the exercises, reviews, and tests. There is an additional Solution Manual available to students and teachers that provide step by step solutions to all problems in the text.	**(Reviewer only.)** __X__ **Yes** _____ **No**
8. Materials assess student proficiency using methods that are accessible and unbiased, including the use of course-level language in student prompts.	**Evidence-** In the Pre-Calculus text course-lever language is used in examples and exercises. Methods used to assess student proficiency are accessible and unbiased.	**(Reviewer only.)** __X__ **Yes** _____ **No**
9. Materials are carefully evaluated by qualified individuals, whose names are listed, in an effort to ensure freedom from mathematical errors and course-level appropriateness.	**Evidence-** This Pre-Calculus Editions has been reviewed by several instructors, all of whom are listed in the preface of the text.	**(Reviewer only.)** __X__ **Yes** _____ **No**
10. The visual design supports students in engaging thoughtfully with the subject. Navigation through the text is clear.	**Evidence-** The authors' attention to clarity and detail throughout the Pre-Calculus text is very apparent. Concepts are explained clearly throughout the text. Mathematical Modeling is introduced early in the text and is continuously reinforced, which provides students with a solid foundation in the principles of mathematical thinking.	**(Reviewer only.)** __X__ **Yes** _____ **No**

Reviewer IMET Evaluation Summary **Title/Level:** Pre-calculus: Mathematics for Calculus, Seventh Edition

Publisher: Cengage Learning, Inc. **Copyright:** 2016

ISBN: 978-1-305-11530-9

Reviewer ID # _____ **Date Review Completed:** _____

Non-Negotiable Criteria-The Non-Negotiable must be met in order for the Non-Negotiable Alignment Criteria to be met overall.

Non- Negotiable 1: Focus and Coherence

__X__ Meets

_____ Does Not Meet

Non-Negotiable Overall:

__X__ Meets _____ Does Not Meet

Alignment Criteria- Each Alignment Criterion must be met with a sufficient number of points in order for Alignment Criteria to be labeled as "Meets" overall. The more points the materials receive on the Alignment Criteria, the better they are aligned.

Alignment Criterion 1: Rigor and Balance

Points: __6__ **of 6 possible.**
(Materials must receive at least 5 of 6 points to align.)

__X__ Meets

_____ Does Not Meet

Alignment Criterion 2: Standards of Mathematical Practice

Points: __5__ **of 6 possible.**
(Materials must receive at least 5 of 6 points to align.)

__X__ Meets

_____ Does Not Meet

Alignment Criterion 3: Access to Standards for All Learners

Points: __6__ **of 6 possible.**
(Materials must receive at least 5 of 6 points to align.)

__X__ Meets

_____ Does Not Meet

Alignment Criteria Overall:

__X__ Meets _____ Does Not Meet

If the materials meet the Non-Negotiable Criterion and each Alignment Criterion, they are aligned to the Shifts and major features of the Core Standards. **Do the materials meet every Non-Negotiable and Alignment Criterion? __X__ Yes _____ No**

What are the specific areas of strength and weakness based on this evaluation? Publishers or others modifying or developing assessments can use this information to make improvements and/or to remedy gaps in the alignment of assessment materials.

Strengths:
The program is well written and easy to follow.
Good assessments and teaching components to assist the teacher.
Consistency in lessons and exercises throughout the text.
Organized sequential lessons.
Real world applications and modeling problems.

Weakness:
The Pre-Calculus text does not directly list or address the practice standards; however it does present all of the practice standards within the lessons, exercises, and assessments.

IDAHO STATE DEPARTMENT OF EDUCATION

Advanced Placement Course: Calculus AB & BC

Content Area: Mathematics

Course Title: Single Variable Calculus, 8th Ed.

Title of Material: AP Calculus AB & BC

Author: James Stewart

Publisher: Cengage

ISBN #: 9781305266704 **Copyright** 2016

Reviewers: CMJN

Meets Content Standards Alignment: X Yes _____ No

Meets Materials Analysis Evaluation: X Yes _____ No

100% Core Program

_____ Other Program

_____ Resource/Supplemental

_____ Not Recommended

Advanced Placement:

- ☐ AP Capstone
- ☐ Arts
- ☐ English
- ☐ History & Social Science
- ☒ Math & Computer Science
- ☐ Sciences
- ☐ World Languages & Cultures

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IDAHO STATE DEPARTMENT OF EDUCATION

Advanced Placement Course: Calculus AB & BC

Content Area: __Math & Computer Science_____

Course Title: AP Calculus AB and B

Title of Material: Single Variable Calculus 8th Edition _____

Author: _____James Stewart_____

Publisher: _____Cengage_____

ISBN #: ___9781305266704 _____Copyright___2016_____

Reviewers: ___CMJN_____

Meets Content Standards Alignment: ___X____Yes _____ No

Meets Materials Analysis Evaluation: ___X____Yes _____ No

___X__ Core Program

_____ Other Program

_____ Resource/Supplemental

_____ Not Recommended

Advanced Placement:

- ☐ AP Capstone
- ☐ Arts
- ☐ English
- ☐ History & Social Science
- ☐ Math & Computer Science
- ☐ Sciences
- ☐ World Languages & Cultures

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Standards Alignment Evaluation Rubric

0 = No Alignment- **Not Evident:** Content as described in the Standards is **not evident**.

.5 = Partial Alignment- **Partially Evident:** Content as described in the Standards is **partially evident** and there are few gaps.

1 = High Alignment - **Clearly Evident:** Content is fully aligned as described in the Standards and repeatedly included to guarantee extensive opportunities for students to work with the content. Alignment is **clearly evident**.

N/A = Not applicable for standard

Note: In the Concept Outline, subject matter that is included only in the BC course is indicated with blue shading.

Advanced Placement	**Calculus AB & BC**	
Standards and Learning Indicators	**Publisher/Provider: List units/lessons with specific examples of where standards are Introduced/Taught/Assessed.**	**Point Value 0/.5/1 (Reviewer)**
Big Idea 1: Limits Many calculus concepts are developed by first considering a discrete model and then the consequences of a limiting case. Therefore, the idea of limits is essential for discovering and developing important ideas, definitions, formulas, and theorems in calculus. Students must have a solid, intuitive understanding of limits and be able to compute various limits, including one-sided limits, limits at infinity, the limit of a sequence, and infinite limits. They should be able to work with tables and graphs in order to estimate the limit of a function at a point. Students should know the algebraic properties of limits and techniques for finding limits of indeterminate forms, and they should be able to apply limits to understand the behavior of a function near a point. Students must also understand how limits are used to determine continuity, a fundamental property of functions.		

Enduring Understandings (Students will understand that...)	**Learning Objectives** (Students will be able to...)	**Essential Knowledge** (Students will know that...)		

EU 1.1: The concept of a limit can be used to understand the behavior of functions.	**LO 1.1A (a):** Express limits symbolically using correct notation. **LO 1.1A (b):** Interpret limits expressed symbolically.	**EK 1.1A1:** Given a function f, the limit of $f(x)$ as x approaches c is a real number R if $f(x)$ can be made arbitrarily close to R by taking x sufficiently close to c (but not equal to c). If the limit exists and is a real number, then the common notation is $\lim_{x \to c} f(x) = R$. **EXCLUSION STATEMENT (EK 1.1A1):** The epsilon-delta definition of a limit is not assessed on the AP Calculus AB or BC Exam. However, teachers may include this topic in the course if time permits.	The formal definition of a limit is presented and can be used to determine the behavior of functio Pg 81, 72	1
		EK 1.1A2: The concept of a limit can be extended to include one-sided limits, limits at infinity, and infinite limits.	The topic of one-sided limits, limits at infinity and infinite limits are clearly introduced and explored with in depth development of conceptual understanding using correct notation. P 77, _ 80	1
		EK 1.1A3: A limit might not exist for some functions at particular values of . Some ways that the limit might not exist are if the function is unbounded, if the function is oscillating near this value, or if the limit from the left does not equal the limit from the right. **EXAMPLES OF LIMITS THAT DO NOT EXIST:** $\lim_{x \to 0} \frac{1}{x^2} = \infty$ $\quad \lim_{x \to 0} \sin\left(\frac{1}{x}\right)$ *does not exist* $\lim_{x \to 0} \frac{\lvert x \rvert}{x}$ *does not exist* $\quad \lim_{x \to 0} \frac{1}{x}$ *does not exist*	The content shows multiple representations of limits that do not exist. Pg 52, 53	1
	LO 1.1B: Estimate limits of functions	**EK 1.1B1:** Numerical and graphical information can be used to estimate limits.	The content shows a clear procedure and multiple representation for the estimation of limits of functions. Pg: 52, 53, 54, 61	1

	LO 1.1C: Determine limits of functions.	**EK 1.1C1:** Limits of sums, differences, products, quotients, and composite functions can be found using the basic theorems of limits and algebraic rules.	Students are asked to determine limits of functions using basic theorems of limits and algebraic rules. Pgs. 62	1
		EK 1.1C2: The limit of a function may be found by using algebraic manipulation, alternate forms of trigonometric functions, or the squeeze theorem	Use of the squeeze theorem and the alternate forms of trigonometric functions Pgs. 65, 69	1
		EK 1.1C3: Limits of the indeterminate forms $\frac{0}{0}$ and $\frac{\infty}{\infty}$ may be evaluated using L'Hospital's Rule.	Limits of indeterminate forms using L'Hospitals rule – this is an extension for AB and required for BC Pg 491	1
	LO 1.1D: Deduce and interpret behavior of functions using limits.	**EK 1.1D1:** Asymptotic and unbounded behavior of functions can be explained and described using limits.	Asymptotic and unbounded behavior is explained using multiple representations with the definition of a limit, and limit theorems. 56,61	1
		EK 1.1D2: Relative magnitudes of functions and their rates of change can be compared using limits	Comparison of rates of change using limits 106	1
EU 1.2: Continuity is a key property of functions that is defined using limits	**LO 1.2A:** Analyze functions for intervals of continuity or points of discontinuity.	**EK 1.2A1:** A function f is continuous at $x = c$ provided that $f(c)$ exists, $\lim_{x \to c} f(x)$ exists, and $\lim_{x \to c} f(x) = f(c)$.	The definition of continuity is presented as a key property 83	1
		EK 1.2A2: Polynomial, rational, power, exponential, logarithmic, and trigonometric functions are continuous at all points in their domains.	Functions are analyzed for intervals of continuity, points of continuity and points of discontinuity 86,88	1

		EK 1.2A3: Types of discontinuities include removable discontinuities, jump discontinuities, and discontinuities due to vertical asymptotes.	Students are asked to differentiate between the different types of discontinuities. 83-84, 941	1
	LO 1.2B: Determine the applicability of important calculus theorems using continuity.	**EK 1.2B1:** Continuity is an essential condition for theorems such as the Intermediate Value Theorem, the Extreme Value Theorem, and the Mean Value Theorem.	The intermediate value theorem, extreme value theorem, and mean value theorem are taught and 90,206,215	1

Standards & Learning Indicators			Publisher/Provider: List units/lessons with specific examples of where standards Introduced/Taught/Assessed.	Point Value 0/.5/1 (Reviewer)
Big Idea 2: Derivatives Using derivatives to describe the rate of change of one variable with respect to another variable allows students to understand change in a variety of contexts. In AP Calculus, students build the derivative using the concept of limits and use the derivative primarily to compute the instantaneous rate of change of a function. Applications of the derivative include finding the slope of a tangent line to a graph at a point, analyzing the graph of a function (for example, determining whether a function is increasing or decreasing and finding concavity and extreme values), and solving problems involving rectilinear motion. Students should be able to use different definitions of the derivative, estimate derivatives from tables and graphs, and apply various derivative rules and properties. In addition, students should be able to solve separable differential equations, understand and be able to apply the Mean Value Theorem, and be familiar with a variety of real-world applications, including related rates, optimization, and growth and decay models.				
Enduring Understandings (Students will understand that…)	**Learning Objectives** (Students will be able to…)	**Essential Knowledge** (Students will know that…)		
EU 2.1: The derivative of a function is defined as the limit of a difference quotient and can be determined using a variety of strategies.	**LO 2.1A:** Identify the derivative of a function as the limit of a difference quotient.	**EK 2.1A1:** The difference quotients $\frac{f(a+h)-f(a)}{h}$ and $\frac{f(x)-f(a)}{x-a}$ express the average rate of change of a function over an interval.	The derivative of a function is introduced as the limit of a difference quotient. 110	1

		EK 2.1A2: The instantaneous rate of change of a function at a point can be expressed by $\lim_{h \to 0} \frac{f(a+h)-f(a)}{h}$ or $\lim_{x \to a} \frac{f(x)-f(a)}{x-a}$, provided that the limit exists. These are common forms of the definition of the derivative and are denoted $f'(a)$.	The instantaneous rate of change of a function is related to the difference quotient Pg. 110	1
		EK 2.1A3: The derivative of f is the function whose value at x is $\lim_{h \to 0} \frac{f(x+h)-f(x)}{h}$ provided this limit exists.	The existence of a limit is shown to be related to the difference quotient Pg. 117	1
		EK 2.1A4: For $y = f(x)$, notations for the derivative include $\frac{dy}{dx}$, $f'(x)$, and y'.	Derivative notations are shown Pg. 120	1
		EK 2.1A5: The derivative can be represented graphically, numerically, analytically, and verbally.	Multiple representations are present throughout the text. 106	1
	LO 2.1B: Estimate derivatives.	**EK 2.1B1:** The derivative at a point can be estimated from information given in tables or graphs	Students are given ample opportunity to estimate derivatives using tables and graphs Pgs. 106	1
	LO 2.1C: Calculate derivatives.	**EK 2.1C1:** Direct application of the definition of the derivative can be used to find the derivative for selected functions, including polynomial, power, sine, cosine, exponential, and logarithmic functions.	Derivatives rules are applied including, the following: Pgs. 130,144,428	1
		EK 2.1C2: Specific rules can be used to calculate derivatives for classes of functions, including polynomial, rational, power, exponential, logarithmic, trigonometric, and inverse trigonometric.	Derivatives rules are applied including, the following: Pgs. 144,479,408	1
		EK 2.1C3: Sums, differences, products, and quotients of functions can be differentiated using derivative rules.	Derivatives rules are applied including, the following Pgs. 132	1

		EK 2.1C4: The chain rule provides a way to differentiate composite functions.	Derivatives rules are applied including, the following Pgs. 152	1
		EK 2.1C5: The chain rule is the basis for implicit differentiation.	Derivatives rules are applied including, the following :Pgs. 161	1
		EK 2.1C6: The chain rule can be used to find the derivative of an inverse function, provided the derivative of that function exists.	Derivatives rules are applied including, the following :Pgs. 405	1
		EK 2.1C7: (BC) Methods for calculating derivatives of realvalued functions can be extended to vector-valued functions, parametric functions, and functions in polar coordinates.	689,703,895	1

	LO 2.1D: Determine higher order derivatives.	**EK 2.1D1:** Differentiating f' produces the second derivative f'', provided the derivative of f' exists; repeating this process produces higher order derivatives of f.	Content includes conceptual understanding and multiple representations of first and second derivative tests. Pg. 123,129	1
		EK 2.1D2: Higher order derivatives are represented with a variety of notations. For $y = f(x)$, notations for the second derivative include $\frac{d^2y}{dx^2}$, $f''(x)$, and y''. Higher order derivatives can be denoted $\frac{d^n y}{dx^n}$ or $f^{(n)}(x)$.	Higher order derivatives are represented with a variety of notations both in lesson, examples, and assignments. Pg. 123	1
EU 2.2: A function's derivative, which is itself a function, can be used to understand the behavior of the function.	**LO 2.2A:** Use derivatives to analyze properties of a function.	**EK 2.2A1:** First and second derivatives of a function can provide information about the function and its graph including intervals of increase or decrease, local (relative) and global (absolute) extrema, intervals of upward or downward concavity, and points of inflection.	Use of functions derivative to understand the behavior of a functinos. Pgs. 117	1
		EK 2.2A2: Key features of functions and their derivatives can be identified and related to their graphical, numerical, and analytical representations.	Information about Functions and their Derivatives are used to identify and relate graphs using multiple represntations. Pgs. 117	1
		EK 2.2A3: Key features of the graphs of f, f', and f'' are related to one another.	Conceptual understanding of curve sketching between f, f', and f'' Pgs. 128	1
		EK 2.2A4: (BC) For a curve given by a polar equation $r = f(\theta)$, derivatives of r, x, and y with respect to θ and first and second derivatives of y with respect to x can provide information about the curve.	Pgs. 703	1

	LO 2.2B: Recognize the connection between differentiability and continuity.	**EK 2.2B1:** A continuous function may fail to be differentiable at a point in its domain.	Differentiability and continuity at specific points in the domain Pgs. 122	1
		EK 2.2B2: If a function is differentiable at a point, then it is continuous at that point.	Definition between differentiation and continuity Pgs. 122	1
EU 2.3: The derivative has multiple interpretations and applications including those that involve instantaneous rates of change.	**LO 2.3A:** Interpret the meaning of a derivative within a problem.	**EK 2.3A1:** The unit for $f'(x)$ is the unit for f divided by the unit for x.	The relationship of the derivative of a function is defined P 111	1
		EK 2.3A2: The derivative of a function can be interpreted as the instantaneous rate of change with respect to its independent variable.	The relationship of the derivative with respect to the instantaneous rate of change. Pg. 110	1
	LO 2.3B: Solve problems involving the slope of a tangent line.	**EK 2.3B1:** The derivative at a point is the slope of the line tangent to a graph at that point on the graph.	The relationship between the derivative and the slope of the tangent line at that point Pgs. 106	1
		EK 2.3B2: The tangent line is the graph of a locally linear approximation of the function near the point of tangency.	Local linearization and approximation Pgs. 106	1
	LO 2.3C: Solve problems involving related rates, optimization, rectilinear motion, **(BC)** and planar motion.	**EK 2.3C1:** The derivative can be used to solve rectilinear motion problems involving position, speed, velocity, and acceleration.	There is content relative to related rates, optimization, rectilinear motion and planar motion(BC) Pgs. 281	1

		EK 2.3C2: The derivative can be used to solve related rates problems, that is, finding a rate at which one quantity is changing by relating it to other quantities whose rates of change are known.	Related Rates Pgs. 181	1
		EK 2.3C3: The derivative can be used to solve optimization problems, that is, finding a maximum or minimum value of a function over a given interval.	Optimization involving max and min values Pgs. 258	1
		EK 2.3C4: (BC) Derivatives can be used to determine velocity, speed, and acceleration for a particle moving along curves given by parametric or vector-valued functions.	Planar and rectilinear motion Pgs. 689,895	1
	LO 2.3D: Solve problems involving rates of change in applied contexts.	**EK 2.3D1:** The derivative can be used to express information about rates of change in applied contexts.	Rates of change in applied contexts Pgs. 169,203	1
	LO 2.3E: Verify solutions to differential equations.	**EK 2.3E1:** Solutions to differential equations are functions or families of functions.	Solutions to differential equations are represented as families of functions, general solutions and particular solutions. Pgs. 143, 279, 625	1
		EK 2.3E2: Derivatives can be used to verify that a function is a solution to a given differential equation.	Pgs. 630 Ex 1-5	1
	LO 2.3F: Estimate solutions to differential equations.	**EK 2.3F1:** Slope fields provide visual clues to the behavior of solutions to first order differential equations.	Use of slope fields for solutions to differential equations Pgs. 630	1
		EK 2.3F2: (BC) For differential equations, Euler's method provides a procedure for approximating a solution or a point on a solution curve.	P 635	1

EU 2.4: The Mean Value Theorem connects the behavior of a differentiable function over an interval to the behavior of the derivative of that function at a particular point in the interval.	**LO 2.4A:** Apply the Mean Value Theorem to describe the behavior of a function over an interval.	**EK 2.4A1:** If a function f is continuous over the interval $[a, b]$ and differentiable over the interval (a, b), the Mean Value Theorem guarantees a point within that open interval where the instantaneous rate of change equals the average rate of change over the interval.	Use of the Mean Value theorem to describe and determine behavior of a function over an interval. Pgs. 215	1

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Big Idea 3: Integrals and the Fundamental Theorem of Calculus Integrals are used in a wide variety of practical and theoretical applications. AP Calculus students should understand the definition of a definite integral involving a Riemann sum, be able to approximate a definite integral using different methods, and be able to compute definite integrals using geometry. They should be familiar with basic techniques of integration and properties of integrals. The interpretation of a definite integral is an important skill, and students should be familiar with area, volume, and motion applications, as well as with the use of the definite integral as an accumulation function. It is critical that students grasp the relationship between integration and differentiation as expressed in the Fundamental Theorem of Calculus — a central idea in AP Calculus. Students should be able to work with and analyze functions defined by an integral.				
Enduring Understandings (Students will understand that...)	**Learning Objectives** (Students will be able to...)	**Essential Knowledge** (Students will know that...)		
EU 3.1: Antidifferentiation is the inverse process of differentiation.	**LO 3.1A:** Recognize antiderivatives of basic functions.	**EK 3.1A1:** An antiderivative of a function f is a function g whose derivative is f.	The antiderivative as an inverse process Pg. 278	1
		EK 3.1A2: Differentiation rules provide the foundation for finding antiderivatives.	The connection between the rules of the differentiation rules and foundation for integration Pgs. 278	1
EU 3.2: The definite integral of a function over an interval is the limit of a Riemann sum over that interval and can be calculated using a variety of strategies	**LO 3.2A(a):** Interpret the definite integral as the limit of a Riemann sum.	**EK 3.2A1:** A Riemann sum, which requires a partition of an interval , is the sum of products, each of which is the value of the function at a point in a subinterval multiplied by the length of that subinterval of the partition.	Riemann sum and the connection to the definite integral Pgs. 306	1

	LO 3.2A(b): Express the limit of a Riemann sum in integral notation.	**EK 3.2A2:** The definite integral of a continuous function f over the interval $[a, b]$, denoted by $\int_a^b f(x)dx$, is the limit of Riemann sums as the widths of the subintervals approach 0. That is, $\int_a^b f(x)dx = \lim_{\max \Delta x_i \to 0} \sum_{i=1}^{n} f(x_i^*)\Delta x_i$ where x_i^* is a value in the ith subinterval, Δx_i is the width of the ith subinterval, n is the number of subintervals, and $\max \Delta x_i$ is the width of the largest subinterval. Another form of the definition is $\int_a^b f(x)dx = \lim_{n \to \infty} \sum_{i=1}^{n} f(x_i^*)\Delta x_i$, where $\Delta x_i = \frac{b-a}{n}$ and x_i^* is a value in the ith subinterval.	Riemann sum in integral notation Pgs. 304-306 (Definite Integrals)	1
		EK 3.2A3: The information in a definite integral can be translated into the limit of a related Riemann sum, and the limit of a Riemann sum can be written as a definite integral.	Translation between definite integral and Riemann sum and vice versa Pgs. 306	1
	LO 3.2B: Approximate a definite integral.	**EK 3.2B1:** Definite integrals can be approximated for functions that are represented graphically, numerically, algebraically, and verbally.	Multiple representations of the definite integral Pgs. 311, 312, 316	1
		EK 3.2B2: Definite integrals can be approximated using a left Riemann sum, a right Riemann sum, a midpoint Riemann sum, or a trapezoidal sum; approximations can be computed using either uniform or nonuniform partitions.	Left, Right, Midpoint, Reiman sums as well as trap sums with uniform and non uniform partitions Pgs. 309	1

	LO 3.2C: Calculate a definite integral using areas and properties of definite integrals.	**EK 3.2C1:** In some cases, a definite integral can be evaluated by using geometry and the connection between the definite integral and area.	Geometric sums with the definite integral Pgs. 313	1
		EK 3.2C2: Properties of definite integrals include the integral of a constant times a function, the integral of the sum of two functions, reversal of limits of integration, and the integral of a function over adjacent intervals.	Integral of a constant, sum of 2 functions, reversal of limits and other limit rules. Pgs. 313	1
		EK 3.2C3: The definition of the definite integral may be extended to functions with removable or jump discontinuities.	Connection between jump and removable discontinuities and integrals P 567	1
	LO 3.2D: (BC) Evaluate an improper integral or show that an improper integral diverges.	**EK 3.2D1:** (BC) An improper integral is an integral that has one or both limits infinite or has an integrand that is unbounded in the interval of integration.	Pg. 567	1
		EK 3.2D2: (BC) Improper integrals can be determined using limits of definite integrals.	Pgs. 567	1

EU 3.3: The Fundamental Theorem of Calculus, which has two distinct formulations, connects differentiation and integration.	**LO 3.3A:** Analyze functions defined by an integral.	**EK 3.3A1:** The definite integral can be used to define new functions; for example, $f(x)=\int_a^x e^{-t^2}\,dt$.	Definite integral to define functions Pgs. 319, 320	1
		EK 3.3A2: If f is a continuous function on the interval $[a, b]$, then $\frac{d}{dx}\left(\int_a^x f(t)\,dt\right)=f(x)$, where x is between a and b.	Continuous function on the closed interval Pgs.326	1
		EK 3.3A3: Graphical, numerical, analytical, and verbal representations of a function f provide information about the function g defined as $g(x)=\int_a^x f(t)\,dt$.	Multiple representations as required by the college board. Pgs. 323, 327	1
	LO 3.3B(a): Calculate antiderivatives.	**EK 3.3B1:** The function defined by $F(x)=\int_a^x f(t)\,dt$ is an antiderivative of f.	Students are able to calculate antiderivatives Pg. 321	1
	LO 3.3B(b): Evaluate definite integrals.	**EK 3.3B2:** If f is continuous on the interval $[a, b]$ and F is an antiderivative of f, then $\int_a^b f(x)\,dx=F(b)-F(a)$.	Evaluation of definite integrals using the FTC Pgs. 324	1
		EK 3.3B3: The notation $\int f(x)\,dx=F(x)+C$ means that $F'(x)=f(x)$, and $\int f(x)\,dx$ is called an indefinite integral of the function f.	The constant of integration Pg. 330	1
		EK 3.3B4: Many functions do not have closed form antiderivatives.	Pg. 546	1

		EK 3.3B5: Techniques for finding antiderivatives include algebraic manipulation such as long division and completing the square, substitution of variables, (BC) integration by parts, and nonrepeating linear partial fractions.	Pgs. 340, 512, 533,	1
EU 3.4: The definite integral of a function over an interval is a mathematical tool with many interpretations and applications involving accumulation.	**LO 3.4A:** Interpret the meaning of a definite integral within a problem.	**EK 3.4A1:** A function defined as an integral represents an accumulation of a rate of change.	Accumulation of a rate of change Pg. 333	1
		EK 3.4A2: The definite integral of the rate of change of a quantity over an interval gives the net change of that quantity over that interval.	Rate of change connection to net change Pgs. 333	1
		EK 3.4A3: The limit of an approximating Riemann sum can be interpreted as a definite integral.	Riemann sum connection to definite integral Pgs. 306	1
	LO 3.4B: Apply definite integrals to problems involving the average value of a function.	**EK 3.4B1:** The average value of a function f over an interval $[a, b]$ is $\frac{1}{b-a}\int_a^b f(x)\,dx$.	Definite integral connection to average Pg. 389	1
	LO 3.4C: Apply definite integrals to problems involving motion.	**EK 3.4C1:** For a particle in rectilinear motion over an interval of time, the definite integral of velocity represents the particle's displacement over the interval of time, and the definite integral of speed represents the particle's total distance traveled over the interval of time.	Particle motion over an interval in relation to displacement, speed, total distance Pg 281	1

		EK 3.4C2: (BC) The definite integral can be used to determine displacement, distance, and position of a particle moving along a curve given by parametric or vector-valued functions.	Limited use of parametric and vectors Pg. 689, 910	.5
	LO 3.4D: Apply definite integrals to problems involving area, volume, **(BC)** and length of a curve.	**EK 3.4D1:** Areas of certain regions in the plane can be calculated with definite integrals. (BC) Areas bounded by polar curves can be calculated with definite integrals	Area bound by polar curves with definite integrals Pg. 356, 709	1
		EK 3.4D2: Volumes of solids with known cross sections, including discs and washers, can be calculated with definite integrals.	Volumes with cross sections, Disk and Shell..even washers Pg. 366, 377	1
		EK 3.4D3: (BC) The length of a planar curve defined by a function or by a parametrically defined curve can be calculated using a definite integral.	Planar curve with definite integral Pg. 584	1
	LO 3.4E: Use the definite integral to solve problems in various contexts.	**EK 3.4E1:** The definite integral can be used to express information about accumulation and net change in many applied contexts.	Accumulation and net change in applied context Pgs. 598,609,613	1

EU 3.5: Antidifferentiation is an underlying concept involved in solving separable differential equations. Solving separable differential equations involves determining a function or relation given its rate of change.	**LO 3.5A:** Analyze differential equations to obtain general and specific solutions.	**EK 3.5A1:** Antidifferentiation can be used to find specific solutions to differential equations with given initial conditions, including applications to motion along a line, exponential growth and decay, **(BC)** and logistic growth.	Specific solutions given initial conditions with both Slope Fields and Eulers meth Pgs. 647, 650	1
		EK 3.5A2: Some differential equations can be solved by separation of variables.	Separation of Variables with general and particular solutions. Pgs. 639	1
		EK 3.5A3: Solutions to differential equations may be subject to domain restrictions.	Growth and Decay, linear differential equations Pgs. 626	1
		EK 3.5A4: The function F defined by $F(x)=c+\int_a^x f(t)dt$ is a general solution to the differential equation $\frac{dy}{dx}=f(x)$, and $F(x)=y_0+\int_a^x f(t)dt$ is a particular solution to the differential equation $\frac{dy}{dx}=f(x)$ satisfying $F(a)=y_0$.	General and Particular solutions Pg.628	1
	LO 3.5B: Interpret, create and solve differential equations from problems in context.	**EK 3.5B1:** The model for exponential growth and decay that arises from the statement "The rate of change of a quantity is proportional to the size of the quantity" is $\frac{dy}{dt}=ky$.	The connection to growth and decay and the algebraic rate of change Pgs. 650, 667	1
		EK 3.5B2: (BC) The model for logistic growth that arises from the statement "The rate of change of a quantity is jointly proportional to the size of the quantity and the difference between the quantity and the carrying capacity" is $\frac{dy}{dt}=ky(a-y)$.	Pgs. 651	1

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Big Idea 4: Series (BC) The AP Calculus BC curriculum includes the study of series of numbers, power series, and various methods to determine convergence or divergence of a series. Students should be familiar with Maclaurin series for common functions and general Taylor series representations. Other topics include the radius and interval of convergence and operations on power series. The technique of using power series to approximate an arbitrary function near a specific value allows for an important connection to the tangent-line problem and is a natural extension that helps achieve a better approximation. The concept of approximation is a common theme throughout AP Calculus, and power series provide a unifying, comprehensive conclusion.				
Enduring Understandings (Students will understand that…)	**Learning Objectives** (Students will be able to…)	**Essential Knowledge** (Students will know that…)		
EU 4.1: The sum of an infinite number of real numbers may converge.	**LO 4.1A:** Determine whether a series converges or diverges.	**EK 4.1A1:** The nth partial sum is defined as the sum of the first n terms of a sequence.	Nth partial sums Pg. 748	1
		EK 4.1A2: An infinite series of numbers converges to a real number S (or has sum S), if and only if the limit of its sequence of partial sums exists and equals S.	Convergence of infinite series Pg. 748	1
		EK 4.1A3: Common series of numbers include geometric series, the harmonic series, and p-series.	Geometric, harmonic, p series Pg. 749,753, 762	1
		EK 4.1A4: A series may be absolutely convergent, conditionally convergent, or divergent.	Absolute convergence and divergent, conditional convergence Pgs. 777,778,748	1
		EK 4.1A5: If a series converges absolutely, then it converges.	Absolute convergence. Pg. 777	1

		EK 4.1A6: In addition to examining the limit of the sequence of partial sums of the series, methods for determining whether a series of numbers converges or diverges are the nth term test, the comparison test, the limit comparison test, the integral test, the ratio test, and the alternating series test. **EXCLUSION STATEMENT (EK 4.1A6):** *Other methods for determining convergence or divergence of a series of numbers are not assessed on the AP Calculus AB or BC Exam. However, teachers may include these topics in the course if time permits.*	Limits of a sequence and partial sums Pgs. 761, 769, 772	1
	LO 4.1B: Determine or estimate the sum of a series.	**EK 4.1B1:** If a is a real number and r is a real number such that $\lvert r\rvert < 1$, then the geometric series $\sum_{n=0}^{\infty} ar^n = \frac{a}{1-r}$.	Geometric Series Pg. 750	1
		EK 4.1B2: If an alternating series converges by the alternating series test, then the alternating series error bound can be used to estimate how close a partial sum is to the value of the infinite series.	Alternating series and alternating series test, and error bound Pg. 772	1
		EK 4.1B3: If a series converges absolutely, then any series obtained from it by regrouping or rearranging the terms has the same value.	Absolute Convergence Pg. 782	1

EU 4.2: A function can be represented by an associated power series over the interval of convergence for the power series.	**LO 4.2A:** Construct and use Taylor polynomials.	**EK 4.2A1:** The coefficient of the nth-degree term in a Taylor polynomial centered at $x = a$ for the function f is $\frac{f^{(n)}(a)}{n!}$.	Pg. 799	1
		EK 4.2A2: Taylor polynomials for a function f centered at $x = a$ can be used to approximate function values of f near $x = a$.	Pgs. 814	1
		EK 4.2A3: In many cases, as the degree of a Taylor polynomial increases, the nth-degree polynomial will converge to the original function over some interval.	Pg. 814	1
		EK 4.2A4: The Lagrange error bound can be used to bound the error of a Taylor polynomial approximation to a function.	Pg. 815	1
		EK 4.2A5: In some situations where the signs of a Taylor polynomial are alternating, the alternating series error bound can be used to bound the error of a Taylor polynomial approximation to the function.	815	1
	LO 4.2B: Write a power series representing a given function.	**EK 4.2B1:** A power series is a series of the form $\sum_{n=0}^{\infty} a_n(x-r)^n$ where n is a non-negative integer, $\{a_n\}$ is a sequence of real numbers, and r is a real number.	Pg. 786	
		EK 4.2B2: The Maclaurin series for $\sin(x)$, $\cos(x)$, and e^x provide the foundation for constructing the Maclaurin series for other functions.	Pgs. 810	

		EK 4.2B3: The Maclaurin se for $\frac{1}{1-x}$ is a geometric series.	P 808, Table 1
		EK 4.2B4: A Taylor polynomial for $f(x)$ is a partial sum of the Taylor series for $f(x)$.	P814 11.11 Applications of Taylor Polynomials
		EK 4.2B5: A power series for a given function can be derived by various methods (e.g., algebraic processes, substitutions, using properties of geometric series, and operations on known series such as term-byterm integration or term-by-term differentiation).	Pgs. 792
	LO 4.2C: Determine the radius and interval of convergence of a power series.	**EK 4.2C1:** If a power series converges, it either converges at a single point or has an interval of convergence.	Pg. 789
		EK 4.2C2: The ratio test can be used to determine the radius of convergence of a power series.	Pg. 787, 790
		EK 4.2C3: If a power series has a positive radius of convergence, then the power series is the Taylor series of the function to which it converges over the open interval.	Pg. 794
		EK 4.2C4: The radius of convergence of a power series obtained by term-by-term differentiation or term-by-term integration is the same as the radius of convergence of the original power series.	Pg. 794

Indicators of Quality:

Indicators of Quality	Evidence- Give specific examples.	Rating: (Reviewer only.)
1. Lessons are thoughtfully structured and support the teacher in leading the class through the learning paths at hand, with active participation by all students in their own learning and in the learning of their classmates.	Evidence- The texts encourages students to focus on calculus concepts and processes and aides the teacher in their role as instructor and facilitator.	(Reviewer only.) ____X__ Yes _____ No
2. The underlying design of the materials includes both problems and exercises. (In solving problems, students learn new mathematics, whereas in working exercises, students apply what they have already learned to build mastery.) Each problem or exercise has a purpose. NOTE: This Criterion does not require that the problems and exercises be labeled as such.	Evidence- The materials included exercises that build on each other as well as modeling and applications that build students conceptual understanding. The overall design of the program supports students as they learn independently and in a group setting.	(Reviewer only.) ____X__ Yes _____ No
3. Design of assignments is not haphazard: exercises are given in intentional sequences in order to strengthen students' mathematical understanding.	Evidence- Lessons and units lend to a coherent flow of concept introduction, examples, check for understanding, independent learning, group learning, exercises and connections.	(Reviewer only.) ___X___ Yes _____ No
4. There are separate teacher materials that support and reward teacher study including, but not limited to: discussion of the mathematics of the units and the mathematical point of each lesson as it relates to the organizing concepts of the unit, discussion on student ways of thinking and anticipating a variety of students responses, guidance on lesson flow, guidance on questions that prompt students thinking, and discussion of desired mathematical behaviors being elicited among students.	Evidence- The supplemental materials support the teachers role as a facilitator of mathematical discussions and help to strengthen the conceptual understanding of these students.	(Reviewer only.) __X____ Yes _____ No

5. Manipulatives suggested in the materials are faithful representations of the mathematical objects they represent and are connected to written methods.	Evidence- There are no physical manipulatives for this program, however this course is a college level course and manipulatives are not really appropriate at this level.	(Reviewer only.) ___X__ Yes _____ No
6. Materials include a variety of curriculum-embedded assessments. Examples include pre-, formative, summative, and self-assessment resources.	Evidence- There are self assessments provided in the units, a long with an assessment bank, lesson quizzes, and AP questions. Students are provided examples in step by step fashion with explanatory sentences for self assessment.	(Reviewer only.) ___X___ Yes _____ No
7. Assessments contain aligned rubrics, answer keys, and scoring guidelines that provide sufficient guidance for interpreting student performance.	Evidence- Answer keys, solutions guides, guided solutions, scoring rubrics for AP questions are provided	(Reviewer only.) ___X___ Yes _____ No
8. Materials assess student proficiency using methods that are accessible and unbiased, including the use of course-level language in student prompts.	Evidence- The content is accessible to all students and no sign of bias is evident in the the lesson material, student text, or teacher materiasl. Appropriate course level language is evident throughout the course. Key vocabulary terms are bolded to ensure students understand mathematical terms.	(Reviewer only.) ___X___ Yes _____ No
9. Materials are carefully evaluated by qualified individuals, whose names are listed, in an effort to ensure freedom from mathematical errors and course-level appropriateness.	Evidence- The material was written and edited by qualified instructors and appear to be free from mathematical error and shows an appropriate course level.	(Reviewer only.) ____X__ Yes _____ No
10. The visual design supports students in engaging thoughtfully with the subject. Navigation through the text is clear.	Evidence- Navigation through the text is clear and well organized. The visual graphics and designs are level appropriate and engaging.	(Reviewer only.) ___X___ Yes _____ No

COMMENTS:

STRENGTHS	WEAKNESSES
The Strengths of this curriculum are evident in the AP level questioning techniques and review. There are teacher supplements for exercises with full solutions and an available student solution manual that offers only solutions to odd exercises. The rigor of the text and the application and modeling questions are excellent especially with the preparation and mathematical vocabulary and wording for the AP Calculus test.	The on line resource material is weaker for a new teacher. There are supplemental resources for the teacher in the form of study guides, student solutions manual, complete solutions manual, test bank, resource guide and AP test Prep, but these are hard to edit and take time to work through and organize. There is a test bank, but not a test generator.

IDAHO STATE DEPARTMENT OF EDUCATION

Advanced Placement Course: Calculus AB & BC

Content Area: AP Mathematics

Course Title: AP Calculus AB/BC

Title of Material: Single Variable Calculus Early Transcendentals 8E

Author: James Stewart

Publisher: Cengage Learning, INC

ISBN #: 9781305267275 **Copyright** 2016

Reviewers: HB and SO

Meets Content Standards Alignment: ✓ Yes _____ No

Meets Materials Analysis Evaluation: ✓ Yes _____ No

✓ **Core Program** 9390 correlation W/ BC

_____ **Other Program**

_____ **Resource/Supplemental**

_____ **Not Recommended**

Advanced Placement:

- ☐ AP Capstone
- ☐ Arts
- ☐ English
- ☐ History & Social Science
- ☒ Math & Computer Science
- ☐ Sciences
- ☐ World Languages & Cultures

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Standards Alignment Evaluation Rubric

0 = No Alignment– **Not Evident:** Content as described in the Standards is **not evident**.

.5 = Partial Alignment- **Partially Evident:** Content as described in the Standards is **partially evident** and there are few gaps.

1 = High Alignment – **Clearly Evident:** Content is fully aligned as described in the Standards and repeatedly included to guarantee extensive opportunities for students to work with the content. Alignment is **clearly evident**.

N/A = Not applicable for standard

Note: In the Concept Outline, subject matter that is included only in the BC course is indicated with blue shading.

<table>
<tr><td colspan="3">Advanced Placement</td><td>Calculus AB & BC</td><td></td></tr>
<tr><td colspan="3">Standards and Learning Indicators</td><td>Publisher/Provider: List units/lessons with specific examples of where standards are Introduced/Taught/Assessed.</td><td>Point Value 0/.5/1 (Reviewer)</td></tr>
<tr><td colspan="5">Big Idea 1: Limits
Many calculus concepts are developed by first considering a discrete model and then the consequences of a limiting case. Therefore, the idea of limits is essential for discovering and developing important ideas, definitions, formulas, and theorems in calculus. Students must have a solid, intuitive understanding of limits and be able to compute various limits, including one-sided limits, limits at infinity, the limit of a sequence, and infinite limits. They should be able to work with tables and graphs in order to estimate the limit of a function at a point. Students should know the algebraic properties of limits and techniques for finding limits of indeterminate forms, and they should be able to apply limits to understand the behavior of a function near a point. Students must also understand how limits are used to determine continuity, a fundamental property of functions.</td></tr>
<tr><td>Enduring Understandings
(Students will understand that…)</td><td>Learning Objectives
(Students will be able to…)</td><td>Essential Knowledge
(Students will know that…)</td><td></td><td></td></tr>
</table>

EU 1.1: The concept of a limit can be used to understand the behavior of functions.	**LO 1.1A (a):** Express limits symbolically using correct notation. **LO 1.1A (b):** Interpret limits expressed symbolically.	**EK 1.1A1:** Given a function f, the limit of $f(x)$ as x approaches c is a real number R if $f(x)$ can be made arbitrarily close to R by taking x sufficiently close to c (but not equal to c). If the limit exists and is a real number, then the common notation is $\lim_{x \to c} f(x) = R$. **EXCLUSION STATEMENT (EK 1.1A1):** The epsilon-delta definition of a limit is not assessed on the AP Calculus AB or BC Exam. However, teachers may include this topic in the course if time permits.	**Lesson 2.2 – 2.4** **Students calculate limits using direct substitution and analytical techniques.**	1
		EK 1.1A2: The concept of a limit can be extended to include one-sided limits, limits at infinity, and infinite limits.	**Lesson 2.2 & 2.6** **Students use end behavior and asymptotes to find limits at infinity.** **Definition of one-sided limit is provided in lesson 2.2**	1
		EK 1.1A3: A limit might not exist for some functions at particular values of . Some ways that the limit might not exist are if the function is unbounded, if the function is oscillating near this value, or if the limit from the left does not equal the limit from the right. **EXAMPLES OF LIMITS THAT DO NOT EXIST:** $\lim_{x \to 0} \frac{1}{x^2} = \infty$ $\quad \lim_{x \to 0} \sin\left(\frac{1}{x}\right)$ *does not exist* $\lim_{x \to 0} \frac{\lvert x \rvert}{x}$ *does not exist* $\quad \lim_{x \to 0} \frac{1}{x}$ *does not exist*	**Lesson 2.5** **Students use left- and right-hand limits in the context of continuity.** **Limits that do not exist are discussed in lesson 2.2. Students look at oscillating behavior near a value.**	**0.5** **Some of these concepts were difficult to locate in text.**
	LO 1.1B: Estimate limits of functions	**EK 1.1B1:** Numerical and graphical information can be used to estimate limits.	**Lesson 2.2** **Students find limits by creating a table of values.**	1

	LO 1.1C: Determine limits of functions.	**EK 1.1C1:** Limits of sums, differences, products, quotients, and composite functions can be found using the basic theorems of limits and algebraic rules.	**Lesson 2.3** **Operations with limits referred to as "Limit Laws". Text then refers to them as properties (more familiar terminology)**	1
		EK 1.1C2: The limit of a function may be found by using algebraic manipulation, alternate forms of trigonometric functions, or the squeeze theorem.	**Lesson 2.3** **Squeeze Theorem and algebraic manipulation to find limits**	1
		EK 1.1C3: Limits of the indeterminate forms $\frac{0}{0}$ and $\frac{\infty}{\infty}$ may be evaluated using L'Hospital's Rule.	**Lesson 4.4**	1
	LO 1.1D: Deduce and interpret behavior of functions using limits.	**EK 1.1D1:** Asymptotic and unbounded behavior of functions can be explained and described using limits.	**Lesson 4.5 / Lesson 2.2** **Asymptotic behavior is mentioned in some of the exercises in the problem set.** **Limits approaching infinity is mentioned in lesson 2.2. Text does a thorough job of explaining limits at infinity along horizontal asymptotes. Limits approaching vertical asymptotes to a lesser degree. Text tends to be verbal rather than visual.**	0.5
		EK 1.1D2: Relative magnitudes of functions and their rates of change can be compared using limits.	**Lesson 2.7 & 2.8. 4.4** **Derivatives and tangent lines are introduced using limits. Relative magnitudes and their rates of change is not mentioned until briefly in section 4.4.**	1
EU 1.2: Continuity is a key property of functions that is defined using limits	**LO 1.2A:** Analyze functions for intervals of continuity or points of discontinuity.	**EK 1.2A1:** A function f is continuous at $x = c$ provided that $f(c)$ exists, $\lim_{x \to c} f(x)$ exists, and $\lim_{x \to c} f(x) = f(c)$.	**Lesson 2.5** **Limits are used to explain concept of continuity**	1
		EK 1.2A2: Polynomial, rational, power, exponential, logarithmic, and trigonometric functions are continuous at all points in their domains.	**Lesson 2.5** **These are specifically identified in 7 Theorem on page 120 in Lesson 2.5**	1

		EK 1.2A3: Types of discontinuities include removable discontinuities, jump discontinuities, and discontinuities due to vertical asymptotes.	**Lesson 2.5** **Types of discontinuity are listed by name, example functions, and illustrations.**	1
	LO 1.2B: Determine the applicability of important calculus theorems using continuity.	**EK 1.2B1:** Continuity is an essential condition for theorems such as the Intermediate Value Theorem, the Extreme Value Theorem, and the Mean Value Theorem.	**Continuity is mentioned as the basis for each of the given theorems.** **Intermediate Value Theorem: Lesson 2.5** **Extreme Value Theorem: Lesson 4.1** **Mean Value Theorem: Lesson 4.2**	1

Standards and Learning Indicators			Publisher/Provider: List units/lessons with specific examples of where standards are Introduced/Taught/Assessed.	Point Value 0/.5/1 (Reviewer)
Big Idea 2: Derivatives Using derivatives to describe the rate of change of one variable with respect to another variable allows students to understand change in a variety of contexts. In AP Calculus, students build the derivative using the concept of limits and use the derivative primarily to compute the instantaneous rate of change of a function. Applications of the derivative include finding the slope of a tangent line to a graph at a point, analyzing the graph of a function (for example, determining whether a function is increasing or decreasing and finding concavity and extreme values), and solving problems involving rectilinear motion. Students should be able to use different definitions of the derivative, estimate derivatives from tables and graphs, and apply various derivative rules and properties. In addition, students should be able to solve separable differential equations, understand and be able to apply the Mean Value Theorem, and be familiar with a variety of real-world applications, including related rates, optimization, and growth and decay models.				
Enduring Understandings (Students will understand that…)	**Learning Objectives** (Students will be able to…)	**Essential Knowledge** (Students will know that…)		
EU 2.1: The derivative of a function is defined as the limit of a difference quotient and can be determined using a variety of strategies.	**LO 2.1A:** Identify the derivative of a function as the limit of a difference quotient.	**EK 2.1A1:** The difference quotients $\frac{f(a+h)-f(a)}{h}$ and $\frac{f(x)-f(a)}{x-a}$ express the average rate of change of a function over an interval.	**Explored in lesson 2.7. Definition is given in written form. There is an illustration in text to show concept.**	1

		EK 2.1A2: The instantaneous rate of change of a function at a point can be expressed by $\lim_{h\to 0}\frac{f(a+h)-f(a)}{h}$ or $\lim_{x\to a}\frac{f(x)-f(a)}{x-a}$, provided that the limit exists. These are common forms of the definition of the derivative and are denoted $f'(a)$.	**Lesson 2.7** **Clearly identified—boxed, examples provided, along with written description.**	1
		EK 2.1A3: The derivative of f is the function whose value at x is $\lim_{h\to 0}\frac{f(x+h)-f(x)}{h}$ provided this limit exists.	**Lesson 2.7**	1
		EK 2.1A4: For $y=f(x)$, notations for the derivative include $\frac{dy}{dx}$, $f'(x)$, and y'.	**Lesson 2.8 explores other derivative notation. More notations than the three required.**	1
		EK 2.1A5: The derivative can be represented graphically, numerically, analytically, and verbally.	**Throughout chapter 2 of the text. Also includes exploration using a graphing calculator.**	1
	LO 2.1B: Estimate derivatives.	**EK 2.1B1:** The derivative at a point can be estimated from information given in tables or graphs.	**Lesson 2.7 – students calculate rate of change of national debt based on a table of values. Students estimate the rate of change of a temperature of a turkey after it's removed from an oven by observing a graph.**	1
	LO 2.1C: Calculate derivatives.	**EK 2.1C1:** Direct application of the definition of the derivative can be used to find the derivative for selected functions, including polynomial, power, sine, cosine, exponential, and logarithmic functions.	**Exponential – lesson 3.1, Trigonometric – lesson 3.3, Polynomial & power – lesson 3.1, Logarithmic functions – 3.6**	1
		EK 2.1C2: Specific rules can be used to calculate derivatives for classes of functions, including polynomial, rational, power, exponential, logarithmic, trigonometric, and inverse trigonometric.	**Beginning in chapter 3 and continuing throughout text.**	1

		EK 2.1C3: Sums, differences, products, and quotients of functions can be differentiated using derivative rules.	**Lesson 3.2**	1
		EK 2.1C4: The chain rule provides a way to differentiate composite functions.	**Lesson 3.4**	1
		EK 2.1C5: The chain rule is the basis for implicit differentiation.	**Implicit Differentiation is introduced in lesson 3.5, clearly stated pages 209-210.**	1
		EK 2.1C6: The chain rule can be used to find the derivative of an inverse function, provided the derivative of that function exists.	**Latter part of lesson 3.5 has derivatives of inverse trigonometric functions. No mention is made of derivative of inverse at a point i.e.** $g'(x) = \frac{1}{f'(g(x))}$ **where f and g are inverse functions.**	0.5
		EK 2.1C7: (BC) Methods for calculating derivatives of realvalued functions can be extended to vector-valued functions, parametric functions, and functions in polar coordinates.	**Derivatives of parametric and polar functions explored in chapter 10.**	1

	LO 2.1D: Determine higher order derivatives.	**EK 2.1D1:** Differentiating f' produces the second derivative f'', provided the derivative of f' exists; repeating this process produces higher order derivatives of f.	**Lesson 2.8**	1
		EK 2.1D2: Higher order derivatives are represented with a variety of notations. For $y = f(x)$, notations for the second derivative include $\frac{d^2y}{dx^2}$, $f''(x)$, and y''. Higher order derivatives can be denoted $\frac{d^ny}{dx^n}$ or $f^{(n)}(x)$.	**Other notations for higher order derivatives in lesson 2.8. Leibnitz notation as well as higher order derivatives in parentheses: (4)**	1
EU 2.2: A function's derivative, which is itself a function, can be used to understand the behavior of the function.	**LO 2.2A:** Use derivatives to analyze properties of a function.	**EK 2.2A1:** First and second derivatives of a function can provide information about the function and its graph including intervals of increase or decrease, local (relative) and global (absolute) extrema, intervals of upward or downward concavity, and points of inflection.	**Using derivatives to find extrema in lesson 4.1. Using derivatives to find intervals of increase or decrease introduced in lesson 4.3, along with concavity and points of inflection.**	1
		EK 2.2A2: Key features of functions and their derivatives can be identified and related to their graphical, numerical, and analytical representations.	**Summarized in lesson 4.5 "summary of curve sketching". Tables, graphs, and analytical representations are used.**	1
		EK 2.2A3: Key features of the graphs of f, f', and f'' are related to one another.	**There are some examples of this in the exercises in chapter 4, but not much practice.**	0.5
		EK 2.2A4: (BC) For a curve given by a polar equation $r = f(\theta)$, derivatives of r, x, and y with respect to θ and first and second derivatives of y with respect to x can provide information about the curve.	**First derivatives of polar equations and slope are covered in this text, but no second derivatives.**	0.5

	LO 2.2B: Recognize the connection between differentiability and continuity.	**EK 2.2B1:** A continuous function may fail to be differentiable at a point in its domain.	**Lesson 2.8 explores how a function can fail to be differentiable.**	1
		EK 2.2B2: If a function is differentiable at a point, then it is continuous at that point.	**4 Theorem lesson 2.8**	1
EU 2.3: The derivative has multiple interpretations and applications including those that involve instantaneous rates of change.	**LO 2.3A:** Interpret the meaning of a derivative within a problem.	**EK 2.3A1:** The unit for $f'(x)$ is the unit for f divided by the unit for x.	**Evident in text**	1
		EK 2.3A2: The derivative of a function can be interpreted as the instantaneous rate of change with respect to its independent variable.	**Lesson 2.7**	1
	LO 2.3B: Solve problems involving the slope of a tangent line.	**EK 2.3B1:** The derivative at a point is the slope of the line tangent to a graph at that point on the graph.	**Lesson 2.7**	1
		EK 2.3B2: The tangent line is the graph of a locally linear approximation of the function near the point of tangency.	**Lesson 3.10**	1
	LO 2.3C: Solve problems involving related rates, optimization, rectilinear motion, (BC) and planar motion.	**EK 2.3C1:** The derivative can be used to solve rectilinear motion problems involving position, speed, velocity, and acceleration.	**Lesson 4.9 and others**	1

		EK 2.3C2: The derivative can be used to solve related rates problems, that is, finding a rate at which one quantity is changing by relating it to other quantities whose rates of change are known.	**Lesson 3.9**	1
		EK 2.3C3: The derivative can be used to solve optimization problems, that is, finding a maximum or minimum value of a function over a given interval.	**Lesson 4.7**	1
		EK 2.3C4: (BC) Derivatives can be used to determine velocity, speed, and acceleration for a particle moving along curves given by parametric or vector-valued functions.	**Not a part of this text.**	0
	LO 2.3D: Solve problems involving rates of change in applied contexts.	**EK 2.3D1:** The derivative can be used to express information about rates of change in applied contexts.	**Text includes a special section 3.7, which looks at rates of change in the natural and social sciences, with many applications.**	1
	LO 2.3E: Verify solutions to differential equations.	**EK 2.3E1:** Solutions to differential equations are functions or families of functions.	**Lessons 4.9 and 9.1 look at differential equations and families of functions**	1
		EK 2.3E2: Derivatives can be used to verify that a function is a solution to a given differential equation.	**Lesson 4.9** **Very few examples and problems on differential equations.**	0.5
	LO 2.3F: Estimate solutions to differential equations.	**EK 2.3F1:** Slope fields provide visual clues to the behavior of solutions to first order differential equations.	**Lesson 9.2 Direction Fields**	1

		EK 2.3F2: (BC) For differential equations, Euler's method provides a procedure for approximating a solution or a point on a solution curve.	**Lesson 9.2**	1
EU 2.4: The Mean Value Theorem connects the behavior of a differentiable function over an interval to the behavior of the derivative of that function at a particular point in the interval.	**LO 2.4A:** Apply the Mean Value Theorem to describe the behavior of a function over an interval.	**EK 2.4A1:** If a function f is continuous over the interval $[a, b]$ and differentiable over the interval (a,b), the Mean Value Theorem guarantees a point within that open interval where the instantaneous rate of change equals the average rate of change over the interval.	**Lesson 4.2**	1

Standards and Learning Indicators			Publisher/Provider: List units/lessons with specific examples of where standards Introduced/Taught/Assessed.	Point Value 0/.5/1 (Reviewer)
Big Idea 3: Integrals and the Fundamental Theorem of Calculus Integrals are used in a wide variety of practical and theoretical applications. AP Calculus students should understand the definition of a definite integral involving a Riemann sum, be able to approximate a definite integral using different methods, and be able to compute definite integrals using geometry. They should be familiar with basic techniques of integration and properties of integrals. The interpretation of a definite integral is an important skill, and students should be familiar with area, volume, and motion applications, as well as with the use of the definite integral as an accumulation function. It is critical that students grasp the relationship between integration and differentiation as expressed in the Fundamental Theorem of Calculus — a central idea in AP Calculus. Students should be able to work with and analyze functions defined by an integral.				
Enduring Understandings (Students will understand that…)	**Learning Objectives** (Students will be able to…)	**Essential Knowledge** (Students will know that…)		
EU 3.1: Antidifferentiation is the inverse process of differentiation.	**LO 3.1A:** Recognize antiderivatives of basic functions.	**EK 3.1A1:** An antiderivative of a function f is a function g whose derivative is f.	**Lesson 4.9**	1
		EK 3.1A2: Differentiation rules provide the foundation for finding antiderivatives.	**Lesson 4.9**	1
EU 3.2: The definite integral of a function over an interval is the limit of a Riemann sum over that interval and can be calculated using a variety of strategies	**LO 3.2A(a):** Interpret the definite integral as the limit of a Riemann sum.	**EK 3.2A1:** A Riemann sum, which requires a partition of an interval , is the sum of products, each of which is the value of the function at a point in a subinterval multiplied by the length of that subinterval of the partition.	**Lesson 5.2 Riemann sums are formally introduced. Prior to this students are given practice approximating the area under a curve using geometry and summation techniques.**	1

	LO 3.2A(b): Express the limit of a Riemann sum in integral notation.	**EK 3.2A2:** The definite integral of a continuous function f over the interval $[a, b]$, denoted by $\int_a^b f(x)dx$, is the limit of Riemann sums as the widths of the subintervals approach 0. That is, $\int_a^b f(x)dx = \lim_{\max \Delta x_i \to 0} \sum_{i=1}^{n} f(x_i^*)\Delta x_i$ where x_i^* is a value in the ith subinterval, Δx_i is the widtl of the ith subinterval, n is the number of subintervals, and $\max \Delta x_i$ is the width of the largest subinterval. Another form of the definition is $\int_a^b f(x)dx = \lim_{n \to \infty} \sum_{i=1}^{n} f(x_i^*)\Delta x_i$, where $\Delta x_i = \frac{b-a}{n}$ and x_i^* is a value in the ith subinterval.	**Lesson 5.2**	1
		EK 3.2A3: The information in a definite integral can be translated into the limit of a related Riemann sum, and the limit of a Riemann sum can be written as a definite integral.	**Lesson 5.2**	1
	LO 3.2B: Approximate a definite integral.	**EK 3.2B1:** Definite integrals can be approximated for functions that are represented graphically, numerically, algebraically, and verbally.	**Parts of chapters 5 and 7**	1
		EK 3.2B2: Definite integrals can be approximated using a left Riemann sum, a right Riemann sum, a midpoint Riemann sum, or a trapezoidal sum; approximations can be computed using either uniform or nonuniform partitions.	**Left- and right-Riemann sums in lesson 5.1, but not very clear. Left- and right- are addressed again in 7.7. Midpoint rule lesson 5.2. Trapezoid rule lesson 7.7.**	0.5

	LO 3.2C: Calculate a definite integral using areas and properties of definite integrals.	**EK 3.2C1:** In some cases, a definite integral can be evaluated by using geometry and the connection between the definite integral and area.	**Lesson 5.1**	1
		EK 3.2C2: Properties of definite integrals include the integral of a constant times a function, the integral of the sum of two functions, reversal of limits of integration, and the integral of a function over adjacent intervals.	**Lessons 4.9-5.2**	1
		EK 3.2C3: The definition of the definite integral may be extended to functions with removable or jump discontinuities.	**Not in this text**	0
	LO 3.2D: (BC) Evaluate an improper integral or show that an improper integral diverges.	**EK 3.2D1:** (BC) An improper integral is an integral that has one or both limits infinite or has an integrand that is unbounded in the interval of integration.	**Lesson 7.8**	1
		EK 3.2D2: (BC) Improper integrals can be determined using limits of definite integrals.	**Lesson 7.8**	1

EU 3.3: The Fundamental Theorem of Calculus, which has two distinct formulations, connects differentiation and integration.	**LO 3.3A:** Analyze functions defined by an integral.	**EK 3.3A1:** The definite integral can be used to define new functions; for example, $f(x)=\int_0^x e^{-t^2}dt$.	**Lesson 5.3**	1
		EK 3.3A2: If f is a continuous function on the interval $[a, b]$, then $\frac{d}{dx}\left(\int_a^x f(t)dt\right)=f(x)$, where x is between a and b.	**Lesson 5.3** **Notation is shown at the bottom of page 398, but not emphasized in the Fundamental Theorem of Calculus box on this page.**	0.5
		EK 3.3A3: Graphical, numerical, analytical, and verbal representations of a function f provide information about the function g defined as $g(x)=\int_a^x f(t)dt$.	**Lesson 5.3**	1
	LO 3.3B(a): Calculate antiderivatives.	**EK 3.3B1:** The function defined by $F(x)=\int_a^x f(t)dt$ is an antiderivative of f.	**Lesson 5.3**	1
	LO 3.3B(b): Evaluate definite integrals.	**EK 3.3B2:** If f is continuous on the interval $[a, b]$ and F is an antiderivative of f, then $\int_a^b f(x)dx=F(b)-F(a)$.	**Lesson 5.3**	1
		EK 3.3B3: The notation $\int f(x)dx=F(x)+C$ means that $F'(x)=f(x)$, and $\int f(x)dx$ is called an indefinite integral of the function f.	**Lesson 5.3**	1
		EK 3.3B4: Many functions do not have closed form antiderivatives.	**Lesson 7.5** **Mentioned at bottom of page 506**	1

		EK 3.3B5: Techniques for finding antiderivatives include algebraic manipulation such as long division and completing the square, substitution of variables, (BC) integration by parts, and nonrepeating linear partial fractions.	**Lesson 7.3 completing the square fo trigonometric substitution** **Lesson 7.7 partial fractions and long division**	1
EU 3.4: The definite integral of a function over an interval is a mathematical tool with many interpretations and applications involving accumulation.	**LO 3.4A:** Interpret the meaning of a definite integral within a problem.	**EK 3.4A1:** A function defined as an integral represents an accumulation of a rate of change.	**Not in text**	0
		EK 3.4A2: The definite integral of the rate of change of a quantity over an interval gives the net change of that quantity over that interval.	**Net Change Theorem Lesson 5.4**	1
		EK 3.4A3: The limit of an approximating Riemann sum can be interpreted as a definite integral.	**Lesson 5.2**	1
	LO 3.4B: Apply definite integrals to problems involving the average value of a function.	**EK 3.4B1:** The average value of a function f over an interval $[a, b]$ is $\frac{1}{b-a}\int_a^b f(x)dx$.	**Lesson 6.5**	1
	LO 3.4C: Apply definite integrals to problems involving motion.	**EK 3.4C1:** For a particle in rectilinear motion over an interval of time, the definite integral of velocity represents the particle's displacement over the interval of time, and the definite integral of speed represents the particle's total distance traveled over the interval of time.	**Lesson 5.4**	1

		EK 3.4C2: (BC) The definite integral can be used to determine displacement, distance, and position of a particle moving along a curve given by parametric or vector-valued functions.	**Lesson 10.2 parametric curve arc length** **Lesson 10. 4 polar arc length**	1
	LO 3.4D: Apply definite integrals to problems involving area, volume, (BC) and length of a curve.	**EK 3.4D1:** Areas of certain regions in the plane can be calculated with definite integrals. (BC) Areas bounded by polar curves can be calculated with definite integrals	**Lesson 6.1 area between two curves** **Lesson 10.4 area of polar curves**	1
		EK 3.4D2: Volumes of solids with known cross sections, including discs and washers, can be calculated with definite integrals.	**Lessons 6.2 & 6.3**	1
		EK 3.4D3: (BC) The length of a planar curve defined by a function or by a parametrically defined curve can be calculated using a definite integral.	**Lesson 10.2 and 10.4**	1
	LO 3.4E: Use the definite integral to solve problems in various contexts.	**EK 3.4E1:** The definite integral can be used to express information about accumulation and net change in many applied contexts.	**Lesson 5.4**	1

EU 3.5: Antidifferentiation is an underlying concept involved in solving separable differential equations. Solving separable differential equations involves determining a function or relation given its rate of change.	**LO 3.5A:** Analyze differential equations to obtain general and specific solutions.	**EK 3.5A1:** Antidifferentiation can be used to find specific solutions to differential equations with given initial conditions, including applications to motion along a line, exponential growth and decay, (BC) and logistic growth.	**Lesson 9.1/9.2 This topic was somewhat hard to find in the text although there are examples and problems on growth and decay using initial conditions.** **Lesson 9.4 logistics growth problems**	1
		EK 3.5A2: Some differential equations can be solved by separation of variables.	**Lesson 9.3**	1
		EK 3.5A3: Solutions to differential equations may be subject to domain restrictions.	**Lesson 9.3**	1
		EK 3.5A4: The function F defined by $F(x)=c+\int_a^x f(t)dt$ is a general solution to the differential equation $\frac{dy}{dx}=f(x)$, and $F(x)=y_0+\int_a^x f(t)dt$ is a particular solution to the differential equation $\frac{dy}{dx}=f(x)$ satisfying $F(a)=y_0$.	**Lesson 9.3**	1
	LO 3.5B: Interpret, create and solve differential equations from problems in context.	**EK 3.5B1:** The model for exponential growth and decay that arises from the statement "The rate of change of a quantity is proportional to the size of the quantity" is $\frac{dy}{dt}=ky$.	**Lesson 9.1 and 9.4**	1
		EK 3.5B2: (BC) The model for logistic growth that arises from the statement "The rate of change of a quantity is jointly proportional to the size of the quantity and the difference between the quantity and the carrying capacity" is $\frac{dy}{dt}=ky(a-y)$.	**Lesson 9.4** **Terminology and use of appropriate language is lacking—"change is jointly proportional". Problems are sufficient.**	1

Standards and Learning Indicators			Publisher/Provider: List units/lessons with specific examples of where standards are Introduced/Taught/Assessed.	Point Value 0/.5/1 (Reviewer)
Big Idea 4: Series (BC) The AP Calculus BC curriculum includes the study of series of numbers, power series, and various methods to determine convergence or divergence of a series. Students should be familiar with Maclaurin series for common functions and general Taylor series representations. Other topics include the radius and interval of convergence and operations on power series. The technique of using power series to approximate an arbitrary function near a specific value allows for an important connection to the tangent-line problem and is a natural extension that helps achieve a better approximation. The concept of approximation is a common theme throughout AP Calculus, and power series provide a unifying, comprehensive conclusion.				
Enduring Understandings (Students will understand that…)	**Learning Objectives** (Students will be able to…)	**Essential Knowledge** (Students will know that…)		
EU 4.1: The sum of an infinite number of real numbers may converge.	**LO 4.1A:** Determine whether a series converges or diverges.	**EK 4.1A1:** The nth partial sum is defined as the sum of the first n terms of a sequence.	**Lesson 11.2**	1
		EK 4.1A2: An infinite series of numbers converges to a real number S (or has sum S), if and only if the limit of its sequence of partial sums exists and equals S.	**Lesson 11.2**	1
		EK 4.1A3: Common series of numbers include geometric series, the harmonic series, and p-series.	**Lesson 11.2 and 11.3**	1
		EK 4.1A4: A series may be absolutely convergent, conditionally convergent, or divergent.	**Lesson 11.6**	1
		EK 4.1A5: If a series converges absolutely, then it converges.	**Lesson 11.6**	1

		EK 4.1A6: In addition to examining the limit of the sequence of partial sums of the series, methods for determining whether a series of numbers converges or diverges are the nth term test, the comparison test, the limit comparison test, the integral test, the ratio test, and the alternating series test. **EXCLUSION STATEMENT (EK 4.1A6):** ***Other methods for determining convergence or divergence of a series of numbers are not assessed on the AP Calculus AB or BC Exam. However, teachers may include these topics in the course if time permits.***	**Lesson 11.3, 11.4, and 11.7**	1
	LO 4.1B: Determine or estimate the sum of a series.	**EK 4.1B1:** If a is a real number and r is a real number such that $\lvert r\rvert < 1$, then the geometric series $\sum_{n=0}^{\infty} ar^n = \frac{a}{1-r}$.	**Lesson 11.2**	1
		EK 4.1B2: If an alternating series converges by the alternating series test, then the alternating series error bound can be used to estimate how close a partial sum is to the value of the infinite series.	**Lesson 11.5**	1
		EK 4.1B3: If a series converges absolutely, then any series obtained from it by regrouping or rearranging the terms has the same value.	**Lesson 11.6**	1

EU 4.2: A function can be represented by an associated power series over the interval of convergence for the power series.	**LO 4.2A:** Construct and use Taylor polynomials.	**EK 4.2A1:** The coefficient of the *n*th-degree term in a Taylor polynomial centered at $x=a$ for the function f is $\frac{f^{(n)}(a)}{n!}$.	**Lesson 11.10**	1
		EK 4.2A2: Taylor polynomials for a function f centered at $x=a$ can be used to approximate function values of f near $x=a$.	**Lesson 11.11**	1
		EK 4.2A3: In many cases, as the degree of a Taylor polynomial increases, the nth-degree polynomial will converge to the original function over some interval.	**Lesson 11.11**	1
		EK 4.2A4: The Lagrange error bound can be used to bound the error of a Taylor polynomial approximation to a function.	**Lesson 11.10** **Remainder theorem is given but not identified as Lagrange error.**	0.5
		EK 4.2A5: In some situations where the signs of a Taylor polynomial are alternating, the alternating series error bound can be used to bound the error of a Taylor polynomial approximation to the function.	**Lesson 11.11** **In the students exercise page 781 problems 27-29.**	1
	LO 4.2B: Write a power series representing a given function.	**EK 4.2B1:** A power series is a series of the form $\sum_{n=0}^{\infty} a_n(x-r)^n$ where n is a non-negative integer, $\{a_n\}$ is a sequence of real numbers, and r is a real number.	**Lesson 11.8**	1
		EK 4.2B2: The Maclaurin series for $\sin(x)$, $\cos(x)$, and e^x provide the foundation for constructing the Maclaurin series for other functions.	**Lesson 11.10**	1

		EK 4.2B3: The Maclaurin s[illegible]s for $\frac{1}{1-x}$ is a geometric series.	**Lesson 11.9/11.10**	1
		EK 4.2B4: A Taylor polynomial for $f(x)$ is a partial sum of the Taylor series for $f(x)$.	**Lesson 11.10**	1
		EK 4.2B5: A power series for a given function can be derived by various methods (e.g., algebraic processes, substitutions, using properties of geometric series, and operations on known series such as term-byterm integration or term-by-term differentiation).	**Lesson 11.9**	1
	LO 4.2C: Determine the radius and interval of convergence of a power series.	**EK 4.2C1:** If a power series converges, it either converges at a single point or has an interval of convergence.	**Lesson 11.8**	1
		EK 4.2C2: The ratio test can be used to determine the radius of convergence of a power series.	**Lesson 11.8**	1
		EK 4.2C3: If a power series has a positive radius of convergence, then the power series is the Taylor series of the function to which it converges over the open interval.	**Lesson 11.10**	1
		EK 4.2C4: The radius of convergence of a power series obtained by term-by-term differentiation or term-by-term integration is the same as the radius of convergence of the original power series.	**Lesson 11.10**	1

Please double check the material's alignment to standards.

Advanced Placement Standards: **93% correlation for AP Calculus AB not BC**

If the material aligns with at least an 80%, move on to: **Material Analysis. If the material has less than an 80% alignment, please notify your team leader.

Indicators of Quality:

Indicators of Quality	Evidence- Give specific examples.	Rating: (Reviewer only.)
1. Lessons are thoughtfully structured and support the teacher in leading the class through the learning paths at hand, with active participation by all students in their own learning and in the learning of their classmates.	Evidence- Text is appropriate for level of students taking the course. Students are expected to engage with active participation.	(Reviewer only.) ___X___ Yes _____ No
2. The underlying design of the materials includes both problems and exercises. (In solving problems, students learn new mathematics, whereas in working exercises, students apply what they have already learned to build mastery.) Each problem or exercise has a purpose. NOTE: This Criterion does not require that the problems and exercises be labeled as such.	Evidence- Worked out examples in the text provide problems for students to learn new concepts. Exercises provide opportunities for students to practice and apply what they have learned.	(Reviewer only.) ___X___ Yes _____ No
3. Design of assignments is not haphazard: exercises are given in intentional sequences in order to strengthen students' mathematical understanding.	Evidence- Problems and exercises go from simple to more complex.	(Reviewer only.) ___X___ Yes _____ No
4. There are separate teacher materials that support and reward teacher study including, but not limited to: discussion of the mathematics of the units and the mathematical point of each lesson as it relates to the organizing concepts of the unit, discussion on student ways of thinking and anticipating a variety of students responses, guidance on lesson flow, guidance on questions that prompt students thinking, and discussion of desired mathematical behaviors being elicited among students.	Evidence- Binders include teaching tips, opportunities for group work including questions that prompt student thinking. Also recommended—Study Guide to accompany text. This includes student-friendly explanations, practice problems with worked out solutions, and self-checks.	(Reviewer only.) ___X___ Yes _____ No

5. Manipulatives suggested in the materials are faithful representations of the mathematical objects they represent and are connected to written methods.	**Evidence-** **Applied problems include calculator simulations and mental manipulation.**	**(Reviewer only.)** **___X___ Yes** **_____ No**
6. Materials include a variety of curriculum-embedded assessments. Examples include pre-, formative, summative, and self-assessment resources.	**Evidence-** **Study Guide includes self-assesment. Also included with materials is a test bank with multiple versions of exams for each chapter. These are in multiple-choice format but could be adapted for free-response type questions.**	**(Reviewer only.)** **___X___ Yes** **_____ No**
7. Assessments contain aligned rubrics, answer keys, and scoring guidelines that provide sufficient guidance for interpreting student performance.	**Evidence-** **Tests just include answer key without rubrics or scoring guidelines. There is an optional "5 Steps to a 5" supplement that includes practice AP tests with scoring guidelines for free response.**	**(Reviewer only.)** **_____ Yes** **___X___ No**
8. Materials assess student proficiency using methods that are accessible and unbiased, including the use of course-level language in student prompts.	**Evidence-** **Course level language is used throughout text without bias.**	**(Reviewer only.)** **___X___ Yes** **_____ No**
9. Materials are carefully evaluated by qualified individuals, whose names are listed, in an effort to ensure freedom from mathematical errors and course-level appropriateness.	**Evidence-** **Text is primarily written by James Stewart who has written numerous AP texts. Team of reviewers also included.**	**(Reviewer only.)** **___X___ Yes** **_____ No**
10. The visual design supports students in engaging thoughtfully with the subject. Navigation through the text is clear.	**Evidence-** **The text is not particularly engaging. Although visually the text is not too appealing, it is a good transitional text to college level texts. Navigation through text could be improved. Some concepts should be located closer together. For example, left- and right-Riemann sums should be alongside definition of integrals. Midpoint and Trapezoid should be closer together as well.**	**(Reviewer only.)** **___X___ Yes** **_____ No**

COMMENTS:

STRENGTHS	WEAKNESSES
• Good verbally in many areas • Uses language that promotes precise understanding • Book is concise • College-level text • Meets or exceeds all requirements for AP • Good supplemental materials—Teacher Resource binder and Study Guide	• Lacking in graphical interpretation of concepts • Difficult to navigate • Fewer problems than many other comparable texts • High reading level • A few concepts are missing—area as an accumulation, solutions to differential equations, and derivatives of inverse functions at a point

IDAHO STATE DEPARTMENT OF EDUCATION

Advanced Placement Course: Statistics

Content Area: AP Statistics

Course Title: AP Statistics

Title of Material: Statistics: Learning from Data

Author: Peck, Olsen

Publisher: Cengage Learning

ISBN #: 9781285085241 **Copyright** 2014

Reviewers: DJQ SNH

Meets Content Standards Alignment: X **Yes** _____ **No**

Meets Materials Analysis Evaluation: X **Yes** _____ **No**

X **Core Program** - 94% correlation

_____ **Other Program**

_____ **Resource/Supplemental**

_____ **Not Recommended**

Advanced Placement:

- ☐ **AP Capstone**
- ☐ **Arts**
- ☐ **English**
- ☐ **History & Social Science**
- ☒ **Math & Computer Science**
- ☐ **Sciences**
- ☐ **World Languages & Cultures**

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Standards Alignment Evaluation Rubric

0 = No Alignment– **Not Evident:** Content as described in the Standards is **not evident.**

.5 = Partial Alignment- **Partially Evident:** Content as described in the Standards is **partially evident** and there are few gaps.

1 = High Alignment – **Clearly Evident:** Content is fully aligned as described in the Standards and repeatedly included to guarantee extensive opportunities for students to work with the content. Alignment is **clearly evident.**

N/A = Not applicable for standard

Advanced Placement		**Statistics**	
Standards and Learning Indicators		**Publisher/Provider: List units/lessons with specific examples of where standards are Introduced/Taught/Assessed.**	**Point Value 0/.5/1 (Reviewer)**
Exploring Data			
Describing patterns and departures from patterns			
A. Constructing and interpreting graphical displays of distributions of univariate data (dotplot, stemplot, histogram, cumulative frequency plot)	1. Center and spread	pg. 130-165	1
	2. Clusters and gaps	pg. 69-96	1
	3. Outliers and other unusual features	pg 73-96	1
	4. Shape	pg. 68-96	1

B. Summarizing distributions of univariate data	1. Measuring center: median, mean	Defined on pgs. 130, 134, 143 Taught and assessed throughout	1
	2. Measuring spread: range, interquartile range, standard deviation	pg. 130-149	1
	3. Measuring position: quartiles, percentiles, standardized scores (z-scores)	pg. 149-164	1
	4. Using boxplots	pg. 149-160	1
	5. The effect of changing units on summary measures	Not evident in text	0
C. Comparing distributions of univariate data (dotplots, back-to-back stemplots, parallel boxplots)	1. Comparing center and spread: within group, between group variation	Comparative boxplots – 149-160 Comparative dotplots – 70, stem and leaf plots – 75	1
	2. Comparing clusters and gaps	Not evident in text	0
	3. Comparing outliers and other unusual features	pg. 149-160	1
	4. Comparing shapes	pg. 149-160, 70-75	1
D. Exploring bivariate data	1. Analyzing patterns in scatterplots	pg. 182-186, 192-210, 231-248	1
	2. Correlation and linearity	pg. 182-211, pg. 229-250	1
	3. Least-squares regression line	pg. 200-227	1
	4. Residual plots, outliers and influential points	pg. 211-229	1
	5. Transformations to achieve linearity: logarithmic and power transformations	pg. 231-248	1

E. Exploring categorical data	1. Frequency tables and bar charts	pg. 65-67	1
	2. Marginal and joint frequencies for two-way tables	pg. 708-723	1
	3. Conditional relative frequencies and association	Not evident in text	1
	4. Comparing distributions using bar charts	pg. 62-67	1
Sampling and Experimentation			
Planning and conducting a study			
A. Overview of methods of data collection	1. Census	defined – pg. 13, used throughout text	1
	2. Sample survey	Surveys are addressed implicitly when discussing observational studies	0
	3. Experiment	pg. 24-41	1
	4. Observational study	pg. 13-24	1
B. Planning and conducting surveys	1. Characteristics of a well-designed and well-conducted survey	Not evident in text	0
	2. Populations, samples and random selection	pg. 13-24 Surveys are not explicitly addressed in the text. However, these topics are addressed for observational studies and a survey is a type of observational study. Therefore, we considered these criteria to be met.	1
	3. Sources of bias in sampling and surveys	pg. 19-20 Surveys are not explicitly addressed in the text. However, these topics are addressed for observational studies and a survey is a type of observational study. Therefore, we considered these criteria to be met.	1
	4. Sampling methods, including simple random sampling, stratified random sampling and cluster sampling	pg. 13-24 Surveys are not explicitly addressed in the text. However, these topics are addressed for observational studies and a survey is a type of observational study. Therefore, we considered these criteria to be met.	1

C. Planning and conducting experiments	1. Characteristics of a well-designed and well-conducted experiment	pg. 24-41	1
	2. Treatments, control groups, experimental units, random assignments and replication	pg. 24-41	1
	3. Sources of bias and confounding, including placebo effect and blinding	pg. 34-35	1
	4. Completely randomized design	pg. 24-41	1
	5. Randomized block design, including matched pairs design	pg 28 – randomized block design. No evidence of matched pairs design	0.5
D. Generalizability of results and types of conclusions that can be drawn from observational studies, experiments and surveys		pg 41-46 Observational studies and experiments are addressed explicitly, surveys are addressed implicitly	1
Anticipating Patterns			
Exploring random phenomena using probability and simulation			
A. Probability	1. Interpreting probability, including long-run relative frequency interpretation	pg 269	1
	2. "Law of Large Numbers" concept	pg. 271	1
	3. Addition rule, multiplication rule, conditional probability and independence	pg. 284-316	1
	4. Discrete random variables and their probability distributions, including binomial and geometric	pg. 336-373	1
	5. Simulation of random behavior and probability distributions	pg. 319-325	1
	6. Mean (expected value) and standard deviation of a random variable, and linear transformation of a random variable	pg. 352-263	1
B. Combining independent random variables	1. Notion of independence versus dependence	pg 285	1

	2. Mean and standard deviation for sums ar differences of independent random variables	pg 385-359	1
C. The normal distribution	1. Properties of the normal distribution	pg. 373-399	1
	2. Using tables of the normal distribution	pg. 373-385	1
	3. The normal distribution as a model for measurements	pg. 381-399	1
D. Sampling distributions	1. Sampling distribution of a sample proportion	pg 433-443	1
	2. Sampling distribution of a sample mean	pg. 568-578	1
	3. Central Limit Theorem	pg. 572	1
	4. Sampling distribution of a difference between two independent sample proportions	pg. 542-543	1
	5. Sampling distribution of a difference between two independent sample means	pg. 619	1
	6. Simulation of sampling	pg. 319-323	1
	7. T-distribution	pg. 580-643	1
	8. Chi-square distribution	pg. 643-730	1

Statistical Inference			
Estimating population parameters and testing hypotheses			
A. Estimation (point estimators and confidence intervals)	1. Estimating population parameters and margins of error	pg. 460-462	1
	2. Properties of point estimators, including unbiasedness and variability	pg. 456-460	1
	3. Logic of confidence intervals, meaning of confidence level and confidence intervals, and properties of confidence intervals	pg. 467-484	1
	4. Large sample confidence interval for a proportion	pg. 467-484	1
	5. Large sample confidence interval for a difference between two proportions	pg. 542-550	1
	6. Confidence interval for a mean	pg. 578-591	1
	7. Confidence interval for a difference between two means (unpaired and paired)	pg. 649-654	1
	8. Confidence interval for the slope of a least-squares regression line	pg. 749-752	1
B. Tests of significance	1. Logic of significance testing, null and alternative hypotheses; p-values; one- and two-sided tests; concepts of Type I and Type II errors; concept of power	pg. 469-507, pg. 514-530	1
	2. Large sample test for a proportion	pg. 514-526	1
	3. Large sample test for a difference between two proportions	pg. 550-559	1
	4. Test for a mean	pg. 591-605	1
	5. Test for a difference between two means (unpaired and paired)	pg. 618-654	1

Indicato[illegible]f Quality	Evidence- Giv[illegible]pecific examples.	Rating: (Reviewe[illegible]nly.)
1. Lessons are thoughtfully structured and support the teacher in leading the class through the learning paths at hand, with active participation by all students in their own learning and in the learning of their classmates.	Evidence- Lessons are thoughtfully structured although students might not be actively participating in all aspects of instruction. However, for an AP class, this is appropriate.	(Reviewer only.) __x____ Yes _____ No
2. The underlying design of the materials includes both problems and exercises. (In solving problems, students learn new mathematics, whereas in working exercises, students apply what they have already learned to build mastery.) Each problem or exercise has a purpose. NOTE: This Criterion does not require that the problems and exercises be labeled as such.	Evidence- The design of the materials includes exercises and not problems, but that is appropriate for this level.	(Reviewer only.) __x____ Yes _____ No
3. Design of assignments is not haphazard: exercises are given in intentional sequences in order to strengthen students' mathematical understanding.	Evidence- Exercises are aligned with the lessons, scaffolded appropriately.	(Reviewer only.) __x____ Yes _____ No
4. There are separate teacher materials that support and reward teacher study including, but not limited to: discussion of the mathematics of the units and the mathematical point of each lesson as it relates to the organizing concepts of the unit, discussion on student ways of thinking and anticipating a variety of students responses, guidance on lesson flow, guidance on questions that prompt students thinking, and discussion of desired mathematical behaviors being elicited among students.	Evidence- The teacher's resources contain discussions of the important concepts that will presented in each chapter and gives the teacher strategies for presenting the material and redirecting students when needed.	(Reviewer only.) __x____ Yes _____ No
5. Manipulatives suggested in the materials are faithful representations of the mathematical objects they represent and are connected to written methods.	Evidence- The text provides the option of using several different types of technology to model the statistical concepts they represent	(Reviewer only.) ___x___ Yes _____ No

STRENGTHS	WEAKNESSES
• Comprehensive AP textbook. Little to no supplementation would be necessary. • Real-world data sets used throughout text • Problems are challenging and prepare students for the exam • Online, print and dvd resources give teachers flexibility to choose which platform to use • Practice AP multiple choice and free response questions included in the resources.	• The topic of surveys is not explicitly addressed in the text. • No support for ELL students

2015-16 Mathematics Interim Review Recommendation & Summary

Publisher Name:	Cengage Learning
Title:	Trigonometry 9e
ISBN #	9781133954323
Grade Level(s) or Course:	9-12
Reviewer ID:	PP and DJQ

RECOMMENDED AS:

__X__ **Core Mathematics Program-** a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials. Substantial evidence clearly supports the designation of this program as Core.

_____ **Other Mathematics Program-** a program that substantially, but partially, meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for supplemental materials. Substantial evidence clearly supports the designation of this program as Other.

_____ **Component Mathematics Program-** a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs. Substantial evidence clearly supports the designation of this program as Component.

_____ **Intervention Program-** a program designed and intended to target and support students' specific needs. Substantial evidence clearly supports the designation of this program as Intervention.

_____ **Does not meet criteria** for recommendation as a Curricular Material or Online Resource for Mathematics.

EVIDENCE SUMMARY:

FOCUS-
NN1 This is a college level course so W.A.P.'s are appropriate

COHERENCE-
NN1 This is a college level course. WAP's are embedded.

RIGOR-
AC1 Starts with procedural skills and works towards Conceptual understandings.

CONCEPTUAL UNDERSTANDING-
AC1 Summarizations at the end of sections. and problem solving sections at the end of Chapters.

MATHEMATICAL PRACTICES-
AC2 Mathematical Practices are used repeatly through the text when students are problem solving towards the end of exercises."

ACCESSIBILITY OF STANDARDS TO ALL STUDENTS-
AC3 Would like to see more visual aids for ELL students.

OTHER:

Strengths:

1. Scope and sequence.
2. Scaffolding of exercizes.
3. Pictures and illustrations do not distract from content.
4. "Summerizations", How Do You See It", Projects at end of each Chapter, Problem Solving Section
5. The Prerequisit Chapter 1st.
6. Review summerizations at end of each Chapter.
7. Lesson Plan book gives pacing guides, more examples and section objectives.
8. Disc has nice resources

Weakness:

1. ELL
2. Not differential resources for teachers.

2015-1 nterim Mathematics Review

Mathematics Evaluation Tool – High School

Publisher: Cengage Learning Inc

Title of Material: Trigonometry 9e

Author: Ron Larson

ISBN #: 9781133954323 **Copyright** 2014

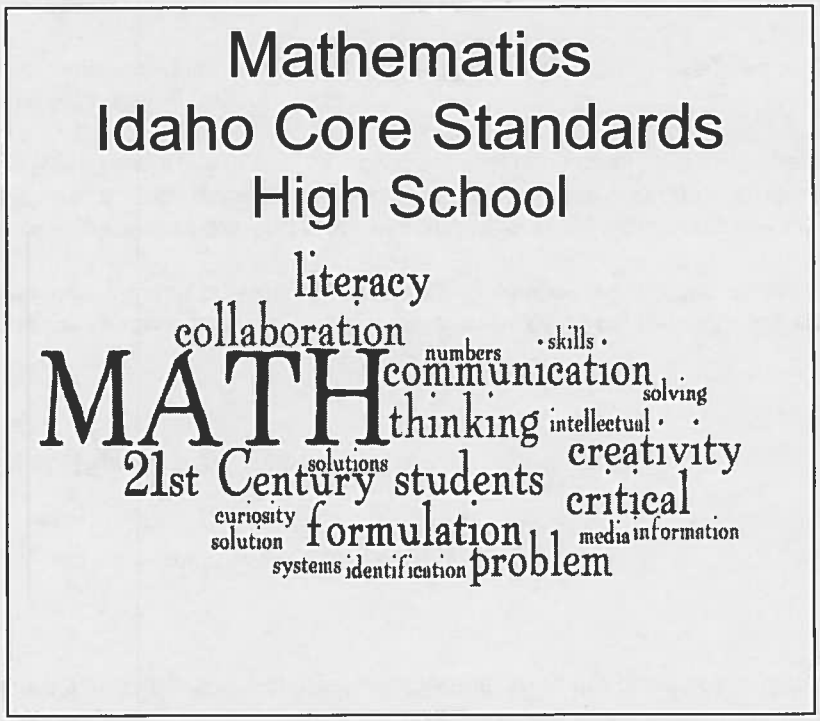
Reviewer ID: PP ½ DJQ

Core Mathematics Program- a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Core.

Other Mathematics Program- a program that substantially, but partially, meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Other.

Component Mathematics Program- a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs.
Substantial evidence clearly supports the designation of this program as Component.

Intervention Program- a program designed and intended to target and support students' specific needs.
Substantial evidence clearly supports the designation of this program as Intervention.



- Evaluation Form adapted from Instructional Materials Evaluation Toolkit (IMET).

The IMET was developed by Student Achievement Partners. Educators may use or adapt. http://creativecommons.org/licenses/by/3.0/ Download this tool at http://achievethecore.org/IMET

Instructional Materials Evaluation Tool

Mathematics, High School

What Are the Purposes of the IMET?

This Math IMET is designed to help educators determine whether instructional materials are aligned to the Shifts and major features of the Common Core State Standards (CCSS). The substantial instructional Shifts (http://www.corestandards.org/other-resources/key-shifts-in-mathematics/) at the heart of the Common Core State Standards are:

- **Focus** strongly where the Standards focus
- **Coherence**: Think across grades and link to major topics within the grade
- **Rigor**: In major topics, pursue conceptual understanding, procedural skill and fluency, and application with equal intensity.

The IMET draws directly from the following documents:

- Common Core State Standards for Mathematics (www.corestandards.org/Math)
- Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013) (http://www. corestandards.org/wp-content/uploads/Math_Publishers_Criteria_ HS_Spring_2013_FINAL1.pdf)

When to use the IMET

1. Purchasing materials: Many factors go into local purchasing decisions. Alignment to the Standards is a critical factor to consider. This tool is designed to evaluate alignment of instructional materials to the Shifts and the major features of the CCSS. It also provides suggestions of additional indicators to consider in the materials evaluation and purchasing process
2. Evaluating materials currently in use: The IMET can be used to analyze the degree of alignment of existing materials and help to highlight specific, concrete flaws in alignment. Even where materials and tools currently in use fail to meet one or more of these criteria, the pattern of failure is likely to be informative. States and districts can use the evaluation to create a thoughtful plan to modify or combine existing resources in such a way that students' actual learning experiences approach the focus, coherence, and rigor of the Standards.
3. Developing programs: Those developing new programs can use this tool as guidance for creating aligned curricula.

Please note this tool was designed for evaluating comprehensive curricula (including any supplemental or ancillary materials), but it was not designed for the evaluation of standalone supplemental materials.

Who Uses the IMET?

Evaluating instructional materials requires both subject-matter and pedagogical expertise. Evaluators should be well versed in the Standards (www.corestandards.org/Math) for all grades in which materials are being evaluated. This includes understanding the Widely Applicable Prerequisites (www.achievethecore.org/prerequisites), how the content fits into the progressions in the Standards (www. achievethecore.org/progressions), and the expectations of the Standards with respect to conceptual understanding, procedural skill and fluency, and application. Evaluators also should be familiar with the substantial instructional Shifts (http://www.corestandards.org/other-resources/key-shifts-in-mathematics/) of Focus, Coherence and Rigor that are listed above.

Getting Started

Prior to Evaluation

Assemble all of the materials necessary for the evaluation. It is essential for evaluators to have materials for all grades covered by the program, as some criteria cannot be rated without having access to each grade. In addition, each evaluator should have a reference copy of the Common Core State Standards for Mathematics (CCSSM) and the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).

Before conducting the evaluation itself, it is important to develop a protocol for the evaluation process. The protocol should include having evaluators study the Publishers' Criteria and the IMET. It will also be helpful for evaluators to get a sense of each program overall before beginning the process. At a minimum, this would include reading the front matter of the text, looking at the table of contents and paging through multiple chapters.

Sections 1-3 below should be completed to produce a comprehensive picture of the strengths and weaknesses of the materials under evaluation. Information about areas in need of improvement or supplementation should be shared with internal and external stakeholders.

Navigating the Tool

Begin with Section 1: Non-Negotiable Alignment Criteria

- The Non-Negotiable Alignment Criteria must each be met in full for materials to be considered aligned to the Shifts and the major features of the Common Core State Standards. Each Non-Negotiable Alignment Criterion has one or more metrics associated with it; every one of these metrics must be met in order for the criterion as a whole to be met.

- Examine the relevant materials and use evidence to rate the materials against each criterion and its associated metric(s).

- Record and explain the evidence upon which the rating is based.

Continue to Section 2: Alignment Criteria

- The Alignment Criteria must each be met for materials to be considered aligned to the Shifts and the major features of the Common Core State Standards. Each Alignment Criterion has one or more metric associated with it; a specific number of these metrics must be met or partially met in order for the criterion as a whole to be met.

- Examine the materials in relation to these criteria, assigning each metric a point value. Rate the criterion as "Meets" or "Does Note Meet" based on the number of points assigned. The more points the materials receive on the alignment Criteria, the better they are aligned.

- Record and explain the evidence upon which the rating is based.

Proceed to Section 4: Indicators of Quality

- Indicators of Quality are important considerations that will help evaluators better understand the overall quality of instructional materials. These considerations are not criteria for alignment to the CCSS, but they provide valuable information about additional program characteristics. Evaluators may want to add their own indicators to the examples provided.

Directions for Non-Negotiable 1

Focus and Coherence

Criterion	Evidence- Give specific examples.	Rating: (Reviewer only.)
Non-Negotiable 1: Focus and Coherence- Materials must focus coherently on the Widely Applicable Prerequisites in a way that is consistent with the progressions in the Standards. Focus and coherence are the two major evidence-based design principles of the Common Core State Standards for Mathematics (CCSSM, p. 3). Focus is necessary in order to fulfill the ambitious promise the states have made to their students by adopting the Standards: greater achievement at the college and career-ready level; greater depth of understanding of mathematics; and a rich classroom environment in which reasoning, sense-making, applications, and a range of mathematical practices flourish. In high school courses, narrowing and deepening the curriculum creates a structure that ties topics together. Thus, materials must focus coherently on the Widely Applicable Prerequisites in a way that is consistent with the progressions in the Standards.	Focus and coherence are the two major evidence-based design principles of the Common Core State Standards for Mathematics (CCSSM, p. 3). Focus is necessary in order to fulfill the ambitious promise the states have made to their students by adopting the Standards: greater achievement at the college and career-ready level; greater depth of understanding of mathematics; and a rich classroom environment in which reasoning, sense-making, applications, and a range of mathematical practices flourish. In high school courses, narrowing and deepening the curriculum creates a structure that ties topics together. Thus, materials must focus coherently on the Widely Applicable Prerequisites in a way that is consistent with the progressions in the Standards. **Required Materials:** • Common Core State Standards for Mathematics (www.corestandards.org/wpcontent/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_HS_Spring_2013_FINAL1.pdf) • Widely Applicable Prerequisites for College and Careers (http://achievethecore.org/prerequisites) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion:** Non-Negotiable 1 is rated as Meets or Does Not Meet. To rate Non-Negotiable 1, first rate Metrics 1A–1H. Each of these eight metrics must be rated as Meets in order for Non-Negotiable 1 to be rated as Meets. Rate each metric 1A–1H as Meets or Does Not Meet/Insufficient Evidence. If the evidence examined shows that the Criterion is met, then mark the Criterion as Meets. If the evidence examined shows that the Criterion is not met—or if there is insufficient evidence to make a determination—then mark the Criterion as Does Not Meet/Insufficient Evidence. Support all ratings with evidence.

Metric NN1A: **In any single course, students spend at least 50% of their time on Widely Applicable Prerequisites.** **How to Find the Evidence:** Familiarize yourself with the Widely Applicable Prerequisites. Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, lessons, homework assignments, and assessments. (Evaluate both student and teacher materials.) Consider time spent on the Widely Applicable Prerequisites and judge qualitatively whether students and teachers using the materials as designed will devote the majority of time to the Widely Applicable Prerequisites For context, read Criterion #1 in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** The 1st Chapter, the P Chapter is all prerequists for this course along with prerequisit embedded through the text. Although the are not listed in the text or referenced in the text, the WAP are obvious.	X **Meets** ____ **Does Not Meet Insufficient Evidence**
Metric NN1B: **Student work in Geometry involves significant work with applications/modeling and problems that use algebra skills.** **How to Find the Evidence:** Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, lessons, homework assignments, and assessments. (Evaluate both student and teacher materials. NOTE: Since Geometry contains relatively fewer Widely Applicable Prerequisites, this Criterion is important to help foster students' college and career readiness. Problems that use algebra skills might include, for example, algebraic geometry problems in a coordinate setting, or problems of measurement involving unknown quantities.	**Evidence-** Because Trig is a subset of Geometry, this text is full of Geometry Standards. PB-Transformation of Functions 1.8- Applications and Modeling. 3.1- Law of Sin, Law of Cos 3.3- Vectors.	X **Meets** ____ **Does Not Meet Insufficient Evidence**

Metric NN1C: **There are problems at a level of sophistication appropriate to high school (beyond mere review of middle school topics) that involve the application of knowledge and skills from grades 6-8.** **How to Find the Evidence:** Evaluate lessons, chapter/unit assessments, and homework assignments. NOTE: Problems should include application of the following topics from grades 6-8: • Ratios and proportional relationships. • Percentage and unit conversions, e.g., in the context of complex measurement problems involving quantities with derived or compound units (such as mg/mL, kg/ m3, acre-feet, etc.). • Basic function concepts, e.g., by interpreting the features of a graph in the context of an applied problem. • Concepts and skills of geometric measurement e.g., when analyzing a diagram or schematic. • Concepts and skills of basic statistics and probability (see grades 6–8.SP) • Performing rational number arithmetic fluently. For context, read Table 1 on Page 8 of the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** This is a college level course and problems are appropriate to the course level of work.	X **Meets** ___ **Does Not Meet Insufficient Evidence**
Metric NN1D: **Materials base courses on the content specified in the Standards.** **How to Find the Evidence:** Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, and lessons in both student and teacher materials. For context, read Criterion #3a in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** This is a college level course and the materials are ~~of~~ appropriate for the content. The text covers content from the standards.	X **Meets** ___ **Does Not Meet Insufficient Evidence**
Metric NN1E: **Materials give all students extensive work with course-level problems.** **How to Find the Evidence:** Evaluate both student and teacher materials. If the materials provide resources for differentiated learning, consider whether lower-performing students have opportunities to engage with course-level problems. Also consider whether higher-performing students are given opportunities to learn current course-level content in greater depth. For context, read Criterion #3b in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** This is a college level course and problems are appropriate for that level.	X **Meets** ___ **Does Not Meet Insufficient Evidence**

Metric NN1F: **Materials relate course-level concepts explicitly to prior knowledge from earlier grades or courses. The materials are designed so that prior knowledge becomes reorganized and extended to accommodate the new knowledge.** **How to Find the Evidence:** Evaluate student and teacher materials, looking for problems that involve extending the knowledge learned in earlier grades and courses. NOTE: An example of evaluating this Criterion might be to look at whether materials connect the equation of a circle with the distance formula and the Pythagorean theorem. For context, read Criterion #3c in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** This context relates material to prior knowledge by starting out with a Prerequist Chapter ~~with~~ and prior knowledge is embedded throughout Chapters. Solving Right Triangles	X Meets ____Does Not Meet Insufficient Evidence
Metric NN1G: **Materials include learning objectives that are visibly shaped by CCSSM cluster and domain headings.** **How to Find the Evidence:** Select several clusters from the course being evaluated. Evaluate teacher and student materials in relation to these clusters. For context, read Criterion #4a in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** College level Course. This text doesnot have learning objectives that specifically align with CCSSM. However at the beginning of each section the objectives are stated	X Meets ____Does Not Meet Insufficient Evidence
Metric NN1H: **Materials include problems and activities that serve to connect two or more clusters in a domain, or two or more domains in a category, or two or more categories, in cases where these connections are natural and important.** **How to Find the Evidence:** In the course being evaluated, choose two or more clusters, two or more domains, or two or more categories for which connections are natural and important. Evaluate the units, chapters, and lessons that deal with the chosen topics, looking for problems and activities that serve to connect the chosen clusters or domains. NOTE: An example of evaluating this Criterion might be to look at whether materials include problems in which students analyze a situation by building a function, graphing it, and using it to create and solve an equation. For context, read Criterion #4b in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** Happens throughout the text within Domains and across Domains	X Meets ____Does Not Meet Insufficient Evidence

Non-Negotiable 1: Focus and Coherence- Materials must focus coherently on the Widely Applicable Prerequisites in a way that is consistent with the progressions in the Standards.

Metric NN 1: If all metrics 1A–1H were rated as Meets, then rate Non-Negotiable 1 as Meets. If one or more metrics were rated as Does Not Meet/Insufficient Evidence, then rate Non-Negotiable 1 as Does Not Meet. Check the final rating.
Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)**

Before moving to Alignment Criterion 1, record the final Meets or Does Not Meet rating in the Evaluation Summary.

X **Meets**

____ **Does Not Meet**

Strengths/Weaknesses

- Relates concepts to prior knowledge from previous courses and the prerequisit Chapter and extends to new knowledge.

Now continue by evaluating Alignment Criterion 1 for Rigor and Balance.

Directions for Alignment Criterion 1

Rigor and Balance

Alignment Criterion 1:
Rigor and Balance- Materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.

The Standards set expectations for attention to all three aspects of rigor: conceptual understanding, procedural skill and fluency, and applications. Thus, materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.

The Standards set expectations for attention to all three aspects of rigor: conceptual understanding, procedural skill and fluency, and applications. Thus, materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.

- Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf)
- Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_HS_Spring_2013_FINAL1.pdf)
- Widely Applicable Prerequisites for College and Careers (http://achievethecore.org/prerequisites)
- From the materials being evaluated: teacher guides, student texts and workbooks

Rating this Criterion:

Alignment Criterion 1 is rated as Meets or Does Not Meet.

To rate Alignment Criterion 1, first rate metrics 1A, 1B, and 1C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). For each metric, guiding questions are provided to aid in gathering evidence.
Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 1 if the materials rate 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as rigor and balance, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.

AC Metric 1A: **The materials support the development of students' conceptual understanding of key mathematical concepts, especially where called for in specific content Standards or cluster headings.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Widely Applicable Prerequisites that relate specifically to conceptual understanding to use throughout the questions associated with this metric. NOTE: Some examples of clusters or Standards that call for conceptual understanding include: N-RN.A.1, A-APR.B, A-REI.A.1, A-REI.D.10, A.REI.D.11, F.IF.A.1, F-LE.A.1, G.SRT.A.2, G-SRT.C.6, S-ID.C.7 For context, read Criterion #2a in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	• Choose a cluster/Standard from the Widely Applicable Prerequisites that is aligned to each aspect of rigor and use it to evaluate these metrics. It is most helpful if the same clusters and Standards are chosen for all of the programs being evaluated. (Guidance in choosing clusters/Standards is included in "How to Find the Evidence" below.)	**Use the questions for AC Metric 1A to evaluate Metric 1A. Record evidence for each question and rate Metric 1A.** X **Meets (2)** ___ **Partially Meets (1)** ___ **Does Not Meet (0)**
Is conceptual understanding attended to thoroughly where the Standards set explicit expectations for understanding or interpreting? Evaluate lessons, chapter/unit assessments and homework assignments, paying attention to work aligned to Standards that explicitly call for understanding or interpreting.	**Evidence-** The exercises start with skill building leading into higher level "Concept understanding." "Do You See It"	
Do the materials feature high-quality conceptual problems and conceptual discussion questions? Evaluate lessons, chapter/unit assessments, and homework assignments. NOTE: Examples of conceptual problems might include such questions as "What is the maximum value of the function f(t) = 5 – t2 ?" or "Is √2 a polynomial? How about ½(x + √2)+ ½ (-x + √2)?"	**Evidence-** See above.	
Do the materials feature opportunities to identify correspondences across mathematical representations? Evaluate lessons, chapter/unit assessments and homework assignments. NOTE: An example of evaluating this metric might include looking at whether materials support students in identifying correspondences among the expression that defines a function, the graph that shows the relationship, and the behavior of the phenomenon being modeled (if any).	**Evidence-** Pg 260, #10 Hours of Daylight.	

AC Metric 1B: **The materials are designed so that students attain the fluencies and procedural skills required by the Standards.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Widely Applicable Prerequisites that relate specifically to fluency and procedural skill to use throughout the questions associated with this metric. NOTE: Some examples of Standards that call for procedural skill and fluency include: A-SSE.A.1b, A-SSE.2, A-APR.A.1, A-APR.C.6, F-BF.B.3, G-GPE.B.4, G-GPE.B.5, G-GPE.B.7, G-CO.A.1, G-SRT.B.5 For context, read Criterion #2b in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).		**Use the questions for AC Metric 1B to evaluate Metric 1B. Record evidence for each question and rate Metric 1B.** X **Meets (2)** ____ **Partially Meets (1)** ____ **Does Not Meet (0)**
Is progress toward fluency and procedural skill interwoven with the student's developing conceptual understanding of the skills in question? Evaluate lessons, chapter/unit assessments, daily routines, and homework assignments for evidence that the development of fluency and procedural skill is supported by conceptual understanding.	**Evidence-** Starts with procedural skills and works toward conceptual understanding. Exploration and "How Do You See It"	
Are purely procedural problems and exercises present that include cases in which opportunistic strategies are valuable and generic cases that require efficient and general procedures present? Evaluate lessons, chapter/unit assessments, daily routines, and homework assignments. NOTE: Problems in which opportunistic strategies are valuable might include such examples as solving x2 + 5 = 49 + 5 or (3x − 2)2 = 6x − 4. Generic cases that require efficient and general procedures might include such problems as solving c + 8 – c2 = 3(c – 1)2 – 5).	**Evidence-** See Above.	
AC Metric 1C: **The materials are designed so that teachers and students spend sufficient time working with engaging applications, without losing focus on the Widely Applicable Prerequisites.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Widely Applicable Prerequisites that relate specifically to application to use throughout the questions associated with this metric. NOTE: Some examples of clusters or Standards that call for application include: N-Q.A, A-SSE.B.3, A-REI.D.11, F-IF.B, F-IF.C.7, F-BF.A.1, G-SRT.C.8, S-ID.A.2, S-IC.A.1 For context, read Criterion #2c in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	V See above.	**Use the questions for AC Metric 1C to evaluate Metric 1C. Record evidence for each question and rate Metric 1C.** X **Meets (2)** ____ **Partially Meets (1)** ____ **Does Not Meet (0)**
Are there single- and multi-step contextual problems, including non-routine problems, that develop the mathematics of the course, afford opportunities for practice, and engage students in problem solving? Do the problems attend thoroughly to those places in the content Standards where expectations for multi-step and real-world problems are explicit? Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** Yes. Start with procedural skills and works toward conceptual understanding	

Do application problems particularly stress applying the Widely Applicable Prerequisites? Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** Yes. This a college level course where conceptual understanding is addressed in the exercises.	
Are there ample opportunities for students to engage with modeling problems? Do materials require students to use both individual parts of the modeling cycle as well as the full modeling cycle? Read the pages on High School—Modeling in the Standards for Mathematics (pp. 72 and 73). Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** Yes. Online resources for project based assessments.	

Alignment Criterion 1: Materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.

AC 1: Materials must earn at least 5 of 6 points to meet this Alignment Criterion. If materials earn less than 5 points, the Criterion has not been met. Check the final rating.
Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)**

Before moving to Alignment Criterion 2, record the final Meets or Does Not Meet rating in the Evaluation Summary.

X **Meets**

____ **Does Not Meet**

Strengths/Weaknesses:
- Prerequisit Chapter
- Review at End of Chapter.

Alignment Criterion 2: **Standards for Mathematical Practice- Materials must demonstrate authentic connections between content Standards and practice Standards.** The Standards require that designers of instructional materials connect the mathematical practices to mathematical content in instruction. Thus, materials must demonstrate authentic connections between content Standards and practice Standards.	The Standards require that designers of instructional materials connect the mathematical practices to mathematical content in instruction. Thus, materials must demonstrate authentic connections between content Standards and practice Standards. **Required Materials**: • Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_HS_Spring_2013_FINAL1.pdf) • Widely Applicable Prerequisites for College and Careers (http://achievethecore.org/prerequisites) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion:** Alignment Criterion 2 is rated as Meets or Does Not Meet. To rate Alignment Criterion 2, first rate metrics 2A, 2B, and 2C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). For each metric, guiding questions are provided to aid in gathering evidence. Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 2 if the materials rate 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as mathematical practices, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.

AC Metric 2A: **Materials address the practice Standards in such a way as to enrich the Widely Applicable Prerequisites; practices strengthen the focus of the course instead of detracting from it, in both teacher and student materials.** **How to Find the Evidence:** Familiarize yourself with the Widely Applicable Prerequisites. Evaluate teacher and student materials for evidence that the mathematical practices support and connect to the focus of the course. NOTE: An example of evaluating this Criterion might include looking at whether materials use regularity in repeated reasoning to illuminate formal algebra as well as functions, particularly recursive definitions of functions. For context, read Criterion #6 in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** MP1, MP2, MP5 and MP7 are used repeatedly throughout the text. MP3, MP4, and MP8 are not present because this is a college level course.	X Meets (2) ___Partially Meets (1) ___Does Not Meet (0)
AC Metric 2B: **Materials attend to the full meaning of each practice Standard.** **How to Find the Evidence:** For context, read Criterion #7 in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).		**Use the questions for AC Metric 2B to evaluate Metric 2B. Record evidence for each question and rate Metric 2B.** ___Meets (2) _1_Partially Meets (1) ___Does Not Meet (0)
Over the course of any given year of instruction, is each mathematical practice Standard meaningfully present in the form of assignments, activities, or problems that stimulate students to develop the habits of mind described in the practice Standard? Evaluate lessons, chapter/ unit assessments, and homework assignments for evidence of each mathematical practice being meaningfully present in instruction.	**Evidence-** See Above AC M2A.	
Are teacher-directed materials that explain the role of the practice Standards in the classroom and in students' mathematical development included? Are alignments to practice Standards accurate? Evaluate teacher materials, paying attention to explanations of the role of the practice Standards in the classroom and in students' mathematical development. Evaluate documents aligning lessons to practice Standards for accuracy. NOTE: Examples to look for when evaluating this metric might include the following: a highly scaffolded problem should not be aligned to MP.1; or a problem that directs a student to use a calculator should not be aligned to MP.5; or a problem about merely extending a pattern should not be aligned to MP.8.	**Evidence-** No. This is a college level course.	

AC Metric 2C: **Materials support the Standards' emphasis on mathematical reasoning.** **How to Find the Evidence:** For context, read Criterion #8 in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).		**Use the questions for AC Metric 2C to evaluate Metric 2C. Record evidence for each question and rate Metric 2C.** __X__ **Meets (2)** ____ **Partially Meets (1)** ____ **Does Not Meet (0)**
Do the materials support students in constructing viable arguments and critiquing the arguments of others concerning course-level mathematics that is detailed in the content Standards? Read Standard for Mathematical Practice 3. Evaluate teacher and student materials to ensure that students are given opportunities to reason with grade-level mathematics.	**Evidence-** Students are given chances to reason through "Do you See It" and in projects. However there are not opportunities for students reasoning with other students.	
Do the materials support students in producing not only answers and solutions, but also, in a course-appropriate way, arguments, explanations, diagrams, mathematical models, etc., especially in the Widely Applicable Prerequisites? Familiarize yourself with the Widely Applicable Prerequisites. Evaluate teacher and student materials to understand the types of work students are expected to produce.	**Evidence-** Yes, see above.	
Do materials explicitly attend to the specialized language of mathematics? Is the language of argument, problem solving, and mathematical explanations taught rather than assumed? Evaluate teacher and student materials, paying attention to how mathematical language is taught. NOTE: An example of evaluating this Criterion might include looking at whether students are supported in: basing arguments on definitions; using the method of providing a counter example; or recognizing that examples alone do not establish a general statement.	**Evidence-** Yes. In Exploration and Problem Solving section of exercises gives students an opportunity to explain and problem solve.	
Alignment Criterion 2: Materials must demonstrate authentic connections between content Standards and practice Standards. **AC 2:** Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 points, the Criterion has not been met. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewers only.)** **Before moving to Alignment Criterion 3, record the final Meets or Does Not Meet rating in the Evaluation Summary.**		__X__ **Meets** ____ **Does Not Meet** **Strengths/Weaknesses:** - Exploration and Problem Solving sections. - Chapter Summaries at the end of the Chapter.

Alignment Criterion 3: **Access to the Standards for All Students- Materials must provide supports for English Language Learners and other special populations.** Because Standards are for all students, alignment requires thoughtful support to ensure all students are able to meet the Standards. Thus, aligned materials must provide supports for English Language Learners and other special populations.	Because Standards are for all students, alignment requires thoughtful support to ensure all students are able to meet the Standards. Thus, aligned materials must provide supports for English Language Learners and other special populations. **Required Materials:** • Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math Publishers_Criteria_HS_Spring_2013_FINAL1.pdf) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion:** Alignment Criterion 3 is rated as Meets or Does Not Meet. To rate Alignment Criterion 3, first rate metrics 3A, 3B, and 3C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 3 if the materials rate 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as support for special population, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.
AC Metric 3A: **Support for English Language Learners and other special populations is thoughtful and helps those students meet the same Standards as all other students. The language in which problems are posed is carefully considered.** **How to Find the Evidence:** Evaluate teacher and student materials, paying attention to supports offered for special populations.	**Evidence-** For ELL, Spanish is supported ONLY online, no other special populations	___ **Meets (2)** X **Partially Meets (1)** ___ **Does Not Meet (0)**
AC Metric 3B: **Materials provide appropriate level and type of scaffolding, differentiation, intervention, and support for a broad range of learners with gradual removal of supports, when needed, to allow students to demonstrate their mathematical understanding independently.** **How to Find the Evidence:** Evaluate teacher and student materials, paying attention to whether materials provide differentiation that will lead all learners to engage with on-grade-level content.	**Evidence-** This is a college level course and materials are appropriate	X **Meets (2)** ___ **Partially Meets (1)** ___ **Does Not Meet (0)**
AC Metric 3C: **Design of lessons recommends and facilitates a mix of instructional approaches for a variety of learners such as using multiple representations (e.g., including models, using a range of questions, checking for understanding, flexible grouping, pair-share).** **How to Find the Evidence:** Evaluate teacher materials, noting instructional approaches suggested for whole class and differentiated lessons and activities.	**Evidence-** Not evident. This is a college level course and materials are appropriate.	X **Meets (2)** ___ **Partially Meets (1)** ___ **Does Not Meet (0)**

Alignment Criterion 3: Materials must provide supports for English Language Learners and other special populations. **AC 3** Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 points, the Criterion has not been met. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewers only.)** **Move to the Evaluation Summary and record the final Meets or Does Not Meet rating .**	X **Meets** ____ **Does Not Meet** **Strengths/Weaknesses:** Weakness •Does not support special populations

Once an evaluation for alignment to the Shifts and major features of the CCSS has been conducted using Sections 1-3, it's important to evaluate for overall quality and best practices. A starting list of Indicators of Quality are suggested below. States, districts and others evaluating instructional materials are encouraged to add to this list to ensure materials reflect local contexts. For background information on some of the Indicators of Quality in this section, refer to pp.16–18 in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).

Indicators of Quality	**Evidence- Give specific examples.**	**Rating: (Reviewer only.)**
1. Lessons are thoughtfully structured and support the teacher in leading the class through the learning paths at hand, with active participation by all students in their own learning and in the learning of their classmates.	**Evidence-** Group activities or peer working is not ~~e~~given.	**(Reviewer only.)** ~~X~~ **Yes** X **No**
2. The underlying design of the materials includes both problems and exercises. (In solving problems, students learn new mathematics, whereas in working exercises, students apply what they have already learned to build mastery.) Each problem or exercise has a purpose. **NOTE: This Criterion does not require that the problems and exercises be labeled as such.**	**Evidence-** See each exercise set.	**(Reviewer only.)** X **Yes** ____ **No**

3. Design of assignments is not haphazard: exercises are given in intentional sequences in order to strengthen students' mathematical understanding.	**Evidence-** Exercise sets start with procedural skills and work towards conceptual understanding.	**(Reviewer only.)** X Yes ____ No
4. There are separate teacher materials that support and reward teacher study including, but not limited to: discussion of the mathematics of the units and the mathematical point of each lesson as it relates to the organizing concepts of the unit, discussion on student ways of thinking and anticipating a variety of students responses, guidance on lesson flow, guidance on questions that prompt students thinking, and discussion of desired mathematical behaviors being elicited among students.	**Evidence-** Hit and miss. ~~the~~ there are small notations made throughout TE.	**(Reviewer only.)** X Yes ____ No
5. Manipulatives suggested in the materials are faithful representations of the mathematical objects they represent and are connected to written methods.	**Evidence-** Online Calculators are good representations	**(Reviewer only.)** X Yes ____ No
6. Materials include a variety of curriculum-embedded assessments. Examples include pre-, formative, summative, and self-assessment resources.	**Evidence-** Check points for immediate feedback throughout text. Summarizes at the end of each section, projects and Chapter Tests.	**(Reviewer only.)** X Yes ____ No
7. Assessments contain aligned rubrics, answer keys, and scoring guidelines that provide sufficient guidance for interpreting student performance.	**Evidence-** Answer key yes, Rubics No	**(Reviewer only.)** X Yes ____ No
8. Materials assess student proficiency using methods that are accessible and unbiased, including the use of course-level language in student prompts.	**Evidence-** Yes, see #6	**(Reviewer only.)** X Yes ____ No

9. Materials are carefully evaluated by qualified individuals whose names are listed, in an effort to ensure freedom from mathematical errors and course-level appropriateness.	**Evidence-** Pg xiii	**(Reviewer only.)** X **Yes** ____ **No**
10. The visual design supports students in engaging thoughtfully with the subject. Navigation through the text is clear.	**Evidence-** Yes .	**(Reviewer only.)** X **Yes** ____ **No**

Reviewer IMET Evaluation Summary **Title/Level:** Trigonometry 9/E 9th-12th

Publisher: Cengage **Copyright:** 2014 **ISBN:** 9781133954323

Reviewer ID # DQ PP. **Date Review Completed:** 3/8/2016

Non-Negotiable Criteria-The Non-Negotiable must be met in order for the Non-Negotiable Alignment Criteria to be met overall.

Non- Negotiable 1: Focus and Coherence

X **Meets**

____ **Does Not Meet**

Non-Negotiable Overall:

__X__ **Meets** _____ **Does Not Meet**

Alignment Criteria- Each Alignment Criterion must be met with a sufficient number of points in order for Alignment Criteria to be labeled as "Meets" overall. The more points the materials receive on the Alignment Criteria, the better they are aligned.

Alignment Criterion 1: Rigor and Balance	Alignment Criterion 2: Standards of Mathematical Practice	Alignment Criterion 3: Access to Standards for All Learners
Points: 6 **of 6 possible.** **(Materials must receive at least 5 of 6 points to align.)**	**Points:** 5 **of 6 possible.** **(Materials must receive at least 5 of 6 points to align.)**	**Points:** 5 **of 6 possible.** **(Materials must receive at least 5 of 6 points to align.)**
X **Meets**	X **Meets**	X **Meets**
_____ **Does Not Meet**	_____ **Does Not Meet**	_____ **Does Not Meet**

Alignment Criteria Overall:

__X__ **Meets** _____ **Does Not Meet**

If the materials meet the Non-Negotiable Criterion and each Alignment Criterion, they are aligned to the Shifts and major features of the Standards. **Do the materials meet every Non-Negotiable and Alignment Criterion?** X **Yes** ____ **No**

What are the specific areas of strength and weakness based on this evaluation? Publishers or others modifying or developing assessments can use this information to make improvements and/or to remedy gaps in the alignment of assessment materials.

Strengths:

1. Relates concepts to prior knowledge throughout text and in Chapter 1
2. Prerequisit Chapter.
3. End of Chapter Review Summary.
4. "How do You See It", "Exploration", "Summarize" and "Problem Solving" Given in each section and/or Chapter.

Weakness:

1. The ELL do only supports Spanish Learners.
2. The red on white can not be seen by some color blind students.

IDAHO STATE DEPARTMENT OF EDUCATION

Advanced Placement Course: Statistics

Content Area: Mathematics

Course Title: AP Stat

Title of Material: Understandable Statistics

Author: Brase & Brase

Publisher: Cengage Learning

ISBN #: 9781285463063 **Copyright** 2015

Reviewers: CM & DJQ

Meets Content Standards Alignment: X **Yes** _____ **No**

Meets Materials Analysis Evaluation: X **Yes** _____ **No**

X **Core Program** 89.390 AP

_____ **Other Program**

_____ **Resource/Supplemental**

_____ **Not Recommended**

Advanced Placement:

- ☐ AP Capstone
- ☐ Arts
- ☐ English
- ☐ History & Social Science
- ☒ Math & Computer Science
- ☐ Sciences
- ☐ World Languages & Cultures

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Standards Alignment Evaluation Rubric

0 = No Alignment– **Not Evident:** Content as described in the Standards is **not evident**.

.5 = Partial Alignment- **Partially Evident:** Content as described in the Standards is **partially evident** and there are few gaps.

1 = High Alignment – **Clearly Evident:** Content is fully aligned as described in the Standards and repeatedly included to guarantee extensive opportunities for students to work with the content. Alignment is **clearly evident**.

N/A = Not applicable for standard

Advanced Placement		**Statistics**	
Standards and Learning Indicators		**Publisher/Provider: List units/lessons with specific examples of where standards are introduced/Taught/Assessed.**	**Point Value 0/.5/1 (Reviewer)**
Exploring Data			
Describing patterns and departures from patterns		Pg 42-70	1
A. Constructing and interpreting graphical displays of distributions of univariate data (dotplot, stemplot, histogram, cumulative frequency plot)	1. Center and spread	Pg 42-70	1
	2. Clusters and gaps	Pg 42-70	1
	3. Outliers and other unusual features	Pg 42-70	1
	4. Shape	Pg 42-70	1

B. Summarizing distributions of univariate data	1. Measuring center: median, mean	Pg 89-97	1
	2. Measuring spread: range, interquartile range, standard deviation	Pg 102-113	1
	3. Measuring position: quartiles, percentiles, standardized scores (z-scores)	Pg 121-128, 288-296	1
	4. Using boxplots	Pg 121-128	1
	5. The effect of changing units on summary measures	Pg 127	.5
C. Comparing distributions of univariate data (dotplots, back-to-back stemplots, parallel boxplots)	1. Comparing center and spread: within group, between group variation	Pg 127	.5
	2. Comparing clusters and gaps		0
	3. Comparing outliers and other unusual features		0
	4. Comparing shapes	Limited pg 127	.5
D. Exploring bivariate data	1. Analyzing patterns in scatterplots	528-542	1
	2. Correlation and linearity	534-542 ; Pg 548-560	1
	3. Least-squares regression line	Pg 548-560	1
	4. Residual plots, outliers and influential points	Pg 548-560	1
	5. Transformations to achieve linearity: logarithmic and power transformations	Pg 566-568 within problem set	.5

E. Exploring categorical data	1. Frequency tables and bar charts	Pg 42-52	1
	2. Marginal and joint frequencies for two-way tables	Not Present	0
	3. Conditional relative frequencies and association	Not Present	0
	4. Comparing distributions using bar charts	Pg 59-65	1
Sampling and Experimentation			
Planning and conducting a study			
A. Overview of methods of data collection	1. Census	Pg 22-29	1
	2. Sample survey	Pg 22-29	1
	3. Experiment	Pg 22-29	1
	4. Observational study	Pg 22-29	1
B. Planning and conducting surveys	1. Characteristics of a well-designed and well-conducted survey	Pg 28	.5
	2. Populations, samples and random selection	Pg 4-18	1
	3. Sources of bias in sampling and surveys	Pg 26-29	1
	4. Sampling methods, including simple random sampling, stratified random sampling and cluster sampling	Pg 13-18	1

C. Planning and conducting experiments	1. Characteristics of a well-designed and well-conducted experiment	Pg 22-29	1
	2. Treatments, control groups, experimental units, random assignments and replication	Pg 22-29	1
	3. Sources of bias and confounding, including placebo effect and blinding	Pg 22-29	1
	4. Completely randomized design	Pg 22-29	1
	5. Randomized block design, including matched pairs design	Pg 22-29	1
D. Generalizability of results and types of conclusions that can be drawn from observational studies, experiments and surveys		Pg 2-29	1
Anticipating Patterns			
Exploring random phenomena using probability and simulation			
A. Probability	1. Interpreting probability, including long-run relative frequency interpretation	Pg 142-151	1
	2. "Law of Large Numbers" concept	Pg 146-157	1
	3. Addition rule, multiplication rule, conditional probability and independence	Pg 155-169	1
	4. Discrete random variables and their probability distributions, including binomial and geometric	Pg 196-205, 212-22, 229-237 Pg 242-257	1
	5. Simulation of random behavior and probability distributions	Pg 194	.5
	6. Mean (expected value) and standard deviation of a random variable, and linear transformation of a random variable	Pg 201-205 Not finding linear transform.	.5
B. Combining independent random variables	1. Notion of independence versus dependence	Pg 156-169	1

	2. Mean and standard deviation for sums and differences of independent random variables	Pg 288-296, 299-308, 331	1
C. The normal distribution	1. Properties of the normal distribution	Pg 288-296, 299-308	1
	2. Using tables of the normal distribution	Pg 288-296, 299-308	1
	3. The normal distribution as a model for measurements	Pg 288-296, 299-308	1
D. Sampling distributions	1. Sampling distribution of a sample proportion	Pg 332-339	1
	2. Sampling distribution of a sample mean	Pg 314-327	1
	3. Central Limit Theorem	Pg 314-327	1
	4. Sampling distribution of a difference between two independent sample proportions	Pg 332-339	1
	5. Sampling distribution of a difference between two independent sample means	Pg 314-327	1
	6. Simulation of sampling	Pg 314-327	1
	7. T-distribution	Pg 374-381	1
	8. Chi-square distribution	Pg 620-634	1

Statistical Inference			
Estimating population parameters and testing hypotheses			
A. Estimation (point estimators and confidence intervals)	1. Estimating population parameters and margins of error	Pg 314-319, 360-369	1
	2. Properties of point estimators, including unbiasedness and variability	Pg 320-327, 387-395	1
	3. Logic of confidence intervals, meaning of confidence level and confidence intervals, and properties of confidence intervals	Pg 361-367	1
	4. Large sample confidence interval for a proportion	Pg 390-395	1
	5. Large sample confidence interval for a difference between two proportions	Pg 400-412	1
	6. Confidence interval for a mean	Pg 360-369	1
	7. Confidence interval for a difference between two means (unpaired and paired)	Pg 494-570	1
	8. Confidence interval for the slope of a least-squares regression line	Pg 548-560	1
B. Tests of significance	1. Logic of significance testing, null and alternative hypotheses; p-values; one- and two-sided tests; concepts of Type I and Type II errors; concept of power	Pg 436-447	1
	2. Large sample test for a proportion	Pg 468-474	1
	3. Large sample test for a difference between two proportions	Pg 494-570	1
	4. Test for a mean	Pg 452-462	1
	5. Test for a difference between two means (unpaired and paired)	Pg 479-487	1

	6. Chi-square test for goodness of fit, homogeneity of proportions, and independence (one- and two-way tables)	Pg 623-634, 638-643	1
	7. Test for the slope of a least-squares regression line	Pg 569-588	1

Indicators of Quality:

Indicators of Quality	Evidence- Give specific examples.	Rating: (Reviewer only.)
1. Lessons are thoughtfully structured and support the teacher in leading the class through the learning paths at hand, with active participation by all students in their own learning and in the learning of their classmates.	Evidence- Level of course is college. The lessons are structured and are supportive of the teacher in guiding the students in an active learning environment	(Reviewer only.) X Yes ____ No
2. The underlying design of the materials includes both problems and exercises. (In solving problems, students learn new mathematics, whereas in working exercises, students apply what they have already learned to build mastery.) Each problem or exercise has a purpose. NOTE: This Criterion does not require that the problems and exercises be labeled as such.	Evidence- The design of the problems and exercises is appropriate for an AP course.	(Reviewer only.) X Yes ____ No
3. Design of assignments is not haphazard: exercises are given in intentional sequences in order to strengthen students' mathematical understanding.	Evidence- The assignments are purposeful and sequential.	(Reviewer only.) X Yes ____ No
4. There are separate teacher materials that support and reward teacher study including, but not limited to: discussion of the mathematics of the units and the mathematical point of each lesson as it relates to the organizing concepts of the unit, discussion on student ways of thinking and anticipating a variety of students responses, guidance on lesson flow, guidance on questions that prompt students thinking, and discussion of desired mathematical behaviors being elicited among students.	Evidence- There is a Teachers Resource Guide that has Teaching Tips for each chapter	(Reviewer only.) X Yes ____ No
5. Manipulatives suggested in the materials are faithful representations of the mathematical objects they represent and are connected to written methods.	Evidence- This is a college level course. The manipulatives are calculators & the use of software, which is appropriate for this course.	(Reviewer only.) X Yes ____ No

6. Materials include a variety of curriculum-embedded assessments. Examples include pre-, formative, summative, and self-assessment resources.	Evidence- There are a variety of assessments that is appropriate for an AP course	(Reviewer only.) 1 Yes ____ No
7. Assessments contain aligned rubrics, answer keys, and scoring guidelines that provide sufficient guidance for interpreting student performance.	Evidence- There are not rubrics however there guidance for performance is in line with AP course	(Reviewer only.) x Yes ____ No
8. Materials assess student proficiency using methods that are accessible and unbiased, including the use of course-level language in student prompts.	Evidence- Course level language is used throughout	(Reviewer only.) x Yes ____ No
9. Materials are carefully evaluated by qualified individuals, whose names are listed, in an effort to ensure freedom from mathematical errors and course-level appropriateness.	Evidence- yes pg xix	(Reviewer only.) x Yes ____ No
10. The visual design supports students in engaging thoughtfully with the subject. Navigation through the text is clear.	Evidence- Not much white space. May be difficult for colour blind student Navagation is logical & clear.	(Reviewer only.) ____ Yes x No

COMMENTS:

STRENGTHS	WEAKNESSES
-Logical flow of content from specific to general. Skill practice to concepuals -Use of real world data sets. -Guided practice in each unit. -Chapter Review problems & the Using Technology at the end of each chapter. help the students tie everything together - "Preparing for the AP Statistics Examination" Supplement help students to become familiar with the exam.	-The use of colour may be difficult for colour blind students. -No ELL support. -No Glossary.

EVIDENCE SUMMARY:

FOCUS-
Materials do not assess topics before the grade level in which the topic should be introduced. Kindergarten Ready Common Core only assess grade-level content.

COHERENCE-
At the beginning of every unit, it shows what standards are being taught in every lesson. It shows the progession that students are being prepared for in the next grade-level.

RIGOR-
With Ready common core, the students are using the Practice Standards. All of the practice standards are used throughout the Ready curriculum. There is support for teachers with the practice standards through the curriculum.

CONCEPTUAL UNDERSTANDING-
Students are using the Strategies in the Talk about it questions and whole class questions. Throughout the lessons, students have to present arguments and explanations to use models. why and how questions Language and vocabulary are grade level appropriate.

MATHEMATICAL PRACTICES-
The guided practice portion has students doing multiple representations and models for problems. The modeled instruction, guided practice, and independent practice include the Talk about it questions for pair share and discussion.

ACCESSIBILITY OF STANDARDS TO ALL STUDENTS-
Ready common core lessons build from supportive lesson structures to independent. The interactive component allows students to participate in learning. All lessons have problems in the introduction, modeled instruction, and guided instruction.

OTHER:
Manipulatives are not provided with this curriculum. However, it does show what manipulatives to use.

2015-16 Interim Mathematics Review

Mathematics Evaluation Tool Grades K-8

Publisher: Curriculum Associates, LLC

Title of Material: Ready Common Core Mathematics, Kindergarten

Author: Curriculum Associates

ISBN #: 9780760988541 **Copyright** 2014

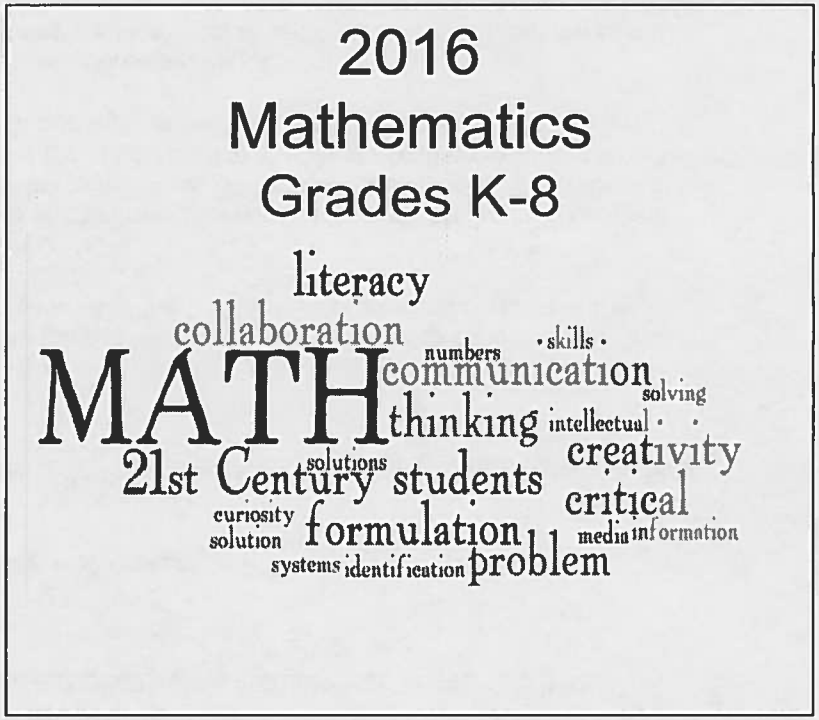
Reviewer ID: E.L. C.O.

Core Mathematics Program- a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Core.

Other Mathematics Program- a program that substantially, but partially, meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Other.

Component Mathematics Program- a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs.
Substantial evidence clearly supports the designation of this program as Component.

Intervention Program- a program designed and intended to target and support students' specific needs.
Substantial evidence clearly supports the designation of this program as Intervention.



- Evaluation Form adapted from Instructional Materials Evaluation Toolkit (IMET).

The IMET was developed by Student Achievement Partners. Educators may use or adapt. http://creativecommons.org/licenses/by/3.0/ Download this tool at http://achievethecore.org/IMET

Instructional Materials Evaluation Tool

Mathematics, Grades K-8

What Are the Purposes of the IMET?

This Math IMET is designed to help educators determine whether instructional materials are aligned to the Shifts and major features of the Common Core State Standards (CCSS). The substantial instructional Shifts (http://www.corestandards.org/other-resources/key-shifts-inmathematics/) at the heart of the Common Core State Standards are:

- **Focus** strongly where the Standards focus
- **Coherence**: Think across grades and link to major topics within the grade
- **Rigor**: In major topics, pursue conceptual understanding, procedural skill and fluency, and application with equal intensity.

The IMET draws directly from the following documents:

- Common Core State Standards for Mathematics (www.corestandards.org/Math)
- Publishers' Criteria for the Common Core State Standards in Mathematics grade K-8 (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)

When to use the IMET

1. Purchasing materials: Many factors go into local purchasing decisions. Alignment to the Standards is a critical factor to consider. This tool is designed to evaluate alignment of instructional materials to the Shifts and the major features of the CCSS. It also provides suggestions of additional indicators to consider in the materials evaluation and purchasing process.

2. Evaluating materials currently in use: The IMET can be used to analyze the degree of alignment of existing materials and help to highlight specific, concrete flaws in alignment. Even where materials and tools currently in use fail to meet one or more of these criteria, the pattern of failure is likely to be informative. States and districts can use the evaluation to create a thoughtful plan to modify or combine existing resources in such a way that students' actual learning experiences approach the focus, coherence, and rigor of the Standards.

3. Developing programs: Those developing new programs can use this tool as guidance for creating aligned curricula.
Please note this tool was designed for evaluating comprehensive curricula (including any supplemental or ancillary materials), but it was not designed for the evaluation of standalone supplemental materials.

Who Uses the IMET?

Evaluating instructional materials requires both subject-matter and pedagogical expertise. Evaluators should be well versed in the Standards (www.corestandards.org/Math) for all grades in which materials are being evaluated. This includes understanding the Major Work of the grade (www.achievethecore/focus), the Supporting and Additional work, how the content fits into the progressions in the Standards (www.achievethecore.org/progressions), and the expectations of the Standards with respect to conceptual understanding, procedural skill and fluency, and application. Evaluators also should be familiar with the substantial instructional Shifts (http:// www.corestandards.org/other-resources/key-shifts-in-mathematics/) of Focus, Coherence and Rigor that are listed above.

Getting Started

Prior to Evaluation

Assemble all of the materials necessary for the evaluation. It is essential for evaluators to have materials for all grades covered by the program, as some criteria cannot be rated without having access to each grade. In addition, each evaluator should have a reference copy of the Common Core State Standards for Mathematics (CCSSM) and the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013).

2015-16 Interim Mathematics Review

Mathematics Evaluation Tool Grades K-8

Publisher: Curriculum Associates, LLC

Title of Material: Ready Common Core Mathematics, Kindergarten

Author: Curriculum Associates

ISBN #: 9780760988541 **Copyright** 2014

Reviewer ID: [redacted] C.O. E.L.

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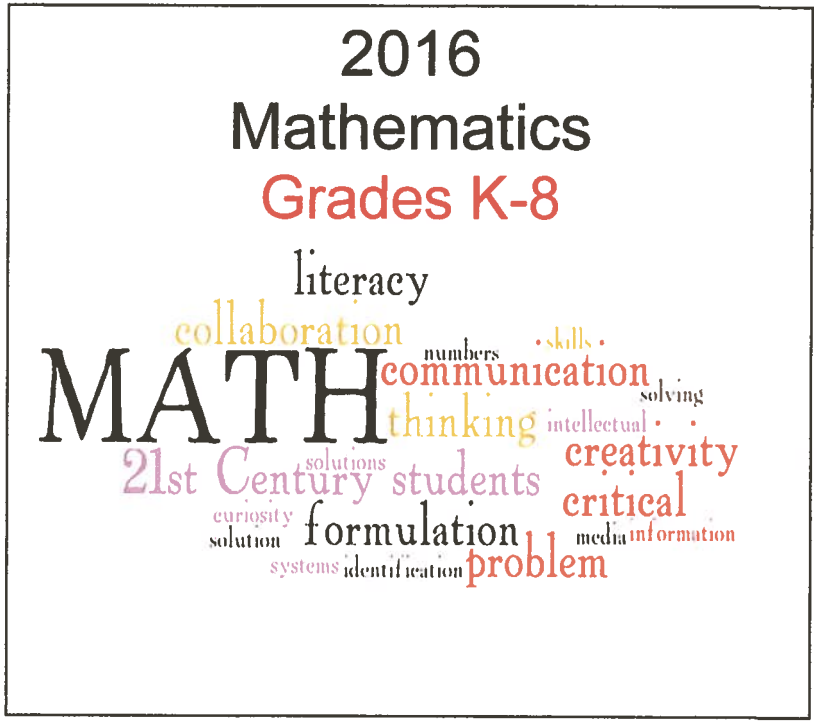

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Please note this tool was designed for evaluating comprehensive curricula (including any supplemental or ancillary materials), but it was not designed for the evaluation of standalone supplemental materials.

Who Uses the IMET?
Evaluating instructional materials requires both subject-matter and pedagogical expertise. Evaluators should be well versed in the Standards (www.corestandards.org/Math) for all grades in which materials are being evaluated. This includes understanding the Major Work of the grade (www.achievethecore/focus), the Supporting and Additional work, how the content fits into the progressions in the Standards (www.achievethecore.org/progressions), and the expectations of the Standards with respect to conceptual understanding, procedural skill and fluency, and application. Evaluators also should be familiar with the substantial instructional Shifts (http:// www.corestandards.org/other-resources/key-shifts-in-mathematics/) of Focus, Coherence and Rigor that are listed above.

Getting Started
Prior to Evaluation

Assemble all of the materials necessary for the evaluation. It is essential for evaluators to have materials for all grades covered by the program, as some criteria cannot be rated without having access to each grade. In addition, each evaluator should have a reference copy of the Common Core State Standards for Mathematics (CCSSM) and the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013).

Before conducting the evaluation itself, it is important to develop a protocol for the evaluation process. The protocol should include having evaluators study the Publishers' Criteria and the IMET. It will also be helpful for evaluators to get a sense of each program overall before beginning the process. At a minimum, this would include reading the front matter of the text, looking at the table of contents and paging through multiple chapters.

Sections 1-3 below should be completed to produce a comprehensive picture of the strengths and weaknesses of the materials under evaluation. Information about areas in need of improvement or supplementation should be shared with internal and external stakeholders.

Navigating the Tool

Begin with Section 1: Non-Negotiable Alignment Criteria

- The Non-Negotiable Alignment Criteria must each be met in full for materials to be considered aligned to the Shifts and the major features of the Common Core State Standards. Each Non-Negotiable Alignment Criterion has one or more metrics associated with it; every one of these metrics must be met in order for the criterion as a whole to be met.

- Examine the relevant materials and use evidence to rate the materials against each criterion and its associated metric(s).

- Record and explain the evidence upon which the rating is based.

Continue to Section 2: Alignment Criteria

- The Alignment Criteria must each be met for materials to be considered aligned to the Shifts and the major features of the Common Core State Standards. Each Alignment Criterion has one or more metric associated with it; a specific number of these metrics must be met or partially met in order for the criterion as a whole to be met.

- Examine the materials in relation to these criteria, assigning each metric a point value. Rate the criterion as "Meets" or "Does Note Meet" based on the number of points assigned. The more points the materials receive on the alignment Criteria, the better they are aligned.

- Record and explain the evidence upon which the rating is based.

Proceed to Section 4: Indicators of Quality

- Indicators of Quality are important considerations that will help evaluators better understand the overall quality of instructional materials. These considerations are not criteria for alignment to the CCSS, but they provide valuable information about additional program characteristics. Evaluators may want to add their own indicators to the examples provided.

Directions for Non-Negotiable 1

Freedom from Obstacles to Focus

Criterion	Evidence- Give specific examples.	Rating: (Reviewer only.)
Non-Negotiable 1: **Freedom from Obstacles to Focus** **Materials must reflect the content architecture of the Standards by not assessing the topics named before the grade level where they first appear in the Standards.** The Standards foster students' progress to algebra by focusing strongly on arithmetic. Consistent with this focus, certain topics from outside of arithmetic appear only in later grades. Thus, to be aligned, materials must reflect the content architecture of the Standards by not assessing the topics named before the grade level where they first appear in the Standards. In this criterion, "topics named" means the topics that are explicitly named in Metric 1A. No other topics should be added to the list in Metric 1A. (Note that other topics in the standards are addressed in criterion NN2.)	**Required Materials** • Common Core State Standards for Mathematics (www.corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf) • From the materials being evaluated: teacher guides and all assessment components	**Rating this Criterion:** Non-Negotiable 1 is rated as Meets or Does Not Meet. To rate Non-Negotiable 1, begin by rating Metric 1A. Since Metric 1A is the only metric for Non-Negotiable 1, the rating for Non-Negotiable 1 is the same as the rating for Metric 1A. If Metric 1A is rated as Does Not Meet, include evidence of when the named topic(s) is/are assessed. If the metric is rated as Meets, list the grade(s) examined in the evaluation.

Metric NN1A: **Materials reflect the basic architecture of the Standards by not assessing the listed topics before the grade level indicated.** • Probability, including chance, likely outcomes, probability models. (Introduced in the CCSSM in grade 7) • Statistical distributions, including center, variation, clumping, outliers, mean, median, mode, range, quartiles; and statistical association or trends, including two-way tables, bivariate measurement data, scatter plots, trend line, line of best fit, correlation. (Introduced in the CCSSM in grade 6) • Similarity, congruence, or geometric transformations. (Introduced in the CCSSM in grade 8) • Symmetry of shapes, including line/ reflection symmetry, rotational symmetry. (Introduced in the CCSSM in grade 4) **How to Find the Evidence:** Evaluate the table of contents, all chapter tests, all unit tests, and other such assessment components (including rubrics). For context, read Criterion #2 from the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013). NOTE: Grade alignments of other topics are addressed in Non-Negotiable 2, Focus and Coherence.) In this criterion, "topics named" means the topics that are explicitly named in Metric 1A. No other topics should be added to the list in Metric 1A. (Note that other topics in the standards are addressed in criterion NN2.)	**Evidence-** Materials do not **assess** topics **before** the grade level in which the topic should be introduced. The instructional materials do not assess any topics from future grade levels. The assessments are featured online in the teacher toolbox. For most lessons, there are informal assessments and remediation tools. The Kindergarten *Ready Common Core* instructional materials only assess grade-level content. The Curriculum tells the teacher about the prerequisite skills needed for the lesson. It also tells the teachers the progression from Kindergarten to first grade.	**(Reviewer only.)** **__x__Meets** **____Does Not Meet**
Non-Negotiable 1: Materials must reflect the content architecture of the Standards by not assessing the topics named* before the grade level where they first appear in the Standards. **NN 1** If Metric 1A was rated as Meets, then rate Non-Negotiable 1 as Meets. If Metric 1A was rated as Does Not Meet, then rate Non- Negotiable 1 as Does Not Meet. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion.**(Reviewer only.)** **Before moving to Non-Negotiable 2, record the final Meets or Does Not Meet rating in the Evaluation Summary.**		**(Reviewer only.)** **_X_Meets** **____Does Not Meet** **Strengths/Weaknesses:**

Directions for Non-Negotiable 2

Focus and Coherence

Non-Negotiable 2:

Focus and Coherence

Materials must focus coherently on the Major Work of the grade in a way that is consistent with the progressions in the Standards.

Focus and coherence are the two major evidence-based design principles of the Common Core State Standards for Mathematics (CCSSM, p. 3). Focus is necessary in order to fulfill the ambitious promise the states have made to their students by adopting the Standards: greater achievement at the college and career ready level; greater depth of understanding of mathematics; and a rich classroom environment in which reasoning, sense-making, applications, and a range of mathematical practices flourish. In simpler terms, a mile-wide, inch-deep curriculum translates to less time per topic. Less time means less depth and moving on without many students. Thus, materials must focus coherently on the Major Work of the grade in a way that is consistent with the progressions in the Standards.

Required Materials

- Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf)
- Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)
- Focus by Grade Level for the grade being evaluated (www.achievethecore.org/focus)
- From the materials being evaluated: teacher guides, student texts and workbooks

Rating this Criterion:

Non-Negotiable 2 is rated as Meets or Does Not Meet.

To rate Non-Negotiable 2, first rate metrics 2A–2H. Each of these eight metrics must be rated as Meets in order for Non-Negotiable 2 to be rated as Meets. Rate each metric 2A-2H as Meets or Does Not Meet/Insufficient Evidence. If the evidence examined shows that the Criterion is met, then mark the Criterion Meets. If the evidence examined shows that the Criterion is not met—or if there is insufficient evidence to make a determination—then mark the Criterion as Does Not Meet/Insufficient Evidence. Support all ratings with evidence.

Metric NN2A:

In each grade K–8, students and teachers using the materials as designed devote the large majority of time to the Major Work of the grade.

How to Find the Evidence:

Familiarize yourself with the Major Work of the grade being evaluated (see the Focus by Grade Level documents.)

Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, lessons, homework assignments, and assessments. (Evaluate both student and teacher materials.)

Consider time spent on the Major Work of the grade and judge qualitatively whether students and teachers using the materials as designed will devote the large majority of time to the Major Work of the grade.

For context, read Criterion #1 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013)

Evidence-

At the beginning of every unit, it shows what standards are taught in every lesson. It also shows the progression that the students are being prepared for in the next grade level.

(Reviewer only.)

_x___Meets

____Does Not Meet/

Insufficient Evidence

Metric NN2B: **Supporting Work, where present, enhances focus and coherence simultaneously by also engaging students in the Major Work of the grade.** **How to Find the Evidence:** Familiarize yourself with the Major Work and Supporting Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate chapters and lessons that focus on Supporting Work. NOTE: Example of evaluating this Criterion might include looking at whether materials for K–5 generally treat data displays as an occasion for solving grade-level word problems using the four operations (e.g., see 3.MD.B.3); or whether materials for grade 7 take advantage of opportunities to use probability to support ratios, proportions, and percentages. For context, read Criterion #3 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Overall, the instructional materials do not miss opportunities to connect non-major clusters of standards to major clusters and as a result, the supporting content does engage students in the major work of Kindergarten.	**(Reviewer only.)** **___x_Meets** **____Does Not Meet/** **Insufficient Evidence**
Metric NN2C: **Materials base content progressions on the grade-by-grade progressions in the Standards. Content from previous or future grades does not unduly interfere with or displace on-grade-level content.** **How to Find the Evidence:** Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, and lessons in both student and teacher materials. NOTE: In some cases it may be possible that aligned materials might address some aspects of a topic in a strategic way before or after the grade level in which the topic is central in the Standards' progressions; for example, a curriculum author might purposefully choose to explore adding fractions with unlike denominators in a way appropriate to grade four, recognizing that this work is not really required until the next grade. However, any such purposeful discrepancies in content progressions should enhance the required learning in each grade; not unduly interfere with or displace grade-level content; and be clearly aimed at helping students meet the Standards as written rather than effectively rewriting the progressions in the Standards. And in all cases, note that Non-Negotiable 1 must be met for materials to be aligned. For context, read Criterion #5a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** All of the lessons in the *Ready Common Core* Curriculum align with the common core standards. At the beginning of every unit, the lessons show what standard is being taught and what the progression is for the following year. It also shows the learning progression of that particular content. In the introduction of each lesson, Ready Common Core makes connections to previous lessons.	**(Reviewer only.)** **___x_Meets** **____Does Not Meet/** **Insufficient Evidence**

Metric NN2D: **Materials give students extensive work with on-grade-level problems.** **How to Find the Evidence:** Evaluate both student and teacher materials. If the materials provide resources for differentiated learning, consider whether lower-performing students have opportunities to engage with grade-level problems. Also consider whether higher-performing students are given opportunities to learn current grade-level content in greater depth. For context, read Criterion #5b in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** All standards are covered but not extensive work is given.	(Reviewer only.) **___x_Meets** **____Does Not Meet/** **Insufficient Evidence**
Metric NN2E: **Materials relate on-grade-level concepts explicitly to prior knowledge from earlier grades.** **How to Find the Evidence:** Evaluate both student and teacher materials. NOTE: Examples of evaluating this Criterion might include looking at the way the materials extend basic ideas of place value across the decimal point; or the role that properties of operations play when the materials extend arithmetic beyond whole numbers to fractions, variables, and expressions. More generally, cluster headings in the Standards sometimes signal key moments where reorganizing and extending previous knowledge is important in order to accommodate new knowledge (e.g., see cluster headings that use the phrase "Apply and extend previous understanding"). For context, read Criterion #5c in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** The introduction of each lesson tells the teacher about the connections from previous learning / lessons. This is done with an opening activity.	(Reviewer only.) **__x__Meets** **____Does Not Meet/** **Insufficient Evidence**
Metric NN2F: **Review of material from previous grades is clearly identified as such to the teacher, and teacher and students can see what their specific responsibility is for the current year.** **How to Find the Evidence:** Evaluate the table of contents, but do not stop there; also evaluate units, chapters, lessons, homework assignments and assessments. (Evaluate both student and teacher materials.) Identify any content from previous grades and check whether it is identified as such. For context, read Criterion #5a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** The content of Ready Common Core is part of the Major work or supporting work. The introduction of each lesson tells about the prerequisite connections. There is also prerequisite support in the Teacher Toolbox.	(Reviewer only.) **__x__Meets** **____Does Not Meet/** **Insufficient Evidence**

Metric NN2G: **Materials include learning objectives that are visibly shaped by CCSSM cluster headings.** **How to Find the Evidence:** Select several clusters from the Major Work in the grade being evaluated. Evaluate teacher and student materials in relation to these clusters. For context, read Criterion #6a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** The Kindergarten materials include learning objectives visibly shaped by CCSSM cluster objectives. • The chapter overview of the teacher edition identifies each lesson as major or supporting work. • Clusters of Counting and Cardinality for Units 1, 2, 3 and 5 • Clusters of Operations and algebraic thinking for unit 4 • Clusters of Numbers and Operations in Base Ten in unit 5. Clusters of Geometry and Measurement and Data for units 6 and 7.	**(Reviewer only.)** **__x__Meets** **____Does Not Meet/ Insufficient Evidence**
Metric NN2H: **Materials include problems and activities that serve to connect two or more clusters in a domain, or two or more domains in a grade, in cases where these connections are natural and important.** **How to Find the Evidence:** In the grade being evaluated, choose two or more clusters or two or more domains for which connections are natural and important. Evaluate the units, chapters, and lessons that deal with the chosen topics, looking for problems and activities that serve to connect the chosen clusters or domains. NOTE: An example of evaluating this Criterion might include looking at whether problems in grade 4 sometimes or often involve students applying their developing computation skills (detailed in domain NBT) in the context of solving word problems (detailed in domain OA). For context, read Criterion #6b in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Materials include problems and activities that serve to connect two or more clusters in a domain or two or more domains in a grade.	**(Reviewer only.)** **_x___Meets** **____Does Not Meet/ Insufficient Evidence**

Non-Negotiable 2:
Focus and Coherence

Materials must focus coherently on the Major Work of the grade in a way that is consistent with the progressions in the Standards.

NN 2 If all Metrics 2A – 2H were rated as Meets, then rate Non-Negotiable 2 as Meets. If one or more Metric was rated Does Not Meet/Insufficient Evidence, then rate Non-Negotiable 2 as Does Not Meet. Check the final rating.
Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)**

Before moving to Alignment Criterion 1, record the final Meets or Does Not Meet rating in the Evaluation Summary.

(Reviewer only.)

__x__Meets

____Does Not Meet

Strengths/Weaknesses:

Now continue by evaluating the Alignment Criterion 1 for Rigor and Balance.

Directions for Alignment Criterion 1

Rigor and Balance

Alignment Criterion 1: Rigor and Balance

Materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.

The Standards set expectations for attention to all three aspects of rigor: conceptual understanding, procedural skill and fluency, and applications. Thus, materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.

Required Materials

- Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf)
- Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)
- Focus by Grade Level for the grade being evaluated (achievethecore.org/focus)
- Situation Types for the Operations in Word Problems (achievethecore.org/situation-types)
- From the materials being evaluated: teacher guides, student texts and workbooks

Rating this Criterion:

Alignment Criterion 1 is rated as Meets or Does Not Meet.

To rate Alignment Criterion 1, first rate metrics 1A, 1B, and 1C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). For each metric, guiding questions are provided to aid in gathering evidence.
Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 1 if the materials rate 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as rigor and balance, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.

Metric AC1A: **The materials support the development of students' conceptual understanding of key mathematical concepts, especially where called for in specific content Standards or cluster headings.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Major Work for the grade being evaluated that relate specifically conceptual understanding to use throughout the questions associated with this metric. NOTE: Some examples of clusters or Standards that call for conceptual understanding include: K.OA.A.1, (1.NBT.B, 1.NBT.C), (2.NBT.A, 2.NBT.B), (3.OA.A.1, 3.OA.A.2), 4.NF.A, (4.NBT.A, 4.NBT.B), 5.NF.B, (5.NBT.A, 5.NBT.B), 6.RP.A, 6.EE.A.3, 7.NS.A, 7.EE.A, 8.EE.B, 8.F.A, 8.G.A Clusters or Standards grouped by parentheses are closely connected and could be analyzed together. For context, read Criterion #4a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	-Choose a cluster/Standard from the Major Work that is aligned to each aspect of rigor and use to evaluate these metrics. It is most helpful if the same clusters/Standards are chosen for all of the programs being evaluated. (Guidance in choosing clusters/Standards is included in "How to Find the Evidence".)	**Use the questions for AC Metric 1A to evaluate Metric 1A. Record evidence for each question and rate Metric 1A.** **__x__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Is conceptual understanding attended to thoroughly where the Standards set explicit expectations for understanding or interpreting? Evaluate lessons, chapter/unit assessments and homework assignments, paying attention to work aligned to Standards that explicitly call for understanding or interpreting. NOTE: Examples of evaluating this Criterion might include looking at how well the multi-digit addition and subtraction algorithms are developed and explained on the basis of place value and properties of operations; or how well the multi-digit multiplication and division algorithms are developed and explained on the basis of place value and properties of operations; or how well solving equations is presented and explained as a process of reasoning.	**Evidence-** Throughout the lessons, conceptual understanding is developed through modeled instruction, guided practice, and independent practice.	
Do the materials feature high-quality conceptual problems and conceptual discussion questions? Evaluate lessons, chapter/unit assessments, and homework assignments. NOTE: Example of conceptual problems might include such questions as "Find a number greater than 1/5 and less than 1/4," or "If the divisor does not change and the dividend increases, what happens to the quotient?"	**Evidence-**	

Do the materials feature opportunities to identify correspondences across mathematical representations? Evaluate lessons, chapter/unit assessments and homework assignments. NOTE: Examples of evaluating this Criterion might include looking at whether students are supported in identifying correspondences among: the verbal description of a situation, the diagrams that distill its mathematical features, and the equations that model it; or equivalent forms of numbers (e.g., 3 and 6/2) and the number line; or rational number operations and representations of them via models such as the vector model; or the expression that defines a function and the graph that shows the relationship.	**Evidence-**	
Metric AC1B: **The materials are designed so that students attain the fluencies and procedural skills required by the Standards.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Major Work for the grade being evaluated that relate specifically to fluency and procedural skill to use throughout the questions associated with this metric. NOTE: Some examples of Standards that call for procedural skill and fluency include: K.OA.A.5, 1.OA.C.6, 2.OA.B.2, 2.NBT.B.5, 3.OA.C.7, 3.NBT.A.2, 4.NBT.B.4, 5.NBT.B.5, 6.NS.B.2, and 6.NS.B.3, 6.EE.A, 7.NS.A, 7.EE.A.1,7.EE.B.4a, 8.EE.C.7, 8.EE.C.8b For context, read Criterion #4b in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).		**Use the questions for Metric 1B to evaluate Metric 1 B. Record evidence for each question and rate Metric 1B.** **(Reviewer only.)** **_x___Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Is progress toward fluency and procedural skill interwoven with students' developing conceptual understanding of the operations in question? Evaluate lessons, chapter/unit assessments, daily routines, and homework assignments for evidence that the development of fluency and procedural skill is supported by conceptual understanding.	**Evidence-** The teachers resource book has fluency support for building fluency and fluency practice. The emphasis is adding and subtracting within 5. There are also routines and activities that support the use of strategies. Starting with unit 1, the students are relating counting and quantity through composing and decomposing numbers. This lends itself to addition and subtraction.	
Are purely procedural problems and exercises present that include cases in which opportunistic strategies are valuable and generic cases that require efficient algorithms present? Evaluate lessons, chapter/unit assessments, daily routines, and homework assignments. NOTE: Examples of problems in which opportunistic strategies are valuable might include the sum 698 + 240 or the system x + y = 1, 2x + 2y = 3. Examples of generic cases that require efficient algorithms might include the sum 8767+2286 or the system 6y + x = x + 3, – x = 1 + 2y.	**Evidence-**	

Do the materials in grades K–6 provide repeated practice toward attainment of fluency Standards? Evaluate lessons, daily routines, and homework assignments for evidence of repeated practice toward attainment of the following K–6 Standards that set an explicit expectation of fluent (accurate and reasonably fast) computation: K.OA.A.5, 1.OA.C.6, 2.OA.B.2, 2.NBT.B.5, 3.OA.C.7, 3.NBT.A.2, 4.NBT.B.4, 5.NBT.B.5, 6.NS.B.2, 6.NS.B.3.	**Evidence-**	
Metric AC1C: **The materials are designed so that teachers and students spend sufficient time working with engaging applications, without losing focus on the Major Work of each grade.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Major Work for the grade being evaluated that relate specifically application to use throughout the questions associated with this metric. NOTE: Some examples of clusters or Standards that call for application include: K.OA.A.2, 1.OA.A, 2.OA.A, 3.OA.A.3, 3.OA.D.8, 4.OA.A.3, 4.NF.B.3d, 4.NF.B.4c, 5.NF.B.6, 5.NF.B.7c, 6.RP.A.3, 6.NS.A.1, 6.EE.B.7, 6.EE.C.9, 7.RP.A, 7.NS.A.3, 7.EE.B.3, 8.EE.C.8c, 8.F.B For context, read Criterion #4c in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Ready Math spends a significant amount of time working on engaging applications. The introduction section and the modeled and guided instruction part of the lessons teach through application. Guided practice	**Use the questions for Metric 1C to evaluate Metric 1C. Record evidence for each question and rate Metric 1C.** **(Reviewer only.)** **__x__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Are there are single- and multi-step contextual problems, including non-routine problems, that develop the mathematics of the grade, afford opportunities for practice, and engage students in problem solving? Do the problems attend thoroughly to those places in the content Standards where expectations for multi-step and real-world problems are explicit? Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-**	
Do application problems particularly stress applying the Major Work of the grade? Evaluate lessons, chapter/unit assessments, and homework assignments. NOTE: Examples of evaluating this Criterion might include looking at: how well, by the end of grade 2, students using the materials as designed can represent and solve a full range of one-step addition and subtraction word problems; or how well, by the end of grade 3, students using the materials as designed can represent and solve a full range of one-step multiplication and division word problems; or how well these basic situation types for each operation are carried coherently across the grades, (e.g., with fractions and algebraic expressions); or, in all grades, whether the problems connect concepts, Standards, and domains in ways that are natural and important. For a list of situation types for one-step addition, subtraction, multiplication, and division problems, see Situation Types for the Operations in Word Problems	**Evidence-**	

Does modeling build slowly across K–8, with applications that are relatively simple in earlier grades and when students are encountering new content? In grades 6–8, do the problems begin to provide opportunities for students to make their own assumptions or simplifications in order to model a situation mathematically? Read Standard for Mathematical Practice 4, Model with Mathematics. Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-**	
Alignment Criterion 1: Rigor and Balance **Materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.** **AC1** Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 out of 6 points, the Criterion has not been met. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)** **Before moving to Alignment Criterion 2, record the final Meets or Does Not Meet rating in the Evaluation Summary.**		**(Reviewer only.)** **__x__Meets** **____Does Not Meet** **Strengths/Weaknesses:**

Directions for Alignment Criterion 2

Standards for Mathematical Practice

Alignment Criterion 2: Standards for Mathematical Practice **Materials must demonstrate authentic connections between content Standards and practice Standards.** The Standards require that designers of instructional materials connect the mathematical practices to mathematical content in instruction. Thus, materials must demonstrate authentic connections between content Standards and practice Standards.	**Required Materials:** • Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf) • Focus by Grade Level for the grade being evaluated (www.achievethecore.org/focus) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion** Alignment Criterion 2 is rated as Meets or Does Not Meet. To rate Alignment Criterion 2, first rate metrics 2A, 2B, and 2C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). For each metric, guiding questions are provided to aid in gathering evidence. Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 2 if the materials earn 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as mathematical practices, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.

Metric AC2A: **Materials address the practice Standards in such a way as to enrich the Major Work of the grade; practices strengthen the focus on Major Work instead of detracting from it, in both teacher and student materials.** **How to Find the Evidence:** Familiarize yourself with the Major Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate teacher and student materials for evidence that the mathematical practices support and connect to the focus of the grade. NOTE: Examples of evaluating this Criterion might include looking at whether, in grades K–5, students using the materials are supported to look for and express regularity in repeated reasoning about the addition table, the multiplication table, the properties of operations, the relationship between addition and subtraction or multiplication and division, and the place value system; or whether, in grades 6–8, students using the materials are supported to look for and express regularity in repeated reasoning about proportional relationships and linear functions. For context, read Criterion #8 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013).	**Evidence-** With the Ready Curriculum the students are using the practice standards. All of the practice standards are used throughout the Ready program. There is support for teacher with the practice standards through the curriculum. Some places to find support are in the table of contents, first page of each lesson, and the performance tasks and rubrics at the end of each unit.	**(Reviewer only.)** **_x___Meets (2)** **_____Partially Meets (1)** **_____Does Not Meet (0)**
Metric AC2B: **Materials attend to the full meaning of each practice Standard.** **How to Find the Evidence:** For context, read Criterion #7 and Criterion #9 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).		**Use the questions for Metric 2B to evaluate Metric 2B. Record evidence for each question and rate Metric 2B.** **(Reviewer only.)** **_x___Meets (2)** **_____Partially Meets (1)** **_____Does Not Meet (0)**
Over the course of any given year of instruction, is each mathematical practice Standard meaningfully present in the form of assignments, activities, or problems that stimulate students to develop the habits of mind described in the practice Standard? Evaluate lessons, chapter/ unit assessments, and homework assignments for evidence of each mathematical practice being meaningfully present in instruction.	**Evidence-** All of the practice standards are used throughout the Ready program. There is support for teacher with the practice standards through the curriculum. Some places to find support are in the table of contents, first page of each lesson, and the performance tasks and rubrics at the end of each unit.	
Do the materials treat the practice Standards as developing across grades or grade bands? Are the practice Standards in early grades appropriately simple? Do they display an arc of growing sophistication across the grades?	**Evidence-**	

Are there teacher-directed materials that explain the role of the practice Standards in the classroom and in students' mathematical development? Are alignments to practice Standards accurate?	**Evidence-**	
Metric AC2C: **Materials support the Standards' emphasis on mathematical reasoning.** **How to Find the Evidence:** For context, read Criterion #10 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).		**Use the questions for Metric 2C to evaluate Metric 2C. Record evidence for each question and rate Metric 2C.** **(Reviewer only.)** **__x__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Do the materials support students in constructing viable arguments and critiquing the arguments of others concerning grade-level mathematics that is detailed in the content Standards? Read Standard for Mathematical Practice 3. Evaluate teacher and student materials to ensure that students are given opportunities to reason with grade-level mathematics.	**Evidence-** In the Ready Curriculum, students are using the strategies in the Talk About It questions and whole class questions. Throughout the lessons, students have to present arguments and explanations to use models. Why and how questions. Language and vocabulary are grade level appropriate. At the beginning of every lesson there is a vocabulary section.	
Do the materials support students in producing not only answers and solutions, but also, in a grade-appropriate way, arguments, explanations, diagrams, mathematical models, etc., especially in the Major Work of the grade? Familiarize yourself with the Major Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate teacher and student materials, to understand the types of work students are expected to produce.	**Evidence-**	
Do materials explicitly attend to the specialized language of mathematics? Is the language of argument, problem solving, and mathematical explanations taught rather than assumed? Evaluate teacher and student materials, paying attention to how mathematical language is taught. NOTE: Examples of evaluating this Criterion might include looking at whether students are supported in: basing arguments on definitions; using the method of providing a counterexample; or recognizing that examples alone do not establish a general statement.	**Evidence-**	

Alignment Criterion 2:
Standards for Mathematical Practice

Materials must demonstrate authentic connections between content Standards and practice Standards.

AC2 Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 out of 6 points, the Criterion has not been met. Check the final rating.
Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion.
(Reviewer only.)

Before moving to Alignment Criterion 3, record the final Meets or Does Not Meet rating in the Evaluation Summary.

(Reviewer only.)

__x__Meets

____Does Not Meet

Strengths/Weaknesses:

Alignment Criterion 3:
Access to the Standards for All Students

Materials must provide supports for English Language Learners and other special populations.

Because Standards are for all students, alignment requires thoughtful support to ensure all students are able to meet the Standards. Thus, aligned materials must provide supports for English Language Learners and other special populations.

Required Materials:

- Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf)
- Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)
- From the materials being evaluated: teacher guides, student texts and workbooks

Rating this Criterion:
Alignment Criterion 3 is rated as Meets or Does Not Meet.

To rate Alignment Criterion 3, first rate metrics 3A, 3B, and 3C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points).

Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 3 if the materials earn 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as support for special population, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.

Metric AC3A:
Support for English Language Learners and other special populations is thoughtful and helps those students meet the same Standards as all other students. The language in which problems are posed is carefully considered.

How to Find the Evidence:
Evaluate teacher and student materials, paying attention to supports offered for special populations.

Evidence-
The use of visual representations are throughout the program for ELL support. There is for many of the lessons an ELL support box for the teachers guidance.

Reviewer only.)

_x___Meets (2)

____Partially Meets (1)

____Does Not Meet (0)

Metric AC3B: **Materials pr e appropriate level and type of scaffolding, differentiation, intervention, and support for a broad range of learners with gradual removal of supports, when needed, to allow students to demonstrate their mathematical understanding independently.** **How to Find the Evidence:** Evaluate teacher and student materials, paying attention to whether materials provide differentiation that will lead all learners to engage with on-grade-level content.	**Evidence-** Some of the indepen t activities have lots of words. Some of the activities have mostly pictures and models. For assessments it provided teachers with if students do this then try this for remediation.	**Reviewer only.)** **_x___Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Metric AC3C: **Design of lessons recommends and facilitates a mix of instructional approaches for a variety of learners such as using multiple representations (e.g., including models, using a range of questions, checking for understanding, flexible grouping, pair-share).** **How to Find the Evidence:** Evaluate teacher materials, noting instructional approaches suggested for whole class and differentiated lessons and activities.	**Evidence-** The guided practice portion has the students doing multiple representations and models for problems. The modeled instruction, guided practice, and independent practice include the Talk About It questions for pair share and discussion. The teacher resource book has materials for hands on activities, intervention, ELL support, and challenge activities. The toolbox has interactive activities.	**Reviewer only.)** **__x__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Alignment Criterion 3: **Access to the Standards for All Students** **Materials must provide supports for English Language Learners and other special populations.** AC3 Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 points, the Criterion has not been met. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion.**(Reviewer only.)** **Move to the Evaluation Summary and record the final Meets or Does Not Meet rating .**		**(Reviewer only.)** **__x__Meets** **____Does Not Meet** **Strengths/Weaknesses:**

Once an evaluation for alignment to the Shifts and major features of the CCSS has been conducted using Sections 1-3, it's important to evaluate for overall quality and best practices. A starting list of Indicators of Quality are suggested below. States, districts and others evaluating instructional materials are encouraged to add to this list to ensure materials reflect local contexts. For background information on some of the Indicators of Quality in this section, refer to pp.18–21 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).

Indicators of Quality	Evidence- Give specific examples.	Rating: (Reviewers only.)
1. Lessons are thoughtfully structured and support the teacher in leading the class through the learning paths at hand, with active participation by all students in their own learning and in the learning of their classmates.	**Evidence-** Ready Common Core lessons build from supportive lesson structure to independent. The interactive component allows students to participate in the learning.	**(Reviewer only.)** **__x____ Yes** **_____ No**
2. The underlying design of the materials includes both problems and exercises. (In solving problems, students learn new mathematics, whereas in working exercises, students apply what they have already learned to build mastery.) Each problem or exercise has a purpose. **NOTE: This Criterion does not require that the problems and exercises be labeled as such.**	**Evidence-** All lessons have problems in the introduction, modeled instruction and guided instruction.	**(Reviewer only.)** **___x___ Yes** **_____ No**
3. Design of assignments is not haphazard: exercises are given in intentional sequences in order to strengthen students' mathematical understanding.	**Evidence-** Ready Common Core assignments begin with guided practice questions that support the students understanding and key ideas. It then moves to independent exercises that are basic to more higher thinking questions with some problem solving.	**(Reviewer only.)** **__x____ Yes** **_____ No**
4. There are separate teacher materials that support and **reward teacher study including, but not limited to: discussion of the mathematics of the units and the mathematical point of each lesson as it relates to the organizing concepts of the unit, discussion on student ways of thinking and anticipating a variety of students responses, guidance on lesson flow, guidance on questions that prompt students thinking, and discussion of desired mathematical behaviors being elicited among students.**	**Evidence-** The teacher materials support the teacher. There is a progression chart at the beginning of each unit. There is a learning progression on the first page of every lesson.	**(Reviewer only.)** **___x___ Yes** **_____ No**

5. Manipulatives suggested in the materials are faithful representations of the mathematical objects they represent and are connected to written methods.	**Evidence-** **Manipulatives were provided with this curriculum.** However, it does show what manipulatives to use.	(Reviewer only.) _____ Yes ___x___ No
6. Materials include a variety of curriculum-embedded assessments. Examples include pre-, formative, summative, and self-assessment resources.	**Evidence-** Ready Common Core provides formal and informal assessments. These are provided in the Teacher Toolbox. The practice and problem solving provides the teacher with opportunities to assess the students as well.	(Reviewer only.) ____x__ Yes _____ No
7. Assessments contain aligned rubrics, answer keys, and scoring guidelines that provide sufficient guidance for interpreting student performance.	**Evidence-** This is provided in the Teacher ToolBox.	(Reviewer only.) ___x___ Yes _____ No
8. Materials assess student proficiency using methods that are accessible and unbiased, including the use of course-level language in student prompts.	**Evidence-** Lessons have multiple methods and representations to learn in multiple ways.	(Reviewer only.) ___x___ Yes _____ No
9. Materials are carefully evaluated by qualified individuals, whose names are listed, in an effort to ensure freedom from mathematical errors and course-level appropriateness.	**Evidence-** Ready Common Core Kindergarten editors are Danielle Curran, Kathy Kellman, Pam Halloran, and Cynthia Tripp.	(Reviewer only.) ___x___ Yes _____ No
10. The visual design supports students in engaging thoughtfully with the subject. Navigation through the text is clear.	**Evidence-** Ready Common Core's visual design is very consistent throughout the series. For this reason it makes it easy for students to understand the lessons and navigate the text easily.	(Reviewer only.) ___x___ Yes _____ No

11. The materials engage parents in appropriate ways. For example, homework assignments in elementary grades, consist of routine problems, practice with getting answers, and fluency-building exercises that parents can easily support.	**Evidence-** There is a family letter for every lesson that explains to the parents what is being taught for the week. It also provides the parents with related activities that parents can do at home.	**(Reviewer only.)** **___x___ Yes** **_____ No**

Reviewer IMET Evaluation Summary **Title/Level:** _____

Publisher: _____ **Copyright:** _____ **ISBN:**_____

Reviewer ID # _____ **Date Review Completed:**_____

Non-Negotiable Criteria- Each Non-Negotiable must be met in order for the Non-Negotiable Alignment Criteria to be met overall.	
Non-Negotiable 1: Freedom from Obstacles to Focus **__X__ Meets** **_____ Does Not Meet**	**Non- Negotiable 2: Focus and Coherence** **__X__ Meets** **_____ Does Not Meet**

Non-Negotiable Overall:

X **Meets** _____ **Does Not Meet**

Alignment Criteria- Each Alignment Criterion must be met with a sufficient number of points in order for Alignment Criteria to be labeled as "Meets" overall. The more points the materials receive on the Alignment Criteria, the better they are aligned.

Alignment Criterion 1: Rigor and Balance	**Alignment Criterion 2: Standards of Mathematical Practice**	**Alignment Criterion 3: Access to Standards for All Learners**
Points: 6 **of 6 possible.** **(Materials must receive at least 5 of 6 points to align.)**	**Points:** 6 **of 6 possible.** **(Materials must receive at least 5 of 6 points to align.)**	**Points:** 6 **of 6 possible.** **(Materials must receive at least 5 of 6 points to align.)**
X **Meets**	X **Meets**	X **Meets**
_____ **Does Not Meet**	_____ **Does Not Meet**	_____ **Does Not Meet**

Alignment Criteria Overall:

X **Meets** _____ **Does Not Meet**

meet both Non-Negotiables and relevant Alignment Criterion, they are aligned to the Shifts and major features of the Core ards. **the materials meet every Non-Negotiable and Alignment Criterion?** X **Yes** ____ **No**

What are the specific areas of strength and weakness based on this evaluation? Publishers or others modifying or developing assessments can use this information to make improvements and/or to remedy gaps in the alignment of assessment materials.

Strengths

- The online portion of the curriculum is user friendly.
- Interactive activities are fun and engaging for the students although there are not interactive activities for every lesson.
- Hand on activity in every lesson
- Vertical and horizontally aligned to ccss
- Prerequisite skill for every lesson
- Learning progression always aligned
- Challenge activities
- Justification questions
- Lots of place value activities
- Ten frames and number bonds
- Fluency for most lessons

Weaknesses

- There were no manipulatives provided with the curriculum.
- Geometry and Measurement & Data Units are very brief and short.

You would need to supplement

2015-16 Mathematics Interim Review Recommendation & Summary

Publisher Name:	Curriculum Associates
Title:	Ready Common Core Mathematics
ISBN #	9781495722721
Grade Level(s) or Course:	1
Reviewer ID:	SCRO

RECOMMENDED AS:

__X__ **Core Mathematics Program-** a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials. Substantial evidence clearly supports the designation of this program as Core.

_____ **Other Mathematics Program-** a program that substantially, but partially, meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for supplemental materials. Substantial evidence clearly supports the designation of this program as Other.

_____ **Component Mathematics Program-** a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs. Substantial evidence clearly supports the designation of this program as Component.

_____ **Intervention Program-** a program designed and intended to target and support students' specific needs. Substantial evidence clearly supports the designation of this program as Intervention.

_____ **Does not meet criteria** for recommendation as a Curricular Material or Online Resource for Mathematics.

EVIDENCE SUMMARY:

FOCUS- This program does an excellent job focusing strongly where the standards focus staying w/in the Major Clusters of 1st grade. There is no evidence of assessment outside the realm of 1st grade. Every CCSS (1st grade) is taught/assessed

COHERENCE- The progression of the standards builds knowledge of the principles over grade levels. It aligns nicely with kindergarten and 2nd grade. Development of ideas progress/align coherently.

RIGOR- The conceptual understanding, procedural skills, fluency, and applications are equally taught/assessed. There is a high expectation of all three components of rigor. The Major Work of 1st grade is taught with rigor and balance and in alignment with the progression of the standards.

CONCEPTUAL UNDERSTANDING- Objectives and CCSS Focus are clearly defined for each lesson. The standards guide the lessons and expectations are stated. Possible error alerts are defined. Students have real-world application of problems and "I Can" Statements are defined for teachers.

MATHEMATICAL PRACTICES- Practices are integrated throughout the Units including lesson practice and games.

ACCESSIBILITY OF STANDARDS TO ALL STUDENTS- The teacher resource book includes ELL Support activities including suggestions for making text more accessible to ELL students. Activities provide content, background, and vocabulary information to clarify things that might otherwise confuse ELL. The program also includes "Mathematical Discourse" that helps challenge students to require higher level thinking.

OTHER:

2015-16 Interim Mathematics Review

Mathematics Evaluation Tool Grades K-8

Publisher: Curriculum Associates

Title of Material: Ready Common Core Grade 1

Author: _____

ISBN #: 978-0-7609-8857-2 **Copyright** _____

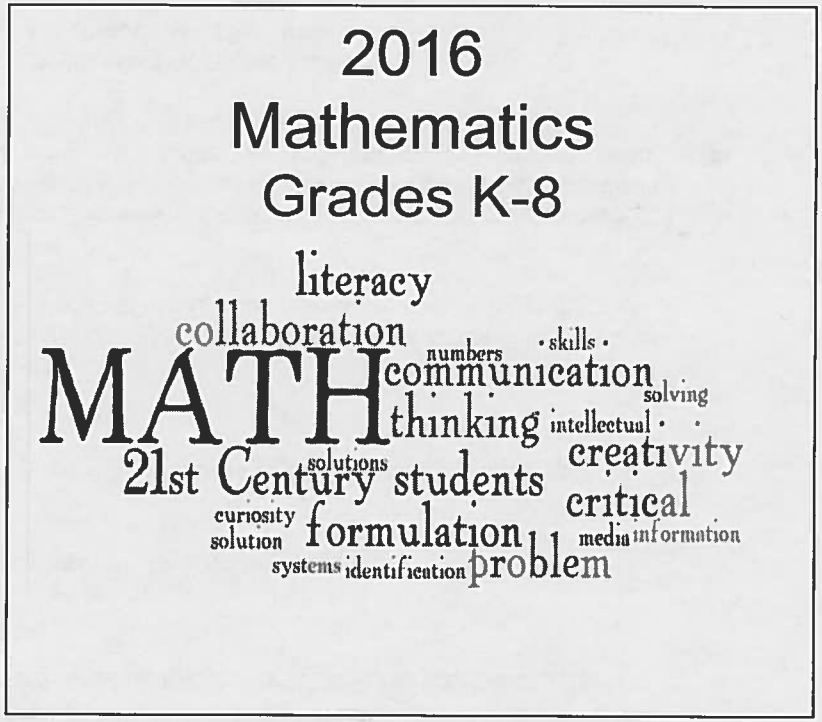
Reviewer ID: RB SC

Core Mathematics Program- a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Core.

Other Mathematics Program- a program that substantially, but partially, meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Other.

Component Mathematics Program- a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs.
Substantial evidence clearly supports the designation of this program as Component.

Intervention Program- a program designed and intended to target and support students' specific needs.
Substantial evidence clearly supports the designation of this program as Intervention.



- Evaluation Form adapted from Instructional Materials Evaluation Toolkit (IMET).

The IMET was developed by Student Achievement Partners. Educators may use or adapt. http://creativecommons.org/licenses/by/3.0/ Download this tool at http://achievethecore.org/IMET

Instructional Materials Evaluation Tool

Mathematics, Grades K-8

What Are the Purposes of the IMET?

This Math IMET is designed to help educators determine whether instructional materials are aligned to the Shifts and major features of the Common Core State Standards (CCSS). The substantial instructional Shifts (http://www.corestandards.org/other-resources/key-shifts-inmathematics/) at the heart of the Common Core State Standards are:

- **Focus** strongly where the Standards focus
- **Coherence**: Think across grades and link to major topics within the grade
- **Rigor**: In major topics, pursue conceptual understanding, procedural skill and fluency, and application with equal intensity.

The IMET draws directly from the following documents:

- Common Core State Standards for Mathematics (www.corestandards.org/Math)
- Publishers' Criteria for the Common Core State Standards in Mathematics grade K-8 (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)

When to use the IMET

1. Purchasing materials: Many factors go into local purchasing decisions. Alignment to the Standards is a critical factor to consider. This tool is designed to evaluate alignment of instructional materials to the Shifts and the major features of the CCSS. It also provides suggestions of additional indicators to consider in the materials evaluation and purchasing process.

2. Evaluating materials currently in use: The IMET can be used to analyze the degree of alignment of existing materials and help to highlight specific, concrete flaws in alignment. Even where materials and tools currently in use fail to meet one or more of these criteria, the pattern of failure is likely to be informative. States and districts can use the evaluation to create a thoughtful plan to modify or combine existing resources in such a way that students' actual learning experiences approach the focus, coherence, and rigor of the Standards.

3. Developing programs: Those developing new programs can use this tool as guidance for creating aligned curricula.
Please note this tool was designed for evaluating comprehensive curricula (including any supplemental or ancillary materials), but it was not designed for the evaluation of standalone supplemental materials.

Who Uses the IMET?

Evaluating instructional materials requires both subject-matter and pedagogical expertise. Evaluators should be well versed in the Standards (www.corestandards.org/Math) for all grades in which materials are being evaluated. This includes understanding the Major Work of the grade (www.achievethecore/focus), the Supporting and Additional work, how the content fits into the progressions in the Standards (www.achievethecore.org/progressions), and the expectations of the Standards with respect to conceptual understanding, procedural skill and fluency, and application. Evaluators also should be familiar with the substantial instructional Shifts (http:// www.corestandards.org/other-resources/key-shifts-in-mathematics/) of Focus, Coherence and Rigor that are listed above.

Getting Started

Prior to Evaluation

Assemble all of the materials necessary for the evaluation. It is essential for evaluators to have materials for all grades covered by the program, as some criteria cannot be rated without having access to each grade. In addition, each evaluator should have a reference copy of the Common Core State Standards for Mathematics (CCSSM) and the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013).

- Record and explain the evidence upon which the rating is based.

Proceed to Section 4: Indicators of Quality

- Indicators of Quality are important considerations that will help evaluators better understand the overall quality of instructional materials. These considerations are not criteria for alignment to the CCSS, but they provide valuable information about additional program characteristics. Evaluators may want to add their own indicators to the examples provided.

Directions for Non-Negotiable 1

Freedom from Obstacles to Focus

Criterion	Evidence- Give specific examples.	Rating: (Reviewer only.)
Non-Negotiable 1: **Freedom from Obstacles to Focus** **Materials must reflect the content architecture of the Standards by not assessing the topics named before the grade level where they first appear in the Standards.** The Standards foster students' progress to algebra by focusing strongly on arithmetic. Consistent with this focus, certain topics from outside of arithmetic appear only in later grades. Thus, to be aligned, materials must reflect the content architecture of the Standards by not assessing the topics named before the grade level where they first appear in the Standards. In this criterion, "topics named" means the topics that are explicitly named in Metric 1A. No other topics should be added to the list in Metric 1A. (Note that other topics in the standards are addressed in criterion NN2.)	**Required Materials** • Common Core State Standards for Mathematics (www.corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf) • From the materials being evaluated: teacher guides and all assessment components	**Rating this Criterion**: Non-Negotiable 1 is rated as Meets or Does Not Meet. To rate Non-Negotiable 1, begin by rating Metric 1A. Since Metric 1A is the only metric for Non-Negotiable 1, the rating for Non-Negotiable 1 is the same as the rating for Metric 1A. If Metric 1A is rated as Does Not Meet, include evidence of when the named topic(s) is/are assessed. If the metric is rated as Meets, list the grade(s) examined in the evaluation.

Metric NN1A: **Materials re[redacted] the basic architecture of the Standards by not assessing the listed topics before the grade level indicated.** • Probability, including chance, likely outcomes, probability models. (Introduced in the CCSSM in grade 7) • Statistical distributions, including center, variation, clumping, outliers, mean, median, mode, range, quartiles; and statistical association or trends, including two-way tables, bivariate measurement data, scatter plots, trend line, line of best fit, correlation. (Introduced in the CCSSM in grade 6) • Similarity, congruence, or geometric transformations. (Introduced in the CCSSM in grade 8) • Symmetry of shapes, including line/ reflection symmetry, rotational symmetry. (Introduced in the CCSSM in grade 4) **How to Find the Evidence:** Evaluate the table of contents, all chapter tests, all unit tests, and other such assessment components (including rubrics). For context, read Criterion #2 from the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013). NOTE: Grade alignments of other topics are addressed in Non-Negotiable 2, Focus and Coherence.) In this criterion, "topics named" means the topics that are explicitly named in Metric 1A. No other topics should be added to the list in Metric 1A. (Note that other topics in the standards are addressed in criterion NN2.)	**Evidence-** No evidence of [redacted]essment outside the realm of 1st grade standards.	**(Reviewer only.)** **__x__Meets** **____Does Not Meet**
Non-Negotiable 1: Materials must reflect the content architecture of the Standards by not assessing the topics named* before the grade level where they first appear in the Standards. **NN 1** If Metric 1A was rated as Meets, then rate Non-Negotiable 1 as Meets. If Metric 1A was rated as Does Not Meet, then rate Non- Negotiable 1 as Does Not Meet. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion.**(Reviewer only.)** **Before moving to Non-Negotiable 2, record the final Meets or Does Not Meet rating in the Evaluation Summary.**		**(Reviewer only.)** **__x__Meets** **____Does Not Meet** **Strengths/Weaknesses:**

Directions for Non-Negotiable 2

Focus and Coherence

Non-Negotiable 2: **Focus and Coherence** **Materials must focus coherently on the Major Work of the grade in a way that is consistent with the progressions in the Standards.** Focus and coherence are the two major evidence-based design principles of the Common Core State Standards for Mathematics (CCSSM, p. 3). Focus is necessary in order to fulfill the ambitious promise the states have made to their students by adopting the Standards: greater achievement at the college and career ready level; greater depth of understanding of mathematics; and a rich classroom environment in which reasoning, sense-making, applications, and a range of mathematical practices flourish. In simpler terms, a mile-wide, inch-deep curriculum translates to less time per topic. Less time means less depth and moving on without many students. Thus, materials must focus coherently on the Major Work of the grade in a way that is consistent with the progressions in the Standards.	**Required Materials** • Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf) • Focus by Grade Level for the grade being evaluated (www.achievethecore.org/focus) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion:** Non-Negotiable 2 is rated as Meets or Does Not Meet. To rate Non-Negotiable 2, first rate metrics 2A–2H. Each of these eight metrics must be rated as Meets in order for Non-Negotiable 2 to be rated as Meets. Rate each metric 2A-2H as Meets or Does Not Meet/Insufficient Evidence. If the evidence examined shows that the Criterion is met, then mark the Criterion Meets. If the evidence examined shows that the Criterion is not met—or if there is insufficient evidence to make a determination—then mark the Criterion as Does Not Meet/Insufficient Evidence. Support all ratings with evidence.
Metric NN2A: **In each grade K–8, students and teachers using the materials as designed devote the large majority of time to the Major Work of the grade.** **How to Find the Evidence:** Familiarize yourself with the Major Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, lessons, homework assignments, and assessments. (Evaluate both student and teacher materials.) Consider time spent on the Major Work of the grade and judge qualitatively whether students and teachers using the materials as designed will devote the large majority of time to the Major Work of the grade. For context, read Criterion #1 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013)	**Evidence-** Materials develop the Major Work of 1st grade including student book, teacher's manual, and pacing guides. The majority of the work is addition and subtraction with geometry and measurement as is appropriate to first grade. See TRB A14/15 and A36/37	**(Reviewer only.)** **__x__Meets** **____Does Not Meet/ Insufficient Evidence**

Metric NN2B: **Supporting work, where present, enhances focus and coherence simultaneously by also engaging students in the Major Work of the grade.** **How to Find the Evidence:** Familiarize yourself with the Major Work and Supporting Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate chapters and lessons that focus on Supporting Work. NOTE: Example of evaluating this Criterion might include looking at whether materials for K–5 generally treat data displays as an occasion for solving grade-level word problems using the four operations (e.g., see 3.MD.B.3); or whether materials for grade 7 take advantage of opportunities to use probability to support ratios, proportions, and percentages. For context, read Criterion #3 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Data used to solve grade level problems and graphing are kid friendly and easy to understand from both the teacher and student point of view.	**(Reviewer only.)** **__x__Meets** **____Does Not Meet/ Insufficient Evidence**
Metric NN2C: **Materials base content progressions on the grade-by-grade progressions in the Standards. Content from previous or future grades does not unduly interfere with or displace on-grade-level content.** **How to Find the Evidence:** Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, and lessons in both student and teacher materials. NOTE: In some cases it may be possible that aligned materials might address some aspects of a topic in a strategic way before or after the grade level in which the topic is central in the Standards' progressions; for example, a curriculum author might purposefully choose to explore adding fractions with unlike denominators in a way appropriate to grade four, recognizing that this work is not really required until the next grade. However, any such purposeful discrepancies in content progressions should enhance the required learning in each grade; not unduly interfere with or displace grade-level content; and be clearly aimed at helping students meet the Standards as written rather than effectively rewriting the progressions in the Standards. And in all cases, note that Non-Negotiable 1 must be met for materials to be aligned. For context, read Criterion #5a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Content is evenly aligned with kindergarten and 2nd grade. Content progression is stated at the beginning of each unit. Units enhance the required learning within in the first grade level.	**(Reviewer only.)** **__x__Meets** **____Does Not Meet/ Insufficient Evidence**

Metric NN2D: **Materials gi[illegible] students extensive work with on-grade-level problems.** **How to Find the Evidence:** Evaluate both student and teacher materials. If the materials provide resources for differentiated learning, consider whether lower-performing students have opportunities to engage with grade-level problems. Also consider whether higher-performing students are given opportunities to learn current grade-level content in greater depth. For context, read Criterion #5b in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Students have o[illegible]rtunities to engage in grade level appropriate skills. Extra materials are not required to complete grade level problems.	(Reviewer only.) **_x___Meets** **____Does Not Meet/** **Insufficient Evidence**
Metric NN2E: **Materials relate on-grade-level concepts explicitly to prior knowledge from earlier grades.** **How to Find the Evidence:** Evaluate both student and teacher materials. NOTE: Examples of evaluating this Criterion might include looking at the way the materials extend basic ideas of place value across the decimal point; or the role that properties of operations play when the materials extend arithmetic beyond whole numbers to fractions, variables, and expressions. More generally, cluster headings in the Standards sometimes signal key moments where reorganizing and extending previous knowledge is important in order to accommodate new knowledge (e.g., see cluster headings that use the phrase "Apply and extend previous understanding"). For context, read Criterion #5c in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Program relates current teaching to prior knowledge. Basic ideas are extended across standards. Each lesson shows/displays vertical alignment in the Unit Overview as well as Chapter Headings. Learning Progression example TRB pg 161	(Reviewer only.) **__x__Meets** **____Does Not Meet/** **Insufficient Evidence**
Metric NN2F: **Review of material from previous grades is clearly identified as such to the teacher, and teacher and students can see what their specific responsibility is for the current year.** **How to Find the Evidence:** Evaluate the table of contents, but do not stop there; also evaluate units, chapters, lessons, homework assignments and assessments. (Evaluate both student and teacher materials.) Identify any content from previous grades and check whether it is identified as such. For context, read Criterion #5a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Each lesson shows/displays vertical alignment in the Unit Overview as well as Chapter Headings. Lesson Objectives are given for students to know what the learning task is for each lesson.	(Reviewer only.) **_x___Meets** **____Does Not Meet/** **Insufficient Evidence**

Metric NN2G: **Materials include learning objectives that are visibly shaped by CCSSM cluster headings.** **How to Find the Evidence:** Select several clusters from the Major Work in the grade being evaluated. Evaluate teacher and student materials in relation to these clusters. For context, read Criterion #6a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Materials have learning objectives clearly stated. Cluster Headings are listed.	**(Reviewer only.)** __x__Meets ____Does Not Meet/ **Insufficient Evidence**
Metric NN2H: **Materials include problems and activities that serve to connect two or more clusters in a domain, or two or more domains in a grade, in cases where these connections are natural and important.** **How to Find the Evidence:** In the grade being evaluated, choose two or more clusters or two or more domains for which connections are natural and important. Evaluate the units, chapters, and lessons that deal with the chosen topics, looking for problems and activities that serve to connect the chosen clusters or domains. NOTE: An example of evaluating this Criterion might include looking at whether problems in grade 4 sometimes or often involve students applying their developing computation skills (detailed in domain NBT) in the context of solving word problems (detailed in domain OA). For context, read Criterion #6b in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Connections are made between clusters in each domain that make it easy for students and teachers to see progress in learning.	**(Reviewer only.)** __x__Meets ____Does Not Meet/ **Insufficient Evidence**
Non-Negotiable 2: **Focus and Coherence** **Materials must focus coherently on the Major Work of the grade in a way that is consistent with the progressions in the Standards.** **NN 2** If all Metrics 2A – 2H were rated as Meets, then rate Non-Negotiable 2 as Meets. If one or more Metric was rated Does Not Meet/Insufficient Evidence, then rate Non-Negotiable 2 as Does Not Meet. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)** **Before moving to Alignment Criterion 1, record the final Meets or Does Not Meet rating in the Evaluation Summary.**		**(Reviewer only.)** __x__Meets ____Does Not Meet **Strengths/Weaknesses:**

Now continue by evaluating the Alignment Criterion 1 for Rigor and Balance.

Indicators of Quality	Evidence- Give specific examples.	Rating: (Reviewers only.)
1. Lessons are thoughtfully structured and support the teacher in leading the class through the learning paths at hand, with active participation by all students in their own learning and in the learning of their classmates.	**Evidence-** TRB pg. A13 (Weekly Pacing-One Lesson/Wk) All lessons include structured support.	**(Reviewer only.)** **___x___ Yes** **_____ No**
2. The underlying design of the materials includes both problems and exercises. (In solving problems, students learn new mathematics, whereas in working exercises, students apply what they have already learned to build mastery.) Each problem or exercise has a purpose. **NOTE: This Criterion does not require that the problems and exercises be labeled as such.**	**Evidence-** Step by Step Implementation Plan is outlined which identify content needs, integrating the content, and measuring student progress. Assessment Remediation offers teacher's possible student errors, and how to remediate.	**(Reviewer only.)** **___x___ Yes** **_____ No**
3. Design of assignments is not haphazard: exercises are given in intentional sequences in order to strengthen students' mathematical understanding.	**Evidence-** Intervention Activities, On-Level Activities, and Challenge Activities are provided at the end of each Lesson to allow a range checking for students understanding.	**(Reviewer only.)** **___x___ Yes** **_____ No**
4. There are separate teacher materials that support and **reward teacher study including, but not limited to: discussion of the mathematics of the units and the mathematical point of each lesson as it relates to the organizing concepts of the unit, discussion on student ways of thinking and anticipating a variety of students responses, guidance on lesson flow, guidance on questions that prompt students thinking, and discussion of desired mathematical behaviors being elicited among students.**	**Evidence-** Teachers Manual include progression chart are easy to follow. Online resource allows for easy access from any location. Mathematical Discourse as well as Error and Misconception Alerts make it easy for teachers to organize content.	**(Reviewer only.)** **__x____ Yes** **_____ No**
5. Manipulatives suggested in the materials are faithful representations of the mathematical objects they represent and are connected to written methods.	**Evidence-** Manipulates include beans, hundreds chats, counting cubes etc. Easy to find, use, and associate with daily objects. Teacher Tool Box has available manipulatives.	**(Reviewer only.)** **____x__ Yes** **_____ No**

6. Materials include a variety of curriculum-embedded assessments. Examples include pre-, formative, summative, and self-assessment resources.	**Evidence-** Assessments, both informal and formal are found throughout the material. Lesson Quiz, Check for Understanding, Talk About it Questions and Guided Instruction provides a pacing for teacher assessments. Self Check before and after the unit allow students to check for their own understanding.	**(Reviewer only.)** **___x___ Yes** **_____ No**
7. Assessments contain aligned rubrics, answer keys, and scoring guidelines that provide sufficient guidance for interpreting student performance.	**Evidence-** Scoring Rubrics are included in each lesson assessment. The PPS Teacher Guide offer detailed solutions to the Assessment Book. Group/Test Data can be gathered on specific assessments for teacher to evaluate. TRB Unit 4 pg. 156157	**(Reviewer only.)** **___x___ Yes** **_____ No**
8. Materials assess student proficiency using methods that are accessible and unbiased, including the use of course-level language in student prompts.	**Evidence-** Questions are posed using appropriate student language. Vocabulary is specifically taught. Student names are not used, instead words such as "student" or "coach" is used making understanding easier.	**(Reviewer only.)** **__x____ Yes** **_____ No**
9. Materials are carefully evaluated by qualified individuals, whose names are listed, in an effort to ensure freedom from mathematical errors and course-level appropriateness.	**Evidence-** Teacher Advisors/Acknowledgments Page included in TRB and page A35.	**(Reviewer only.)** **__x____ Yes** **_____ No**
10. The visual design supports students in engaging thoughtfully with the subject. Navigation through the text is clear.	**Evidence-** Appropriate language is used. Visuals engage students without distraction.	**(Reviewer only.)** **___x___ Yes** **_____ No**
11. The materials engage parents in appropriate ways. For example, homework assignments in elementary grades, consist of routine problems, practice with getting answers, and fluency-building exercises that parents can easily support.	**Evidence-** Pages are listed as "Explore Together", "Learn Together", "Practice Together", and "Practice by Myself." This helps parents see the progression of learning by their child. Fluency in practiced over and over.	**(Reviewer only.)** **___x___ Yes** **_____ No**

Reviewer IMET Evaluation Summary **Title/Level: __Ready Common Core Mathematics**

Publisher: ___Curriculum Associates____ **Copyright: __2014____**
ISBN:_____

Reviewer ID # ___S.C.R.O._____ **Date Review Completed:___3-8-16_____**

Non-Negotiable Criteria- Each Non-Negotiable must be met in order for the Non-Negotiable Alignment Criteria to be met overall.

Non-Negotiable 1: Freedom from Obstacles to Focus	Non- Negotiable 2: Focus and Coherence
____x___ Meets _____ Does Not Meet	___x__ Meets _____ Does Not Meet

Non-Negotiable Overall:

__x___ Meets **_____ Does Not Meet**

Alignment Criteria- Each Alignment Criterion must be met with a sufficient number of points in order for Alignment Criteria to be labeled as "Meets" overall. The more points the materials receive on the Alignment Criteria, the better they are aligned.

Alignment Criterion 1: Rigor and Balance	Alignment Criterion 2: Standards of Mathematical Practice	Alignment Criterion 3: Access to Standards for All Learners
Points: ___6__ of 6 possible. (Materials must receive at least 5 of 6 points to align.) ____x___ Meets _____ Does Not Meet	Points: ___6__ of 6 possible. (Materials must receive at least 5 of 6 points to align.) ___x____ Meets _____ Does Not Meet	Points: __6___ of 6 possible. (Materials must receive at least 5 of 6 points to align.) ___x____ Meets _____ Does Not Meet

Alignment Criteria Overall:

___x__ Meets **_____ Does Not Meet**

If the materials meet both Non-Negotiables and relevant Alignment Criterion, they are aligned to the Shifts and major features of the Core Standards. **the materials meet every Non-Negotiable and Alignment Criterion? __x___ Yes _____ No**

What are the specific areas of strength and weakness based on this evaluation? Publishers or others modifying or developing assessments can use this information to make improvements and/or to remedy gaps in the alignment of assessment materials.

2015-16 Mathematics Interim Review Recommendation & Summary

Publisher Name:	Curriculum Associates LLC
Title:	Ready Common Core Mathematics, Grade 2
ISBN #	9781495705496
Grade Level(s) or Course:	Grade 2
Reviewer ID:	LBTR

RECOMMENDED AS:

____x____**Core Mathematics Program-** a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials. Substantial evidence clearly supports the designation of this program as Core.

_____**Other Mathematics Program-** a program that substantially, but partially, meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for supplemental materials. Substantial evidence clearly supports the designation of this program as Other.

_____**Component Mathematics Program-** a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs. Substantial evidence clearly supports the designation of this program as Component.

_____**Intervention Program-** a program designed and intended to target and support students' specific needs. Substantial evidence clearly supports the designation of this program as Intervention.

_____ **Does not meet criteria** for recommendation as a Curricular Material or Online Resource for Mathematics.

Instructional Materials Evaluation Tool
Mathematics, Grades K-8

What Are the Purposes of the IMET?
This Math IMET is designed to help educators determine whether instructional materials are aligned to the Shifts and major features of the Common Core State Standards (CCSS). The substantial instructional Shifts (http://www.corestandards.org/other-resources/key-shifts-inmathematics/) at the heart of the Common Core State Standards are:
- **Focus** strongly where the Standards focus
- **Coherence**: Think across grades and link to major topics within the grade
- **Rigor**: In major topics, pursue conceptual understanding, procedural skill and fluency, and application with equal intensity.

The IMET draws directly from the following documents:
- Common Core State Standards for Mathematics (www.corestandards.org/Math)
- Publishers' Criteria for the Common Core State Standards in Mathematics grade K-8 (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)

When to use the IMET
1. Purchasing materials: Many factors go into local purchasing decisions. Alignment to the Standards is a critical factor to consider. This tool is designed to evaluate alignment of instructional materials to the Shifts and the major features of the CCSS. It also provides suggestions of additional indicators to consider in the materials evaluation and purchasing process.

2. Evaluating materials currently in use: The IMET can be used to analyze the degree of alignment of existing materials and help to highlight specific, concrete flaws in alignment. Even where materials and tools currently in use fail to meet one or more of these criteria, the pattern of failure is likely to be informative. States and districts can use the evaluation to create a thoughtful plan to modify or combine existing resources in such a way that students' actual learning experiences approach the focus, coherence, and rigor of the Standards.

3. Developing programs: Those developing new programs can use this tool as guidance for creating aligned curricula.
Please note this tool was designed for evaluating comprehensive curricula (including any supplemental or ancillary materials), but it was not designed for the evaluation of standalone supplemental materials.

Who Uses the IMET?
Evaluating instructional materials requires both subject-matter and pedagogical expertise. Evaluators should be well versed in the Standards (www.corestandards.org/Math) for all grades in which materials are being evaluated. This includes understanding the Major Work of the grade (www.achievethecore/focus), the Supporting and Additional work, how the content fits into the progressions in the Standards (www.achievethecore.org/progressions), and the expectations of the Standards with respect to conceptual understanding, procedural skill and fluency, and application. Evaluators also should be familiar with the substantial instructional Shifts (http:// www.corestandards.org/other-resources/key-shifts-in-mathematics/) of Focus, Coherence and Rigor that are listed above.

Getting Started
Prior to Evaluation

Assemble all of the materials necessary for the evaluation. It is essential for evaluators to have materials for all grades covered by the program, as some criteria cannot be rated without having access to each grade. In addition, each evaluator should have a reference copy of the Common Core State Standards for Mathematics (CCSSM) and the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013).

Before conducting the evaluation itself, it is important to develop a protocol for the evaluation process. The protocol should include having evaluators study the Publishers' Criteria and the IMET. It will also be helpful for evaluators to get a sense of each program overall before beginning the process. At a minimum, this would include reading the front matter of the text, looking at the table of contents and paging through multiple chapters.

Sections 1-3 below should be completed to produce a comprehensive picture of the strengths and weaknesses of the materials under evaluation. Information about areas in need of improvement or supplementation should be shared with internal and external stakeholders.

Navigating the Tool

Begin with Section 1: Non-Negotiable Alignment Criteria

- The Non-Negotiable Alignment Criteria must each be met in full for materials to be considered aligned to the Shifts and the major features of the Common Core State Standards. Each Non-Negotiable Alignment Criterion has one or more metrics associated with it; every one of these metrics must be met in order for the criterion as a whole to be met.

- Examine the relevant materials and use evidence to rate the materials against each criterion and its associated metric(s).

- Record and explain the evidence upon which the rating is based.

Continue to Section 2: Alignment Criteria

- The Alignment Criteria must each be met for materials to be considered aligned to the Shifts and the major features of the Common Core State Standards. Each Alignment Criterion has one or more metric associated with it; a specific number of these metrics must be met or partially met in order for the criterion as a whole to be met.

- Examine the materials in relation to these criteria, assigning each metric a point value. Rate the criterion as "Meets" or "Does Note Meet" based on the number of points assigned. The more points the materials receive on the alignment Criteria, the better they are aligned.

- Record and explain the evidence upon which the rating is based.

Proceed to Section 4: Indicators of Quality

- Indicators of Quality are important considerations that will help evaluators better understand the overall quality of instructional materials. These considerations are not criteria for alignment to the CCSS, but they provide valuable information about additional program characteristics. Evaluators may want to add their own indicators to the examples provided.

Directions for Non-Negotiable 1

Freedom from Obstacles to Focus

Criterion	Evidence- Give specific examples.	Rating: (Reviewer only.)
Non-Negotiable 1: **Freedom from Obstacles to Focus** **Materials must reflect the content architecture of the Standards by not assessing the topics named before the grade level where they first appear in the Standards.** The Standards foster students' progress to algebra by focusing strongly on arithmetic. Consistent with this focus, certain topics from outside of arithmetic appear only in later grades. Thus, to be aligned, materials must reflect the content architecture of the Standards by not assessing the topics named before the grade level where they first appear in the Standards. In this criterion, "topics named" means the topics that are explicitly named in Metric 1A. No other topics should be added to the list in Metric 1A. (Note that other topics in the standards are addressed in criterion NN2.)	**Required Materials** • Common Core State Standards for Mathematics (www.corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf) • From the materials being evaluated: teacher guides and all assessment components	**Rating this Criterion**: Non-Negotiable 1 is rated as Meets or Does Not Meet. To rate Non-Negotiable 1, begin by rating Metric 1A. Since Metric 1A is the only metric for Non-Negotiable 1, the rating for Non-Negotiable 1 is the same as the rating for Metric 1A. If Metric 1A is rated as Does Not Meet, include evidence of when the named topic(s) is/are assessed. If the metric is rated as Meets, list the grade(s) examined in the evaluation.

Metric NN1A: **Materials reflect the basic architecture of the Standards by not assessing the listed topics before the grade level indicated.** • Probability, including chance, likely outcomes, probability models. (Introduced in the CCSSM in grade 7) • Statistical distributions, including center, variation, clumping, outliers, mean, median, mode, range, quartiles; and statistical association or trends, including two-way tables, bivariate measurement data, scatter plots, trend line, line of best fit, correlation. (Introduced in the CCSSM in grade 6) • Similarity, congruence, or geometric transformations. (Introduced in the CCSSM in grade 8) • Symmetry of shapes, including line/ reflection symmetry, rotational symmetry. (Introduced in the CCSSM in grade 4) **How to Find the Evidence:** Evaluate the table of contents, all chapter tests, all unit tests, and other such assessment components (including rubrics). For context, read Criterion #2 from the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013). NOTE: Grade alignments of other topics are addressed in Non-Negotiable 2, Focus and Coherence.) In this criterion, "topics named" means the topics that are explicitly named in Metric 1A. No other topics should be added to the list in Metric 1A. (Note that other topics in the standards are addressed in criterion NN2.)	**Evidence-** Teacher Resource Book, Student Book, Student Practice and Problem Solving Book Ready Common Core Mathematics for Grade 2 does not assess any of the topics indicated on the NN1 Metric 1A list.	**(Reviewer only.)** **__x__Meets** **____Does Not Meet**

Non-Negotiable 1: Materials must reflect the content architecture of the Standards by not assessing the topics named* before the grade level where they first appear in the Standards. **NN 1** If Metric 1A was rated as Meets, then rate Non-Negotiable 1 as Meets. If Metric 1A was rated as Does Not Meet, then rate Non- Negotiable 1 as Does Not Meet. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion.**(Reviewer only.)** **Before moving to Non-Negotiable 2, record the final Meets or Does Not Meet rating in the Evaluation Summary.**	**(Reviewer only.)** **__x__Meets** **____Does Not Meet** **Strengths/Weaknesses:** Maintains a good focus on the major clusters of base ten, place value and number sense. Unit overviews list the Common Core numbers and standards, indicating the alignment of each lesson.

Directions for Non-Negotiable 2

Focus and Coherence

Non-Negotiable 2:

Focus and Coherence

Materials must focus coherently on the Major Work of the grade in a way that is consistent with the progressions in the Standards.

Focus and coherence are the two major evidence-based design principles of the Common Core State Standards for Mathematics (CCSSM, p. 3). Focus is necessary in order to fulfill the ambitious promise the states have made to their students by adopting the Standards: greater achievement at the college and career ready level; greater depth of understanding of mathematics; and a rich classroom environment in which reasoning, sense-making, applications, and a range of mathematical practices flourish. In simpler terms, a mile-wide, inch-deep curriculum translates to less time per topic. Less time means less depth and moving on without many students. Thus, materials must focus coherently on the Major Work of the grade in a way that is consistent with the progressions in the Standards.

Required Materials

- Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf)
- Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)
- Focus by Grade Level for the grade being evaluated (www.achievethecore.org/focus)
- From the materials being evaluated: teacher guides, student texts and workbooks

Rating this Criterion:

Non-Negotiable 2 is rated as Meets or Does Not Meet.

To rate Non-Negotiable 2, first rate metrics 2A–2H. Each of these eight metrics must be rated as Meets in order for Non-Negotiable 2 to be rated as Meets. Rate each metric 2A-2H as Meets or Does Not Meet/Insufficient Evidence. If the evidence examined shows that the Criterion is met, then mark the Criterion Meets. If the evidence examined shows that the Criterion is not met—or if there is insufficient evidence to make a determination—then mark the Criterion as Does Not Meet/Insufficient Evidence. Support all ratings with evidence.

<table>
<tr>
<td>Metric NN2A:
In each grade 2-8, students and teachers using the materials as designed devote the large majority of time to the Major Work of the grade.
How to Find the Evidence:
Familiarize yourself with the Major Work of the grade being evaluated (see the Focus by Grade Level documents.)
Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, lessons, homework assignments, and assessments. (Evaluate both student and teacher materials.)
Consider time spent on the Major Work of the grade and judge qualitatively whether students and teachers using the materials as designed will devote the large majority of time to the Major Work of the grade.
For context, read Criterion #1 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013)</td>
<td>Evidence- Teacher Resource Book, Student Book, Student Practice and Problem Solving Book
There are 28 lessons in the Ready Common Core grade 2 Mathematics program (Ready).
20 lessons attend to standards associated with major clusters,
5 lessons attend to standards associated with supporting clusters, and
3 lessons attend to standards associated with additional clusters.
Materials include 4 units.
Units 1 and 2 are 100% major work of place value, number sense, and one, two, three-digit addition/subtraction.
Unit 3 and 4 are shorter units that focus on measurement, data and geometry.</td>
<td>(Reviewer only.)
__x__Meets
____Does Not Meet/
Insufficient Evidence</td>
</tr>
<tr>
<td>Metric NN2B:
Supporting Work, where present, enhances focus and coherence simultaneously by also engaging students in the Major Work of the grade.
How to Find the Evidence:
Familiarize yourself with the Major Work and Supporting Work of the grade being evaluated (see the Focus by Grade Level documents.)
Evaluate chapters and lessons that focus on Supporting Work. NOTE: Example of evaluating this Criterion might include looking at whether materials for K–5 generally treat data displays as an occasion for solving grade-level word problems using the four operations (e.g., see 3.MD.B.3); or whether materials for grade 7 take advantage of opportunities to use probability to support ratios, proportions, and percentages.
For context, read Criterion #3 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).</td>
<td>Evidence- Teacher Resource Book
Supporting works are the focus of lessons 4, 5, and 23-28.
<table>
<tr><th>Lesson</th><th>Student engagement in Major Work during the course of the Supporting Work lesson.</th></tr>
<tr><td>4</td><td>Some engagement with NBT.A</td></tr>
<tr><td>5</td><td>Some engagement with NBT.A</td></tr>
<tr><td>23</td><td>Little to none</td></tr>
<tr><td>24</td><td>Some engagement with NBT.A</td></tr>
<tr><td>25</td><td>Some engagement with NBT.A</td></tr>
<tr><td>26</td><td>Little to none</td></tr>
<tr><td>27</td><td>Little to none</td></tr>
<tr><td>28</td><td>Little to none</td></tr>
</table>
All other lessons directly focus on Major Works.</td>
<td>(Reviewer only.)
__x__Meets
____Does Not Meet/
Insufficient Evidence
All other lessons directly focus on Major Works.</td>
</tr>
</table>

Metric NN2C: **Materials ba[illegible]ontent progressions on the grade-by-grade progressions in the Standards. Content from previous or future grades does not unduly interfere with or displace on-grade-level content.** **How to Find the Evidence:** Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, and lessons in both student and teacher materials. NOTE: In some cases it may be possible that aligned materials might address some aspects of a topic in a strategic way before or after the grade level in which the topic is central in the Standards' progressions; for example, a curriculum author might purposefully choose to explore adding fractions with unlike denominators in a way appropriate to grade four, recognizing that this work is not really required until the next grade. However, any such purposeful discrepancies in content progressions should enhance the required learning in each grade; not unduly interfere with or displace grade-level content; and be clearly aimed at helping students meet the Standards as written rather than effectively rewriting the progressions in the Standards. And in all cases, note that Non-Negotiable 1 must be met for materials to be aligned. For context, read Criterion #5a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Materials are consist[illegible]with the progressions in the Standards. As evidenced in the Teacher Resource Book, Student Textbook and the Practice and Problem Solving Textbook. The Student Practice and Problem Solving book aligns extremely well with the Student Book (Main Common Core Instruction Book).	**(Reviewer only.)** **__x__Meets** **____Does Not Meet/** **Insufficient Evidence**
Metric NN2D: **Materials give all students extensive work with on-grade-level problems.** **How to Find the Evidence:** Evaluate both student and teacher materials. If the materials provide resources for differentiated learning, consider whether lower-performing students have opportunities to engage with grade-level problems. Also consider whether higher-performing students are given opportunities to learn current grade-level content in greater depth. For context, read Criterion #5b in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Teacher Resource Book, Student Book, Student Practice and Problem Solving Book and Teacher's Guide Book The Teacher Resource Book provides suggestions for embedding remediation and challenge into the grade-level work lesson. In addition to lesson activities and problems, each unit has associated games, extra practice and performance tasks. The Key Code Bar of B=Basic, M=Medium, and C=Challenge in the Practice and Problem Solving Teacher's Guide Book is helpful and accurate.	**(Reviewer only.)** **__x__Meets** **____Does Not Meet/** **Insufficient Evidence**

Metric NN2E: **Materials relate non-grade-level concepts explicitly to prior knowledge from earlier grades.** **How to Find the Evidence:** Evaluate both student and teacher materials. NOTE: Examples of evaluating this Criterion might include looking at the way the materials extend basic ideas of place value across the decimal point; or the role that properties of operations play when the materials extend arithmetic beyond whole numbers to fractions, variables, and expressions. More generally, cluster headings in the Standards sometimes signal key moments where reorganizing and extending previous knowledge is important in order to accommodate new knowledge (e.g., see cluster headings that use the phrase "Apply and extend previous understanding"). For context, read Criterion #5c in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Teacher Resource Book, Student Book Lessons are structured in a gradual release model. The lesson introduction includes a "Use What You Know" activity to connect to prior knowledge. For each lesson, the Teacher Resource Book includes progressions showing the related grade 2, grade 3 and grade 1 concepts and skills. The format of student, teacher and parent materials, the cartoon characters and the navigation headings are consistent from grade level to grade level; supporting use as student progress through the program.	**(Reviewer only.)** **__x__Meets** **____Does Not Meet/** **Insufficient Evidence**
Metric NN2F: **Review of material from previous grades is clearly identified as such to the teacher, and teacher and students can see what their specific responsibility is for the current year.** **How to Find the Evidence:** Evaluate the table of contents, but do not stop there; also evaluate units, chapters, lessons, homework assignments and assessments. (Evaluate both student and teacher materials.) Identify any content from previous grades and check whether it is identified as such. For context, read Criterion #5a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Teacher Resource Book, Student Book, Student Practice and Problem Solving Book Materials connected the general grade 2 content foci and the specific content foci of the lesson to the relevant grade 1 content and to the relevant grade 3 content. (Learning Progression notes found in the Teacher's Resource Book on the Lesson Overview pages) The Pacing Chart shows a clear scope and sequence for the year that matches well with those in the Standards. (Pages A42-A45 in the Teacher Resource Book)	**(Reviewer only.)** **__x__Meets** **____Does Not Meet/** **Insufficient Evidence**

Metric NN2G:
Materials include learning objectives that are visibly shaped by CCSSM cluster headings.

How to Find the Evidence:
Select several clusters from the Major Work in the grade being evaluated. Evaluate teacher and student materials in relation to these clusters.
For context, read Criterion #6a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).

Evidence- Teacher Resource Book

Learning objectives are visibly shaped by the individual standards.

Example: Lesson 15 overview

Content objective: Develop strategies for adding more than two numbers.

Content Standard 2.NBT.B.6: Add up to four two-digit numbers using strategies based on place value and properties of operations.

Cluster heading: Use place value understanding and properties of operations to add and subtract.

Also included for each lesson is CCSS Focus overview.

(Reviewer only.)

__x__Meets

____Does Not Meet/

Insufficient Evidence

Metric NN2H:
Materials include problems and activities that serve to connect two or more clusters in a domain, or two or more domains in a grade, in cases where these connections are natural and important.

How to Find the Evidence:
In the grade being evaluated, choose two or more clusters or two or more domains for which connections are natural and important. Evaluate the units, chapters, and lessons that deal with the chosen topics, looking for problems and activities that serve to connect the chosen clusters or domains. NOTE: An example of evaluating this Criterion might include looking at whether problems in grade 4 sometimes or often involve students applying their developing computation skills (detailed in domain NBT) in the context of solving word problems (detailed in domain OA).
For context, read Criterion #6b in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).

Evidence- Teacher Resource Book

As well as connections within the lessons, at the end of each of the units is a Math in Action activity that specifically makes domain/cluster connections.

Unit	Associated Domains	Associated Clusters
1	2.OA and 2.NBT	2.OA.Clusters A-C 2.NBT Clusters A-B
2	2.NBT	2.NBT Clusters A-B
3	2.MD	2.MD Clusters A-C
4	2.G	2.G Cluster A

(Reviewer only.)

__x__Meets

____Does Not Meet/

Insufficient Evidence

Non-Negotiable 2:

Focus and Coherence

Materials must focus coherently on the Major Work of the grade in a way that is consistent with the progressions in the Standards.

NN 2 If all Metrics 2A – 2H were rated as Meets, then rate Non-Negotiable 2 as Meets. If one or more Metric was rated Does Not Meet/Insufficient Evidence, then rate Non-Negotiable 2 as Does Not Meet. Check the final rating.
Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)**

Before moving to Alignment Criterion 1, record the final Meets or Does Not Meet rating in the Evaluation Summary.

(Reviewer only.)

__x__Meets

____Does Not Meet

Strengths/Weaknesses:

Strengths

Majority of work focuses on the major clusters and pacing seems balanced.

Materials are visibly and coherently aligned to Common Core.

Parent letters are engaging and appropriately detailed for home support. The unit games are compatible and would likely be easy to play at home.

Student Book page formats are user friendly and enhance conceptual understanding and navigation.

Now continue by evaluating the Alignment Criterion 1 for Rigor and Balance.

Directions for Alignment Criterion 1

Rigor and Balance

Alignment Criterion 1: Rigor and Balance

Materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.

The Standards set expectations for attention to all three aspects of rigor: conceptual understanding, procedural skill and fluency, and applications. Thus, materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.

Required Materials

- Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf)
- Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)
- Focus by Grade Level for the grade being evaluated (achievethecore.org/focus)
- Situation Types for the Operations in Word Problems (achievethecore.org/situation-types)
- From the materials being evaluated: teacher guides, student texts and workbooks

Rating this Criterion:

Alignment Criterion 1 is rated as Meets or Does Not Meet.

To rate Alignment Criterion 1, first rate metrics 1A, 1B, and 1C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). For each metric, guiding questions are provided to aid in gathering evidence.
Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 1 if the materials rate 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as rigor and balance, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.

Metric AC1A:

The materials support the development of students' conceptual understanding of key mathematical concepts, especially where called for in specific content Standards or cluster headings.

How to Find the Evidence:

Select one or more cluster(s) or Standard(s) from the Major Work for the grade being evaluated that relate specifically conceptual understanding to use throughout the questions associated with this metric. NOTE: Some examples of clusters or Standards that call for conceptual understanding include: K.OA.A.1, (1.NBT.B, 1.NBT.C), (2.NBT.A, 2.NBT.B), (3.OA.A.1, 3.OA.A.2), 4.NF.A, (4.NBT.A, 4.NBT.B), 5.NF.B, (5.NBT.A, 5.NBT.B), 6.RP.A, 6.EE.A.3, 7.NS.A, 7.EE.A, 8.EE.B, 8.F.A, 8.G.A

Clusters or Standards grouped by parentheses are closely connected and could be analyzed together.

For context, read Criterion #4a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).

-Choose a cluster/Standard from the Major Work that is aligned to each aspect of rigor and use it to evaluate these metrics. It is most helpful if the same clusters/Standards are chosen for all of the programs being evaluated. (Guidance in choosing clusters/Standards is included in "How to Find the Evidence".)

Use the questions for AC Metric 1A to evaluate Metric 1A. Record evidence for each question and rate Metric 1A.

__2__Meets (2)

____Partially Meets (1)

____Does Not Meet (0)

Is conceptual understanding attended to thoroughly where the Standards set explicit expectations for understanding or interpreting? Evaluate lessons, chapter/unit assessments and homework assignments, paying attention to work aligned to Standards that explicitly call for understanding or interpreting. NOTE: Examples of evaluating this Criterion might include looking at how well the multi-digit addition and subtraction algorithms are developed and explained on the basis of place value and properties of operations; or how well the multi-digit multiplication and division algorithms are developed and explained on the basis of place value and properties of operations; or how well solving equations is presented and explained as a process of reasoning.	**Evidence-** Teacher Resource Book Conceptual understanding is attended to thoroughly where the Standards set explicit expectations for understanding or interpreting. Cluster headings chosen: 2.NBT.A and 2.NBT.B Materials provide students enactive, iconic and symbolic opportunities to develop and communicate understandings of place value and the use of place value when adding and subtracting. Example: Lesson 7, Opening activity "Students use base-ten blocks to add two numbers, exploring the purpose for regrouping 10 ones into 1 ten." Example: Lesson 12, Learn About Students are given an example of two numbers, 467 and 463, shown as "quick drawings" representing base-ten blocks. Example: Lesson 12, Practice Students are given multiple-choice answers written symbolically, e.g. 350 > 305. The Lesson Overview includes alignment of the lesson to Standards and to Standards for Mathematical Practice (SMP). Throughout the components of the lesson are specific connections aligning to the Standards and SMP, e.g. SMP TIP boxes.	

Do the materials feature high-quality conceptual problems and conceptual discussion questions? Evaluate lessons, chapter/unit assessments, and homework assignments. NOTE: Example of conceptual problems might include such questions as "Find a number greater than 1/5 and less than 1/4," or "If the divisor does not change and the dividend increases, what happens to the quotient?"	**Evidence-** Teacher Resource Book, Student Book, Student Practice and Problem Solving Book, SBAC Assessment Booklet The Teacher Resource Book provides teachers with high quality discussion question. Materials include questions targeting conceptual understanding. Example: Lesson 7, Opening activity "So you are telling me that 7 tens and 14 ones is 84? I don't see an 8 anywhere. Where did it come from?" "When you look at two numbers to add, what tells you whether you will have to make another ten?" Example: Lesson 12, Learn About "Ask students how the numbers on this page [352 and 328] could be written as tens and ones." The teacher is provided with an answer. [35 tens and 2ones; 32 tens and 8 ones] The Teacher Resource Book in the "Mathematical Discourse" section supports making connections with leading questions that are helpful and concise. The SBAC Assessment booklet coordinates with the conceptual understanding of the unit lessons.	

Do the materials feature opportunities to identify correspondences across mathema[illegible]epresentations? Evaluate lessons, chapter/unit assessments and homework assignments. NOTE: Examples of evaluating this Criterion might include looking at whether students are supported in identifying correspondences among: the verbal description of a situation, the diagrams that distill its mathematical features, and the equations that model it; or equivalent forms of numbers (e.g., 3 and 6/2) and the number line; or rational number operations and representations of them via models such as the vector model; or the expression that defines a function and the graph that shows the relationship.	**Evidence-** Teacher Resource Book, Student Book, Student Practice and Problem S[illegible]ng Book The materials provide many opportunities to identify correspondences between verbal descriptions, diagrams, models and mathematical notation. The materials provide some opportunities to include hands-on/manipulative representations. Examples: Parent letters have diagrams/pictorial representations of skills. Try it sections encourage trying multiple ways. *Model It* usually show two or more mathematical representations in the guided practice section. The questions and problems in student materials are student-friendly, e.g. grapes, soccer games.	
Metric AC1B: **The materials are designed so that students attain the fluencies and procedural skills required by the Standards.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Major Work for the grade being evaluated that relate specifically to fluency and procedural skill to use throughout the questions associated with this metric. NOTE: Some examples of Standards that call for procedural skill and fluency include: K.OA.A.5, 1.OA.C.6, 2.OA.B.2, 2.NBT.B.5, 3.OA.C.7, 3.NBT.A.2, 4.NBT.B.4, 5.NBT.B.5, 6.NS.B.2, and 6.NS.B.3, 6.EE.A, 7.NS.A, 7.EE.A.1,7.EE.B.4a, 8.EE.C.7, 8.EE.C.8b For context, read Criterion #4b in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Teacher Resource Book, Student Book, Student Practice and Problem Solving Book Clusters chosen 2.OA.A and 2.OA.B Materials are designed so that students attain the fluencies and procedural skills required by the Standards. Each lesson has a few independent practice exercises at the end of the lesson. The Practice and Problem Solving book has additional practice for each lesson. In the back of the Practice and Problem Solving book is a Fluency section. The Fluency Table of Content accurately represents the targeted skills and fluencies as aligned to the intent of the Standards. The Activity Sheets found in the Teacher Resources Book Appendix also support developing fluencies and procedural skills.	**Use the questions for Metric 1B to evaluate Metric 1 B. Record evidence for each question and rate Metric 1B.** **(Reviewer only.)** **__2__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Is progress toward fluency and procedural skill interwoven with students' developing conceptual understanding of the operations in question? Evaluate lessons, chapter/unit assessments, daily routines, and homework assignments for evidence that the development of fluency and procedural skill is supported by conceptual understanding.	**Evidence-** Teacher Resource Book, Student Book, Student Practice and Problem Solving Book Materials comprehensively and cohesively connect developing conceptual understanding of the operations with fluency and procedural skills. The teacher is advised how to use the various components of the program to achieve this end.	

Are purely procedural problems and exercises present that include cases in which opportunistic strategies are valuable and generic cases that require efficient algorithms present? Evaluate lessons, chapter/unit assessments, daily routines, and homework assignments. NOTE: Examples of problems in which opportunistic strategies are valuable might include the sum 698 + 240 or the system $x + y = 1$, $2x + 2y = 3$. Examples of generic cases that require efficient algorithms might include the sum 8767+2286 or the system $6y + x = x + 3$, $-x = 1 + 2y$.	**Evidence-** Teacher Resource Book, Student Book, Student Practice and Problem Solving Book Format and design of materials supports fluency and procedural skill with a wider scope than only using standard algorithms.	
Do the materials in grades K–6 provide repeated practice toward attainment of fluency Standards? Evaluate lessons, daily routines, and homework assignments for evidence of repeated practice toward attainment of the following K–6 Standards that set an explicit expectation of fluent (accurate and reasonably fast) computation: K.OA.A.5, 1.OA.C.6, 2.OA.B.2, 2.NBT.B.5, 3.OA.C.7, 3.NBT.A.2, 4.NBT.B.4, 5.NBT.B.5, 6.NS.B.2, 6.NS.B.3.	**Evidence-** Teacher Resource Book, Student Book, Student Practice and Problem Solving Book Materials provide adequate repeated practice toward attainment of fluency Standards provided the teacher uses the Student Book, as well as the Student Practice and Problem Solving Book, including the Fluency Practice as recommended.	

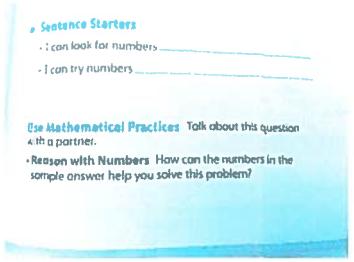
Metric AC1C: **The material[illegible]e designed so that teachers and students spend sufficient time working with engaging applications, without losing focus on the Major Work of each grade.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Major Work for the grade being evaluated that relate specifically application to use throughout the questions associated with this metric. NOTE: Some examples of clusters or Standards that call for application include: K.OA.A.2, 1.OA.A, 2.OA.A, 3.OA.A.3, 3.OA.D.8, 4.OA.A.3, 4.NF.B.3d, 4.NF.B.4c, 5.NF.B.6, 5.NF.B.7c, 6.RP.A.3, 6.NS.A.1, 6.EE.B.7, 6.EE.C.9, 7.RP.A, 7.NS.A.3, 7.EE.B.3, 8.EE.C.8c, 8.F.B For context, read Criterion #4c in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Teacher Resource Book, Student Book, Student Practice and Problem S[illegible]ng Book Materials are designed so that teachers and students spend sufficient time working with engaging applications, without losing focus on the Major Work of each grade. Materials provide for a wide variety of problems. Cluster 2.OA.A Applications in the form of word problems are the focus of the following lessons. Lesson 2: solving one-step word problems. Lesson 6: solving two-step word problems. Lesson 9: solving one-step word problems involving two-digit numbers Lesson 25: solving word problems involving money Applications in the form of unit performance tasks are provided for each of the 4 units. Applications, in the form of word problems, are also included in the extra practice for each unit.	**Use the questions for Metric 1C to evaluate Metric 1C. Record evidence for each questi[illegible]d rate Metric 1C.** **(Reviewer only.)** **__2__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Are there are single- and multi-step contextual problems, including non-routine problems, that develop the mathematics of the grade, afford opportunities for practice, and engage students in problem solving? Do the problems attend thoroughly to those places in the content Standards where expectations for multi-step and real-world problems are explicit? Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** Teacher Resource Book, Student Book, Student Practice and Problem Solving Book The format and layout of materials support student engagement. The "speech bubble" hints are concise and well-placed to engage students in problem-solving.	

Do application problems particularly stress applying the Major Work of the grade? Evaluate lessons, chapter/unit assessments, and homework assignments. NOTE: Examples of evaluating this Criterion might include looking at: how well, by the end of grade 2, students using the materials as designed can represent and solve a full range of one-step addition and subtraction word problems; or how well, by the end of grade 3, students using the materials as designed can represent and solve a full range of one-step multiplication and division word problems; or how well these basic situation types for each operation are carried coherently across the grades, (e.g., with fractions and algebraic expressions); or, in all grades, whether the problems connect concepts, Standards, and domains in ways that are natural and important. For a list of situation types for one-step addition, subtraction, multiplication, and division problems, see Situation Types for the Operations in Word Problems	**Evidence-** Teacher Resource Book, Student Book, Student Practice and Problem Solving Book Applications are cohesively focused on the Major Work of grade 2, building upon number sense learned in grade 1 progressing toward the foundations, concepts and skills needed for third grade.	
Does modeling build slowly across K–8, with applications that are relatively simple in earlier grades and when students are encountering new content? In grades 6–8, do the problems begin to provide opportunities for students to make their own assumptions or simplifications in order to model a situation mathematically? Read Standard for Mathematical Practice 4, Model with Mathematics. Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** Teacher Resource Book, Student Book, Student Practice and Problem Solving Book Modeling progression across grades 2 and 3 is age/developmentally appropriate, aligning with the intent of the lesson be it new content or supporting communication of and reasoning with known content.	
Alignment Criterion 1: **Rigor and Balance** **Materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.** **AC1** Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 out of 6 points, the Criterion has not been met. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)** **Before moving to Alignment Criterion 2, record the final Meets or Does Not Meet rating in the Evaluation Summary.**		**(Reviewer only.)** **__x__Meets** **____Does Not Meet** **Strengths/Weaknesses:** Strength Scope and pacing of materials attends to the components of conceptual understanding, procedural skill, fluency and applications. The program sets high expectations for all three components throughout the materials for teacher, student and parents.

Directions for Alignment Criterion 2

Standards for Mathematical Practice

Alignment Criterion 2: Standards for Mathematical Practice **Materials must demonstrate authentic connections between content Standards and practice Standards.** The Standards require that designers of instructional materials connect the mathematical practices to mathematical content in instruction. Thus, materials must demonstrate authentic connections between content Standards and practice Standards.	**Required Materials**: • Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf) • Focus by Grade Level for the grade being evaluated (www.achievethecore.org/focus) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion** Alignment Criterion 2 is rated as Meets or Does Not Meet. To rate Alignment Criterion 2, first rate metrics 2A, 2B, and 2C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). For each metric, guiding questions are provided to aid in gathering evidence. Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 2 if the materials earn 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as mathematical practices, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.
Metric AC2A: **Materials address the practice Standards in such a way as to enrich the Major Work of the grade; practices strengthen the focus on Major Work instead of detracting from it, in both teacher and student materials.** **How to Find the Evidence:** Familiarize yourself with the Major Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate teacher and student materials for evidence that the mathematical practices support and connect to the focus of the grade. NOTE: Examples of evaluating this Criterion might include looking at whether, in grades K–5, students using the materials are supported to look for and express regularity in repeated reasoning about the addition table, the multiplication table, the properties of operations, the relationship between addition and subtraction or multiplication and division, and the place value system; or whether, in grades 6–8, students using the materials are supported to look for and express regularity in repeated reasoning about proportional relationships and linear functions. For context, read Criterion #8 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013).	**Evidence-** Teacher Resource Book, Student Book, Student Practice and Problem Solving Book Standards of Mathematical Practice (SMP) are embedded in each lesson. Each lesson embeds 2 – 8 of the standards. All eight SMPs are embedded in each of the four units. (Table of Contents found in Teacher's Resource Book) Across the lesson, materials give teachers guidance on drawing out mathematical practices. Example: SMP TIP page 2 "Help students recognize the commutative property within the structure of the number bond. Point out that the numbers in the two bottom boxes can be switched. (SMP7)" Example: SMP TIP page 52 "Encourage students to look for patterns and explain their strategies when identifying odd and even numbers. Some examples: doubles and doubles +1, skip counting by 2s, making equal groups, drawing arrays, etc. (SMP4)" The Math in Action Overview for each unit also notes which SMP connections are associated with the tasks.	**(Reviewer only.)** **__x__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**

	Example: Unit 4 Math in Action p.270a Standards for Mathematical Practice (SMP) Standards 1, 3 and 4 are indicated. Standards 2, 3, 5 and 6 are indicated as additional SMPs. SMPs appear in the student texts as well. Example: Unit 2 Math in Action, page 145  Sentence Starters • I can look for numbers _____ • I can try numbers _____ Use Mathematical Practices Talk about this question with a partner. • Reason with Numbers How can the numbers in the sample answer help you solve this problem?	

Metric AC2B:
Materials att[illegible] to the full meaning of each practice Standard.

How to Find the Evidence:
For context, read Criterion #7 and Criterion #9 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).

Use the questions for Metric 2B to evaluate Metric 2B. Record evidence for each questi[illegible]d rate Metric 2B.

(Reviewer only.)

__x__Meets (2)

____Partially Meets (1)

____Does Not Meet (0)

Over the course of any given year of instruction, is each mathematical practice Standard meaningfully present in the form of assignments, activities, or problems that stimulate students to develop the habits of mind described in the practice Standard? Evaluate lessons, chapter/ unit assessments, and homework assignments for evidence of each mathematical practice being meaningfully present in instruction.	**Evidence-** Teacher Resource Book, Student Textbook, Student Practice and Problem Solving Book All Practice Standards are embedded in the instructions usually providing students opportunities for guided and independent engagement with the SMP. Examples Lesson 1: SMP, 2,3,4,7,8 indicated in TRB as being embedded in Lesson 1. SMP2: Teacher leads students in decontextualizing from pictures, p.2, Evidence of students independently engaging in SMP 2 was not apparent to the evaluator. SMP3: SMP TIP p.4, Students independently engage in SMP 3 during the Let's Talk About It activity SMP4: Students are prompted to independently show their mathematical thinking using specified tools, e.g. an open number line (SB p5). Students are prompted to independently interpret a given model, e.g. a counting on table (SB p6) SMP7: SMP TIP p.2, Students are asked, "You want to count on to find 2+6. What number would you start with? Why?" Students are asked to independently fill in number bonds during a guided part of the lesson (SB p.4). Students have opportunities to explain their structural understandings while explaining their computation methods (SB p.7) SMP8: Evidence of students independently engaging in SMP 8 was not apparent to the evaluator. Lesson 14: SMP, 1,2,3,4,6,7 indicated in TRB as being embedded in Lesson 14. SMP1: Challenge Activity: Write subtraction problems for a given difference. "Challenge students to write as many subtraction problems as they can think of in which their number is the difference. Have them record the equations and see if they notice any patterns or consistencies. Have them, describe what they notice." (TRB p133) SMP2: SMP TIP (p 128) "Have students restate problem, making sure they understand the context of the problem, what they need to find, and what number to subtract. (SMP2)" The instructions for the guided lesson are "Read the problem. Then you will model subtraction." SMP3: Students are prompted to critique the work of others. "Invite the class to ask questions of each other, seek clarification, and acknowledge the work of their peers. Highlight innovative strategies or representations as an encouragement for all students to attempt diverse ways of	

Do the materials treat the practice Standards as developing across grades or grade bands? Are the practice Standards in early grades appropriately simple? Do they display an arc of growing sophistication across the grades?	**Evidence-**	
Are there teacher-directed materials that explain the role of the practice Standards in the classroom and in students' mathematical development? Are alignments to practice Standards accurate?	**Evidence-** The materials provide the teacher with clear and supportive supports for teachers (including rubrics); however, professional development/training might be necessary for teachers to glean all that the Teacher Resource Book has to offer.	
Metric AC2C: **Materials support the Standards' emphasis on mathematical reasoning.** **How to Find the Evidence:** For context, read Criterion #10 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).		**Use the questions for Metric 2C to evaluate Metric 2C. Record evidence for each question and rate Metric 2C.** **(Reviewer only.)** **__x__Meets (2)**

Do the materials support students in constructing viable arguments and critiquing th uments of others concerning grade-level mathematics that is detailed in the content Standards? Read Standard for Mathematical Practice 3. Evaluate teacher and student materials to ensure that students are given opportunities to reason with grade-level mathematics.

Evidence- Teacher Resource Book, Student Book

Materials support students in constructing viable arguments and critiquing the arguments of others. Each lesson includes discussion and modeling activities as well as explain and support your answer opportunities as well as modeling advice for the teacher (Step by Step notes).

TRB Table of Contents indicates that SMP3 is embedded in 24 of the 28 lessons and in 3 of the 4 Math in Action end of unit activities. Lessons that do not have SMP3 noted are 6,11,16 and 18.

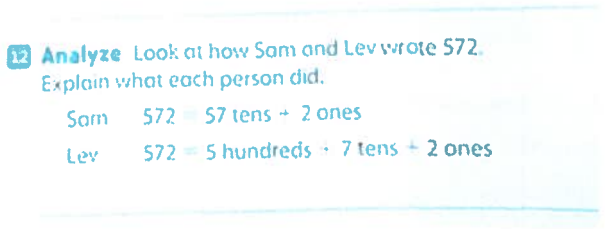
Examples

Lesson 3 (TRB p 19) "Read the Reflect question with the class. Ask students to discuss ideas with a partner before writing an answer. Invite students to share responses with the class, using a model to justify their reasoning." The Reflect question posed is "How can you make a 10 to help you add 8+7?"

Lesson 9 (TRB p 80d) "Invite the class to ask questions of each other, seek clarification, and acknowledge the work of peers. Highlight innovative strategies or representations as an encouragement for all students to attempt diverse ways of thinking."

Lesson 9 (TRB p80) "Why might this be a good model to use for this problem?"

Lesson 10 (SB p94)

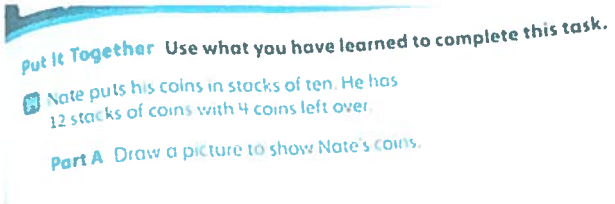


12 **Analyze** Look at how Sam and Lev wrote 572. Explain what each person did.

Sam 572 = 57 tens + 2 ones

Lev 572 = 5 hundreds + 7 tens + 2 ones

Lesson 10 (SB p95)



Put It Together Use what you have learned to complete this task.

14 Nate puts his coins in stacks of ten. He has 12 stacks of coins with 4 coins left over.

Part A Draw a picture to show Nate's coins.

____**Partially Meets (1)**

____**Does Not Meet (0)**

Do the materials support students in producing not only answers and solutions, but al[illegible] a grade-appropriate way, arguments, explanations, diagrams, mathematical models, etc., especially in the Major Work of the grade? Familiarize yourself with the Major Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate teacher and student materials, to understand the types of work students are expected to produce.	**Evidence-** Teacher Resource Book, Student Book Materials support student in constructing arguments, explanations, etc. See examples above.	
Do materials explicitly attend to the specialized language of mathematics? Is the language of argument, problem solving, and mathematical explanations taught rather than assumed? Evaluate teacher and student materials, paying attention to how mathematical language is taught. NOTE: Examples of evaluating this Criterion might include looking at whether students are supported in: basing arguments on definitions; using the method of providing a counterexample; or recognizing that examples alone do not establish a general statement.	**Evidence-** Teacher Resource Book, Student Book, Student Practice and Problem Solving Book The specialized language of mathematics is attended to in both the Teacher Resource Book and the Student Book. Each lesson includes student supports for vocabulary building in the Student Practice and Problem Solving Book.	
Alignment Criterion 2: **Standards for Mathematical Practice** **Materials must demonstrate authentic connections between content Standards and practice Standards.** **AC2** Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 out of 6 points, the Criterion has not been met. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)** **Before moving to Alignment Criterion 3, record the final Meets or Does Not Meet rating in the Evaluation Summary.**		**(Reviewer only.)** **__x__Meets** **____Does Not Meet** **Strengths/Weaknesses:** Strengths Practice standards are clearly and meaningfully embedded throughout the materials focusing on student development of authentic connections between content Standards and practice Standards. The meaningful connections extend to students, teachers and parents.

Alignment Criterion 3:

Access to the Standards for All Students

Materials must provide supports for English Language Learners and other special populations.

Because Standards are for all students, alignment requires thoughtful support to ensure all students are able to meet the Standards. Thus, aligned materials must provide supports for English Language Learners and other special populations.

Required Materials:

- Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf)
- Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)
- From the materials being evaluated: teacher guides, student texts and workbooks

Rating this Criterion:

Alignment Criterion 3 is rated as Meets or Does Not Meet.

To rate Alignment Criterion 3, first rate metrics 3A, 3B, and 3C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points).

Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 3 if the materials earn 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as support for special population, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.

Metric AC3A: **Support for English Language Learners and other special populations is thoughtful and helps those students meet the same Standards as all other students. The language in which problems are posed is carefully considered.** **How to Find the Evidence:** Evaluate teacher and student materials, paying attention to supports offered for special populations.	**Evidence-** Teacher Resource Book, Student Book The Teacher Resource Book contains support for English language learners. Sometimes the suggestions are vague/weak; however the model activities are always clear. Example: Lesson 2 p10 The word problem "There are 15 players on a team. There are 7 girls. The rest of the players are boys. How many boys are on the team?" Teacher support for English Language Learners "Some students may struggle to comprehend the language used in a word problem. You may want to type or write the problem on a piece of paper so that each sentence is on a separate line. Cut out the sentences and have the students match each sentence to the appropriate part of the model, then fill in the blanks: ____ are on the team. ___ are girls. ___ are boys." Suggestions for modeling to support English language learners. Lesson 21, TRB p197, English Language Learners "Read problem 12 with students. Then draw a simple diagram that shows a 4-yard piece and a 6-yard piece have been cut from an 18-yard piece of rope. You might also make a drawing of a birdhouse hanging from a 4-yard piece of rope and a swing hanging from a 6-yard piece of rope. Ask students to use the diagrams and pictures to tell what the problem is asking and what they need to find out."	**Reviewer only.)** **__x__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**

Metric AC3B:
Materials provide appropriate level and type of scaffolding, differentiation, intervention, and support for a broad range of learners with gradual removal of supports, when needed, to allow students to demonstrate their mathematical understanding independently.

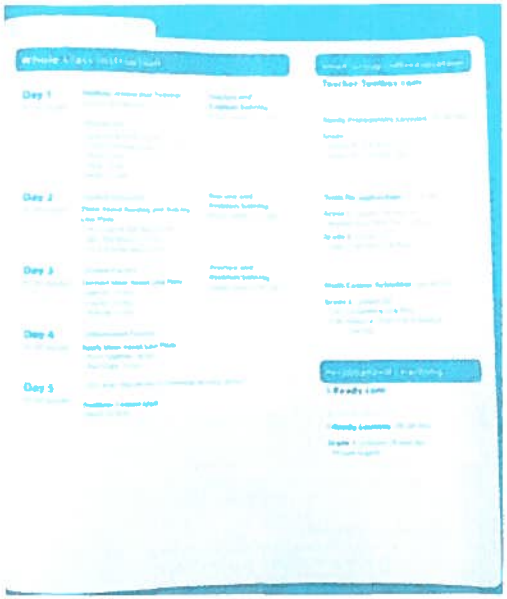
How to Find the Evidence:

Evaluate teacher and student materials, paying attention to whether materials provide differentiation that will lead all learners to engage with on-grade-level content.

Evidence- Teacher Resource Book,

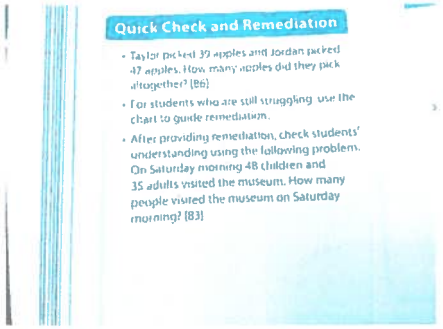
Lessons are designed [redacted] gradual release of responsibility model over the course of several days.

Introduction, Guided instruction, Guided practice, Independent Practice.



Differentiation, remediation and scaffolding support

Example: Lesson 7, TRB p68



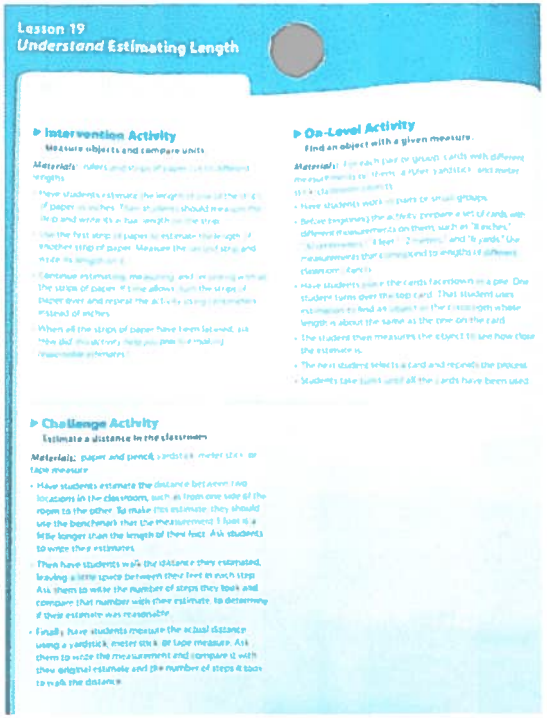
Lesson 19: TRB p181b

Reviewer only.)

___x_Meets (2)

____Partially Meets (1)

____Does Not Meet (0)



Lesson 19
Understand Estimating Length

▶ **Intervention Activity**
Measure objects and compare units.

Materials: rulers and strips of paper cut to different lengths

- Have students estimate the length of one side of a piece of paper in inches. Then students should measure the side and write its exact length on the strip.
- Use the first strip of paper to estimate the length of another strip of paper. Measure the second strip and write its length on it.
- Continue estimating, measuring, and recording with all the strips of paper. If time allows, turn the strips of paper over and repeat the activity using centimeters instead of inches.
- When all the strips of paper have been labeled, put them [illegible] in order from the shortest to the longest.

▶ **On-Level Activity**
Find an object with a given measure.

Materials: [illegible] cards with different measurements to inform, a ruler, yardstick, and meter stick, classroom objects

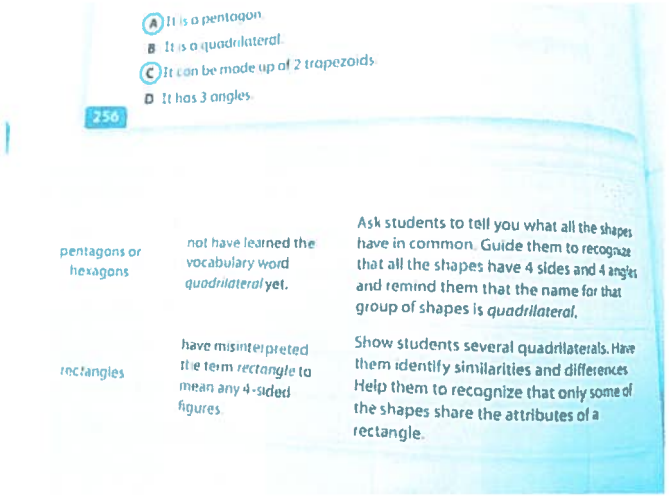
- Have students work in pairs or small groups.
- Before beginning the activity, prepare a set of cards with different measurements on them, such as "8 inches," "1 foot," "2 meters," and "5 yards." Use measurements that correspond to lengths of different classroom objects.
- Have students place the cards facedown in a pile. One student turns over the top card. That student uses estimation to find an object in the classroom whose length is about the same as the one on the card.
- The student then measures the object to see how close the estimate is.
- The next student selects a card and repeats the process.
- Students take turns until all the cards have been used.

▶ **Challenge Activity**
Estimate a distance in the classroom.

Materials: paper and pencil, yardstick, meter stick, or tape measure

- Have students estimate the distance between two locations in the classroom, such as from one side of the room to the other. To make this estimate, they should use the benchmark that the measurement 1 foot is a little longer than the length of their feet. Ask students to write their estimates.
- Then have students walk the distance they estimated, leaving a little space between their feet in each step. Ask them to write the number of steps they took and compare that number with their estimate to determine if their estimate was reasonable.
- Finally, have students measure the actual distance using a yardstick, meter stick, or tape measure. Ask them to write the measurement and compare it with their original estimate and the number of steps it took to walk the distance.

Lesson 26: TRB p256



(A) It is a pentagon.
B It is a quadrilateral.
(C) It can be made up of 2 trapezoids.
D It has 3 angles.

256

pentagons or hexagons	not have learned the vocabulary word *quadrilateral* yet.	Ask students to tell you what all the shapes have in common. Guide them to recognize that all the shapes have 4 sides and 4 angles and remind them that the name for that group of shapes is *quadrilateral*.
rectangles	have misinterpreted the term *rectangle* to mean any 4-sided figures.	Show students several quadrilaterals. Have them identify similarities and differences. Help them to recognize that only some of the shapes share the attributes of a rectangle.

Metric AC3C: **Design of lessons recommends and facilitates a mix of instructional approaches for a variety of learners such as using multiple representations (e.g., including models, using a range of questions, checking for understanding, flexible grouping, pair-share).** **How to Find the Evidence:** Evaluate teacher materials, noting instructional approaches suggested for whole class and differentiated lessons and activities.	**Evidence-** Teacher Resource Book, Student Book Across each lesson, teachers are given supports for a variety of approaches. Example: Lesson 13 TRB/Student Book pp 114c-123 Approaches specifically noted in Lesson 13 include, whole group instruction, students working in pairs, using charts and models, extending concepts, hands-on activity and visualizing manipulatives, as well as examples, problems and mathematical discourse targeting multiple DOK levels.	**Reviewer only.)** **__x__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Alignment Criterion 3: **Access to the Standards for All Students** **Materials must provide supports for English Language Learners and other special populations.** **AC3** Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 points, the Criterion has not been met. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion.**(Reviewer only.)** **Move to the Evaluation Summary and record the final Meets or Does Not Meet rating .**		**(Reviewer only.)** **__x__Meets** **____Does Not Meet** **Strengths/Weaknesses:** Strengths Modeling is evident throughout the materials. The consistent format and repetitive nature of the language supports ELL students. The differentiation supports provide for ELL students and other special populations.

Once an evaluation for alignment to the Shifts and major features of the CCSS has been conducted using Sections 1-3, it's important to evaluate for overall quality and best practices. A starting list of Indicators of Quality are suggested below. States, districts and others evaluating instructional materials are encouraged to add to this list to ensure materials reflect local contexts. For background information on some of the Indicators of Quality in this section, refer to pp.18–21 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).

Indicators of Quality	**Evidence- Give specific examples.**	**Rating: (Reviewers only.)**

1. Lessons are thoughtfully structured and support the teacher in leading the class through the learning paths at hand, with active participation by all students in their own learning and in the learning of their classmates.	**Evidence-** Teacher Resource Book, Student Book Teacher supports are in a variety of approaches that follow a gradual release of responsibility progression, i.e. beginning with full teacher support progressing toward student independence. Materials provide supports for both differentiation for both access and extension. Mathematical discourse is supported throughout the lessons.	**(Reviewer only.)** ___x___ **Yes** _____ **No**
2. The underlying design of the materials includes both problems and exercises. (In solving problems, students learn new mathematics, whereas in working exercises, students apply what they have already learned to build mastery.) Each problem or exercise has a purpose. **NOTE: This Criterion does not require that the problems and exercises be labeled as such.**	**Evidence-** Teacher Resource Book, Student Book, Student Practice and Problem Book The problems and exercise are worth doing. Each aligns to the stated goals of the unit/lesson. The suggested homework, applications and parent supports align to and support the goals of the unit/lesson.	**(Reviewer only.)** ___x___ **Yes** _____ **No**
3. Design of assignments is not haphazard: exercises are given in intentional sequences in order to strengthen students' mathematical understanding.	**Evidence-** Teacher Resource Book, Student Book, Student Practice and Problem Book Problems and exercises are given in intentional sequences, beginning from what should be known to the student to problems targeting the learning of new concepts and skills and finally to exercises for applying newly learned concepts and practicing newly learned skills.	**(Reviewer only.)** ____x__ **Yes** _____ **No**
4. There are separate teacher materials that support and reward teacher study including, but not limited to: discussion of the mathematics of the units and the mathematical point of each lesson as it relates to the organizing concepts of the unit, discussion on student ways of thinking and anticipating a variety of students responses, guidance on lesson flow, guidance on questions that prompt students thinking, and discussion of desired mathematical behaviors being elicited among students.	**Evidence-** Teacher Resource Book, Student Book, Student Practice and Problem Book The Teacher Resource Book provides teachers details on how each lesson is situated in a progression of mathematical understanding, including specific prerequisite skills. Supports identify areas of student engagement and thought of which the teacher should be particularly aware. Supports are included for anticipating areas of struggle or possible misconceptions and for providing supports should such struggles or misconceptions become apparent. Teachers will likely need training on fully utilizing/implementing the materials provided. The online iReady component greatly enhances the supports for teachers in the areas of diagnostics, interventions and reporting.	**(Reviewer only.)** ___x___ **Yes** _____ **No**

5. Manipulatives suggested in the materials are faithful representations of the mathematical objects they represent and are connected to written methods.	**Evidence-** Manipulatives are true representations of the objects they represent. They are used intentionally toward meeting specific mathematical understandings. Manipulatives used are commonly available (although not included in the program). The supporting activity sheets support the use of manipulatives.	**(Reviewer only.)** **___x___ Yes** **_____ No**
6. Materials include a variety of curriculum-embedded assessments. Examples include pre-, formative, summative, and self-assessment resources.	**Evidence-** Teacher Resource Book, Student Book, Student Practice and Problem Book, SBAC Assessment Booklet The TRB provides questions at multiple DOK levels. The teacher is provided with suggestions regarding what to assess as students work and discuss. Each unit includes a summative unit Interim Assessment. A bank of SBAC aligned assessments is provided in the SBAC Edition supplement. Student materials also provide formative assessment opportunities in the form of fluency practice, unit practice, games, and unit performance tasks.	**(Reviewer only.)** **___x___ Yes** **_____ No**
7. Assessments contain aligned rubrics, answer keys, and scoring guidelines that provide sufficient guidance for interpreting student performance.	**Evidence-** Teacher Resource Book, SBAC Assessment Booklet Assessments, formal and informal, are accompanied with answer keys, aligned rubrics with scoring guidelines, and support for interpreting student responses. Rubrics are clear and concise.	**(Reviewer only.)** **___x___ Yes** **_____ No**
8. Materials assess student proficiency using methods that are accessible and unbiased, including the use of course-level language in student prompts.	**Evidence-** Teacher Resource Book, SBAC Assessment Booklet Assessments are varied and provide students with multiple methods and means for demonstrating understanding, and for demonstrating multiple depths of understanding. Language is clear and grade appropriate.	**(Reviewer only.)** **___x___ Yes** **_____ No**
9. Materials are carefully evaluated by qualified individuals, whose names are listed, in an effort to ensure freedom from mathematical errors and course-level appropriateness.	**Evidence-** Teacher Resource Book The publisher listed the names and brief bio on the authors, as well as the names, associated school and location of school of Teacher Advisors in the Mathematics Instruction Teacher's Resource Book.	**(Reviewer only.)** **___x___ Yes** **_____ No**

10. The visual design supports students in engaging thoughtfully with the subject. Navigation through the text is clear.	**Evidence-** Student Book Each unit and lesson is formatted in a logical and meaningful way. The gradual release model is clear to students. Visual cues in lesson materials lead students across a predictable progression. <u>Progression</u> Using What You Know Find Out More Picture It Model It Connect It Try It Practice Self-Check Materials are student friendly, free of extraneous pictures, graphics and other visuals that would distract from the focus of the lesson.	**(Reviewer only.)** **___x___ Yes** **_____ No**
11. The materials engage parents in appropriate ways. For example, homework assignments in elementary grades, consist of routine problems, practice with getting answers, and fluency-building exercises that parents can easily support.	**Evidence-** Practice and Problem Solving Book Materials include a letter to parents providing the mathematical focus of the lesson, sample problems and methods of solution and guidance on what can be done at home to support the student in learning the associated concepts and skills. Routine problems are provided as practice/homework exercises.	**(Reviewer only.)** **___x___ Yes** **_____ No**

Reviewer IMET Evaluation Summary **Title/Level: Ready Common Core Mathematics, Grade 2**

Publisher: Curriculum Associates LLC **Copyright: 2016** **ISBN: 9781495705496**

Reviewer ID # LBTR_____ **Date Review Completed: March 8, 2016**

Non-Negotiable Criteria- Each Non-Negotiable must be met in order for the Non-Negotiable Alignment Criteria to be met overall.

Non-Negotiable 1: Freedom from Obstacles to Focus	Non- Negotiable 2: Focus and Coherence
_____x__ Meets _____ Does Not Meet	___x__ Meets _____ Does Not Meet

Non-Negotiable Overall:

___x__ Meets **_____ Does Not Meet**

Alignment Criteria- Each Alignment Criterion must be met with a sufficient number of points in order for Alignment Criteria to be labeled as "Meets" overall. The more points the materials receive on the Alignment Criteria, the better they are aligned.

Alignment Criterion 1: Rigor and Balance	Alignment Criterion 2: Standards of Mathematical Practice	Alignment Criterion 3: Access to Standards for All Learners
Points: __6___ of 6 possible. (Materials must receive at least 5 of 6 points to align.) ____x___ Meets _____ Does Not Meet	Points: ___6__ of 6 possible. (Materials must receive at least 5 of 6 points to align.) _____x__ Meets _____ Does Not Meet	Points: __6___ of 6 possible. (Materials must receive at least 5 of 6 points to align.) ___x____ Meets _____ Does Not Meet

Alignment Criteria Overall:

___x__ Meets **_____ Does Not Meet**

If the mater[illegible] meet both Non-Negotiables and relevant Alignment Cr[illegible]ion, they are aligned to the Shifts and major features o[illegible]e Core Standards. **Do the materials meet every Non-Negotiable and Alignment Criterion? ___x__ Yes _____ No**

What are the specific areas of strength and weakness based on this evaluation? Publishers or others modifying or developing assessments can use this information to make improvements and/or to remedy gaps in the alignment of assessment materials.

Strength

Materials comprehensively and coherently align to Content Standards.

Materials comprehensively and coherently attend to and embed Practice Standards in engaging ways for both teacher and students.

Format of materials (teacher, student and parent) enhances engagement, mathematical understandings and navigation of materials.

Diagnostic, formative and summative assessment is well supported.

All levels of DOK are present in meaningful ways.

Materials have useful/purposefully-aligned parent supports.

Weakness

The comprehensive nature of the materials is a strength; however, accompanying this strength is the responsibility of teachers/districts to fully understand the components, supports and learning opportunities found in the materials.

2015-16 Mathematics Interim Review Recommendation & Summary

Publisher Name:	Curriculum Associates LLC
Title:	Ready Common Core Mathematics, Grade 3
ISBN #	9781495705502
Grade Level(s) or Course:	Grade 3
Reviewer ID:	LBTR

RECOMMENDED AS:

____x____**Core Mathematics Program-** a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials. Substantial evidence clearly supports the designation of this program as Core.

_____**Other Mathematics Program-** a program that substantially, but partially, meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for supplemental materials. Substantial evidence clearly supports the designation of this program as Other.

_____**Component Mathematics Program-** a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs. Substantial evidence clearly supports the designation of this program as Component.

_____**Intervention Program-** a program designed and intended to target and support students' specific needs. Substantial evidence clearly supports the designation of this program as Intervention.

_____ **Does not meet criteria** for recommendation as a Curricular Material or Online Resource for Mathematics.

EVIDENCE SUMMARY:

FOCUS- The program maintains consistent focus on the concepts, skills and processes aligned to the Common Core Content Standards and Mathematical Practices. It is free of extraneous or non-aligned content.

COHERENCE- Mathematics is presented as interrelated concepts and skills. The Teacher Resource Book supports coherence and progressive development of ideas, concepts, skills and processes.

RIGOR- Scope and pacing of materials attends to the components of conceptual understanding, procedural skill, fluency and applications. The program sets high expectations for all three components throughout the materials for teacher, student and parents.

CONCEPTUAL UNDERSTANDING- Conceptual understanding is attended to thoroughly where the Standards set explicit expectations for understanding or interpreting. Materials provide students enactive, iconic and symbolic opportunities to develop and communicate understandings of the major clusters of the grade Standards.

MATHEMATICAL PRACTICES- This is a strength of the program. Standards of Mathematical Practice (SMP) are embedded in each lesson. All Practice Standards are embedded in the instructions usually providing students opportunities for guided and independent engagement with the SMP. Each lesson focuses on 2 – 8 of the standards. All eight SMPs are embedded in each of the four units. Across the lesson, materials give teachers guidance on drawing out mathematical practices. The parent pages help guide parents in mathematical thinking.

ACCESSIBILITY OF STANDARDS TO ALL STUDENTS- Lessons are designed on a gradual release of responsibility model over the course of several days, i.e. Introduction, Guided instruction, Guided practice, Independent Practice. Differentiation, remediation and scaffolding support as well as the variety of approaches give teachers considerable guidance and support accessibility for all students.

OTHER:

The materials are visually appealing. Visuals support navigation, teacher and student engagement, as well as purposeful focus on the mathematics.

It might be difficult for teachers to realize the full breadth and depth of these materials without professional development/training.

2015-1 nterim Mathematics Review

Mathematics Evaluation Tool – High School

Publisher: Curriculum Associates LLC

Title of Material: Ready Common Core Mathematics Grade 3

Author: Curriculum Associates

ISBN #: 978 149 570 5502 **Copyright** 2016

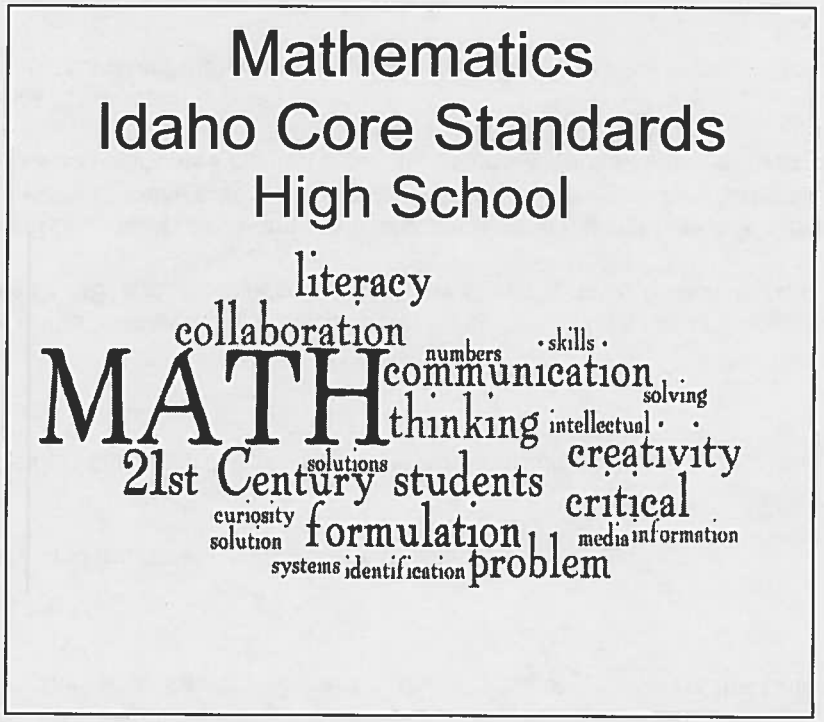
Reviewer ID: LBTR

Core Mathematics Program- a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Core.

Other Mathematics Program- a program that substantially, but partially, meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Other.

Component Mathematics Program- a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs.
Substantial evidence clearly supports the designation of this program as Component.

Intervention Program- a program designed and intended to target and support students' specific needs.
Substantial evidence clearly supports the designation of this program as Intervention.



- Evaluation Form adapted from Instructional Materials Evaluation Toolkit (IMET).

The IMET was developed by Student Achievement Partners. Educators may use or adapt. http://creativecommons.org/licenses/by/3.0/ Download this tool at http://achievethecore.org/IMET

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Instructional Materials Evaluation Tool

Mathematics, Grades K-8

What Are the Purposes of the IMET?

This Math IMET is designed to help educators determine whether instructional materials are aligned to the Shifts and major features of the Common Core State Standards (CCSS). The substantial instructional Shifts (http://www.corestandards.org/other-resources/key-shifts-inmathematics/) at the heart of the Common Core State Standards are:

- **Focus** strongly where the Standards focus
- **Coherence**: Think across grades and link to major topics within the grade
- **Rigor**: In major topics, pursue conceptual understanding, procedural skill and fluency, and application with equal intensity.

The IMET draws directly from the following documents:

- Common Core State Standards for Mathematics (www.corestandards.org/Math)
- Publishers' Criteria for the Common Core State Standards in Mathematics grade K-8 (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)

When to use the IMET

1. Purchasing materials: Many factors go into local purchasing decisions. Alignment to the Standards is a critical factor to consider. This tool is designed to evaluate alignment of instructional materials to the Shifts and the major features of the CCSS. It also provides suggestions of additional indicators to consider in the materials evaluation and purchasing process.

2. Evaluating materials currently in use: The IMET can be used to analyze the degree of alignment of existing materials and help to highlight specific, concrete flaws in alignment. Even where materials and tools currently in use fail to meet one or more of these criteria, the pattern of failure is likely to be informative. States and districts can use the evaluation to create a thoughtful plan to modify or combine existing resources in such a way that students' actual learning experiences approach the focus, coherence, and rigor of the Standards.

3. Developing programs: Those developing new programs can use this tool as guidance for creating aligned curricula.
Please note this tool was designed for evaluating comprehensive curricula (including any supplemental or ancillary materials), but it was not designed for the evaluation of standalone supplemental materials.

Who Uses the IMET?

Evaluating instructional materials requires both subject-matter and pedagogical expertise. Evaluators should be well versed in the Standards (www.corestandards.org/Math) for all grades in which materials are being evaluated. This includes understanding the Major Work of the grade (www.achievethecore/focus), the Supporting and Additional work, how the content fits into the progressions in the Standards (www.achievethecore.org/progressions), and the expectations of the Standards with respect to conceptual understanding, procedural skill and fluency, and application. Evaluators also should be familiar with the substantial instructional Shifts (http:// www.corestandards.org/other-resources/key-shifts-in-mathematics/) of Focus, Coherence and Rigor that are listed above.

Getting Started

Prior to Evaluation

Assemble all of the materials necessary for the evaluation. It is essential for evaluators to have materials for all grades covered by the program, as some criteria cannot be rated without having access to each grade. In addition, each evaluator should have a reference copy of the Common Core State Standards for Mathematics (CCSSM) and the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013).

Before conducting the evaluation itself, it is important to develop a protocol for the evaluation process. The protocol should include having evaluators study the Publishers' Criteria and the IMET. It will also be helpful for evaluators to get a sense of each program overall before beginning the process. At a minimum, this would include reading the front matter of the text, looking at the table of contents and paging through multiple chapters.

Sections 1-3 below should be completed to produce a comprehensive picture of the strengths and weaknesses of the materials under evaluation. Information about areas in need of improvement or supplementation should be shared with internal and external stakeholders.

Navigating the Tool

Begin with Section 1: Non-Negotiable Alignment Criteria

- The Non-Negotiable Alignment Criteria must each be met in full for materials to be considered aligned to the Shifts and the major features of the Common Core State Standards. Each Non-Negotiable Alignment Criterion has one or more metrics associated with it; every one of these metrics must be met in order for the criterion as a whole to be met.

- Examine the relevant materials and use evidence to rate the materials against each criterion and its associated metric(s).

- Record and explain the evidence upon which the rating is based.

Continue to Section 2: Alignment Criteria

- The Alignment Criteria must each be met for materials to be considered aligned to the Shifts and the major features of the Common Core State Standards. Each Alignment Criterion has one or more metric associated with it; a specific number of these metrics must be met or partially met in order for the criterion as a whole to be met.

- Examine the materials in relation to these criteria, assigning each metric a point value. Rate the criterion as "Meets" or "Do Not Meet" based on the number of points assigned. The more points the materials receive on the alignment Criteria, the better they are aligned.

- Record and explain the evidence upon which the rating is based.

Proceed to Section 4: Indicators of Quality

- Indicators of Quality are important considerations that will help evaluators better understand the overall quality of instructional materials. These considerations are not criteria for alignment to the CCSS, but they provide valuable information about additional program characteristics. Evaluators may want to add their own indicators to the examples provided.

Directions for Non-Negotiable 1

Freedom from Obstacles to Focus

Criterion	Evidence- Give specific examples.	Rating: (Reviewer only.)
Non-Negotiable 1: **Freedom from Obstacles to Focus** **Materials must reflect the content architecture of the Standards by not assessing the topics named before the grade level where they first appear in the Standards.** The Standards foster students' progress to algebra by focusing strongly on arithmetic. Consistent with this focus, certain topics from outside of arithmetic appear only in later grades. Thus, to be aligned, materials must reflect the content architecture of the Standards by not assessing the topics named before the grade level where they first appear in the Standards. In this criterion, "topics named" means the topics that are explicitly named in Metric 1A. No other topics should be added to the list in Metric 1A. (Note that other topics in the standards are addressed in criterion NN2.)	**Required Materials** • Common Core State Standards for Mathematics (www.corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf) • From the materials being evaluated: teacher guides and all assessment components	**Rating this Criterion:** Non-Negotiable 1 is rated as Meets or Does Not Meet. To rate Non-Negotiable 1, begin by rating Metric 1A. Since Metric 1A is the only metric for Non-Negotiable 1, the rating for Non-Negotiable 1 is the same as the rating for Metric 1A. If Metric 1A is rated as Does Not Meet, include evidence of when the named topic(s) is/are assessed. If the metric is rated as Meets, list the grade(s) examined in the evaluation.

Metric NN1A: **Materials reflect the basic architecture of the Standards by not assessing the listed topics before the grade level indicated.** • Probability, including chance, likely outcomes, probability models. (Introduced in the CCSSM in grade 7) • Statistical distributions, including center, variation, clumping, outliers, mean, median, mode, range, quartiles; and statistical association or trends, including two-way tables, bivariate measurement data, scatter plots, trend line, line of best fit, correlation. (Introduced in the CCSSM in grade 6) • Similarity, congruence, or geometric transformations. (Introduced in the CCSSM in grade 8) • Symmetry of shapes, including line/ reflection symmetry, rotational symmetry. (Introduced in the CCSSM in grade 4) **How to Find the Evidence:** Evaluate the table of contents, all chapter tests, all unit tests, and other such assessment components (including rubrics). For context, read Criterion #2 from the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013). NOTE: Grade alignments of other topics are addressed in Non-Negotiable 2, Focus and Coherence.) In this criterion, "topics named" means the topics that are explicitly named in Metric 1A. No other topics should be added to the list in Metric 1A. (Note that other topics in the standards are addressed in criterion NN2.)	**Evidence-** Teacher Resource Book, Student Book, Student Practice and Problem Solving Book Ready Common Core Mathematics for Grade 3 does not assess any of the topics indicated on the NN1 Metric 1A list.	**(Reviewer only.)** **__x__Meets** **____Does Not Meet**
Non-Negotiable 1: Materials must reflect the content architecture of the Standards by not assessing the topics named* before the grade level where they first appear in the Standards. **NN 1** If Metric 1A was rated as Meets, then rate Non-Negotiable 1 as Meets. If Metric 1A was rated as Does Not Meet, then rate Non- Negotiable 1 as Does Not Meet. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion.**(Reviewer only.)** **Before moving to Non-Negotiable 2, record the final Meets or Does Not Meet rating in the Evaluation Summary.**		**(Reviewer only.)** **__x__Meets** **____Does Not Meet** **Strengths/Weaknesses:** Maintains a good focus on the major clusters of grade 3. Unit overviews list the Common Core numbers and standards, indicating the alignment of each lesson. Indicated alignment is an accurate representation of

Directions for Non-Negotiable 2

Focus and Coherence

Non-Negotiable 2:

Focus and Coherence

Materials must focus coherently on the Major Work of the grade in a way that is consistent with the progressions in the Standards.

Focus and coherence are the two major evidence-based design principles of the Common Core State Standards for Mathematics (CCSSM, p. 3). Focus is necessary in order to fulfill the ambitious promise the states have made to their students by adopting the Standards: greater achievement at the college and career ready level; greater depth of understanding of mathematics; and a rich classroom environment in which reasoning, sense-making, applications, and a range of mathematical practices flourish. In simpler terms, a mile-wide, inch-deep curriculum translates to less time per topic. Less time means less depth and moving on without many students. Thus, materials must focus coherently on the Major Work of the grade in a way that is consistent with the progressions in the Standards.

Required Materials

- Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf)
- Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)
- Focus by Grade Level for the grade being evaluated (www.achievethecore.org/focus)
- From the materials being evaluated: teacher guides, student texts and workbooks

Rating this Criterion:

Non-Negotiable 2 is rated as Meets or Does Not Meet.

To rate Non-Negotiable 2, first rate metrics 2A–2H. Each of these eight metrics must be rated as Meets in order for Non-Negotiable 2 to be rated as Meets. Rate each metric 2A-2H as Meets or Does Not Meet/Insufficient Evidence. If the evidence examined shows that the Criterion is met, then mark the Criterion Meets. If the evidence examined shows that the Criterion is not met—or if there is insufficient evidence to make a determination—then mark the Criterion as Does Not Meet/Insufficient Evidence. Support all ratings with evidence.

Metric NN2A:
In each grade 3–8, students and teachers using the materials as designed devote the large majority of time to the Major Work of the grade.

How to Find the Evidence:
Familiarize yourself with the Major Work of the grade being evaluated (see the Focus by Grade Level documents.)
Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, lessons, homework assignments, and assessments. (Evaluate both student and teacher materials.)
Consider time spent on the Major Work of the grade and judge qualitatively whether students and teachers using the materials as designed will devote the large majority of time to the Major Work of the grade.
For context, read Criterion #1 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013)

Evidence- Teacher Resource Book, Student Practice and Problem Solving Book

There are 33 lessons in the Ready Common Core grade 3 Mathematics program (Ready).

23 lessons attend to standards associated with major clusters,

6 lessons attend to standards associated with supporting clusters, and

4 lessons attend to standards associated with additional clusters.

The pacing calendar also reflects the devotion of time to Major Works.

(Reviewer only.)

__x__Meets

____Does Not Meet/

Insufficient Evidence

Metric NN2B:
Supporting Work, where present, enhances focus and coherence simultaneously by also engaging students in the Major Work of the grade.

How to Find the Evidence:
Familiarize yourself with the Major Work and Supporting Work of the grade being evaluated (see the Focus by Grade Level documents.)
Evaluate chapters and lessons that focus on Supporting Work. NOTE: Example of evaluating this Criterion might include looking at whether materials for K–5 generally treat data displays as an occasion for solving grade-level word problems using the four operations (e.g., see 3.MD.B.3); or whether materials for grade 7 take advantage of opportunities to use probability to support ratios, proportions, and percentages.
For context, read Criterion #3 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).

Evidence- Teacher Resource Book

Supporting works are the focus of lessons 24-26 and 31-33.

Lesson	Student engagement in Major Work
24	Some engagement with OA.A
25	Some engagement with OA.A
26	Little to none
31	Little to none
32	Little to none
33	Some engagement with NF.A

Additional works are the focus of lessons 8-10 and 30.

Lesson	Student engagement in Major Work
8	Little to none
9	Little to none
10	Some engagement with OA.A, OA.B and OA.C

(Reviewer only.)

__x__Meets

____Does Not Meet/

Insufficient Evidence

	30 | Making connections between area and perimeter All other lessons directly focus on Major Works.	
Metric NN2C: **Materials base content progressions on the grade-by-grade progressions in the Standards. Content from previous or future grades does not unduly interfere with or displace on-grade-level content.** **How to Find the Evidence:** Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, and lessons in both student and teacher materials. NOTE: In some cases it may be possible that aligned materials might address some aspects of a topic in a strategic way before or after the grade level in which the topic is central in the Standards' progressions; for example, a curriculum author might purposefully choose to explore adding fractions with unlike denominators in a way appropriate to grade four, recognizing that this work is not really required until the next grade. However, any such purposeful discrepancies in content progressions should enhance the required learning in each grade; not unduly interfere with or displace grade-level content; and be clearly aimed at helping students meet the Standards as written rather than effectively rewriting the progressions in the Standards. And in all cases, note that Non-Negotiable 1 must be met for materials to be aligned. For context, read Criterion #5a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Teacher Resource Book, Student Book, Student Practice and Problem Solving Book Materials are consistent with the progressions in the Standards. As evidenced in the Teacher Resource Book, Student Textbook and the Practice and Problem Solving Textbook. The Student Practice and Problem Solving book aligns extremely well with the Student Book (Main Common Core Instruction Book).	**(Reviewer only.)** **__x__Meets** **____Does Not Meet/** **Insufficient Evidence**
Metric NN2D: **Materials give all students extensive work with on-grade-level problems.** **How to Find the Evidence:** Evaluate both student and teacher materials. If the materials provide resources for differentiated learning, consider whether lower-performing students have opportunities to engage with grade-level problems. Also consider whether higher-performing students are given opportunities to learn current grade-level content in greater depth. For context, read Criterion #5b in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Teacher Resource Book, Student Book, Student Practice and Problem Solving Book and Teacher's Guide Book The Teacher Resource Book provides suggestions for embedding remediation and challenge into the grade-level work lesson. In addition to lesson activities and problems, each unit has associated games, extra practice and performance tasks. The Key Code Bar of B=Basic, M=Medium, and C=Challenge in the Practice and Problem Solving Teacher's Guide Book is helpful and accurate.	**(Reviewer only.)** **__x__Meets** **____Does Not Meet/** **Insufficient Evidence**

Metric NN2E: **Materials re[illegible]on-grade-level concepts explicitly to prior knowledge from earlier grades.** **How to Find the Evidence:** Evaluate both student and teacher materials. NOTE: Examples of evaluating this Criterion might include looking at the way the materials extend basic ideas of place value across the decimal point; or the role that properties of operations play when the materials extend arithmetic beyond whole numbers to fractions, variables, and expressions. More generally, cluster headings in the Standards sometimes signal key moments where reorganizing and extending previous knowledge is important in order to accommodate new knowledge (e.g., see cluster headings that use the phrase "Apply and extend previous understanding"). For context, read Criterion #5c in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Teacher Resource Book, Student Book Lessons are structure[illegible]n a gradual release model. The lesson introduction includes a "Use What You Know" activity to connect to prior knowledge. For each lesson, the Teacher Resource Book includes progressions showing the related grade 3, grade 4 and grade 2 concepts and skills. Specific notation of prerequisite skills is helpful as is the reference to where to go in the second grade lessons should remediation be necessary. (Personalized Learning note in TRB) The format of student, teacher and parent materials, the cartoon characters and the navigation headings are consistent from grade level to grade level; supporting use as student progress through the program.	**(Reviewer only.)** **__x__Meets** **____Does Not Meet/** **Insufficient Evidence**
Metric NN2F: **Review of material from previous grades is clearly identified as such to the teacher, and teacher and students can see what their specific responsibility is for the current year.** **How to Find the Evidence:** Evaluate the table of contents, but do not stop there; also evaluate units, chapters, lessons, homework assignments and assessments. (Evaluate both student and teacher materials.) Identify any content from previous grades and check whether it is identified as such. For context, read Criterion #5a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Teacher Resource Book, Student Book, Student Practice and Problem Solving Book Materials connected the general grade 2 content foci and the specific content foci of the lesson to the relevant grade 1 content and to the relevant grade 3 content. (Learning Progression notes found in the Teacher's Resource Book on the Lesson Overview pages) The Pacing Chart shows a clear scope and sequence for the year that matches well with those in the Standards. (Pages A42-A45 in the Teacher Resource Book)	**(Reviewer only.)** **__x__Meets** **____Does Not Meet/** **Insufficient Evidence**
Metric NN2G: **Materials include learning objectives that are visibly shaped by CCSSM cluster headings.** **How to Find the Evidence:** Select several clusters from the Major Work in the grade being evaluated. Evaluate teacher and student materials in relation to these clusters. For context, read Criterion #6a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Teacher Resource Book Learning objectives are visibly shaped by the individual standards. Example: Lesson 15 overview Unit Title: Understand Fractions on a Number Line Content objectives: • Understand fractions a numbers on a number line. • Understand how to use number lines to count and identify fractional parts. • Represent fractions on a number line that are less than, equal to, or greater than one.	**(Reviewer only.)** **__x__Meets** **____Does Not Meet/** **Insufficient Evidence**

	Content Standard 3.N[illegible].A.2 Cluster heading: Understand a fraction as a number on the number line; represent fractions on a number line diagram. Also included for each lesson is CCSS Focus overview.	
Metric NN2H: **Materials include problems and activities that serve to connect two or more clusters in a domain, or two or more domains in a grade, in cases where these connections are natural and important.** **How to Find the Evidence:** In the grade being evaluated, choose two or more clusters or two or more domains for which connections are natural and important. Evaluate the units, chapters, and lessons that deal with the chosen topics, looking for problems and activities that serve to connect the chosen clusters or domains. NOTE: An example of evaluating this Criterion might include looking at whether problems in grade 4 sometimes or often involve students applying their developing computation skills (detailed in domain NBT) in the context of solving word problems (detailed in domain OA). For context, read Criterion #6b in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Teacher Resource Book As well as connections within the lessons, at the end of each of the units is a Math in Action activity that specifically makes domain/cluster connections.	**(Reviewer only.)** **__x__Meets** **____Does Not Meet/** **Insufficient Evidence**

Unit	Associated Domains	Associated Clusters
1	3.OA	2.OA.Clusters A.1-3 2.OA.Clusters B.5-7
2	3.NBT and 3.OA	3.NBT.Clusters A.1-3 3.OA.Clusters B.5 and C.7
3	3.NBT and 3.OA	3.NBT.A.2 3.AO.Clusters A.3, B.5 and D.8
4	3.NF	3.NF. Clusters A.1, 3a, 3b, 3d
5	3.MD, 3.OA, and 3.NBT	3.MD. Clusters A, C and D 3.OA.A 3.NBT.A
6	3.G, 3.MD, and 3.NF	3.G. Clusters A.1-2 3.MD.C.7a 3.NF.A.1

Non-Negotiable 2:

Focus and Coherence

Materials must focus coherently on the Major Work of the grade in a way that is consistent with the progressions in the Standards.

NN 2 If all Metrics 2A – 2H were rated as Meets, then rate Non-Negotiable 2 as Meets. If one or more Metric was rated Does Not Meet/Insufficient Evidence, then rate Non-Negotiable 2 as Does Not Meet. Check the final rating.
Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)**

Before moving to Alignment Criterion 1, record the final Meets or Does Not Meet rating in the Evaluation Summary.

(Reviewer only.)

__x__Meets

____Does Not Meet

Strengths/Weaknesses:

Strengths
Majority of work focuses on the major clusters and pacing seems balanced.

Materials are visibly and coherently aligned to Common Core, and lead students to conceptual understandings built on prior knowledge.

Mathematical practices are well developed and embedded throughout the materials.

Parent letters are engaging and appropriately detailed for home support. The unit games are compatible and would likely be easy to play at home.

Student Book page formats are user friendly and enhance conceptual understanding and navigation.

Weakness
The richness of the program may be lost if teachers are not adequately trained in using the program as intended.

Now continue by evaluating the Alignment Criterion 1 for Rigor and Balance.

Directions for Alignment Criterion 1

Rigor and Balance

Alignment Criterion 1: Rigor and Balance

Materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.

The Standards set expectations for attention to all three aspects of rigor: conceptual understanding, procedural skill and fluency, and applications. Thus, materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.

Required Materials

- Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf)
- Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)
- Focus by Grade Level for the grade being evaluated (achievethecore.org/focus)
- Situation Types for the Operations in Word Problems (achievethecore.org/situation-types)
- From the materials being evaluated: teacher guides, student texts and workbooks

Rating this Criterion:

Alignment Criterion 1 is rated as Meets or Does Not Meet.

To rate Alignment Criterion 1, first rate metrics 1A, 1B, and 1C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). For each metric, guiding questions are provided to aid in gathering evidence.

Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 1 if the materials rate 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as rigor and balance, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.

The materials support the development of students' conceptual understanding of key mathematical concepts, especially where called for in specific content Standards or cluster headings. **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Major Work for the grade being evaluated that relate specifically conceptual understanding to use throughout the questions associated with this metric. NOTE: Some examples of clusters or Standards that call for conceptual understanding include: K.OA.A.1, (1.NBT.B, 1.NBT.C), (2.NBT.A, 2.NBT.B), (3.OA.A.1, 3.OA.A.2), 4.NF.A, (4.NBT.A, 4.NBT.B), 5.NF.B, (5.NBT.A, 5.NBT.B), 6.RP.A, 6.EE.A.3, 7.NS.A, 7.EE.A, 8.EE.B, 8.F.A, 8.G.A Clusters or Standards grouped by parentheses are closely connected and could be analyzed together. For context, read Criterion #4a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	-Choose a cluster/Standard from the Major Work that is aligned to each aspect of rigor and use it to evaluate these metrics. It is most helpful if the same clusters/Standards are chosen for all of the programs being evaluated. (Guidance in choosing clusters/Standards is included in "How to Find the Evidence".)	**Use the questions for AC Metric 1A to evaluate Metric 1A. Record evidence for each question and rate Metric 1A.** **__2__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**

Is conceptual understanding attended to thoroughly where the Standards set explicit expectations for understanding or interpreting? Evaluate lessons, chapter/unit assessments and homework assignments, paying attention to work aligned to Standards that explicitly call for understanding or interpreting.
NOTE: Examples of evaluating this Criterion might include looking at how well the multi-digit addition and subtraction algorithms are developed and explained on the basis of place value and properties of operations; or how well the multi-digit multiplication and division algorithms are developed and explained on the basis of place value and properties of operations; or how well solving equations is presented and explained as a process of reasoning.

Evidence- Teacher Resource Book, Student Book, Student Practice and Problem Solving Book

Conceptual understanding is attended to thoroughly where the Standards set explicit expectations for understanding or interpreting.

Cluster headings chosen: 3.OA.A.1 and 3.OA.A.2

Materials provide student enactive, iconic and symbolic opportunities to represent and solve problems involving multiplication and division (3.OA.A.1) and to understand properties of multiplication and the relationship between multiplication and division (3.OA.A.2).

Example: Lesson 1, Understand the Meaning of Multiplication, Hands-on Activity, TRB p2

"Have students use counters or tiles to build 3 groups of 5 and find the total. Then ask them to use words to fill in the sentence to say aloud what they did. [3 groups of 5 tiles equals 15 tiles]."

Example: Lesson 3, Use What You Know, TRB p20a

Students are given a picture of 6 bunches of carrots. There are 3 carrots in each bunch. The students are asked to determine how many carrots there are altogether. The lesson emphasizes grouping the carrots into a bundle of 5 bunches and using the fact that 3x5=15 to quickly know how many are in that bundle, then add on the 3 from the 6th bundle.

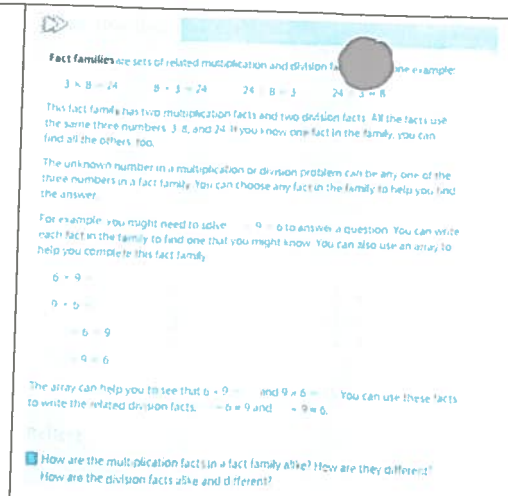
Example: Lesson 3, Practice, Question 5, SB p.29

"There are 9 rows in Mrs. Mitchell's flower garden. Each row has 9 flowers planted in it. How many flowers are planted in the garden? Show how to break apart the numbers to find the answer."

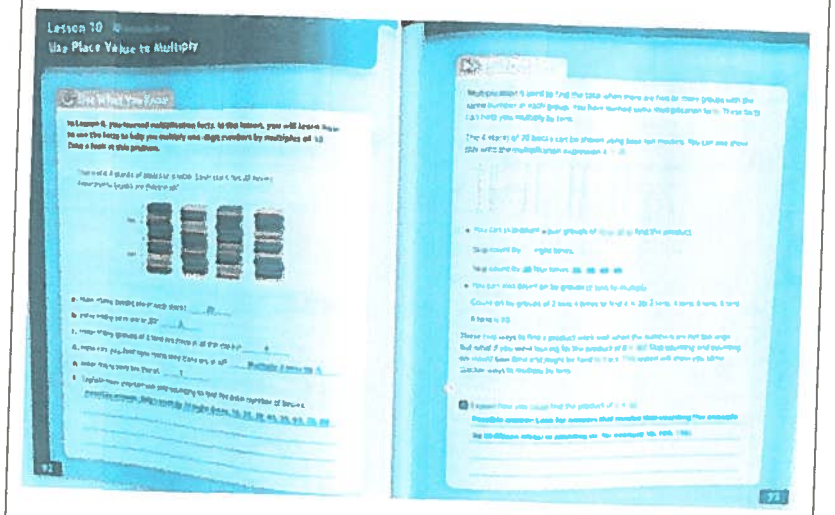
Example: Lesson 4, Understand the Meaning of Division, Hands-on Activity, TRB p30

"Write '12÷2 = ____ ' on the board. Ask student pairs to divide the counters between them so they get equal shares. ... Ask questions such as: 'How did you know the shares were equal?"

Example: Lesson 6: Multiplication and Division Facts, Find Out More, TRB p43



Example: Lesson 10, Using Place Value to Multiply, TRB p92-93



Do the materials feature high-quality conceptual problems and conceptual discussion questions? Evaluate lessons, chapter/unit assessments, and homework assignments. NOTE: Example of conceptual problems might include such questions as "Find a number greater than 1/5 and less than 1/4," or "If the divisor does not change and the dividend increases, what happens to the quotient?"	**Evidence-** Teacher Resource Book, Student Book, Student Practice and Problem Solving Book, SBAC Assessment Booklet The Teacher Resource Book provides teachers with high quality discussion question. Notably, the Mathematical Discourse section provides support with leading questions that are helpful and concise.	

Do the materials feature opportunities to identify correspondences across mathema representations? Evaluate lessons, chapter/unit assessments and homework assignments. NOTE: Examples of evaluating this Criterion might include looking at whether students are supported in identifying correspondences among: the verbal description of a situation, the diagrams that distill its mathematical features, and the equations that model it; or equivalent forms of numbers (e.g., 3 and 6/2) and the number line; or rational number operations and representations of them via models such as the vector model; or the expression that defines a function and the graph that shows the relationship.	**Evidence-** Teacher Resource Book, Student Book, Student Practice and Problem Sol Book The materials provide many opportunities to identify correspondences between verbal descriptions, diagrams, models and mathematical notation. The materials provide some opportunities to include hands-on/manipulative representations. Examples: Parent letters have diagrams/pictorial representations of skills. Try it sections encourage trying multiple ways. *Model It* usually show two or more mathematical representations in the guided practice section.	
Metric AC1B: **The materials are designed so that students attain the fluencies and procedural skills required by the Standards.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Major Work for the grade being evaluated that relate specifically to fluency and procedural skill to use throughout the questions associated with this metric. NOTE: Some examples of Standards that call for procedural skill and fluency include: K.OA.A.5, 1.OA.C.6, 2.OA.B.2, 2.NBT.B.5, 3.OA.C.7, 3.NBT.A.2, 4.NBT.B.4, 5.NBT.B.5, 6.NS.B.2, and 6.NS.B.3, 6.EE.A, 7.NS.A, 7.EE.A.1,7.EE.B.4a, 8.EE.C.7, 8.EE.C.8b For context, read Criterion #4b in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Teacher Resource Book, Student Book, Student Practice and Problem Solving Book Cluster chosen 3.NBT.A.2 Materials are designed so that students attain the fluencies and procedural skills required by the Standards. Each lesson has a few independent practice exercises at the end of the lesson. The Practice and Problem Solving book has additional practice for each lesson. In the back of the Practice and Problem Solving book is a Fluency section. The Fluency Table of Content accurately represents the targeted skills and fluencies as aligned to the intent of the Standards. The Activity Sheets found in the Teacher Resources Book Appendix also support developing fluencies and procedural skills.	**Use the questions for Metric 1B to evaluate Metric 1 B. Record evidence for each question and rate Metric 1B.** **(Reviewer only.)** **__2__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Is progress toward fluency and procedural skill interwoven with students' developing conceptual understanding of the operations in question? Evaluate lessons, chapter/unit assessments, daily routines, and homework assignments for evidence that the development of fluency and procedural skill is supported by conceptual understanding.	**Evidence-** Teacher Resource Book, Student Book, Student Practice and Problem Solving Book Materials comprehensively and cohesively connect developing conceptual understanding of the operations with fluency and procedural skills. The teacher is advised how to use the various components of the program to achieve this end.	

Are purely procedural problems and exercises present that include cases in which opportunistic strategies are valuable and generic cases that require efficient algorithms present? Evaluate lessons, chapter/unit assessments, daily routines, and homework assignments. NOTE: Examples of problems in which opportunistic strategies are valuable might include the sum 698 + 240 or the system x + y = 1, 2x + 2y = 3. Examples of generic cases that require efficient algorithms might include the sum 8767+2286 or the system 6y + x = x + 3, – x = 1 + 2y.	**Evidence-** Teacher Resource Book, Student Book, Student Practice and Problem Solving Book Format and design of materials supports fluency and procedural skill with a wider scope than only using standard algorithms.	
Do the materials in grades K–6 provide repeated practice toward attainment of fluency Standards? Evaluate lessons, daily routines, and homework assignments for evidence of repeated practice toward attainment of the following K–6 Standards that set an explicit expectation of fluent (accurate and reasonably fast) computation: K.OA.A.5, 1.OA.C.6, 2.OA.B.2, 2.NBT.B.5, 3.OA.C.7, 3.NBT.A.2, 4.NBT.B.4, 5.NBT.B.5, 6.NS.B.2, 6.NS.B.3.	**Evidence-** Teacher Resource Book, Student Book, Student Practice and Problem Solving Book Materials provide adequate repeated practice toward attainment of fluency Standards provided the teacher uses the Student Book, as well as the Student Practice and Problem Solving Book, including the Fluency Practice as recommended.	

Metric AC1C: **The materia[illegible]e designed so that teachers and students spend sufficient time working with engaging applications, without losing focus on the Major Work of each grade.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Major Work for the grade being evaluated that relate specifically application to use throughout the questions associated with this metric. NOTE: Some examples of clusters or Standards that call for application include: K.OA.A.2, 1.OA.A, 2.OA.A, 3.OA.A.3, 3.OA.D.8, 4.OA.A.3, 4.NF.B.3d, 4.NF.B.4c, 5.NF.B.6, 5.NF.B.7c, 6.RP.A.3, 6.NS.A.1, 6.EE.B.7, 6.EE.C.9, 7.RP.A, 7.NS.A.3, 7.EE.B.3, 8.EE.C.8c, 8.F.B For context, read Criterion #4c in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Teacher Resource Book, Student Book, Student Practice and Problem Sol[illegible]Book Materials are designed so that teachers and students spend sufficient time working with engaging applications, without losing focus on the Major Work of each grade. Materials provide for a wide variety of problems. Cluster headings chosen: 3.OA.A.3 and 3.OA.D.8 Materials provide student problem solving opportunities to develop and communicate use of multiplication and division within 100 to solve word problems in situations involving equal groups, arrays, and measurement quantities (3.OA.A.3) as well as to solve two-step word problems using the four operations; and representing these problems using equations with a letter standing for the unknown quantity (3.OA.D.8). Example: Lesson 3, Practice, Question 5, SB p.29 "There are 9 rows in Mrs. Mitchell's flower garden. Each row has 9 flowers planted in it. How many flowers are planted in the garden? Show how to break apart the numbers to find the answer." Example: Lesson 4, Understand the Meaning of Division, Hands-on Activity, TRB p30 "Write '12÷2 = ____ ' on the board. Ask student pairs to divide the counters between them so they get equal shares. ... Ask questions such as: 'How did you know the shares were equal?"	**Use the questions for Metric 1C to evaluate Metric 1C. Record evidence for each que[illegible]and rate Metric 1C.** **(Reviewer only.)** **__2__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**

Are there are single- and multi-step contextual problems, including non-routine pro[illegible], that develop the mathematics of the grade, afford opportunities for practice, and engage students in problem solving? Do the problems attend thoroughly to those places in the content Standards where expectations for multi-step and real-world problems are explicit? Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** Teacher Resource Book, Student Book, Student Practice and Problem Sol[illegible] Book Materials provide students with both guided practice and independent practice solving single- and multi-step contextual problems, including non-routine problems. Example: Lesson 11: Solving one-Step Word Problems, Practice, SB p123 "There are 24 different tables to set up for field day. The principal wants the tables set up in equal rows. Should she use 3 rows or 5 rows? Explain." Example: Lesson 13: Solving Two-Step Word Problems, Introduction, TRB p134-135 "The Shirt Shack has 438 T-shirts at the end of the day. Then they receive a delivery of new shirts. The shirts come in 4 different colors. There are 8 shirts of each color. How many T-shirts does the store have now?" The format and layout of materials support student engagement. The "speech bubble" hints are concise and well-placed to engage students in problem-solving.	
Do application problems particularly stress applying the Major Work of the grade? Evaluate lessons, chapter/unit assessments, and homework assignments. NOTE: Examples of evaluating this Criterion might include looking at: how well, by the end of grade 2, students using the materials as designed can represent and solve a full range of one-step addition and subtraction word problems; or how well, by the end of grade 3, students using the materials as designed can represent and solve a full range of one-step multiplication and division word problems; or how well these basic situation types for each operation are carried coherently across the grades, (e.g., with fractions and algebraic expressions); or, in all grades, whether the problems connect concepts, Standards, and domains in ways that are natural and important. For a list of situation types for one-step addition, subtraction, multiplication, and division problems, see Situation Types for the Operations in Word Problems	**Evidence-** Teacher Resource Book, Student Book, Student Practice and Problem Solving Book Applications are cohesively focused on the Major Work of grade 3, building upon number sense learned in grade 2 progressing toward the foundations, concepts and skills needed for fourth grade.	

Does modeling build slowly across K–8, with applications that are relatively simple[illegible]rlier grades and when students are encountering new content? In grades 6–8, do the problems begin to provide opportunities for students to make their own assumptions or simplifications in order to model a situation mathematically? Read Standard for Mathematical Practice 4, Model with Mathematics. Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** Teacher Resource Book, Student Book, Student Practice and Problem Sol[illegible]Book Modeling progression across grades is age/developmentally appropriate, aligning with the intent of the lesson be it new content or supporting communication of and reasoning with known content.	

Alignment Criterion 1: Rigor and Balance

Materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.

AC1 Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 out of 6 points, the Criterion has not been met. Check the final rating.
Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)**

Before moving to Alignment Criterion 2, record the final Meets or Does Not Meet rating in the Evaluation Summary.

(Reviewer only.)

__x__Meets

____Does Not Meet

Strengths/Weaknesses:

Strength
Scope and pacing of materials attends to the components of conceptual understanding, procedural skill, fluency and applications. The program sets high expectations for all three components throughout the materials for teacher, student and parents.

Directions for Alignment Criterion 2

Standards for Mathematical Practice

Alignment Criterion 2: Standards for Mathematical Practice **Materials must demonstrate authentic connections between content Standards and practice Standards.** The Standards require that designers of instructional materials connect the mathematical practices to mathematical content in instruction. Thus, materials must demonstrate authentic connections between content Standards and practice Standards.	**Required Materials:** • Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf) • Focus by Grade Level for the grade being evaluated (www.achievethecore.org/focus) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion** Alignment Criterion 2 is rated as Meets or Does Not Meet. To rate Alignment Criterion 2, first rate metrics 2A, 2B, and 2C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). For each metric, guiding questions are provided to aid in gathering evidence. Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 2 if the materials earn 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as mathematical practices, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.
Metric AC2A: **Materials address the practice Standards in such a way as to enrich the Major Work of the grade; practices strengthen the focus on Major Work instead of detracting from it, in both teacher and student materials.** **How to Find the Evidence:** Familiarize yourself with the Major Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate teacher and student materials for evidence that the mathematical practices support and connect to the focus of the grade. NOTE: Examples of evaluating this Criterion might include looking at whether, in grades K–5, students using the materials are supported to look for and express regularity in repeated reasoning about the addition table, the multiplication table, the properties of operations, the relationship between addition and subtraction or multiplication and division, and the place value system; or whether, in grades 6–8, students using the materials are supported to look for and express regularity in repeated reasoning about proportional relationships and linear functions. For context, read Criterion #8 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring	**Evidence-** Teacher Resource Book, Student Book, Student Practice and Problem Solving Book Standards of Mathematical Practice (SMP) are embedded in each lesson. Each lesson embeds 2 – 8 of the standards. All eight SMPs are embedded in each of the four units. (Table of Contents found in Teacher's Resource Book) Across the lesson, materials give teachers guidance on drawing out mathematical practices. Example: Lesson 1, SMP TIP, TRB p2 "Asking students to build a concrete model and to use language and symbols to describe it helps students focus on the meaning of quantities and operations, not just on how to compute. (SMP 2)" Example: Lesson 8, SMP TIP, TRB p70 "When rounding numbers, students are looking for and using the structure of place value. Students should	**(Reviewer only.)** **__x__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**

2013).	know and be able to use the concept that 10 ones make 1 ten and 10 t make 1 hundred. (SMP 7)" Example: Lesson 16, SMP TIP, TRB p169 "Students reason quantitatively about how it takes two or more parts (and smaller parts) to create fractions that are equivalent to 1/2. (SMP 2)"	

Metric AC2B:
Materials at[illegible] to the full meaning of each practice Standard.

How to Find the Evidence:
For context, read Criterion #7 and Criterion #9 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).

Use the questions for Metric 2B to evaluate Metric 2B. Record evidence for each que[illegible] and rate Metric 2B.

(Reviewer only.)

__x__Meets (2)

____Partially Meets (1)

____Does Not Meet (0)

Over the course of any given year of instruction, is each mathematical practice Standard meaningfully present in the form of assignments, activities, or problems that stimulate students to develop the habits of mind described in the practice Standard? Evaluate lessons, chapter/ unit assessments, and homework assignments for evidence of each mathematical practice being meaningfully present in instruction.	**Evidence-** Teacher Resource Book, Student Textbook, Student Practice and Problem Solving Book All Practice Standards are embedded in the instructions usually providing students opportunities for guided and independent engagement with the SMP. Examples Lesson 3: SMP 1, 2, 4, 7, 8 indicated in TRB as being embedded in Lesson 3 • SMP1: Students are asked to independently make sense of a word problem, solve it and communicate how he/she came to that solution. SB p27 • SMP2: If the teacher uses the Visual Model suggestion students are given the opportunity to independently contextualize multiple grouping scenarios and strategies for using grouping to multiply. TRB p20 • SMP4: Across the lesson, students are given several opportunities to go from situation to model to mathematics; from model to mathematics; and from mathematics to model. • SMP7 and SMP 8: The Connect It (SR p25): "Madison knows the answer to 4x7. How can this help her multiply 8x7?" Lesson 17: SMP 1, 2, 4, and 6 indicated in TRB as being embedded in Lesson 17 • SMP1: Students are given the opportunity to make sense of problems. (SPPB p194) • SMP2: Across the lesson, students have independent opportunities to contextualize and decontextualize. • SMP4: Students have independent opportunities to model mathematics. (SB p183) • SMP6: Teachers are advised to encourage precision of language. Students are given opportunities to use precise language when explaining their thinking. (TRB, SB p178)	

Do the materials treat the practice Standards as developing across grades or grade bands? Are the practice Standards in early grades appropriately simple? Do they display an arc of growing sophistication across the grades?	**Evidence-** Materials treat the practice Standards as developmental across grade levels. The sophistication increases from K to 5.	
Are there teacher-directed materials that explain the role of the practice Standards in the classroom and in students' mathematical development? Are alignments to practice Standards accurate?	**Evidence-** The materials provide the teacher with clear and supportive supports for teachers (including rubrics); however, professional development/training might be necessary for teachers to glean all that the Teacher Resource Book has to offer.	
Metric AC2C: **Materials support the Standards' emphasis on mathematical reasoning.** **How to Find the Evidence:** For context, read Criterion #10 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).		**Use the questions for Metric 2C to evaluate Metric 2C. Record evidence for each question and rate Metric 2C.** **(Reviewer only.)** **__x__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Do the materials support students in constructing viable arguments and critiquing the arguments of others concerning grade-level mathematics that is detailed in the content Standards? Read Standard for Mathematical Practice 3. Evaluate teacher and student materials to ensure that students are given opportunities to reason with grade-level mathematics.	**Evidence-** Teacher Resource Book, Student Book Materials support students in constructing viable arguments and critiquing the arguments of others. Each lesson includes discussion and modeling activities as well as explain and support your answer opportunities as well as modeling advice for the teacher (Step by Step notes). SMP3 is embedded in 16 of the 33 lessons and in all 6 of the Math in Action end of unit activities. Lessons with SMP3 embedded are 1, 2, 4, 11, 13 -16, 18-21, 27, 29, 30, and 32.	
Do the materials support students in producing not only answers and solutions, but also, in a grade-appropriate way, arguments, explanations, diagrams, mathematical models, etc., especially in the Major Work of the grade? Familiarize yourself with the Major Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate teacher and student materials, to understand the types of work students are expected to produce.	**Evidence-** Teacher Resource Book, Student Book Materials support student in constructing arguments, explanations, etc.	

Do materials explicitly attend to the specialized language of mathematics? Is the language of argument, problem solving, and mathematical explanations taught rather than assumed? Evaluate teacher and student materials, paying attention to how mathematical language is taught. NOTE: Examples of evaluating this Criterion might include looking at whether students are supported in: basing arguments on definitions; using the method of providing a counterexample; or recognizing that examples alone do not establish a general statement.	**Evidence-** Teacher Resource Book, Student Book, Student Practice and Problem Solving Book The specialized language of mathematics is attended to in both the Teacher Resource Book and the Student Book. Each lesson includes student supports for vocabulary building in the Student Practice and Problem Solving Book. The use of visuals such as drawings, charts, and models support the development of mathematically specific language.	
Alignment Criterion 2: **Standards for Mathematical Practice** **Materials must demonstrate authentic connections between content Standards and practice Standards.** **AC2** Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 out of 6 points, the Criterion has not been met. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)** **Before moving to Alignment Criterion 3, record the final Meets or Does Not Meet rating in the Evaluation Summary.**		**(Reviewer only.)** **__x__Meets** **____Does Not Meet** **Strengths/Weaknesses:** Strengths Practice standards are clearly and meaningfully embedded throughout the materials focusing on student development of authentic connections between content Standards and practice Standards. The meaningful connections extend to students, teachers and parents.

Alignment Criterion 3:

Access to the Standards for All Students

Materials must provide supports for English Language Learners and other special populations.

Because Standards are for all students, alignment requires thoughtful support to ensure all students are able to meet the Standards. Thus, aligned materials must provide supports for English Language Learners and other special populations.

Required Materials:

- Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf)
- Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)
- From the materials being evaluated: teacher guides, student texts and workbooks

Rating this Criterion:

Alignment Criterion 3 is rated as Meets or Does Not Meet.

To rate Alignment Criterion 3, first rate metrics 3A, 3B, and 3C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points).

Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 3 if the materials earn 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as support for special population, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.

Metric AC3A: **Support for English Language Learners and other special populations is thoughtful and helps those students meet the same Standards as all other students. The language in which problems are posed is carefully considered.** **How to Find the Evidence:** Evaluate teacher and student materials, paying attention to supports offered for special populations.	**Evidence-** Teacher Resource Book, Student Book The Teacher Resource Book contains specific support for English language learners. Example: Lesson 11, TRB p112 The students are writing word problems. The support for English Language Learners is as follows. "Students may struggle with the language needed to write a word problem. You may wish to pair an English language learner with a proficient speaker to perform this task. Another option is to provide students with a problem template to complete. For example: Each team has ____ baseballs. There are ____ teams. How many baseballs do the teams have altogether? ___" Example: Lesson 13, TRB p135 The support for English Language Learners "Help students understand the difference between using mental math and making an estimate. Use the examples in the Student Book or other examples to point out the following distinctions: When you use mental math you use the actual numbers from the problem. You don't use pen and paper, so you might think about how to break apart the numbers to make them easier to work with. The answer you get is the actual answer. When you estimate, you use "friendly numbers" that are close to but not equal to the actual numbers, so that you can compute quickly without pen and paper. The answer you get when you estimate is usually close to, but not equal to, the actual answer." Additionally, the visual format of the student materials, including the consistent headings, provide navigation support for ELL students.	**Reviewer only.)** **__x__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**

Metric AC3B:
Materials provide appropriate level and type of scaffolding, differentiation, intervention, and support for a broad range of learners with gradual removal of supports, when needed, to allow students to demonstrate their mathematical understanding independently.

How to Find the Evidence:
Evaluate teacher and student materials, paying attention to whether materials provide differentiation that will lead all learners to engage with on-grade-level content.

Evidence- Teacher Resource Book,

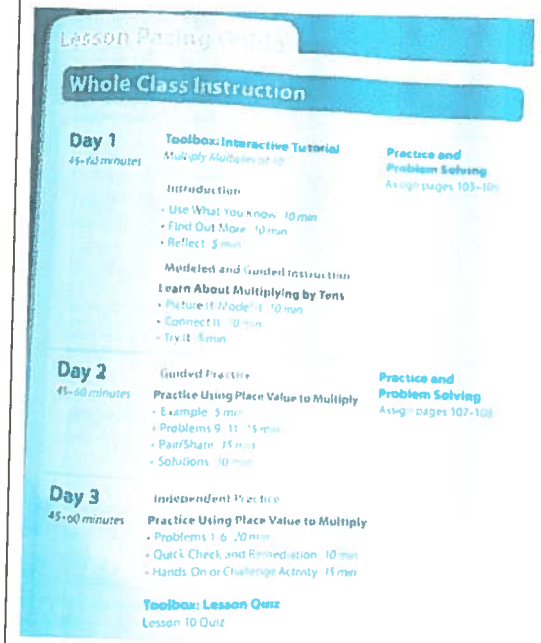
Lessons are designed [illegible] gradual release of responsibility model over the course of several days.

Introduction, Guided instruction, Guided practice, Independent Practice.

Lessons are designed on the gradual release of responsibility model over the course of days.

Introduction, Guided instruction, Guided practice, Independent Practice.

Example: Lesson 10, TRB p92a



Differentiation, remediation and scaffolding support

Example: Lesson 7, TRB p57b

Reviewer only.)

___x_Meets (2)

____Partially Meets (1)

____Does Not Meet (0)

Lesson 7
Understand Patterns

Differentiated Instruction

▶ Intervention Activity

Find patterns in a multiplication table.

Materials: blank multiplication table, highlighters

Ask students to fill in the 1 row and the 1 column of the table. Ask: The 1 column has the same products as the 1 row. Why is that so? [The factors for the products in the 1 row and the 1 column are the same, multiplied in a different order.] Remind students that the numbers in the 2 row are the "count by's" of 2. Ask them to fill in this row. Remind them that the 2 column counts in the same products and instruct them to fill it in. Have students fill in the product to for the 3s, 10s, 0s, 5s, and 4s in the same way.

Have students describe the pattern of the even digits in the products in the 5 row and column. [0 and 5 repeat.] Have them circle the 0s and underline the 5s. Ask whether each product is even or odd. [products with 0 in the ones place are even, with 5 are odd.] Ask students to circle or highlight another pattern in the table and describe the patterns.

▶ On-Level Activity

Further explore odd and even numbers using addition tables.

Materials: addition tables with addends to 10, crayons or highlighters

Have students highlight the addends along the side and top of the table in different colors than the sums.

Instruct students to work in pairs or groups. Tell them they will use the addition table to help them explore questions, such as, if you add an odd number to itself (double it), will the sum be even or odd? If you add any two odd numbers on the chart, will the sum be even or odd? You may want to let each group or pair a different question to explore.

Have pairs or groups share their questions and answers. Ask questions such as: Can you give some examples? Do you agree with what [student name] said? Do you think this is true for all whole numbers? Why?

▶ Challenge Activity

Explore patterns using a pattern train.

Materials: 1 inch square paper, scissors, tape

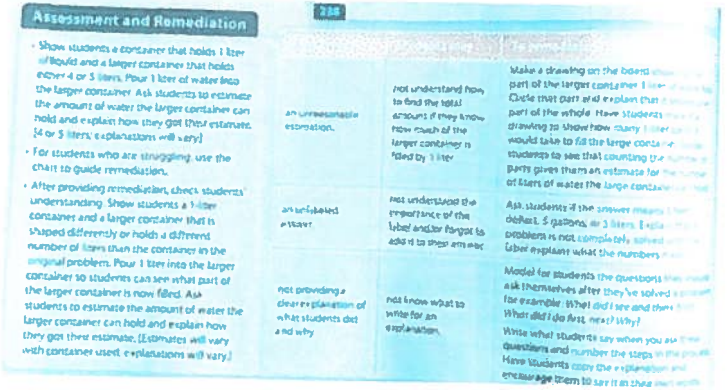
Ask students to work in pairs or small groups. Instruct each student to color every 4th square in the row. Have the students cut out the 4-square sections and tape them together, with no overlap, to create a train at least 3 feet long.

Have students draw a star on the first square to mark it as the front. Have them cut five to eight 3-square sections starting from the front, and place them flat, one above the other and in order, so the green with the star is at the bottom. Have students describe the pattern the colored squares make. [diagonals going from bottom left to top right]

Instruct students to cut off any white squares, if necessary, from the front of the remaining train so that the front square is shaded. Again draw a star on the back square of the train. Have students cut about four or five 4-square sections, starting from the front of the train. Have students place these sections flat, one above the other, and in order, so the piece with the star is at the bottom. Again, have students describe the pattern shown by the colored squares. [all the squares of the first column are shaded]

Ask students to predict what the starred squares will look like if they cut the remaining train into 3-square sections. Then have students test their predictions, making sure their train starts with a shaded square with a star on it on the front. [diagonals going from bottom right to top left] Students can repeat the steps for 7-square sections and 8-square sections. Invite students to share their observations.

Example: Lesson 22, TRB p238



Assessment and Remediation

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- Show students a container that holds 1 liter of liquid and a larger container that holds either 4 or 5 liters. Pour 1 liter of water into the larger container. Ask students to estimate the amount of water the larger container can hold and explain how they got their estimate. [4 or 5 liters; explanations will vary]
- For students who are struggling, use the chart to guide remediation.
- After providing remediation, check students' understanding. Show students a 1-liter container and a larger container that is shaped differently or holds a different number of liters than the container in the original problem. Pour 1 liter into the larger container so students can see what part of the larger container is now filled. Ask students to estimate the amount of water the larger container can hold and explain how they got their estimate. [Estimates will vary with container used; explanations will vary.]

an unreasonable estimation.	not understand how to find the total amount if they know how much of the larger container is filled by 1 liter	Make a drawing on the board [illegible] part of the larger container 1 liter [illegible]. Circle that part and explain that it [illegible] part of the whole. Have students [illegible] drawing to show how many 1 liter [illegible] would take to fill the large container. [illegible] students to see that counting the [illegible] parts gives them an estimate for the [illegible] of liters of water the large container [illegible]
an unlabeled answer	not understand the importance of the label and/or forget to add it to their answer	Ask students if the answer means 1 liter, [illegible] 5 gallons, or 3 liters. Explain that the problem is not complete [illegible] label explaining what the numbers [illegible]
not providing a clear explanation of what students did and why	not know what to write for an explanation.	Model for students the questions they could ask themselves after they've solved a problem, for example: What did I see and think first? What did I do first, next? Why? Write what students say when you ask these questions and number the steps in the process. Have students copy the explanation and encourage them to try it on their own with

Metric AC3C: **Design of lessons recommends and facilitates a mix of instructional approaches for a variety of learners such as using multiple representations (e.g., including models, using a range of questions, checking for understanding, flexible grouping, pair-share).** **How to Find the Evidence:** Evaluate teacher materials, noting instructional approaches suggested for whole class and differentiated lessons and activities.	**Evidence-** Teacher Resource Book, Student Book Across each lesson, teachers are given supports for a variety of approaches. Example: Lesson 8, TRB pp 69c-79 Approaches specifically noted in Lesson 8 include, whole group instruction, students working in pairs, using charts and models, extending the concept, making real-world connections, hands-on activity, using manipulative, as well as examples, problems and mathematical discourse targeting multiple DOK levels.	**Reviewer only.)** **__x__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Alignment Criterion 3: **Access to the Standards for All Students** **Materials must provide supports for English Language Learners and other special populations.** **AC3** Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 points, the Criterion has not been met. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion.**(Reviewer only.)** **Move to the Evaluation Summary and record the final Meets or Does Not Meet rating .**		**(Reviewer only.)** **__x__Meets** **____Does Not Meet** **Strengths/Weaknesses:** Strengths Modeling is evident throughout the materials. The consistent format and repetitive nature of the language supports ELL students. The differentiation supports provide for ELL students and other special populations.

Once an evaluation for alignment to the Shifts and major features of the CCSS has been conducted using Sections 1-3, it's important to evaluate for overall quality and best practices. A starting list of Indicators of Quality are suggested below. States, districts and others evaluating instructional materials are encouraged to add to this list to ensure materials reflect local contexts. For background information on some of the Indicators of Quality in this section, refer to pp.18–21 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).

Indicators of Quality	Evidence- Give specific examples.	Rating: (Reviewers only.)

1. Lessons are thoughtfully structured and support the teacher in leading the class through the learning paths at hand, with active participation by all students in their own learning and in the learning of their classmates.	**Evidence-** Teacher Resource Book, Student Book Teacher supports are in a variety of approaches that follow a gradual release of responsibility progression, i.e. beginning with full teacher support progressing toward student independence. Materials provide supports for both differentiation for both access and extension. Mathematical discourse is supported throughout the lessons.	**(Reviewer only.)** **___x___ Yes** **_____ No**
2. The underlying design of the materials includes both problems and exercises. (In solving problems, students learn new mathematics, whereas in working exercises, students apply what they have already learned to build mastery.) Each problem or exercise has a purpose. **NOTE: This Criterion does not require that the problems and exercises be labeled as such.**	**Evidence-** Teacher Resource Book, Student Book, Student Practice and Problem Book The problems and exercise are worth doing. Each aligns to the stated goals of the unit/lesson. The suggested homework, applications and parent supports align to and support the goals of the unit/lesson.	**(Reviewer only.)** **___x___ Yes** **_____ No**
3. Design of assignments is not haphazard: exercises are given in intentional sequences in order to strengthen students' mathematical understanding.	**Evidence-** Teacher Resource Book, Student Book, Student Practice and Problem Book Problems and exercises are given in intentional sequences, beginning from what should be known to the student to problems targeting the learning of new concepts and skills and finally to exercises for applying newly learned concepts and practicing newly learned skills.	**(Reviewer only.)** **____x__ Yes** **_____ No**
4. There are separate teacher materials that support and reward teacher study including, but not limited to: discussion of the mathematics of the units and the mathematical point of each lesson as it relates to the organizing concepts of the unit, discussion on student ways of thinking and anticipating a variety of students responses, guidance on lesson flow, guidance on questions that prompt students thinking, and discussion of desired mathematical behaviors being elicited among students.	**Evidence-** Teacher Resource Book, Student Book, Student Practice and Problem Book The Teacher Resource Book provides teachers details on how each lesson is situated in a progression of mathematical understanding, including specific prerequisite skills. Supports identify areas of student engagement and thought of which the teacher should be particularly aware. Supports are included for anticipating areas of struggle or possible misconceptions and for providing supports should such struggles or misconceptions become apparent. Teachers will likely need training to fully utilize/implement the materials provided. The online iReady component greatly enhances the supports for teachers in the areas of diagnostics, interventions and reporting.	**(Reviewer only.)** **___x___ Yes** **_____ No**

5. Manipulatives suggested in the materials are faithful representations of the mathematical objects they represent and are connected to written methods.	**Evidence-** Manipulatives are true representations of the objects they represent. They are used intentionally toward meeting specific mathematical understandings. Manipulatives used are commonly available (although not included in the program). The supporting activity sheets support the use of manipulatives.	**(Reviewer only.)** ___x___ **Yes** _____ **No**
6. Materials include a variety of curriculum-embedded assessments. Examples include pre-, formative, summative, and self-assessment resources.	**Evidence-** Teacher Resource Book, Student Book, Student Practice and Problem Book, SBAC Assessment Booklet The TRB provides questions at multiple DOK levels. The teacher is provided with suggestions regarding what to assess as students work and discuss. Each unit includes a summative unit Interim Assessment. A bank of SBAC aligned assessments is provided in the SBAC Edition supplement. Student materials also provide formative assessment opportunities in the form of fluency practice, unit practice, games, and unit performance tasks.	**(Reviewer only.)** ___x___ **Yes** _____ **No**
7. Assessments contain aligned rubrics, answer keys, and scoring guidelines that provide sufficient guidance for interpreting student performance.	**Evidence-** Teacher Resource Book, SBAC Assessment Booklet Assessments, formal and informal, are accompanied with answer keys, aligned rubrics with scoring guidelines, and support for interpreting student responses. Rubrics are clear and concise.	**(Reviewer only.)** ___x___ **Yes** _____ **No**
8. Materials assess student proficiency using methods that are accessible and unbiased, including the use of course-level language in student prompts.	**Evidence-** Teacher Resource Book, SBAC Assessment Booklet Assessments are varied and provide students with multiple methods and means for demonstrating understanding, and for demonstrating multiple depths of understanding. Language is clear and grade appropriate.	**(Reviewer only.)** ___x___ **Yes** _____ **No**

9. Materials are carefully evaluated by qualified individuals, whose names are listed, in an effort to ensure freedom from mathematical errors and course-level appropriateness.	**Evidence-** Teacher Resource Book The publisher listed the names and brief bio on the authors, as well as the names, associated school and location of school of Teacher Advisors in the Mathematics Instruction Teacher's Resource Book.	**(Reviewer only.)** **___x___ Yes** **_____ No**
10. The visual design supports students in engaging thoughtfully with the subject. Navigation through the text is clear.	**Evidence-** Student Book Each unit and lesson is formatted in a logical and meaningful way. The gradual release model is clear to students. Visual cues in lesson materials lead students across a predictable progression. <u>Progression</u> Using What You Know Find Out More Picture It Model It Connect It Try It Practice Self-Check Materials are student friendly, free of extraneous pictures, graphics and other visuals that would distract from the focus of the lesson.	**(Reviewer only.)** **___x___ Yes** **_____ No**
11. The materials engage parents in appropriate ways. For example, homework assignments in elementary grades, consist of routine problems, practice with getting answers, and fluency-building exercises that parents can easily support.	**Evidence-** Practice and Problem Solving Book Materials include a letter to parents providing the mathematical focus of the lesson, sample problems and methods of solution and guidance on what can be done at home to support the student in learning the associated concepts and skills. Routine problems are provided as practice/homework exercises.	**(Reviewer only.)** **___x___ Yes** **_____ No**

Reviewer IMET Evaluation Summary **Title/Level: Ready Common Core Mathematics, Grade 3**

Publisher: Curriculum Associates LLC **Copyright: 2016** **ISBN: 97814957055002**

Reviewer ID # LBTR_____ **Date Review Completed: March 8, 2016**

Non-Negotiable Criteria- Each Non-Negotiable must be met in order for the Non-Negotiable Alignment Criteria to be met overall.	
Non-Negotiable 1: Freedom from Obstacles to Focus **_____x__ Meets** **_____ Does Not Meet**	**Non- Negotiable 2: Focus and Coherence** **___x__ Meets** **_____ Does Not Meet**
Non-Negotiable Overall: **___x__ Meets** **_____ Does Not Meet**	
Alignment Criteria- Each Alignment Criterion must be met with a sufficient number of points in order for Alignment Criteria to be labeled as "Meets" overall. The more points the materials receive on the Alignment Criteria, the better they are aligned.	

Alignment Criterion 1: Rigor and Balance	Alignment Criterion 2: Standards of Mathematical Practice	Alignment Criterion 3: Access to Standards for All Learners
Points: __6___ of 6 possible. (Materials must receive at least 5 of 6 points to align.) ____x___ Meets _____ Does Not Meet	Points: ___6__ of 6 possible. (Materials must receive at least 5 of 6 points to align.) _____x__ Meets _____ Does Not Meet	Points: __6___ of 6 possible. (Materials must receive at least 5 of 6 points to align.) ___x____ Meets _____ Does Not Meet

Alignment Criteria Overall:

___x__ Meets **_____ Does Not Meet**

If the materials meet both Non-Negotiables and relevant Alignment Criterion, they are aligned to the Shifts and major features of the Core Standards. **the materials meet every Non-Negotiable and Alignment Criterion? ___x__ Yes _____ No**

What are the specific areas of strength and weakness based on this evaluation? Publishers or others modifying or developing assessments can use this information to make improvements and/or to remedy gaps in the alignment of assessment materials.

Strength

Materials comprehensively and coherently align to Content Standards.

Materials comprehensively and coherently attend to and embed Practice Standards in engaging ways for both teacher and students.

Format of materials (teacher, student and parent) enhances engagement, mathematical understandings and navigation of materials.

Diagnostic, formative and summative assessment is well supported.

All levels of DOK are present in meaningful ways.

Materials have useful/purposefully-aligned parent supports.

Weakness

The comprehensive nature of the materials is a strength; however, accompanying this strength is the responsibility of teachers/districts to fully understand the components, supports and learning opportunities found in the materials.

2015-16 Mathematics Interim Review Recommendation & Summary

Publisher Name:	Curriculum Associates
Title:	Ready Common Core
ISBN #	
Grade Level(s) or Course:	4th Grade
Reviewer ID:	TJ AJ

RECOMMENDED AS:

__X__ **Core Mathematics Program-** a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials. Substantial evidence clearly supports the designation of this program as Core.

_____ **Other Mathematics Program-** a program that substantially, but partially, meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for supplemental materials. Substantial evidence clearly supports the designation of this program as Other.

_____ **Component Mathematics Program-** a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs. Substantial evidence clearly supports the designation of this program as Component.

_____ **Intervention Program-** a program designed and intended to target and support students' specific needs. Substantial evidence clearly supports the designation of this program as Intervention.

_____ **Does not meet criteria** for recommendation as a Curricular Material or Online Resource for Mathematics.

EVIDENCE SUMMARY: Ready Common Core 4th grade meets focus, Rigor and coherence Standards

FOCUS- Ready Common Core 4th grade is aligned to all standards for 4th grade. The majority of lessons are focused on the Major Works of the Grade.

COHERENCE-
The supporting works are clearly identified and support the major work of the grade.

RIGOR- Ready Common Core student materials are presented in an engaging manner to students as they interact with rigorous math problems. Practice toward fluency in fourth grade is weak.

CONCEPTUAL UNDERSTANDING-
Ready Common Core 4th grade uses modeling, guided instruction, and discussions to build students conceptual understanding of math concepts presented.

MATHEMATICAL PRACTICES-
Ready Common Core integrates mathematical practices into all lessons. The materials provide support for teachers in understanding and implementing the mathematical practices.

ACCESSIBILITY OF STANDARDS TO ALL STUDENTS-

Ready Common Core provides support for all learners through resources found in the teacher manual. ELL resources provide appropriate supports. Differentiation opportunities are appropriate

OTHER:

2015-16 Interim Mathematics Review

Mathematics Evaluation Tool Grades K-8

Publisher: Curriculum Associates

Title of Material: Ready Common Core Grade 4

Author: _____

ISBN #: _____ **Copyright** 2014

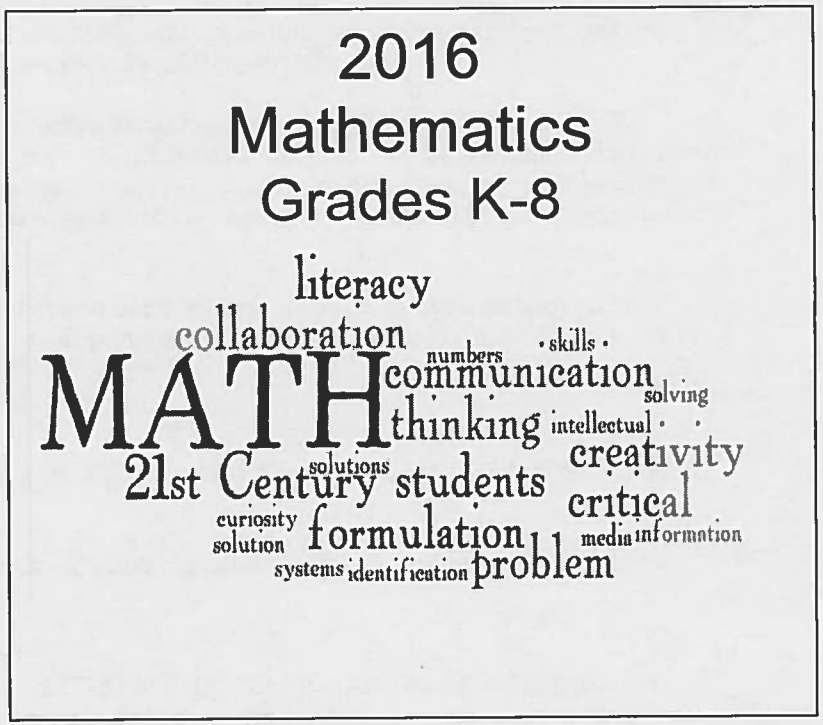
Reviewer ID: IJ AJ

Core Mathematics Program- a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Core.

Other Mathematics Program- a program that substantially, but partially, meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Other.

Component Mathematics Program- a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs.
Substantial evidence clearly supports the designation of this program as Component.

Intervention Program- a program designed and intended to target and support students' specific needs.
Substantial evidence clearly supports the designation of this program as Intervention.



- Evaluation Form adapted from Instructional Materials Evaluation Toolkit (IMET).

The IMET was developed by Student Achievement Partners. Educators may use or adapt. http://creativecommons.org/licenses/by/3.0/ Download this tool at http://achievethecore.org/IMET

Instructional Materials Evaluation Tool

Mathematics, Grades K-8

What Are the Purposes of the IMET?

This Math IMET is designed to help educators determine whether instructional materials are aligned to the Shifts and major features of the Common Core State Standards (CCSS). The substantial instructional Shifts (http://www.corestandards.org/other-resources/key-shifts-inmathematics/) at the heart of the Common Core State Standards are:

- **Focus** strongly where the Standards focus
- **Coherence**: Think across grades and link to major topics within the grade
- **Rigor**: In major topics, pursue conceptual understanding, procedural skill and fluency, and application with equal intensity.

The IMET draws directly from the following documents:

- Common Core State Standards for Mathematics (www.corestandards.org/Math)
- Publishers' Criteria for the Common Core State Standards in Mathematics grade K-8 (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)

When to use the IMET

1. Purchasing materials: Many factors go into local purchasing decisions. Alignment to the Standards is a critical factor to consider. This tool is designed to evaluate alignment of instructional materials to the Shifts and the major features of the CCSS. It also provides suggestions of additional indicators to consider in the materials evaluation and purchasing process.

2. Evaluating materials currently in use: The IMET can be used to analyze the degree of alignment of existing materials and help to highlight specific, concrete flaws in alignment. Even where materials and tools currently in use fail to meet one or more of these criteria, the pattern of failure is likely to be informative. States and districts can use the evaluation to create a thoughtful plan to modify or combine existing resources in such a way that students' actual learning experiences approach the focus, coherence, and rigor of the Standards.

3. Developing programs: Those developing new programs can use this tool as guidance for creating aligned curricula.
Please note this tool was designed for evaluating comprehensive curricula (including any supplemental or ancillary materials), but it was not designed for the evaluation of standalone supplemental materials.

Who Uses the IMET?

Evaluating instructional materials requires both subject-matter and pedagogical expertise. Evaluators should be well versed in the Standards (www.corestandards.org/Math) for all grades in which materials are being evaluated. This includes understanding the Major Work of the grade (www.achievethecore/focus), the Supporting and Additional work, how the content fits into the progressions in the Standards (www.achievethecore.org/progressions), and the expectations of the Standards with respect to conceptual understanding, procedural skill and fluency, and application. Evaluators also should be familiar with the substantial instructional Shifts (http:// www.corestandards.org/other-resources/key-shifts-in-mathematics/) of Focus, Coherence and Rigor that are listed above.

Getting Started

Prior to Evaluation

Assemble all of the materials necessary for the evaluation. It is essential for evaluators to have materials for all grades covered by the program, as some criteria cannot be rated without having access to each grade. In addition, each evaluator should have a reference copy of the Common Core State Standards for Mathematics (CCSSM) and the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013).

2015-16 Interim Mathematics Review

Mathematics Evaluation Tool Grades K-8

Publisher: Curriculum Associates

Title of Material: Ready Math 4th Grade

Author: Mark Ellis, Ph.D and Gladis Kersaint, PhD.

ISBN #: _____ **Copyright** 2016

Reviewer ID: TJ and AJ

Core Mathematics Program- a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials.
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Component Mathematics Program- a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs.
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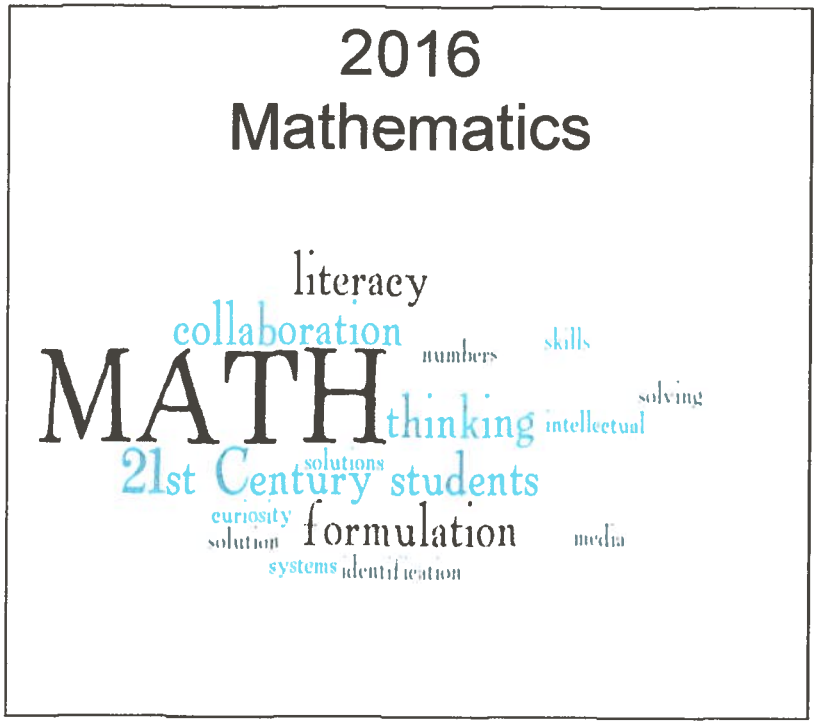
Intervention Program- a program designed and intended to target and support students' specific needs.
Substantial evidence clearly supports the designation of this program as Intervention.



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Getting Started
Prior to Evaluation

Assemble all of the materials necessary for the evaluation. It is essential for evaluators to have materials for all grades covered by the program, as some criteria cannot be rated without having access to each grade. In addition, each evaluator should have a reference copy of the Common Core State Standards for Mathematics (CCSSM) and the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013).

Before conducting the evaluation itself, it is important to develop a protocol for the evaluation process. The protocol should include having evaluators study the Publishers' Criteria and the IMET. It will also be helpful for evaluators to get a sense of each program overall before beginning the process. At a minimum, this would include reading the front matter of the text, looking at the table of contents and paging through multiple chapters.

Sections 1-3 below should be completed to produce a comprehensive picture of the strengths and weaknesses of the materials under evaluation. Information about areas in need of improvement or supplementation should be shared with internal and external stakeholders.

Navigating the Tool

Begin with Section 1: Non-Negotiable Alignment Criteria

- The Non-Negotiable Alignment Criteria must each be met in full for materials to be considered aligned to the Shifts and the major features of the Common Core State Standards. Each Non-Negotiable Alignment Criterion has one or more metrics associated with it; every one of these metrics must be met in order for the criterion as a whole to be met.

- Examine the relevant materials and use evidence to rate the materials against each criterion and its associated metric(s).

- Record and explain the evidence upon which the rating is based.

Continue to Section 2: Alignment Criteria

- The Alignment Criteria must each be met for materials to be considered aligned to the Shifts and the major features of the Common Core State Standards. Each Alignment Criterion has one or more metric associated with it; a specific number of these metrics must be met or partially met in order for the criterion as a whole to be met.

- Examine the materials in relation to these criteria, assigning each metric a point value. Rate the criterion as "Meets" or "Does Note Meet" based on the number of points assigned. The more points the materials receive on the alignment Criteria, the better they are aligned.

- Record and explain the evidence upon which the rating is based.

Proceed to Section 4: Indicators of Quality

- Indicators of Quality are important considerations that will help evaluators better understand the overall quality of instructional materials. These considerations are not criteria for alignment to the CCSS, but they provide valuable information about additional program characteristics. Evaluators may want to add their own indicators to the examples provided.

Directions for Non-Negotiable 1

Freedom from Obstacles to Focus

Criterion	Evidence- Give specific examples.	Rating: (Reviewer only.)
Non-Negotiable 1: **Freedom from Obstacles to Focus** **Materials must reflect the content architecture of the Standards by not assessing the topics named before the grade level where they first appear in the Standards.** The Standards foster students' progress to algebra by focusing strongly on arithmetic. Consistent with this focus, certain topics from outside of arithmetic appear only in later grades. Thus, to be aligned, materials must reflect the content architecture of the Standards by not assessing the topics named before the grade level where they first appear in the Standards. In this criterion, "topics named" means the topics that are explicitly named in Metric 1A. No other topics should be added to the list in Metric 1A. (Note that other topics in the standards are addressed in criterion NN2.)	**Required Materials** • Common Core State Standards for Mathematics (www.corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf) • From the materials being evaluated: teacher guides and all assessment components	**Rating this Criterion**: Non-Negotiable 1 is rated as Meets or Does Not Meet. To rate Non-Negotiable 1, begin by rating Metric 1A. Since Metric 1A is the only metric for Non-Negotiable 1, the rating for Non-Negotiable 1 is the same as the rating for Metric 1A. If Metric 1A is rated as Does Not Meet, include evidence of when the named topic(s) is/are assessed. If the metric is rated as Meets, list the grade(s) examined in the evaluation.

Metric NN1A **Materials reflect the basic architecture of the Standards by not assessing the listed topics before the grade level indicated.** • Probability, including chance, likely outcomes, probability models. (Introduced in the CCSSM in grade 7) • Statistical distributions, including center, variation, clumping, outliers, mean, median, mode, range, quartiles; and statistical association or trends, including two-way tables, bivariate measurement data, scatter plots, trend line, line of best fit, correlation. (Introduced in the CCSSM in grade 6) • Similarity, congruence, or geometric transformations. (Introduced in the CCSSM in grade 8) • Symmetry of shapes, including line/ reflection symmetry, rotational symmetry. (Introduced in the CCSSM in grade 4) **How to Find the Evidence:** Evaluate the table of contents, all chapter tests, all unit tests, and other such assessment components (including rubrics). For context, read Criterion #2 from the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013). NOTE: Grade alignments of other topics are addressed in Non-Negotiable 2, Focus and Coherence.) In this criterion, "topics named" means the topics that are explicitly named in Metric 1A. No other topics should be added to the list in Metric 1A. (Note that other topics in the standards are addressed in criterion NN2.)	Ready Math does not [illegible]ess listed topics that are beyond 4th grade on 4th grade assessments. All materials included in Ready Common Core are aligned to the standards for 4th grade. Future grade level concepts may be alluded to, but are not assessed. The materials stick to the concepts, skills, and strategies stated in the standards. In the online tools for multiplications, it mentions the traditional algorithm, but does not teach to it. Each lesson includes a learning progression for the teacher, which provides connections to previous grade levels skills, the current grade level, and then extends to the following grade level. However, these topics are for teacher information only, they are not included in the lesson. **Evidence-** • Table of Contents (TE) A42-A43 • Math Assessment Booklet (SBAC Edition) • Interim Assessments • Lesson Quizzes included in the Teacher Toolbox (online) • Correlation Charts (TE) B3-B7	**(Reviewer only.)** **___X_Meets** **____Does Not Meet**
Non-Negotiable 1: Materials must reflect the content architecture of the Standards by not assessing the topics named* before the grade level where they first appear in the Standards. **NN 1** If Metric 1A was rated as Meets, then rate Non-Negotiable 1 as Meets. If Metric 1A was rated as Does Not Meet, then rate Non- Negotiable 1 as Does Not Meet. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion.**(Reviewer only.)** **Before moving to Non-Negotiable 2, record the final Meets or Does Not Meet rating in the Evaluation Summary.**		**(Reviewer only.)** **__X_Meets** **____Does Not Meet** **Strengths/Weaknesses: Focuses on assessing 4th grade standards.**

Directions for Non-Negotiable 2

Focus and Coherence

Non-Negotiable 2: **Focus and Coherence** **Materials must focus coherently on the Major Work of the grade in a way that is consistent with the progressions in the Standards.** Focus and coherence are the two major evidence-based design principles of the Common Core State Standards for Mathematics (CCSSM, p. 3). Focus is necessary in order to fulfill the ambitious promise the states have made to their students by adopting the Standards: greater achievement at the college and career ready level; greater depth of understanding of mathematics; and a rich classroom environment in which reasoning, sense-making, applications, and a range of mathematical practices flourish. In simpler terms, a mile-wide, inch-deep curriculum translates to less time per topic. Less time means less depth and moving on without many students. Thus, materials must focus coherently on the Major Work of the grade in a way that is consistent with the progressions in the Standards.	**Required Materials** • Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf) • Focus by Grade Level for the grade being evaluated (www.achievethecore.org/focus) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion:** Non-Negotiable 2 is rated as Meets or Does Not Meet. To rate Non-Negotiable 2, first rate metrics 2A–2H. Each of these eight metrics must be rated as Meets in order for Non-Negotiable 2 to be rated as Meets. Rate each metric 2A-2H as Meets or Does Not Meet/Insufficient Evidence. If the evidence examined shows that the Criterion is met, then mark the Criterion Meets. If the evidence examined shows that the Criterion is not met—or if there is insufficient evidence to make a determination—then mark the Criterion as Does Not Meet/Insufficient Evidence. Support all ratings with evidence.
Metric NN2A: **In each grade K–8, students and teachers using the materials as designed devote the large majority of time to the Major Work of the grade.** **How to Find the Evidence:** Familiarize yourself with the Major Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, lessons, homework assignments, and assessments. (Evaluate both student and teacher materials.) Consider time spent on the Major Work of the grade and judge qualitatively whether students and teachers using the materials as designed will devote the large majority of time to the Major Work of the grade. For context, read Criterion #1 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013)	The majority of the work is designed as the Major work of 5th grade. The program designates in the table of contents with an "M" if that content is a major work, making it easy for teachers to know what lessons ARE focused on the major work. With 33 lessons in the text, 20 are devoted to major works, equaling 61%. With a total of 137 days, 80 are devoted to the major work of the garde, equaling 58%. When checking areas labeled as "M", it was found that they were indeed part of the major work for 5th grade. **Evidence-** • Year-Long Pacing (TE) A42-A43 • Correlation Charts (TE) B3-B7 • Unit Overviews • Individual Lesson Pacing Guides	**(Reviewer only.)** **_X___Meets** **____Does Not Meet/** **Insufficient Evidence**

Metric NN2E **Supporting Work, where present, enhances focus and coherence simultaneously by also engaging students in the Major Work of the grade.** **How to Find the Evidence:** Familiarize yourself with the Major Work and Supporting Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate chapters and lessons that focus on Supporting Work. NOTE: Example of evaluating this Criterion might include looking at whether materials for K–5 generally treat data displays as an occasion for solving grade-level word problems using the four operations (e.g., see 3.MD.B.3); or whether materials for grade 7 take advantage of opportunities to use probability to support ratios, proportions, and percentages. For context, read Criterion #3 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Supporting work is clearly identified in the table of contents. Materials provide coherence throughout each lesson in grade 4. The supporting works for the grade are not isolated from the major works. For example, in **Measurement and Data** (a supporting work), connections to using **operations with whole numbers to solve problems**(a major work) are made in most lessons. Connections to **Number and Operations-Fractions** (a major work) are also made within Measurement and Data (a supporting work). **Evidence:** • Lesson 25: Connects Measurement and Data with number and operations in fractions. Students convert measurements, by multiplying a whole number by a unit fraction. • Lesson 26: Connects Measurement and Data, using area and perimeter with Number and Operations in Base 10 through multiplying length and width • Lesson 30 Connects Measurement and Data related to angle measurement with Operations and Algebraic Thinking as well as Number and Operations in Base 10 to add and subtract angle measurements.	**(Reviewer only.)** **_X___Meets** **____Does Not Meet/** **Insufficient Evidence**

Metric NN2C **Materials base content progressions on the grade-by-grade progressions in the Standards. Content from previous or future grades does not unduly interfere with or displace on-grade-level content.** **How to Find the Evidence:** Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, and lessons in both student and teacher materials. NOTE: In some cases it may be possible that aligned materials might address some aspects of a topic in a strategic way before or after the grade level in which the topic is central in the Standards' progressions; for example, a curriculum author might purposefully choose to explore adding fractions with unlike denominators in a way appropriate to grade four, recognizing that this work is not really required until the next grade. However, any such purposeful discrepancies in content progressions should enhance the required learning in each grade; not unduly interfere with or displace grade-level content; and be clearly aimed at helping students meet the Standards as written rather than effectively rewriting the progressions in the Standards. And in all cases, note that Non-Negotiable 1 must be met for materials to be aligned. For context, read Criterion #5a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	The progressions in the materials match those in the Standards. Discrepancies in the content progressions were minimal and used to enhance learning. Each lesson includes a learning progression (for teacher reference), which may provide a connection to previous lessons (or previous grade), the current lesson, and the subsequent lesson (or subsequent grade). Future grade concepts are to mentioned in the teacher manual, student manual, or online resources. The resources in the Teacher Toolbox (online) refer to future grade level skills/strategies, but do not teach to them. Review of lessons reflects that these overviews coordinate with grade level standards. **Evidence-** • Teacher Toolbox (online) • Lesson unit progressions TE: Lesson 12 p. 122a Division in Grade 3: students gained conceptual understanding of division….In this lesson, students apply their knowledge of basic facts, place value, and properties of operations to solve multi-digit division. In Grade 5, students will find quotients of dividents. • Unit 4: Which lessons are students building upon p. 143A (TE)	(Reviewer only.) **__X__Meets** **____Does Not Meet/** **Insufficient Evidence**
Metric NN2D: **Materials give all students extensive work with on-grade-level problems.** **How to Find the Evidence:** Evaluate both student and teacher materials. If the materials provide resources for differentiated learning, consider whether lower-performing students have opportunities to engage with grade-level problems. Also consider whether higher-performing students are given opportunities to learn current grade-level content in greater depth. For context, read Criterion #5b in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	Connections for remediation are at the end of every lesson as quick checks, along with suggestions for remediation, if needed. Both are designed to keep students working at the grade level. Although materials are provided for intervention and remediation, the program does not focus on these sources as a replacement of the core curriculum. Lessons from the previous grade level are also listed that could be used as extra teaching and practice if needed to get students more ready for the current grade level work. Those in Teacher Toolbox (online) are correlated to previous grade level materials and content. Challenge activities are provided as well. The teacher manual makes connections to DOK for problems in the SBR. **Evidence-** • TE: Lesson 19 p. 198 Quick Check and Remediation • TE: Lesson 26 p. 281 Challenge Activity • Online Teacher Toolbox: Reteach tab	(Reviewer only.) **__X__Meets** **____Does Not Meet/** **Insufficient Evidence**

Metric NN2E **Materials relate on-grade-level concepts explicitly to prior knowledge from earlier grades.** **How to Find the Evidence:** Evaluate both student and teacher materials. NOTE: Examples of evaluating this Criterion might include looking at the way the materials extend basic ideas of place value across the decimal point; or the role that properties of operations play when the materials extend arithmetic beyond whole numbers to fractions, variables, and expressions. More generally, cluster headings in the Standards sometimes signal key moments where reorganizing and extending previous knowledge is important in order to accommodate new knowledge (e.g., see cluster headings that use the phrase "Apply and extend previous understanding"). For context, read Criterion #5c in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	The prior learnings are explicitly laid out for teachers at the beginning of each unit, as well as in the remediation information. Problems are provided at the beginning of most lessons that encourage students to access prior knowledge. "Use What You Know". Self-checks are included so students can identify skills they already have as they start the unit. Prerequisite skills are listed for the teacher as well. Lessons are identified to pre-teach for those who may not be ready for the new information that is going to be taught in the current lesson. **Evidence-** • Lesson 2: SE p 8 "You have already learned how to compare numbers up to 999. Take a look at this problem that compares numbers in the thousands." • Lesson 1: SE p. 2, does not make a connection • Lesson 6: SE p. 52 In lesson 5, you thought about equations… • Lesson 14: SE p. 150 In the past, you learned to compare fractions using models	**(Reviewer only.)** **___X_Meets** **____Does Not Meet/** **Insufficient Evidence**
Metric NN2F: **Review of material from previous grades is clearly identified as such to the teacher, and teacher and students can see what their specific responsibility is for the current year.** **How to Find the Evidence:** Evaluate the table of contents, but do not stop there; also evaluate units, chapters, lessons, homework assignments and assessments. (Evaluate both student and teacher materials.) Identify any content from previous grades and check whether it is identified as such. For context, read Criterion #5a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	Progressions show previous grade material but it is not the work in this grade. Previous lesson identification is provided for teachers (in the introduction of the lesson) to easily access if needed to help those who are behind. The Teacher Toolbox (online) also clearly identifies content from previous grade levels. **Evidence-** • Lesson 14 Overview (TE) p. 150a Prerequisites skills for the lesson and connections to learning progressions from grade 3. • Teacher Toolbox (online) Reteach Ready Prerequisite lessons	**(Reviewer only.)** **__X__Meets** **____Does Not Meet/** **Insufficient Evidence**

Metric NN2G **Materials include learning objectives that are visibly shaped by CCSSM cluster headings.** **How to Find the Evidence:** Select several clusters from the Major Work in the grade being evaluated. Evaluate teacher and student materials in relation to these clusters. For context, read Criterion #6a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	A correlation between learning objectives and cluster headings is explicit in the materials. The table of contents explicitly states the standards being taught in each lesson. Each lesson identifies the cluster that the lesson correlates to. **Evidence-** • For examples, in fourth grade, a cluster is extending previous understanding of fraction and equivalence and ordering Lesson 13 and 14 (pg TE p. 144a and TE p. 150a) both support the learning of this cluster. Additionally, Lesson 20 integrates multiple clusters from the number and operation in fractions domain to apply real world problems with fractions.	(Reviewer only.) **__X__Meets** **____Does Not Meet/** **Insufficient Evidence**
Metric NN2H: **Materials include problems and activities that serve to connect two or more clusters in a domain, or two or more domains in a grade, in cases where these connections are natural and important.** **How to Find the Evidence:** In the grade being evaluated, choose two or more clusters or two or more domains for which connections are natural and important. Evaluate the units, chapters, and lessons that deal with the chosen topics, looking for problems and activities that serve to connect the chosen clusters or domains. NOTE: An example of evaluating this Criterion might include looking at whether problems in grade 4 sometimes or often involve students applying their developing computation skills (detailed in domain NBT) in the context of solving word problems (detailed in domain OA). For context, read Criterion #6b in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	The materials doe a sufficient job of connecting clusters in a domain as well as the domains. In the lesson overview, it states the cluster, standards, and then additional domains. In fourth grade, the cluster of **using the four operations with whole numbers to solve problems,** which is an Operations and Algebraic Thinking domain is connected to the Number and Operations in Base Ten domain throughout the materials. **Evidence-** • Lesson 10 TE p. 92a focuses on solving multi-step problems (4.OA.3) with strong connections to 4.NBT.3-6). • In independent practice, SE p 98, problem 1, students must solve a multi-step problem (4.OA.3) using multiplication and addition (4.NBT.4 and 4.NBT.5).	(Reviewer only.) **__X__Meets** **____Does Not Meet/** **Insufficient Evidence**

Non-Negotiable 2:

Focus and Coherence

Materials must focus coherently on the Major Work of the grade in a way that is consistent with the progressions in the Standards.

NN 2 If all Metrics 2A – 2H were rated as Meets, then rate Non-Negotiable 2 as Meets. If one or more Metric was rated Does Not Meet/Insufficient Evidence, then rate Non-Negotiable 2 as Does Not Meet. Check the final rating.
Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)**

Before moving to Alignment Criterion 1, record the final Meets or Does Not Meet rating in the Evaluation Summary.

(Reviewer only.)

__X__Meets

____Does Not Meet

Strengths/Weaknesses:

Strengths:

- Support for teachers in easily accessing the progressions.
- Connections made for students to prior knowledge
- Amount of time spent on major works of the grade

Weaknesses:

- Could be stronger in connecting clusters or domains

Now continue by evaluating the Alignment Criterion 1 for Rigor and Balance.

Directions for Alignment Criterion 1

Rigor and Balance

Alignment Criterion 1: Rigor and Balance

Materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.

The Standards set expectations for attention to all three aspects of rigor: conceptual understanding, procedural skill and fluency, and applications. Thus, materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.

Required Materials

- Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf)
- Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)
- Focus by Grade Level for the grade being evaluated (achievethecore.org/focus)
- Situation Types for the Operations in Word Problems (achievethecore.org/situation-types)
- From the materials being evaluated: teacher guides, student texts and workbooks

Rating this Criterion:

Alignment Criterion 1 is rated as Meets or Does Not Meet.

To rate Alignment Criterion 1, first rate metrics 1A, 1B, and 1C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). For each metric, guiding questions are provided to aid in gathering evidence.
Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 1 if the materials rate 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as rigor and balance, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.

Metric AC1A:

The materials support the development of students' conceptual understanding of key mathematical concepts, especially where called for in specific content Standards or cluster headings.

How to Find the Evidence:

Select one or more cluster(s) or Standard(s) from the Major Work for the grade being evaluated that relate specifically conceptual understanding to use throughout the questions associated with this metric. NOTE: Some examples of clusters or Standards that call for conceptual understanding include: K.OA.A.1, (1.NBT.B, 1.NBT.C), (2.NBT.A, 2.NBT.B), (3.OA.A.1, 3.OA.A.2), 4.NF.A, (4.NBT.A, 4.NBT.B), 5.NF.B, (5.NBT.A, 5.NBT.B), 6.RP.A, 6.EE.A.3, 7.NS.A, 7.EE.A, 8.EE.B, 8.F.A, 8.G.A

Clusters or Standards grouped by parentheses are closely connected and could be analyzed together.

For context, read Criterion #4a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).

-Choose a cluster/Standard from the Major Work that is aligned to each aspect of rigor and use it to evaluate these metrics. It is most helpful if the same clusters/Standards are chosen for all of the programs being evaluated. (Guidance in choosing clusters/Standards is included in "How to Find the Evidence".)

Use the questions for AC Metric 1A to evaluate Metric 1A. Record evidence for each question and rate Metric 1A.

__X__Meets (2)

____Partially Meets (1)

____Does Not Meet (0)

Is conceptual understanding attended to thoroughly where the Standards set explicit expectations for understanding or interpreting? Evaluate lessons, chapter/unit assessments and homework assignments, paying attention to work aligned to Standards that explicitly call for understanding or interpreting. NOTE: Examples of evaluating this Criterion might include looking at how well the multi-digit addition and subtraction algorithms are developed and explained on the basis of place value and properties of operations; or how well the multi-digit multiplication and division algorithms are developed and explained on the basis of place value and properties of operations; or how well solving equations is presented and explained as a process of reasoning.	Conceptual understanding is addressed through the modeling and the guided instruction provided in each lesson, as well as though the Connect It activities. Various conceptual problems and questions are provided. Questions range from low level difficulty to requiring students make connections between concepts appropriate for the grade level. The TRB designates with the word "understand" in the table of contents the lessons that will focus on conceptual understanding. **Evidence-** • Connections to place value are made when teaching multiplication of whole numbers (SE p. 113) established multiplying by multiples of 10 before teaching the concept of multiplication of whole numbers. • Lesson 11 (TE pf. 114) uses the area model to begin the multiplication lesson, and then transitions to partial products. • Connections to place value are made within the area and partial products model. (Lesson 11 SE p. 118, #16 and #17).	
Do the materials feature high-quality conceptual problems and conceptual discussion questions? Evaluate lessons, chapter/unit assessments, and homework assignments. NOTE: Example of conceptual problems might include such questions as "Find a number greater than 1/5 and less than 1/4," or "If the divisor does not change and the dividend increases, what happens to the quotient?"	Students are asked to discuss with partners, write about it and identify when errors were made, etc. Direct questions to be used with class are provided in the TRB. Questions are also provided in the SE and the TRB in the Explain, Compare and Connect it sections. **Evidence-** **4.NF.A Extend Understanding of fraction equivalence and ordering:** • Draw a model of 2/3 and then divide it into a different number of parts to show an equivalent fraction (SE p. 146 #6) • Find the missing numbers to find an equivalent fraction to 5/6 (SE p. 147 #10) • Use different methods to find two fractions that are equivalent to 3/3. (SE p. 148 #13). • Think about the cooking problem below. Fia eeds ¾ of a cup of brown sugar. She only has 1/3 cup measuring cup and a 1/8 cup measuring cup. Which should she use and why? (SE p. 148 #15).	

Do the materials feature opportunities to identify correspondences across mathematical representations? Evaluate lessons, chapter/unit assessments and homework assignments. NOTE: Examples of evaluating this Criterion might include looking at whether students are supported in identifying correspondences among: the verbal description of a situation, the diagrams that distill its mathematical features, and the equations that model it; or equivalent forms of numbers (e.g., 3 and 6/2) and the number line; or rational number operations and representations of them via models such as the vector model; or the expression that defines a function and the graph that shows the relationship.	The materials provide correspondence across mathematical representations. However, the connections are weak and sporadic.. **Evidence-** • SE pg 121 #4- Student practice: the question is to identify the model which would represent 45x15. • SE pg 123 When teaching division, the area model is connected to the area model of multiplication • SE pg. 124 Partial Products is used to divide whole numbers, but a connection to partial products for multiplication is not explicitly stated.	
Metric AC1B: **The materials are designed so that students attain the fluencies and procedural skills required by the Standards.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Major Work for the grade being evaluated that relate specifically to fluency and procedural skill to use throughout the questions associated with this metric. NOTE: Some examples of Standards that call for procedural skill and fluency include: K.OA.A.5, 1.OA.C.6, 2.OA.B.2, 2.NBT.B.5, 3.OA.C.7, 3.NBT.A.2, 4.NBT.B.4, 5.NBT.B.5, 6.NS.B.2, and 6.NS.B.3, 6.EE.A, 7.NS.A, 7.EE.A.1,7.EE.B.4a, 8.EE.C.7, 8.EE.C.8b For context, read Criterion #4b in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).		**Use the questions for Metric 1B to evaluate Metric 1 B. Record evidence for each question and rate Metric 1B.** **(Reviewer only.)** **____Meets (2)** **_X___Partially Meets (1)** **____Does Not Meet (0)**
Is progress toward fluency and procedural skill interwoven with students' developing conceptual understanding of the operations in question? Evaluate lessons, chapter/unit assessments, daily routines, and homework assignments for evidence that the development of fluency and procedural skill is supported by conceptual understanding.	Student's progression toward fluency is balanced with procedural skills. Practice, and time devoted to fluency of the skill is weak. **Evidence-** • In the materials 4.NBT.4, is taught in only 1 lesson, which should last only 5 days. • Practice for mastering fluency is weak and dedicated only to the identified lesson on multiplying multi-digit whole numbers using the traditional algorithm (Lesson 3).	

Are purely procedural problems and exercises present that include cases in which opportunistic strategies are valuable and generic cases that require efficient algorithms present? Evaluate lessons, chapter/unit assessments, daily routines, and homework assignments. NOTE: Examples of problems in which opportunistic strategies are valuable might include the sum 698 + 240 or the system x + y = 1, 2x + 2y = 3. Examples of generic cases that require efficient algorithms might include the sum 8767+2286 or the system 6y + x = x + 3, – x = 1 + 2y.	There is procedural practice found in the practice and problem solving book……both those that allow opportunistic strategies and those that require more traditional use of algorithms. • SE pg. 22-23 practice problems (#15 would require an algorithm) • Practice and Problem Solving pg 19 encourages students to use place value, rather than an algorithm • Practice and Problem Solving pg 21	
Do the materials in grades K–6 provide repeated practice toward attainment of fluency Standards? Evaluate lessons, daily routines, and homework assignments for evidence of repeated practice toward attainment of the following K–6 Standards that set an explicit expectation of fluent (accurate and reasonably fast) computation: K.OA.A.5, 1.OA.C.6, 2.OA.B.2, 2.NBT.B.5, 3.OA.C.7, 3.NBT.A.2, 4.NBT.B.4, 5.NBT.B.5, 6.NS.B.2, 6.NS.B.3.	The materials DO NOT provide repeated practice toward the attainment of fluecy of NBT 45,adding and subtracting multi-digit whole numbers using the standard altorithm. Work towards this fluency is limited to Lessons 3, 9 and 10. Additional practice for fluency is found in the Teacher Toolbox (online materials).	
Metric AC1C: **The materials are designed so that teachers and students spend sufficient time working with engaging applications, without losing focus on the Major Work of each grade.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Major Work for the grade being evaluated that relate specifically application to use throughout the questions associated with this metric. NOTE: Some examples of clusters or Standards that call for application include: K.OA.A.2, 1.OA.A, 2.OA.A, 3.OA.A.3, 3.OA.D.8, 4.OA.A.3, 4.NF.B.3d, 4.NF.B.4c, 5.NF.B.6, 5.NF.B.7c, 6.RP.A.3, 6.NS.A.1, 6.EE.B.7, 6.EE.C.9, 7.RP.A, 7.NS.A.3, 7.EE.B.3, 8.EE.C.8c, 8.F.B For context, read Criterion #4c in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-**	**Use the questions for Metric 1C to evaluate Metric 1C. Record evidence for each question and rate Metric 1C.** **(Reviewer only.)** **__X__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**

Are there are single and multi-step contextual problems, including non-routine problems, that develop the mathematics of the grade, afford opportunities for practice, and engage students in problem solving? Do the problems attend thoroughly to those places in the content Standards where expectations for multi-step and real-world problems are explicit? Evaluate lessons, chapter/unit assessments, and homework assignments.	Problem solving opportunities are plentiful and there is a mix of single step and multi-step problems to be solved. Two lessons (6 days) are explicitly devoted to multi-step word problems. The majority of lessons include either single or multi-step problems in class work, independent practice, and homework. Performance tasks, as well as Math In Action lessons require students work through multi-step problems. **Evidence-** • Math In Action: TE pg. 100E, students examine a complex problem and discuss how it was solved before progressing to solve multi-step problems on their own. • Practice and Problem Solving pg.91: has word problems, which involve multiple steps as well as multiple operations. This is homework practice for Lesson #9 Multi-Step Word Problems • Lesson 5 SE p. 59 #8 story problem: Yao blew up 8 balloons. Flora blew up 2 times as many balloons as Yao. Write an equation that represents the number of balloons Flora blew up.	
Do application problems particularly stress applying the Major Work of the grade? Evaluate lessons, chapter/unit assessments, and homework assignments. NOTE: Examples of evaluating this Criterion might include looking at: how well, by the end of grade 2, students using the materials as designed can represent and solve a full range of one-step addition and subtraction word problems; or how well, by the end of grade 3, students using the materials as designed can represent and solve a full range of one-step multiplication and division word problems; or how well these basic situation types for each operation are carried coherently across the grades, (e.g., with fractions and algebraic expressions); or, in all grades, whether the problems connect concepts, Standards, and domains in ways that are natural and important. For a list of situation types for one-step addition, subtraction, multiplication, and division problems, see Situation Types for the Operations in Word Problems	The major works of the grade are supported through application problems. Varied situation-type problems are used throughout the materials. The work required builds on prior learning, and is designated for teachers in the TRB. **Evidence-** • Array of Products:Practice and problem Solving p. 134 #4. • Equal Groups of Objects: Practice and Problem Solve p. 135 #2 • Lesson 5 SE begins with arrays, and then moves to all the different problem types.	

Does modeling [illegible] slowly across K–8, with applications that are relatively simple in earlier grades and when students are encountering new content? In grades 6–8, do the problems begin to provide opportunities for students to make their own assumptions or simplifications in order to model a situation mathematically? Read Standard for Mathematical Practice 4, Model with Mathematics. Evaluate lessons, chapter/unit assessments, and homework assignments.	Modeling is a focus using a variety of ways throughout this program. Each lesson provides teachers with guidance to implement modeling into the instruction. Students are expected to utilize models in solving problems as well. Complexity of models is increased as concept complexity increases. Connections to previous models are made as well. **Evidence-** • Lesson 13 SE p. 145 shows fractions equivalence with a model. Throughout the lesson, students are asked to use models to answer questions and support their thinking about fraction equivalence. • Lesson 13 SE p. 146 connects a model for hundredths to tenths. • Practice and Problem Solving p. 158: students are asked how they used the numberline to show how the two fractions compare.	
Alignment Criterion 1: Rigor and Balance **Materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.** **AC1** Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 out of 6 points, the Criterion has not been met. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)** **Before moving to Alignment Criterion 2, record the final Meets or Does Not Meet rating in the Evaluation Summary.**		**(Reviewer only.)** **_X___Meets** **____Does Not Meet** **Strengths/Weaknesses:** • **Provided many opportunities for multi-step problem solving.** • **Abundance of modeling** **Weakness:** Practice, and time devoted to fluency of the skill is weak.

Directions for Alignment Criterion 2

Standards for Mathematical Practice

Alignment Criterion 2: Standards for Mathematical Practice **Materials must demonstrate authentic connections between content Standards and practice Standards.** The Standards require that designers of instructional materials connect the mathematical practices to mathematical content in instruction. Thus, materials must demonstrate authentic connections between content Standards and practice Standards.	**Required Materials**: • Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf) • Focus by Grade Level for the grade being evaluated (www.achievethecore.org/focus) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion** Alignment Criterion 2 is rated as Meets or Does Not Meet. To rate Alignment Criterion 2, first rate metrics 2A, 2B, and 2C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). For each metric, guiding questions are provided to aid in gathering evidence. Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 2 if the materials earn 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as mathematical practices, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.
Metric AC2A: **Materials address the practice Standards in such a way as to enrich the Major Work of the grade; practices strengthen the focus on Major Work instead of detracting from it, in both teacher and student materials.** **How to Find the Evidence:** Familiarize yourself with the Major Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate teacher and student materials for evidence that the mathematical practices support and connect to the focus of the grade. NOTE: Examples of evaluating this Criterion might include looking at whether, in grades K–5, students using the materials are supported to look for and express regularity in repeated reasoning about the addition table, the multiplication table, the properties of operations, the relationship between addition and subtraction or multiplication and division, and the place value system; or whether, in grades 6–8, students using the materials are supported to look for and express regularity in repeated reasoning about proportional relationships and linear functions. For context, read Criterion #8 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013).	The practice standards are clearly identified in each lesson for teachers to help make their use intentional. Students reflect on these standards in performance tasks at the end of units. Support for teachers for practice standards appears in a variety of places and ways in the TRB. **Evidence-** • The mathematical practices are stated at the beginning of the Student Edition with explanation (SE pg SmP1-SMP8) • Lessons integrate the mathematical practices through the Reflect portion. SE pg. 37 Use mathematical practices. As you work through the problem, discus these questions with a partner. Use structure…Use a model…. • In the TE, connections to SMP are provided. TE p. 245 Repeated Reasoning. Point out to students….	**(Reviewer only.)** **__X__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**

Metric AC2B **Materials attend to the full meaning of each practice Standard.** **How to Find the Evidence:** For context, read Criterion #7 and Criterion #9 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).		**Use the questions for Metric 2B to evaluate Metric 2B. Record evidence for each question and rate Metric 2B.** **(Reviewer only.)** **__X__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Over the course of any given year of instruction, is each mathematical practice Standard meaningfully present in the form of assignments, activities, or problems that stimulate students to develop the habits of mind described in the practice Standard? Evaluate lessons, chapter/ unit assessments, and homework assignments for evidence of each mathematical practice being meaningfully present in instruction.	The mathematical practice standards are present in each lesson through assignments, activities and problems. **Evidence-** • SMP are built into the instruction and problems throughout the student book. • Performance Tasks in the Practice and Problem Solving Guide ask students to reflect on Mathematical practices. P. 241 • The mathematical practices are stated at the beginning of the Student Edition with explanations (SE pg SMPi-SMP8)	
Do the materials treat the practice Standards as developing across grades or grade bands? Are the practice Standards in early grades appropriately simple? Do they display an arc of growing sophistication across the grades?	Correlations are in the table of contents of the TRB Materials are developed throughout the year	
Are there teacher-directed materials that explain the role of the practice Standards in the classroom and in students' mathematical development? Are alignments to practice Standards accurate?	Practice standards are listed with content standards on 1st page of each lesson overview in TRB The materials provide numerous resources for teachers to strengthen their knowledge and application of the standards for mathematical practice. **Evidence-** • The Table of Contents (TE pg A4-A7) state the embedded standards for mathematical practice for each lesson. • On page A16-A17 of the TE, it is stated where each SMP is embedded in daily lessons.	
Metric AC2C: **Materials support the Standards' emphasis on mathematical reasoning.** **How to Find the Evidence:** For context, read Criterion #10 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).		**Use the questions for Metric 2C to evaluate Metric 2C. Record evidence for each question and rate Metric 2C.** **(Reviewer only.)** **__X__Meets (2)**

Do the materials support students in constructing viable arguments and critiquing the arguments of others concerning grade-level mathematics that is detailed in the content Standards? Read Standard for Mathematical Practice 3. Evaluate teacher and student materials to ensure that students are given opportunities to reason with grade-level mathematics.	The materials place a strong emphasis on a student's ability to reason and provides numerous opportunities to practice their reasoning skills. Students must explain, justify, show, or prove their thinking daily. Guided instruction questions and mathematical discourse questions are provided in each lesson for small groups and/or whole class discussions **Evidence-** • In lessons, students are asked to reflect. On SE pg 177, they must explain how they could figure out how many halves are in 3 ½. • In the Practice and Problem Solving book p. 307, the entire exercise focuses on Reasoning and Writing. • Each unit has a performance task, found in the practice and problem solving book, which has a question directly related to reasoning mathematically. P. 341. How did you decide which yard and flower borders Joey should work on? • In daily lessons, students are asked to Pair/Share with another student SE p. 205 Chelsea chose D. How did she get that answer?	**____Partially Meets (1)** **____Does Not Meet (0)**
Do the materials support students in producing not only answers and solutions, but also, in a grade-appropriate way, arguments, explanations, diagrams, mathematical models, etc., especially in the Major Work of the grade? Familiarize yourself with the Major Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate teacher and student materials, to understand the types of work students are expected to produce.	Students are expected to explain, share their thinking, create models and/or diagrams in each lesson. **Evidence-** • Each lesson has a modeling component SE pg. 242 First students are provided a model as an example, and then they create a model. • A connection and/or explanation to the model is also required in most lessons SE p. 298 #15 Look at Model It on the previous page Explain how you could use the number line with arrows to find the difference between the two lengths. • Practice and Problem book p. 158 #5 Explain how you used the models in problem 3 to show how the two fractions compare in problem 4.	
Do materials explicitly attend to the specialized language of mathematics? Is the language of argument, problem solving, and mathematical explanations taught rather than assumed? Evaluate teacher and student materials, paying attention to how mathematical language is taught. NOTE: Examples of evaluating this Criterion might include looking at whether students are supported in: basing arguments on definitions; using the method of providing a counterexample; or recognizing that examples alone do not establish a general statement.	The materials are weak in their use and teaching of the language of mathematics. Vocabulary is stated for each lesson, with those words in bold in student materials. However, there is explicit instruction on language for argument, problem solving, and mathematical explanations. **Evidence-** • TE pg 122a Lesson Vocabulary	

Alignment Criterion 2:
Standards for Mathematical Practice

Materials must demonstrate authentic connections between content Standards and practice Standards.

AC2 Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 out of 6 points, the Criterion has not been met. Check the final rating.
Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion.
(Reviewer only.)

(Reviewer only.)

__X__Meets

____Does Not Meet

Strengths/Weaknesses:
Strengths: Consistently present in every lesson.
Clearly laid out for teachers in regards to math practices.

Before moving to Alignment Criterion 3, record the final Meets or Does Not Meet rating in the Evaluation Summary.

Alignment Criterion 3:
Access to the Standards for All Students

Materials must provide supports for English Language Learners and other special populations.

Because Standards are for all students, alignment requires thoughtful support to ensure all students are able to meet the Standards. Thus, aligned materials must provide supports for English Language Learners and other special populations.

Required Materials:

- Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf)
- Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)
- From the materials being evaluated: teacher guides, student texts and workbooks

Rating this Criterion:
Alignment Criterion 3 is rated as Meets or Does Not Meet.

To rate Alignment Criterion 3, first rate metrics 3A, 3B, and 3C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points).

Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 3 if the materials earn 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as support for special population, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.

Metric AC3A:
Support for English Language Learners and other special populations is thoughtful and helps those students meet the same Standards as all other students. The language in which problems are posed is carefully considered.

How to Find the Evidence:
Evaluate teacher and student materials, paying attention to supports offered for special populations.

Support for ELL's is provided in the materials through notes in the TE, as well as suggestions for visual models, and visual models in the SE.

Evidence-

- TE pg 123 English Language Learners note: Be sure students understand the parts of a division problem (includes reference).
- Visual Model (TE p. 144) Explore equivalent fractions on a number line.
- TE pg. 266 ELL hands on exercise to make sure students know what capacity means.

Reviewer only.)

_X___Meets (2)

____Partially Meets (1)

____Does Not Meet (0)

Metric AC3B **Materials provide appropriate level and type of scaffolding, differentiation, intervention, and support for a broad range of learners with gradual removal of supports, when needed, to allow students to demonstrate their mathematical understanding independently.** **How to Find the Evidence:** Evaluate teacher and student materials, paying attention to whether materials provide differentiation that will lead all learners to engage with on-grade-level content.	The progression is clearly spelled out There are extensions, challenged, ELL tips, quick checks and remediation tips provided. Lesson progress from modeled and guided instruction to guided practice to independent practices and assessments are available. Practice can be individualized for students by the teacher. Differentiated instruction is found at the end of each lesson. **Evidence-** • Learning Progressions provided in each lesson create an awareness of what skills students should already have This can help provide scaffolding for students below grade-level (TE p. 112a) • Small group differentiation (TE p. 112b) • Personalized learning available on iready.com • Quick check and remediation (independent practice) TE p 184 • Differentiated Instruction ideas for 3 levels TE pg 165b	**Reviewer only.)** **__X__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Metric AC3C: **Design of lessons recommends and facilitates a mix of instructional approaches for a variety of learners such as using multiple representations (e.g., including models, using a range of questions, checking for understanding, flexible grouping, pair-share).** **How to Find the Evidence:** Evaluate teacher materials, noting instructional approaches suggested for whole class and differentiated lessons and activities.	The mix is provided through modeled and guided instruction in each lesson. Activities and visual models in each lesson are provided. The teacher toolbox offers variety as well. Many opportunities to incorporate Pair/Share are available for teachers and students, with questions provided to the teachers. Guided instruction includes questions that have students think about and understand different representations and how they are related. **Evidence-** **The following are found in Lesson 16 which is 5 days:** • **Hands-On Activity (TE p. 167)** • **Picture It SE p. 168. Use a picture to help understand the problem** • **Model It SE p. 168. Use a number line to help understand the problem** • **Visual Model TE p. 170 connect the picture and the number line.** • **Pair/Share SE p. 172-173**	**Reviewer only.)** **__X__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**

Alignment Criterion 3: Access to the Standards for All Students Materials must provide supports for English Language Learners and other special populations. **AC3** Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 points, the Criterion has not been met. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion.**(Reviewer only.)** **Move to the Evaluation Summary and record the final Meets or Does Not Meet rating .**	**(Reviewer only.)** **__X__Meets** **____Does Not Meet** **Strengths/Weaknesses:** S: Many supports for ELL, Tier 1, 2 and 3 resources. S: gave teachers guidance on what to do if a student was making a particular mistake or displaying a specific misconception.

Once an evaluation for alignment to the Shifts and major features of the CCSS has been conducted using Sections 1-3, it's important to evaluate for overall quality and best practices. A starting list of Indicators of Quality are suggested below. States, districts and others evaluating instructional materials are encouraged to add to this list to ensure materials reflect local contexts. For background information on some of the Indicators of Quality in this section, refer to pp.18–21 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).

Indicators of Quality	Evidence- Give specific examples.	Rating: (Reviewers only.)
1. Lessons are thoughtfully structured and support the teacher in leading the class through the learning paths at hand, with active participation by all students in their own learning and in the learning of their classmates.	Each lesson contains clear progression from whole class instruction to guided practice to independent practice. Much questions and discussion is included in each, as it the use of models to represent the work being done. All lessons are structured in a manner providing students with support and time to become independent. Evidence: Lesson introduction, modeled and guided instruction, guided practice, independent practice, lesson quiz	**(Reviewer only.)** **__X____ Yes** **_____ No**

2. The underlying design of the materials includes both problems and exercises. (In solving problems, students learn new mathematics, whereas in working exercises, students apply what they have already learned to build mastery.) Each problem or exercise has a purpose. **NOTE: This Criterion does not require that the problems and exercises be labeled as such.**	Both problems and exercises are provided for each skill and exercises spiral throughout the program. All standards are represented through these problems and exercises. **In the introduction and modeled and guided instruction, students participate in solving problems. As students gain experience and practice with the concept, they transition to solving exercises in the Independent Practice portion of the lesson.**	**(Reviewer only.)** **___X___ Yes** **_____ No**
3. Design of assignments is not haphazard: exercises are given in intentional sequences in order to strengthen students' mathematical understanding.	There is a clear progression, from grade to grade, and throughout each grade's standards. Clearly noted for teachers to see the progression and help them understand the importance of meeting their grade level needs to prepare students for the expectations in the next grade level. Evidence-Lessons begin "Use What You Know" to provide connections to student's prior knowledge and then transitions to "Find Out More" which adds to the student's knowledge base and leads to deeper learning. (SE p 104-105) **Problems in Independent practice increase in difficulty throughout the assignment**	**(Reviewer only.)** **___X___ Yes** **_____ No**
4. There are separate teacher materials that support and reward teacher study including, but not limited to: discussion of the mathematics of the units and the mathematical point of each lesson as it relates to the organizing concepts of the unit, discussion on student ways of thinking and anticipating a variety of students responses, guidance on lesson flow, guidance on questions that prompt students thinking, and discussion of desired mathematical behaviors being elicited among students.	The materials provide teachers support in teaching the lesson as well as providing a deeper understanding of the concepts themselves. Evidence: • Progression Chart (beginning of each unit) shows what students are building on and what the lesson is preparing students for (TE p. 239a-b) • Lesson Learning Progression tells teachers what students have done in previous grades, will do in this grade, and the next grade. • Lessons provide real world connections (TE p. 242) • Concept Extensions (TE p. 245) • Mathematical Discourse provides questions teachers can ask to deepen student understanding (TE p. 286) • Quick Check and Remediation provide explanation of why students may have given an incorrect response and how to remediate based on the response (TE p. 308)	**(Reviewer only.)** **___X___ Yes** **_____ No**
5. Manipulatives suggested in the materials are faithful representations of the mathematical objects they represent and are connected to written methods.	Manipulatives are occasionally shown in both modeled and guided instruction. When suggested, they are appropriate.	**(Reviewer only.)** **_____ Yes** **____X__ No**

6. Materials include a variety of curriculum-embedded assessments. Examples include pre-, formative, summative, and self-assessment resources.	Many options for formative and summative assessments. **Evidence-** • Try It Questions, Guided Practice, Pair/Share, Lesson Quiz-included in each lesson. • At the end of each Lesson is a Quick Check • At the end of each unit is an Interim Assessment • Benchmark Assessment (3 times a year) • Teacher Toolbox (online) has quizzes	**(Reviewer only.)** **__X____ Yes** **_____ No**
7. Assessments contain aligned rubrics, answer keys, and scoring guidelines that provide sufficient guidance for interpreting student performance.	All assessments for the materials contain rubrics, answer keys, and score guides. Performance tasks have rubrics as well. **Evidence-** • Interim Assessment Solutions TE p. 236-238a • Quick Check and Remediation TE p. 258	**(Reviewer only.)** **__X____ Yes** **_____ No**
8. Materials assess student proficiency using methods that are accessible and unbiased, including the use of course-level language in student prompts.	**Materials used to assess for proficiency are appropriate to the grade level, and are not biased. All students receive the same opportunities to display proficiency.**	**(Reviewer only.)** **____X__ Yes** **____ No**
9. Materials are carefully evaluated by qualified individuals, whose names are listed, in an effort to ensure freedom from mathematical errors and course-level appropriateness.	**Teacher advisors and authors are listed in the front of the TE.**	**(Reviewer only.)** **___X___ Yes** **_____ No**
10. The visual design supports students in engaging thoughtfully with the subject. Navigation through the text is clear.	**Evidence-** The student edition seems to be engaging. The lessons follow a format that is consistent and easy to follow. Some pictures are included, with many tables, graphs, and charts. These items do not distract from the math.	**(Reviewer only.)** **___X___ Yes** **_____ No**
11. The materials engage parents in appropriate ways. For example, homework assignments in elementary grades, consist of routine problems, practice with getting answers, and fluency-building exercises that parents can easily support.	The materials are created to engage parents and support parents and students with math work at home. **Evidence-** There are family letters, family activities, practice and problem solving parent pages and an APP that is free that could be used at home with families.	**(Reviewer only.)** **__X___ Yes** **_____ No**

Reviewer IMET Evaluation Summary Title/Level: Fourth Grade Ready Common Core

Publisher: _Curriculum Associates_____ Copyright: __2016
Reviewer ID # ___TJ and AJ_____ Date Review Completed:_3/8/2016_____

Non-Negotiable Criteria- Each Non-Negotiable must be met in order for the Non-Negotiable Alignment Criteria to be met overall.	
Non-Negotiable 1: Freedom from Obstacles to Focus **___X____ Meets** **_____ Does Not Meet**	**Non- Negotiable 2: Focus and Coherence** **__X___ Meets** **_____ Does Not Meet**
Non-Negotiable Overall: **__X___ Meets _____ Does Not Meet**	
Alignment Criteria- Each Alignment Criterion must be met with a sufficient number of points in order for Alignment Criteria to be labeled as "Meets" overall. The more points the materials receive on the Alignment Criteria, the better they are aligned.	

Alignment Criterion 1: Rigor and Balance	Alignment Criterion 2: Standards of Mathematical Practice	Alignment Criterion 3: Access Standards for All Learners
Points: ___5__ of 6 possible. (Materials must receive at least 5 of 6 points to align.) ____X___ Meets _____ Does Not Meet	**Points: __6___ of 6 possible.** (Materials must receive at least 5 of 6 points to align.) ____X___ Meets _____ Does Not Meet	**Points: __6___ of 6 possible.** (Materials must receive at least 5 of 6 points to align.) ___X____ Meets _____ Does Not Meet

Alignment Criteria Overall:

__X___ Meets **_____ Does Not Meet**

If the materials meet both Non-Negotiables and relevant Alignment Criterion, they are aligned to the Shifts and major features of the Core Standards. **Do the materials meet every Non-Negotiable and Alignment Criterion? ___X__ Yes _____ No**

What are the specific areas of strength and weakness based on this evaluation? Publishers or others modifying or developing assessments can use this information to make improvements and/or to remedy gaps in the alignment of assessment materials.

2015-16 Mathematics Interim Review Recommendation & Summary

Publisher Name:	Curriculum Associates
Title:	Ready Common Core
ISBN #	
Grade Level(s) or Course:	5th grade
Reviewer ID:	TJ AJ

RECOMMENDED AS:

__X__ **Core Mathematics Program-** a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials. Substantial evidence clearly supports the designation of this program as Core.

_____ **Other Mathematics Program-** a program that substantially, but partially, meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for supplemental materials. Substantial evidence clearly supports the designation of this program as Other.

_____ **Component Mathematics Program-** a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs. Substantial evidence clearly supports the designation of this program as Component.

_____ **Intervention Program-** a program designed and intended to target and support students' specific needs. Substantial evidence clearly supports the designation of this program as Intervention.

_____ **Does not meet criteria** for recommendation as a Curricular Material or Online Resource for Mathematics.

EVIDENCE SUMMARY: Ready Common Core 5th grade meets focus, rigor, and coherence standards.

FOCUS- Ready Common Core 5th grade is aligned to all standards for 5th grade. The majority of lessons are focused on the Major Works of the grade.

COHERENCE-
The supporting works are clearly identified and support the major work of the grade.

RIGOR-
Ready Common Core student materials are presented in an engaging manner to students as they interact with rigorous math problems. Practice toward fluency in fifth grade is weak.

CONCEPTUAL UNDERSTANDING-
Ready Common Core 5th grade uses modeling, guided instruction, and discussions to build students conceptual understanding of math concepts presented.

MATHEMATICAL PRACTICES-
Ready Common Core integrates mathematical practices into all lessons. The materials provide support for teachers in understanding and implementing the mathematical practices.

ACCESSIBILITY OF STANDARDS TO ALL STUDENTS-
Ready Common Core provides support for all learners through resources found in the teacher manual. ELL resources provide appropriate supports. Differentiation opportunities are appropriate.

OTHER:

2015-16 Interim Mathematics Review

Mathematics Evaluation Tool Grades K-8

Publisher: Curriculum Associates

Title of Material: Ready Common Core Grade 5th

Author: _____

ISBN #: _____ **Copyright** 2016

Reviewer ID: TJ AJ

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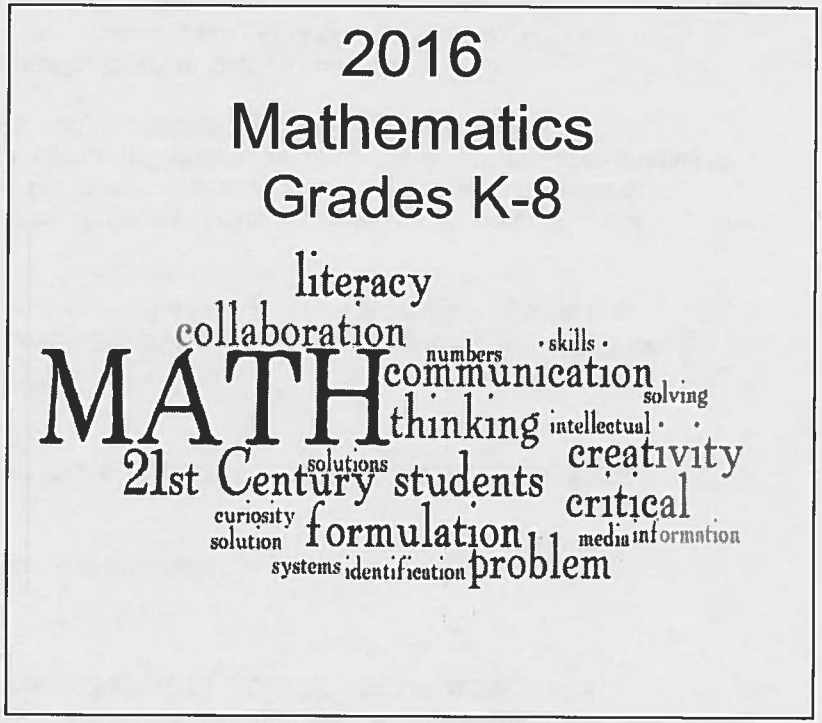
Substantial evidence clearly supports the designation of this program as Component.

Intervention Program- a program designed and intended to target and support students' specific needs.
Substantial evidence clearly supports the designation of this program as Intervention.



- Evaluation Form adapted from Instructional Materials Evaluation Toolkit (IMET).

The IMET was developed by Student Achievement Partners. Educators may use or adapt. http://creativecommons.org/licenses/by/3.0/ Download this tool at http://achievethecore.org/IMET

Instructional Materials Evaluation Tool

Mathematics, Grades K-8

What Are the Purposes of the IMET?

This Math IMET is designed to help educators determine whether instructional materials are aligned to the Shifts and major features of the Common Core State Standards (CCSS). The substantial instructional Shifts (http://www.corestandards.org/other-resources/key-shifts-inmathematics/) at the heart of the Common Core State Standards are:

- **Focus** strongly where the Standards focus
- **Coherence**: Think across grades and link to major topics within the grade
- **Rigor**: In major topics, pursue conceptual understanding, procedural skill and fluency, and application with equal intensity.

The IMET draws directly from the following documents:

- Common Core State Standards for Mathematics (www.corestandards.org/Math)
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When to use the IMET

1. Purchasing materials: Many factors go into local purchasing decisions. Alignment to the Standards is a critical factor to consider. This tool is designed to evaluate alignment of instructional materials to the Shifts and the major features of the CCSS. It also provides suggestions of additional indicators to consider in the materials evaluation and purchasing process.

2. Evaluating materials currently in use: The IMET can be used to analyze the degree of alignment of existing materials and help to highlight specific, concrete flaws in alignment. Even where materials and tools currently in use fail to meet one or more of these criteria, the pattern of failure is likely to be informative. States and districts can use the evaluation to create a thoughtful plan to modify or combine existing resources in such a way that students' actual learning experiences approach the focus, coherence, and rigor of the Standards.

3. Developing programs: Those developing new programs can use this tool as guidance for creating aligned curricula.
Please note this tool was designed for evaluating comprehensive curricula (including any supplemental or ancillary materials), but it was not designed for the evaluation of standalone supplemental materials.

Who Uses the IMET?

Evaluating instructional materials requires both subject-matter and pedagogical expertise. Evaluators should be well versed in the Standards (www.corestandards.org/Math) for all grades in which materials are being evaluated. This includes understanding the Major Work of the grade (www.achievethecore/focus), the Supporting and Additional work, how the content fits into the progressions in the Standards (www.achievethecore.org/progressions), and the expectations of the Standards with respect to conceptual understanding, procedural skill and fluency, and application. Evaluators also should be familiar with the substantial instructional Shifts (http:// www.corestandards.org/other-resources/key-shifts-in-mathematics/) of Focus, Coherence and Rigor that are listed above.

Getting Started

Prior to Evaluation

Assemble all of the materials necessary for the evaluation. It is essential for evaluators to have materials for all grades covered by the program, as some criteria cannot be rated without having access to each grade. In addition, each evaluator should have a reference copy of the Common Core State Standards for Mathematics (CCSSM) and the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013).

2015-16 Interim Mathematics Review

Mathematics Evaluation Tool Grades K-8

Publisher: Curriculum Associates

Title of Material: Ready Math 5th Grade

Author: Mark Ellis, Ph.D and Gladis Kersaint, PhD.

ISBN #: _____ **Copyright** 2016

Reviewer ID: TJ and AJ

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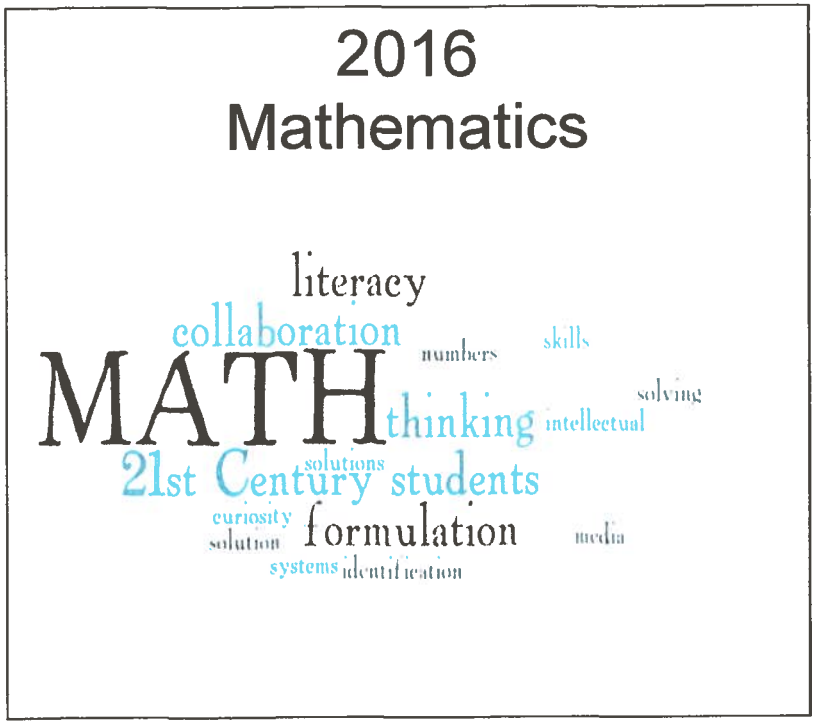

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Getting Started
Prior to Evaluation

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Before conducting the evaluation itself, it is important to develop a protocol for the evaluation process. The protocol should include having evaluators study the Publishers' Criteria and the IMET. It will also be helpful for evaluators to get a sense of each program overall before beginning the process. At a minimum, this would include reading the front matter of the text, looking at the table of contents and paging through multiple chapters.

Sections 1-3 below should be completed to produce a comprehensive picture of the strengths and weaknesses of the materials under evaluation. Information about areas in need of improvement or supplementation should be shared with internal and external stakeholders.

Navigating the Tool

Begin with Section 1: Non-Negotiable Alignment Criteria

- The Non-Negotiable Alignment Criteria must each be met in full for materials to be considered aligned to the Shifts and the major features of the Common Core State Standards. Each Non-Negotiable Alignment Criterion has one or more metrics associated with it; every one of these metrics must be met in order for the criterion as a whole to be met.

- Examine the relevant materials and use evidence to rate the materials against each criterion and its associated metric(s).

- Record and explain the evidence upon which the rating is based.

Continue to Section 2: Alignment Criteria

- The Alignment Criteria must each be met for materials to be considered aligned to the Shifts and the major features of the Common Core State Standards. Each Alignment Criterion has one or more metric associated with it; a specific number of these metrics must be met or partially met in order for the criterion as a whole to be met.

- Examine the materials in relation to these criteria, assigning each metric a point value. Rate the criterion as "Meets" or "Does Note Meet" based on the number of points assigned. The more points the materials receive on the alignment Criteria, the better they are aligned.

- Record and explain the evidence upon which the rating is based.

Proceed to Section 4: Indicators of Quality

- Indicators of Quality are important considerations that will help evaluators better understand the overall quality of instructional materials. These considerations are not criteria for alignment to the CCSS, but they provide valuable information about additional program characteristics. Evaluators may want to add their own indicators to the examples provided.

Directions for Non-Negotiable 1

Freedom from Obstacles to Focus

Criterion	Evidence- Give specific examples.	Rating: (Reviewer only.)
Non-Negotiable 1: **Freedom from Obstacles to Focus** **Materials must reflect the content architecture of the Standards by not assessing the topics named before the grade level where they first appear in the Standards.** The Standards foster students' progress to algebra by focusing strongly on arithmetic. Consistent with this focus, certain topics from outside of arithmetic appear only in later grades. Thus, to be aligned, materials must reflect the content architecture of the Standards by not assessing the topics named before the grade level where they first appear in the Standards. In this criterion, "topics named" means the topics that are explicitly named in Metric 1A. No other topics should be added to the list in Metric 1A. (Note that other topics in the standards are addressed in criterion NN2.)	**Required Materials** • Common Core State Standards for Mathematics (www.corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf) • From the materials being evaluated: teacher guides and all assessment components	**Rating this Criterion**: Non-Negotiable 1 is rated as Meets or Does Not Meet. To rate Non-Negotiable 1, begin by rating Metric 1A. Since Metric 1A is the only metric for Non-Negotiable 1, the rating for Non-Negotiable 1 is the same as the rating for Metric 1A. If Metric 1A is rated as Does Not Meet, include evidence of when the named topic(s) is/are assessed. If the metric is rated as Meets, list the grade(s) examined in the evaluation.

Metric NN1A: **Materials reflect the basic architecture of the Standards by not assessing the listed topics before the grade level indicated.** • Probability, including chance, likely outcomes, probability models. (Introduced in the CCSSM in grade 7) • Statistical distributions, including center, variation, clumping, outliers, mean, median, mode, range, quartiles; and statistical association or trends, including two-way tables, bivariate measurement data, scatter plots, trend line, line of best fit, correlation. (Introduced in the CCSSM in grade 6) • Similarity, congruence, or geometric transformations. (Introduced in the CCSSM in grade 8) • Symmetry of shapes, including line/ reflection symmetry, rotational symmetry. (Introduced in the CCSSM in grade 4) **How to Find the Evidence:** Evaluate the table of contents, all chapter tests, all unit tests, and other such assessment components (including rubrics). For context, read Criterion #2 from the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013). NOTE: Grade alignments of other topics are addressed in Non-Negotiable 2, Focus and Coherence.) In this criterion, "topics named" means the topics that are explicitly named in Metric 1A. No other topics should be added to the list in Metric 1A. (Note that other topics in the standards are addressed in criterion NN2.)	Ready Math does not assess listed topics that are beyond 5th grade on 5th grade assessments. All materials included in Ready Common Core are aligned to the standards for 5th grade. Future grade level concepts may be alluded to, but are not assessed. The materials stick to the concepts, skills, and strategies stated in the standards. In the online tools for multiplications, it mentions the traditional algorithm, but does not teach to it. Each lesson includes a learning progression for the teacher, which provides connections to previous grade levels skills, the current grade level, and then extends to the following grade level. However, these topics are for teacher information only, they are not included in the lesson. **Evidence-** • Table of Contents (TE) A42-A43 • Math Assessment Booklet (SBAC Edition) • Interim Assessments • Lesson Quizzes included in the Teacher Toolbox (online) • Correlation Charts (TE) B3-B7	**(Reviewer only.)** **___X_Meets** **____Does Not Meet**
Non-Negotiable 1: Materials must reflect the content architecture of the Standards by not assessing the topics named* before the grade level where they first appear in the Standards. **NN 1** If Metric 1A was rated as Meets, then rate Non-Negotiable 1 as Meets. If Metric 1A was rated as Does Not Meet, then rate Non- Negotiable 1 as Does Not Meet. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion.**(Reviewer only.)** **Before moving to Non-Negotiable 2, record the final Meets or Does Not Meet rating in the Evaluation Summary.**		**(Reviewer only.)** **__X_Meets** **____Does Not Meet** **Strengths/Weaknesses: Focuses on assessing 4th grade standards.**

Directions for Non-Negotiable 2

Focus and Coherence

Non-Negotiable 2: **Focus and Coherence** **Materials must focus coherently on the Major Work of the grade in a way that is consistent with the progressions in the Standards.** Focus and coherence are the two major evidence-based design principles of the Common Core State Standards for Mathematics (CCSSM, p. 3). Focus is necessary in order to fulfill the ambitious promise the states have made to their students by adopting the Standards: greater achievement at the college and career ready level; greater depth of understanding of mathematics; and a rich classroom environment in which reasoning, sense-making, applications, and a range of mathematical practices flourish. In simpler terms, a mile-wide, inch-deep curriculum translates to less time per topic. Less time means less depth and moving on without many students. Thus, materials must focus coherently on the Major Work of the grade in a way that is consistent with the progressions in the Standards.	**Required Materials** • Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf) • Focus by Grade Level for the grade being evaluated (www.achievethecore.org/focus) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion:** Non-Negotiable 2 is rated as Meets or Does Not Meet. To rate Non-Negotiable 2, first rate metrics 2A–2H. Each of these eight metrics must be rated as Meets in order for Non-Negotiable 2 to be rated as Meets. Rate each metric 2A-2H as Meets or Does Not Meet/Insufficient Evidence. If the evidence examined shows that the Criterion is met, then mark the Criterion Meets. If the evidence examined shows that the Criterion is not met—or if there is insufficient evidence to make a determination—then mark the Criterion as Does Not Meet/Insufficient Evidence. Support all ratings with evidence.
Metric NN2A: **In each grade K–8, students and teachers using the materials as designed devote the large majority of time to the Major Work of the grade.** **How to Find the Evidence:** Familiarize yourself with the Major Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, lessons, homework assignments, and assessments. (Evaluate both student and teacher materials.) Consider time spent on the Major Work of the grade and judge qualitatively whether students and teachers using the materials as designed will devote the large majority of time to the Major Work of the grade. For context, read Criterion #1 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013)	The majority of the work is designed as the Major work of 5th grade. The program designates in the table of contents with an "M" if that content is a major work, making it easy for teachers to know what lessons ARE focused on the major work. With 31 lessons in the text, 22 are devoted to major works, equaling 71% When checking areas labeled as "M", it was found that they were indeed part of the major work for 5th grade. **Evidence-** • Year-Long Pacing (TE) A42-A43 • Correlation Charts (TE) B3-B7 • Unit Overviews • Individual Lesson Pacing Guides	**(Reviewer only.)** **_X___Meets** **____Does Not Meet/** **Insufficient Evidence**

Metric NN2B: **Supporting work, where present, enhances focus and coherence simultaneously by also engaging students in the Major Work of the grade.** **How to Find the Evidence:** Familiarize yourself with the Major Work and Supporting Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate chapters and lessons that focus on Supporting Work. NOTE: Example of evaluating this Criterion might include looking at whether materials for K–5 generally treat data displays as an occasion for solving grade-level word problems using the four operations (e.g., see 3.MD.B.3); or whether materials for grade 7 take advantage of opportunities to use probability to support ratios, proportions, and percentages. For context, read Criterion #3 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Supporting work is clearly identified in the table of contents. Materials provide coherence throughout each lesson in grade 5. The supporting works for the grade are not isolated from the major works. For example, in **Measurement and Data** (a supporting work), connections to using **perform operations with multi-digit whole numbers and with decimals to hundredths** (a major work) are made in most lessons. Connections to **Number and Operations-Fractions** (a major work) are also made within **represent and interpret data** (a supporting work). **Evidence:** • Lesson 21: Connects Measurement and Data with operations with decimals and whole numbers. Students convert measurements, by multiplying a whole number by a decimal, fractions, or whole numbers. • Lesson 23: Connects representing and interpreting data with number and operations in fractions as students use fractions to create line plots, and then answer questions which involves calculations with fractions.	**(Reviewer only.)** **_X___Meets** **____Does Not Meet/** **Insufficient Evidence**
Metric NN2C: **Materials base content progressions on the grade-by-grade progressions in the Standards. Content from previous or future grades does not unduly interfere with or displace on-grade-level content.** **How to Find the Evidence:** Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, and lessons in both student and teacher materials. NOTE: In some cases it may be possible that aligned materials might address some aspects of a topic in a strategic way before or after the grade level in which the topic is central in the Standards' progressions; for example, a curriculum author might purposefully choose to explore adding fractions with unlike denominators in a way appropriate to grade four, recognizing that this work is not really required until the next grade. However, any such purposeful discrepancies in content progressions should enhance the required learning in each grade; not unduly interfere with or displace grade-level content; and be clearly aimed at helping students meet the Standards as written rather than effectively rewriting the progressions in the Standards. And in all cases, note that Non-Negotiable 1 must be met for materials to be aligned. For context, read Criterion #5a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	Before each unit is a chart that shows "which lessons are students building on". This chart shows previous grade lessons that led to the relevant 5th grade lessons in the unit. It also shows what lessons the 5th grade lessons are preparing students for as they proceed to 6th grade. Prerequisite skills are also specified in the lesson overviews for each lesson along with a statement made on the learning progression that includes prior year, now and next year's information. Review of lessons reflects that these overviews coordinate with grade level standards. **Evidence-** • Teacher Toolbox (online) • Lesson unit progressions TE: Lesson 22 p. 222a previously students….in this lesson..in Grade 6…. • Unit 2: Which lessons are students building upon p. 93A (TE)	**(Reviewer only.)** **__X__Meets** **____Does Not Meet/** **Insufficient Evidence**

Metric NN2D: **Materials g[illegible]ll students extensive work with on-grade-level problems.** **How to Find the Evidence:** Evaluate both student and teacher materials. If the materials provide resources for differentiated learning, consider whether lower-performing students have opportunities to engage with grade-level problems. Also consider whether higher-performing students are given opportunities to learn current grade-level content in greater depth. For context, read Criterion #5b in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	Connections for remediation are at the end of every lesson as quick checks, alo[illegible]with suggestions for remediation, if needed. Both are designed to keep students working at the grade level. Lessons from the previous grade level are also listed that could be used as extra teaching and practice if needed to get students more ready for the current grade level work. Challenge activities are provided as well. The teacher manual makes connections to DOK for problems in the SBR. **Evidence-** • TE: Lesson 10 p. 102 Quick Check and Remediation • TE: Lesson 18 p. 167 Challenge Activity • Online Teacher Toolbox: Reteach tab	**(Reviewer only.)** **__X__Meets** **____Does Not Meet/** **Insufficient Evidence**
Metric NN2E: **Materials relate on-grade-level concepts explicitly to prior knowledge from earlier grades.** **How to Find the Evidence:** Evaluate both student and teacher materials. NOTE: Examples of evaluating this Criterion might include looking at the way the materials extend basic ideas of place value across the decimal point; or the role that properties of operations play when the materials extend arithmetic beyond whole numbers to fractions, variables, and expressions. More generally, cluster headings in the Standards sometimes signal key moments where reorganizing and extending previous knowledge is important in order to accommodate new knowledge (e.g., see cluster headings that use the phrase "Apply and extend previous understanding"). For context, read Criterion #5c in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	The prior learnings are explicitly laid out for teachers at the beginning of each unit, as well as in the remediation information. Problems are provided at the beginning of most lessons that encourage students to access prior knowledge. "Use What You Know". Self-checks are included so students can identify skills they already have as they start the unit. Prerequisite skills are listed for the teacher as well. Lessons are identified to pre-teach for those who may not be ready for the new information that is going to be taught in the current lesson. **Evidence-** • Lesson 16: SE p 142 "Now that you have learned how to multiply fractions, take a look at this problem." • Lesson 91: SE p. 180, "You know about the order of operations. Now you will see how using parentheses in an expression can change the value of the expression." • Lesson 5: SE p. 34 In grade 4, you multiplies…	**(Reviewer only.)** **___X_Meets** **____Does Not Meet/** **Insufficient Evidence**

Metric NN2F: **Review of material from previous grades is clearly identified as such to the teacher, and teacher and students can see what their specific responsibility is for the current year.** **How to Find the Evidence:** Evaluate the table of contents, but do not stop there; also evaluate units, chapters, lessons, homework assignments and assessments. (Evaluate both student and teacher materials.) Identify any content from previous grades and check whether it is identified as such. For context, read Criterion #5a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	Progressions show previous grade material but it is not the work in this grade. Previous lesson identification is provided for teachers (in the introduction of the lesson) to easily access if needed to help those who are behind. The Teacher Toolbox (online) also clearly identifies content from previous grade levels. **Evidence-** • Lesson 8 Overview (TE) p. 600a Prerequisites skills for the lesson and connections to learning progressions from grade 4. • Teacher Toolbox (online) Reteach Ready Prerequisite lessons	**(Reviewer only.)** **__X__Meets** **____Does Not Meet/ Insufficient Evidence**
Metric NN2G: **Materials include learning objectives that are visibly shaped by CCSSM cluster headings.** **How to Find the Evidence:** Select several clusters from the Major Work in the grade being evaluated. Evaluate teacher and student materials in relation to these clusters. For context, read Criterion #6a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	Objectives are directly shaped by CCSS cluster headings. Correlations are identified for teachers in each lesson. **Evidence-** • Clusters within Operations and Algebraic Thinking: Primary Instruction in Unit 3; Applied and extended in Unit 4. • Cluster is extending previous understanding of multiplication and division to multiply and divide fractions. Lessons 10-14 (pf TE p 94a support the learning of this cluster)	**(Reviewer only.)** **__X__Meets** **____Does Not Meet/ Insufficient Evidence**
Metric NN2H: **Materials include problems and activities that serve to connect two or more clusters in a domain, or two or more domains in a grade, in cases where these connections are natural and important.** **How to Find the Evidence:** In the grade being evaluated, choose two or more clusters or two or more domains for which connections are natural and important. Evaluate the units, chapters, and lessons that deal with the chosen topics, looking for problems and activities that serve to connect the chosen clusters or domains. NOTE: An example of evaluating this Criterion might include looking at whether problems in grade 4 sometimes or often involve students applying their developing computation skills (detailed in domain NBT) in the context of solving word problems (detailed in domain OA). For context, read Criterion #6b in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Math In Action lessons in each unit help students in how to tackle complex problems, like performance tasks. These lessons are connecting clusters. In the lesson overview, it states the cluster, standards, and then additional domains. In fifth grade, the cluster of perform operations with multi-digit whole numbers and with decimals to hundredths which is the Number and Operations in Base 10 domain is connected to the Operation and Algebraic Thinking and Number and Operations-Fractions domains throughout the materials. Topics are combined on the interim assessments at the end of units as well.	**(Reviewer only.)** **__X__Meets** **____Does Not Meet/ Insufficient Evidence**

Non-Negotiable 2:

Focus and Coherence

Materials must focus coherently on the Major Work of the grade in a way that is consistent with the progressions in the Standards.

NN 2 If all Metrics 2A – 2H were rated as Meets, then rate Non-Negotiable 2 as Meets. If one or more Metric was rated Does Not Meet/Insufficient Evidence, then rate Non-Negotiable 2 as Does Not Meet. Check the final rating.
Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)**

Before moving to Alignment Criterion 1, record the final Meets or Does Not Meet rating in the Evaluation Summary.

(Reviewer only.)

__X__Meets

____Does Not Meet

Strengths/Weaknesses:

Strengths:

- **Support for teachers in easily accessing the progressions.**
- **Connections made for students to prior knowledge**
- **Amount of time spent on major works of the grade**

Weaknesses:

- **Could be stronger in connecting clusters or domains**

Now continue by evaluating the Alignment Criterion 1 for Rigor and Balance.

Directions for Alignment Criterion 1

Rigor and Balance

Alignment Criterion 1: Rigor and Balance

Materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.

The Standards set expectations for attention to all three aspects of rigor: conceptual understanding, procedural skill and fluency, and applications. Thus, materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.

Required Materials

- Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf)
- Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)
- Focus by Grade Level for the grade being evaluated (achievethecore.org/focus)
- Situation Types for the Operations in Word Problems (achievethecore.org/situation-types)
- From the materials being evaluated: teacher guides, student texts and workbooks

Rating this Criterion:

Alignment Criterion 1 is rated as Meets or Does Not Meet.

To rate Alignment Criterion 1, first rate metrics 1A, 1B, and 1C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). For each metric, guiding questions are provided to aid in gathering evidence.

Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 1 if the materials rate 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as rigor and balance, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.

Metric AC1A:

The materials support the development of students' conceptual understanding of key mathematical concepts, especially where called for in specific content Standards or cluster headings.

How to Find the Evidence:

Select one or more cluster(s) or Standard(s) from the Major Work for the grade being evaluated that relate specifically conceptual understanding to use throughout the questions associated with this metric. NOTE: Some examples of clusters or Standards that call for conceptual understanding include: K.OA.A.1, (1.NBT.B, 1.NBT.C), (2.NBT.A, 2.NBT.B), (3.OA.A.1, 3.OA.A.2), 4.NF.A, (4.NBT.A, 4.NBT.B), 5.NF.B, (5.NBT.A, 5.NBT.B), 6.RP.A, 6.EE.A.3, 7.NS.A, 7.EE.A, 8.EE.B, 8.F.A, 8.G.A

Clusters or Standards grouped by parentheses are closely connected and could be analyzed together.

For context, read Criterion #4a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).

-Choose a cluster/Standard from the Major Work that is aligned to each aspect of rigor and use it to evaluate these metrics. It is most helpful if the same clusters/Standards are chosen for all of the programs being evaluated. (Guidance in choosing clusters/Standards is included in "How to Find the Evidence".)

Use the questions for AC Metric 1A to evaluate Metric 1A. Record evidence for each question and rate Metric 1A.

__X__Meets (2)

____Partially Meets (1)

____Does Not Meet (0)

Is conceptual understanding attended to thoroughly where the Standards set ex[illegible]expectations for understanding or interpreting? Evaluate lessons, chapter/unit assessments and homework assignments, paying attention to work aligned to Standards that explicitly call for understanding or interpreting. NOTE: Examples of evaluating this Criterion might include looking at how well the multi-digit addition and subtraction algorithms are developed and explained on the basis of place value and properties of operations; or how well the multi-digit multiplication and division algorithms are developed and explained on the basis of place value and properties of operations; or how well solving equations is presented and explained as a process of reasoning.	Conceptual understanding is addressed through the modeling and the guide[illegible]struction provided in each lesson, as well as though the Connect It activities. The TRB designates with the word "understand" in the table of contents the lessons that will focus on conceptual understanding. **Evidence-** • Connections to place value are made when teaching about the powers of ten (SE p. 8) • Lesson 6 (SE pf. 43) uses the area model to begin the division lesson, and then transitions to partial quotients.	
Do the materials feature high-quality conceptual problems and conceptual discussion questions? Evaluate lessons, chapter/unit assessments, and homework assignments. NOTE: Example of conceptual problems might include such questions as "Find a number greater than 1/5 and less than 1/4," or "If the divisor does not change and the dividend increases, what happens to the quotient?"	Students are asked to discuss with partners, write about it and identify when errors were made, etc. Direct questions to be used with class are provided in the TRB. Questions are also provided in the SE and the TRB in the Explain, Compare and Connect it sections. **Evidence-** **5.NBT.6** • The area model shows 345 divided by 15 (SE pg. 43) • "How is dividing with an area model similar to multiplying with an area model?" (SE pg. 43) • "Use the relationship between multiplication and division to estimate the quotient in a division problem (SE pg. 44) • Which equation cannot be represented by the model below? (SE pg. 48) • SE pg 95 "Write a multiplication equation that shows how the denominators of ¼ and ½ are related. Explain how this equation helps you write ½ as an equivalent fraction with a denominator of 4.	
Do the materials feature opportunities to identify correspondences across mathematical representations? Evaluate lessons, chapter/unit assessments and homework assignments. NOTE: Examples of evaluating this Criterion might include looking at whether students are supported in identifying correspondences among: the verbal description of a situation, the diagrams that distill its mathematical features, and the equations that model it; or equivalent forms of numbers (e.g., 3 and 6/2) and the number line; or rational number operations and representations of them via models such as the vector model; or the expression that defines a function and the graph that shows the relationship.	Opportunities to identify correspondences are provided throughout with discussions, mathematical discourse, picture it, model it, connect it opportunities. **Evidence-** • SE pg 95 Explain why you chose the type of model you did to solve this problem. • TE pg 35 Use the area model to illustrate the standard algorithm • SE pg. 34 'Why is the area model divided into six sections?" • SE pg. 37 "How do the three partial products in each multiplication equation….relate to the three sections in each row of the area model?"	

Metric AC1B: **The materials are designed so that students attain the fluencies and procedural skills required by the Standards.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Major Work for the grade being evaluated that relate specifically to fluency and procedural skill to use throughout the questions associated with this metric. NOTE: Some examples of Standards that call for procedural skill and fluency include: K.OA.A.5, 1.OA.C.6, 2.OA.B.2, 2.NBT.B.5, 3.OA.C.7, 3.NBT.A.2, 4.NBT.B.4, 5.NBT.B.5, 6.NS.B.2, and 6.NS.B.3, 6.EE.A, 7.NS.A, 7.EE.A.1,7.EE.B.4a, 8.EE.C.7, 8.EE.C.8b For context, read Criterion #4b in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).		**Use the questions for Metric 1B to evaluate Metric 1 B. Record evidence for each question and rate Metric 1B.** **(Reviewer only.)** **____Meets (2)** **_X___Partially Meets (1)** **____Does Not Meet (0)**
Is progress toward fluency and procedural skill interwoven with students' developing conceptual understanding of the operations in question? Evaluate lessons, chapter/unit assessments, daily routines, and homework assignments for evidence that the development of fluency and procedural skill is supported by conceptual understanding.	Student's progression toward fluency is balanced with procedural skills. Practice, and time devoted to fluency of the skill is weak. **Evidence-** • In the materials 5.NBT.5, is taught in only 1 lesson, which should last only 3 days. • Practice for mastering fluency is weak and dedicated only to the identified lesson on multiplying multi-digit whole numbers using the traditional algorithm (Lesson 5). • Additional practice is found in the online materials.	
Are purely procedural problems and exercises present that include cases in which opportunistic strategies are valuable and generic cases that require efficient algorithms present? Evaluate lessons, chapter/unit assessments, daily routines, and homework assignments. NOTE: Examples of problems in which opportunistic strategies are valuable might include the sum 698 + 240 or the system x + y = 1, 2x + 2y = 3. Examples of generic cases that require efficient algorithms might include the sum 8767+2286 or the system 6y + x = x + 3, – x = 1 + 2y.	There is procedural practice found in the practice and problem solving book……both those that allow opportunistic strategies and those that require more traditional use of algorithms. • Fluency pages 352 and 353 in Practice/Problem Solving Book, opportunistic: problem 3 and 19 • SE pg. 58 practice problems (*3 would require an algorithm) • Practice and Problem Solving pg 61 would require algorithms • Practice and Problem Solving pg 178 would support the use of a model to solve the story problem.	
Do the materials in grades K–6 provide repeated practice toward attainment of fluency Standards? Evaluate lessons, daily routines, and homework assignments for evidence of repeated practice toward attainment of the following K–6 Standards that set an explicit expectation of fluent (accurate and reasonably fast) computation: K.OA.A.5, 1.OA.C.6, 2.OA.B.2, 2.NBT.B.5, 3.OA.C.7, 3.NBT.A.2, 4.NBT.B.4, 5.NBT.B.5, 6.NS.B.2, 6.NS.B.3.	The materials DO NOT provide repeated practice toward the attainment of fluecy of NBT 5, multiplying multi-digit whole numbers using the standard algorithm. Work towards this fluency is limited to Lesson 5. Additional practice for fluency is found in the Teacher Toolbox (online materials).	

Metric AC1C: **The material[illegible]e designed so that teachers and students spend sufficient time working with engaging applications, without losing focus on the Major Work of each grade.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Major Work for the grade being evaluated that relate specifically application to use throughout the questions associated with this metric. NOTE: Some examples of clusters or Standards that call for application include: K.OA.A.2, 1.OA.A, 2.OA.A, 3.OA.A.3, 3.OA.D.8, 4.OA.A.3, 4.NF.B.3d, 4.NF.B.4c, 5.NF.B.6, 5.NF.B.7c, 6.RP.A.3, 6.NS.A.1, 6.EE.B.7, 6.EE.C.9, 7.RP.A, 7.NS.A.3, 7.EE.B.3, 8.EE.C.8c, 8.F.B For context, read Criterion #4c in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Yes, through the Introduction[illegible] the modeled and guided instruction, students and teachers spend a significant amount of time with engaging applications, focused on the major work. Fifth grade standards that call for application specifically are 5.FB.6 and 5.NF.B.7c 5.NF.B.7c is addressed in Lesson 18, on pages 158 a-167.	**Use the questions for Metric 1C to evaluate Metric 1C. Record evidence for each quest[illegible]nd rate Metric 1C.** **(Reviewer only.)** **__X__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Are there are single- and multi-step contextual problems, including non-routine problems, that develop the mathematics of the grade, afford opportunities for practice, and engage students in problem solving? Do the problems attend thoroughly to those places in the content Standards where expectations for multi-step and real-world problems are explicit? Evaluate lessons, chapter/unit assessments, and homework assignments.	Problem solving opportunities are plentiful and there is a mix of single step and multi-step problems to be solved. The majority of lessons include either single or multi-step problems in class work, independent practice, and homework. Performance tasks, as well as Math In Action lessons require students work through multi-step problems. **Evidence-** • Math In Action: TE pg. 82A students examine a complex problem and discuss how it was solved before progressing to solve multi-step problems on their own. • "Mr. Bernstein will cut 8 pies into pieces that are each 1/6 of the whole. After he cuts the 8 pies, how many pieces will Mr. Bernstein have" SE pg. 16. • Practice and Problem Solving pg. 254: Using data in the line plot to solve. IF Miguel uses 2 of each length strip to make a line, how long would it be?	

Do application problems particularly stress applying the Major Work of the grade? Evaluate lessons, chapter/unit assessments, and homework assignments. NOTE: Examples of evaluating this Criterion might include looking at: how well, by the end of grade 2, students using the materials as designed can represent and solve a full range of one-step addition and subtraction word problems; or how well, by the end of grade 3, students using the materials as designed can represent and solve a full range of one-step multiplication and division word problems; or how well these basic situation types for each operation are carried coherently across the grades, (e.g., with fractions and algebraic expressions); or, in all grades, whether the problems connect concepts, Standards, and domains in ways that are natural and important. For a list of situation types for one-step addition, subtraction, multiplication, and division problems, see Situation Types for the Operations in Word Problems	The major works of the grade are supported through application problems. Varied situation-type problems are used throughout the materials. The work required builds on prior learning, and is designated for teachers in the TRB. **Evidence-** • Practice and problem Solving • "Corrine picked ¼ gallon of blackberries. She poured the berries equally into 4 containers. What fraction of a gallon is in each container? (SE pg. 164) • A sticker is ½ centimeters wide. How many stickers will fit edge to edge on a strip of paper that is 108 centimeters long? (SE pg. 80).	
Does modeling build slowly across K–8, with applications that are relatively simple in earlier grades and when students are encountering new content? In grades 6–8, do the problems begin to provide opportunities for students to make their own assumptions or simplifications in order to model a situation mathematically? Read Standard for Mathematical Practice 4, Model with Mathematics. Evaluate lessons, chapter/unit assessments, and homework assignments.	Modeling is a focus using a variety of ways throughout this program. Each lesson provides teachers with guidance to implement modeling into the instruction. Students are expected to utilize models in solving problems as well. Complexity of models is increased as concept complexity increases. Connections to previous models are made as well. **Evidence-** • Lesson 9 SE p. 72 shows a bar model to represent dividing a decimal by a whole number. SE pg. 74 shows 100 grids, dividing decimals. • Lesson 13 SE p. 122 uses the area model to show multiplying a fraction by a fraction. • Practice and Problem Solving p. 168! Students are asked to use the number line to solve 3 divided by 1/3.	

Alignment Criterion 1: Rigor and Balance

Materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.

AC1 Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 out of 6 points, the Criterion has not been met. Check the final rating.
Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)**

Before moving to Alignment Criterion 2, record the final Meets or Does Not Meet rating in the Evaluation Summary.

(Reviewer only.)

_X___Meets

____Does Not Meet

Strengths/Weaknesses:

- **Provided many opportunities for multi-step problem solving.**
- **Abundance of modeling**

Weakness:
Practice, and time devoted to fluency of the skill is weak.

Directions for Alignment Criterion 2

Standards for Mathematical Practice

Alignment Criterion 2: Standards for Mathematical Practice

Materials must demonstrate authentic connections between content Standards and practice Standards.

The Standards require that designers of instructional materials connect the mathematical practices to mathematical content in instruction. Thus, materials must demonstrate authentic connections between content Standards and practice Standards.

Required Materials:

- Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf)
- Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)
- Focus by Grade Level for the grade being evaluated (www.achievethecore.org/focus)
- From the materials being evaluated: teacher guides, student texts and workbooks

Rating this Criterion

Alignment Criterion 2 is rated as Meets or Does Not Meet.

To rate Alignment Criterion 2, first rate metrics 2A, 2B, and 2C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). For each metric, guiding questions are provided to aid in gathering evidence.

Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 2 if the materials earn 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as mathematical practices, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.

Metric AC2A: **Materials address the practice Standards in such a way as to enrich the Major Work of the grade; practices strengthen the focus on Major Work instead of detracting from it, in both teacher and student materials.** **How to Find the Evidence:** Familiarize yourself with the Major Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate teacher and student materials for evidence that the mathematical practices support and connect to the focus of the grade. NOTE: Examples of evaluating this Criterion might include looking at whether, in grades K–5, students using the materials are supported to look for and express regularity in repeated reasoning about the addition table, the multiplication table, the properties of operations, the relationship between addition and subtraction or multiplication and division, and the place value system; or whether, in grades 6–8, students using the materials are supported to look for and express regularity in repeated reasoning about proportional relationships and linear functions. For context, read Criterion #8 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013).	**Evidence-** The practice standards are clearly identified in each lesson for teachers to help make their use intentional. Students reflect on these standards in performance tasks at the end of units. Support for teachers for practice standards appears in a variety of places and ways in the TRB. - Correlations in the table of contents (SE pg. SMPi-SPM8) - descriptors on page A9 of TRB - Content standards are on the first page of each lesson - tips highlighting different practice standards in each lesson are provided -	**(Reviewer only.)** **__X__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Metric AC2B: **Materials attend to the full meaning of each practice Standard.** **How to Find the Evidence:** For context, read Criterion #7 and Criterion #9 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).		**Use the questions for Metric 2B to evaluate Metric 2B. Record evidence for each question and rate Metric 2B.** **(Reviewer only.)** **__X__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Over the course of any given year of instruction, is each mathematical practice Standard meaningfully present in the form of assignments, activities, or problems that stimulate students to develop the habits of mind described in the practice Standard? Evaluate lessons, chapter/ unit assessments, and homework assignments for evidence of each mathematical practice being meaningfully present in instruction.	The mathematical practice standards are present in each lesson through assignments, activities and problems. **Evidence-** • SMP are built into the instruction and problems throughout the student book. • Performance Tasks in the Practice and Problem Solving Guide ask students to reflect on Mathematical practices. P. 185 • The mathematical practices are stated at the beginning of the Student Edition with explanations (SE pg SMPi-SMP8)	

Do the materials treat the practice Standards as developing across grades or gra[illegible]ds? Are the practice Standards in early grades appropriately simple? Do they display an arc of growing sophistication across the grades?	Correlations are in the table of contents of the TRB	
Are there teacher-directed materials that explain the role of the practice Standards in the classroom and in students' mathematical development? Are alignments to practice Standards accurate?	Practice standards are listed with content standards on 1st page of each lesson overview in TRB **Evidence-** • pg 8a and 168a in TRB • There are detailed descriptions on P. A16-A17 of TRB • The Table of Contents (TE pg A4-A7) state the embedded standards for mathematical practice for each lesson.	
Metric AC2C: **Materials support the Standards' emphasis on mathematical reasoning.** **How to Find the Evidence:** For context, read Criterion #10 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).		**Use the questions for Metric 2C to evaluate Metric 2C. Record evidence for each question and rate Metric 2C.** **(Reviewer only.)** **__X__Meets (2)**
Do the materials support students in constructing viable arguments and critiquing the arguments of others concerning grade-level mathematics that is detailed in the content Standards? Read Standard for Mathematical Practice 3. Evaluate teacher and student materials to ensure that students are given opportunities to reason with grade-level mathematics.	The materials place a strong emphasis on a student's ability to reason and provides numerous opportunities to practice their reasoning skills. Students must explain, justify, show, or prove their thinking daily. Guided instruction questions and mathematical discourse questions are provided in each lesson for small groups and/or whole class discussions **Evidence-** • pgs. 142-147 TRB • In lessons, students are asked to reflect. On SE pg 105, they must explain which estimate makes more sense to them and why • Each unit has a performance task, found in the practice and problem solving book, which has a question directly related to reasoning mathematically. P. 185. How did you make sure that you had enough sunflower seeds for all your batches of snack mi? • In daily lessons, students are asked to Pair/Share with another student SE p. 133 Does Ollie's answer make sense?	**____Partially Meets (1)** **____Does Not Meet (0)**

Do the materials support students in producing not only answers and solutions, but also in a grade-appropriate way, arguments, explanations, diagrams, mathematical models, etc., especially in the Major Work of the grade? Familiarize yourself with the Major Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate teacher and student materials, to understand the types of work students are expected to produce.	Students are expected to explain, share their thinking, create models and/or diagrams each lesson. **Evidence-** • pair share/ pgs. 148 and 149 • Mathematical discourse questions page 146 • Let's Talk About it page 139 • Let's Explore the idea page 138 • Reflect, page 137 • Justify page 156 • Each lesson has a modeling component SE pg. 106 First students are provided a model as an example, and then they create a model. • Show that ½ divided by 3 = 1/6 by using a model. Explain why the result is less than the number you started with, ½.	
Do materials explicitly attend to the specialized language of mathematics? Is the language of argument, problem solving, and mathematical explanations taught rather than assumed? Evaluate teacher and student materials, paying attention to how mathematical language is taught. NOTE: Examples of evaluating this Criterion might include looking at whether students are supported in: basing arguments on definitions; using the method of providing a counterexample; or recognizing that examples alone do not establish a general statement.	The materials are weak in their use and teaching of the language of mathematics. Vocabulary is stated for each lesson, with those words in bold in student materials. However, there is explicit instruction on language for argument, problem solving, and mathematical explanations. **Evidence-** • TE pg 190a Lesson Vocabulary • Practice and Problem Solving Vocabulary pages pg. 93-100	

Alignment Criterion 2:
Standards for Mathematical Practice

Materials must demonstrate authentic connections between content Standards and practice Standards.

AC2 Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 out of 6 points, the Criterion has not been met. Check the final rating.
Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion.
(Reviewer only.)

Before moving to Alignment Criterion 3, record the final Meets or Does Not Meet rating in the Evaluation Summary.

(Reviewer only.)

__X__Meets

____Does Not Meet

Strengths/Weaknesses:

Alignment Criterion 3: **Access to the Standards for All Students** **Materials must provide supports for English Language Learners and other special populations.** Because Standards are for all students, alignment requires thoughtful support to ensure all students are able to meet the Standards. Thus, aligned materials must provide supports for English Language Learners and other special populations.	**Required Materials:** • Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion:** Alignment Criterion 3 is rated as Meets or Does Not Meet. To rate Alignment Criterion 3, first rate metrics 3A, 3B, and 3C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 3 if the materials earn 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as support for special population, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.
Metric AC3A: **Support for English Language Learners and other special populations is thoughtful and helps those students meet the same Standards as all other students. The language in which problems are posed is carefully considered.** **How to Find the Evidence:** Evaluate teacher and student materials, paying attention to supports offered for special populations.	**Evidence-** ELL tips are provided in many lessons, such as TRB pg 168 and202. Visual representations are used throughout the program, in modeled instruction and in practice work Visual models are provided in TRB frequently (TE p 113) demonstrate the connection between the two diagrams. Language is presented in student friendly way throughout Students are encouraged to answer questions verbally and in their own words Tips are provided for visual models to be used in instruction	**Reviewer only.)** **_X___Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Metric AC3B: **Materials provide appropriate level and type of scaffolding, differentiation, intervention, and support for a broad range of learners with gradual removal of supports, when needed, to allow students to demonstrate their mathematical understanding independently.** **How to Find the Evidence:** Evaluate teacher and student materials, paying attention to whether materials provide differentiation that will lead all learners to engage with on-grade-level content.	The progression is clearly spelled out There are extensions, challenged, ELL tips, quick checks and remediation tips provided. Lesson progress from modeled and guided instruction to guided practice to independent practices and assessments are available. Practice can be individualized for students by the teacher. Differentiated instruction is found at the end of each lesson. **Evidence-** • Learning Progressions provided in each lesson create an awareness of what skills students should already have This can help provide scaffolding for students below grade-level (TE p. 120a) • Small group differentiation (TE p. 142b) • Personalized learning available on iready.com • Quick check and remediation (independent practice) TE p 166	**Reviewer only.)** **__X__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**

Metric AC3C: **Design of lessons recommends and facilitates a mix of instructional approaches for a variety of learners such as using multiple representations (e.g., including models, using a range of questions, checking for understanding, flexible grouping, pair-share).** **How to Find the Evidence:** Evaluate teacher materials, noting instructional approaches suggested for whole class and differentiated lessons and activities.	The mix is provided through modeled and guided instruction in each lesson. Activities and visual models in each lesson are provided. The teacher toolbox offers variety as well. Many opportunities to incorporate Pair/Share are available for teachers and students, with questions provided to the teachers. Guided instruction includes questions that have students think about and understand different representations and how they are related. **Evidence-** **The following are found in Lesson 10 in 5 days:** • **Hands-On Activity (TE p. 94)** • **Picture It SE p. 96. Use a picture to help understand the problem** • **Model It SE p. 96. Use a number line to add fractions.** • **Visual Model TE p. 95 Relate halves to fourths.** • **Pair/Share SE p. 100-101** • **Concept Extension TE pg. 96** • **Differentiated Instruction 247 B**	**Reviewer only.)** **__X__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Alignment Criterion 3: **Access to the Standards for All Students** **Materials must provide supports for English Language Learners and other special populations.** **AC3** Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 points, the Criterion has not been met. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion.**(Reviewer only.)** **Move to the Evaluation Summary and record the final Meets or Does Not Meet rating .**		**(Reviewer only.)** **__X__Meets** **____Does Not Meet** **Strengths/Weaknesses:**

Once an evaluation for alignment to the Shifts and major features of the CCSS has been conducted using Sections 1-3, it's important to evaluate for overall quality and best practices. A starting list of Indicators of Quality are suggested below. States, districts and others evaluating instructional materials are encouraged to add to this list to ensure materials reflect local contexts. For background information on some of the Indicators of Quality in this section, refer to pp.18–21 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).

Indicators of Quality	Evidence- Give specific examples.	Rating: (Reviewers only.)
1. Lessons are thoughtfully structured and support the teacher in leading the class through the learning paths at hand, with active participation by all students in their own learning and in the learning of their classmates.	Each lesson contains clear progression from whole class instruction to guided practice to independent practice. Much questions and discussion is included in each, as it the use of models to represent the work being done. All lessons are structured in a manner providing students with support and time to become independent. Evidence: Lesson introduction, modeled and guided instruction, guided practice, independent practice, lesson quiz	(Reviewer only.) __X____ Yes _____ No
2. The underlying design of the materials includes both problems and exercises. (In solving problems, students learn new mathematics, whereas in working exercises, students apply what they have already learned to build mastery.) Each problem or exercise has a purpose. **NOTE: This Criterion does not require that the problems and exercises be labeled as such.**	Both problems and exercises are provided for each skill and exercises spiral throughout the program. All standards are represented through these problems and exercises. **In the introduction and modeled and guided instruction, students participate in solving problems. As students gain experience and practice with the concept, they transition to solving exercises in the Independent Practice portion of the lesson.**	(Reviewer only.) ___X___ Yes _____ No
3. Design of assignments is not haphazard: exercises are given in intentional sequences in order to strengthen students' mathematical understanding.	There is a clear progression, from grade to grade, and throughout each grade's standards. Clearly noted for teachers to see the progression and help them understand the importance of meeting their grade level needs to prepare students for the expectations in the next grade level. Evidence-Lessons begin "Use What You Know" to provide connections to student's prior knowledge and then transitions to "Find Out More" which adds to the student's knowledge base and leads to deeper learning. (SE p 104-105) **Problems in Independent practice increase in difficulty throughout the assignment**	(Reviewer only.) ___X___ Yes _____ No

4. There are separate teacher materials that support and reward teacher study including, but not limited to: discussion of the mathematics of the units and the mathematical point of each lesson as it relates to the organizing concepts of the unit, discussion on student ways of thinking and anticipating a variety of students responses, guidance on lesson flow, guidance on questions that prompt students thinking, and discussion of desired mathematical behaviors being elicited among students.	The materials provide teachers support in teaching the lesson as well as prov[illegible]g a deeper understanding of the concepts themselves. Evidence: • Progression Chart (beginning of each unit) shows what students are building on and what the lesson is preparing students for (TE p. 424 a-b) • Lesson Learning Progression tells teachers what students have done in previous grades, will do in this grade, and the next grade. • Concept Extensions (TE p. 264) • Mathematical Discourse provides questions teachers can ask to deepen student understanding (TE p. 266) • Quick Check and Remediation provide explanation of why students may have given an incorrect response and how to remediate based on the response (TE p. 22)	**(Reviewer only.)** **___X___ Yes** **_____ No**
5. Manipulatives suggested in the materials are faithful representations of the mathematical objects they represent and are connected to written methods.	Manipulatives are occasionally shown in both modeled and guided instruction. When suggested, they are appropriate.	**(Reviewer only.)** **_____ Yes** **____X__ No**
6. Materials include a variety of curriculum-embedded assessments. Examples include pre-, formative, summative, and self-assessment resources.	Many options for formative and summative assessments. **Evidence-** • Try It Questions, Guided Practice, Pair/Share, Lesson Quiz-included in each lesson. • At the end of each Lesson is a Quick Check • At the end of each unit is an Interim Assessment • Benchmark Assessment (3 times a year) • Teacher Toolbox (online) has quizzes	**(Reviewer only.)** **__X____ Yes** **_____ No**
7. Assessments contain aligned rubrics, answer keys, and scoring guidelines that provide sufficient guidance for interpreting student performance.	All assessments for the materials contain rubrics, answer keys, and score guides. Performance tasks have rubrics as well. **Evidence-** • Interim Assessment Solutions TE p. 208-210a • Quick Check and Remediation TE p. 166	**(Reviewer only.)** **__X____ Yes** **_____ No**

8. Materials assess student proficiency using methods that are accessible and unbiased, including the use of course-level language in student prompts.	**Materials used to assess for proficiency are appropriate to the grade level, and are not biased. All students receive the same opportunities to display proficiency.**	**(Reviewer only.)** **____X__ Yes** **____ No**
9. Materials are carefully evaluated by qualified individuals, whose names are listed, in an effort to ensure freedom from mathematical errors and course-level appropriateness.	**Teacher advisors and authors are listed in the front of the TE.**	**(Reviewer only.)** **___X___ Yes** **_____ No**
10. The visual design supports students in engaging thoughtfully with the subject. Navigation through the text is clear.	**Evidence-** The student edition seems to be engaging. The lessons follow a format that is consistent and easy to follow. Some pictures are included, with many tables, graphs, and charts. These items do not distract from the math.	**(Reviewer only.)** **___X___ Yes** **_____ No**
11. The materials engage parents in appropriate ways. For example, homework assignments in elementary grades, consist of routine problems, practice with getting answers, and fluency-building exercises that parents can easily support.	The materials are created to engage parents and support parents and students with math work at home. **Evidence-** There are family letters, family activities, practice and problem solving parent pages and an APP that is free that could be used at home with families.	**(Reviewer only.)** **__X___ Yes** **_____ No**

Reviewer IMET Evaluation Summary **Title/Level: __ Ready Common Core_____**

Publisher: _____ Copyright: __2016

Reviewer ID # ___TJ and AJ_____ Date Review Completed:_3/8/2016_____

Non-Negotiable Criteria- Each Non-Negotiable must be met in order for the Non-Negotiable Alignment Criteria to be met overall.	
Non-Negotiable 1: Freedom from Obstacles to Focus **___X___ Meets** **_____ Does Not Meet**	**Non- Negotiable 2: Focus and Coherence** **__X___ Meets** **_____ Does Not Meet**

Non-Negotiable Overall:

__X___ Meets **_____ Does Not Meet**

Alignment Criteria- Each Alignment Criterion must be met with a sufficient number of points in order for Alignment Criteria to be labeled as "Meets" overall. The more points the materials receive on the Alignment Criteria, the better they are aligned.

Alignment Criterion 1: Rigor and Balance	**Alignment Criterion 2: Standards of Mathematical Practice**	**Alignment Criterion 3: Access to Standards for All Learners**
Points: ___5__ of 6 possible. **(Materials must receive at least 5 of 6 points to align.)** **____X___ Meets** **_____ Does Not Meet**	**Points: __6___ of 6 possible.** **(Materials must receive at least 5 of 6 points to align.)** **____X___ Meets** **_____ Does Not Meet**	**Points: __6___ of 6 possible.** **(Materials must receive at least 5 of 6 points to align.)** **___X____ Meets** **_____ Does Not Meet**

Alignment Criteria Overall:

__X___ Meets **_____ Does Not Meet**

If the materials meet both Non-Negotiables and relevant Alignment Criterion, they are aligned to the Shifts and major features of the Core Standards. **Do the materials meet every Non-Negotiable and Alignment Criterion? ___X__ Yes _____ No**

What are the specific areas of strength and weakness based on this evaluation? Publishers or others modifying or developing assessments can use this information to make improvements and/or to remedy gaps in the alignment of assessment materials.

EVIDENCE SUMMARY:

FOCUS- The program maintains consistent focus on the concepts, skills and processes aligned to the Common Core Content Standards and Mathematical Practices. It is free of extraneous or non-aligned content.

COHERENCE- Mathematics is presented as interrelated concepts and skills. The Teacher Resource Book supports coherence and progressive development of ideas, concepts, skills and processes.

RIGOR- Scope and pacing of materials attends to the components of conceptual understanding, procedural skill, fluency and applications. The program sets high expectations for all three components throughout the materials for teacher, student and parents.

CONCEPTUAL UNDERSTANDING- Conceptual understanding is attended to thoroughly where the Standards set explicit expectations for understanding or interpreting. Materials provide students enactive, iconic and symbolic opportunities to develop and communicate understandings of the major clusters of the grade 6 Standards.

MATHEMATICAL PRACTICES- This is a strength of the program. Standards of Mathematical Practice (SMP) are embedded in each lesson. All Practice Standards are embedded in the instructions usually providing students opportunities for guided and independent engagement with the SMP. Each lesson focuses on 2 – 8 of the standards. All eight SMPs are embedded in each of the five units. Across the lesson, materials give teachers guidance on drawing out mathematical practices. The parent pages help guide parents in mathematical thinking.

ACCESSIBILITY OF STANDARDS TO ALL STUDENTS- Lessons are designed on a gradual release of responsibility model over the course of several days, i.e. Introduction, Guided instruction, Guided practice, Independent Practice. Differentiation, remediation and scaffolding support as well as the variety of approaches give teachers considerable guidance and support accessibility for all students.

OTHER:

The curriculum has easy navigation, teacher and student engagement, as well as purposeful focus on the mathematics.

2015-16 Interim Mathematics Review

Mathematics Evaluation Tool Grades K-8

Publisher: Curriculum Associates

Title of Material: Ready Common Core Mathematics, Grade 6

Author: Curriculum Associates

ISBN #: 9780760986417 **Copyright** 2014

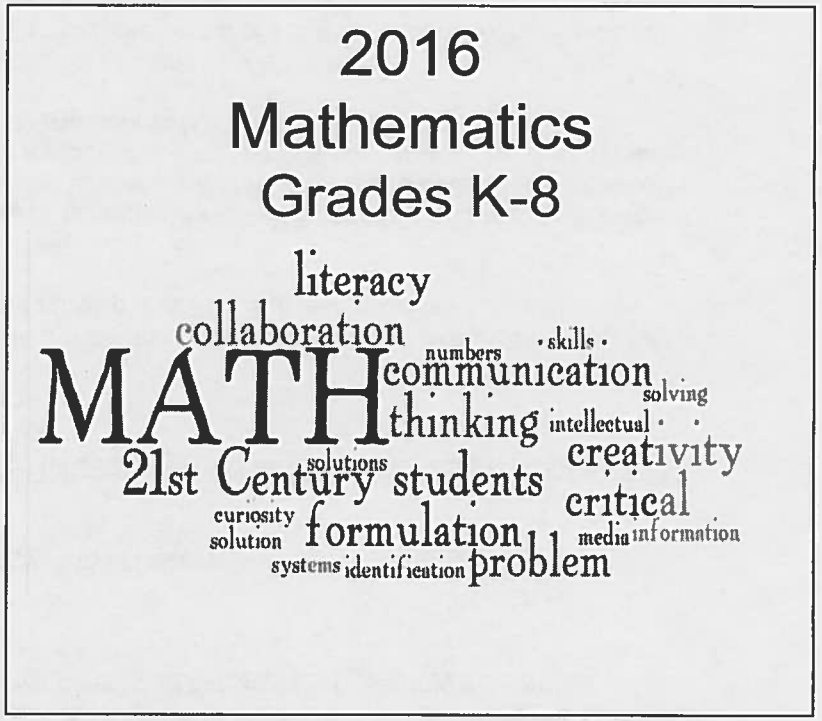
Reviewer ID: TS HC

Core Mathematics Program- a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Core.

Other Mathematics Program- a program that substantially, but partially, meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Other.

Component Mathematics Program- a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs.
Substantial evidence clearly supports the designation of this program as Component.

Intervention Program- a program designed and intended to target and support students' specific needs.
Substantial evidence clearly supports the designation of this program as Intervention.



- Evaluation Form adapted from Instructional Materials Evaluation Toolkit (IMET).

The IMET was developed by Student Achievement Partners. Educators may use or adapt. http://creativecommons.org/licenses/by/3.0/ Download this tool at http://achievethecore.org/IMET

Instructional Materials Evaluation Tool
Mathematics, Grades K-8

What Are the Purposes of the IMET?
This Math IMET is designed to help educators determine whether instructional materials are aligned to the Shifts and major features of the Common Core State Standards (CCSS). The substantial instructional Shifts (http://www.corestandards.org/other-resources/key-shifts-inmathematics/) at the heart of the Common Core State Standards are:
- **Focus** strongly where the Standards focus
- **Coherence**: Think across grades and link to major topics within the grade
- **Rigor**: In major topics, pursue conceptual understanding, procedural skill and fluency, and application with equal intensity.

The IMET draws directly from the following documents:
- Common Core State Standards for Mathematics (www.corestandards.org/Math)
- Publishers' Criteria for the Common Core State Standards in Mathematics grade K-8 (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)

When to use the IMET
1. Purchasing materials: Many factors go into local purchasing decisions. Alignment to the Standards is a critical factor to consider. This tool is designed to evaluate alignment of instructional materials to the Shifts and the major features of the CCSS. It also provides suggestions of additional indicators to consider in the materials evaluation and purchasing process.

2. Evaluating materials currently in use: The IMET can be used to analyze the degree of alignment of existing materials and help to highlight specific, concrete flaws in alignment. Even where materials and tools currently in use fail to meet one or more of these criteria, the pattern of failure is likely to be informative. States and districts can use the evaluation to create a thoughtful plan to modify or combine existing resources in such a way that students' actual learning experiences approach the focus, coherence, and rigor of the Standards.

3. Developing programs: Those developing new programs can use this tool as guidance for creating aligned curricula.
Please note this tool was designed for evaluating comprehensive curricula (including any supplemental or ancillary materials), but it was not designed for the evaluation of standalone supplemental materials.

Who Uses the IMET?
Evaluating instructional materials requires both subject-matter and pedagogical expertise. Evaluators should be well versed in the Standards (www.corestandards.org/Math) for all grades in which materials are being evaluated. This includes understanding the Major Work of the grade (www.achievethecore/focus), the Supporting and Additional work, how the content fits into the progressions in the Standards (www.achievethecore.org/progressions), and the expectations of the Standards with respect to conceptual understanding, procedural skill and fluency, and application. Evaluators also should be familiar with the substantial instructional Shifts (http:// www.corestandards.org/other-resources/key-shifts-in-mathematics/) of Focus, Coherence and Rigor that are listed above.

Getting Started
Prior to Evaluation

Assemble all of the materials necessary for the evaluation. It is essential for evaluators to have materials for all grades covered by the program, as some criteria cannot be rated without having access to each grade. In addition, each evaluator should have a reference copy of the Common Core State Standards for Mathematics (CCSSM) and the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013).

Before conducting the evaluation itself, it is important to develop a protocol for the evaluation process. The protocol should include having evaluators study the Publishers' Criteria and the IMET. It will also be helpful for evaluators to get a sense of each program overall before beginning the process. At a minimum, this would include reading the front matter of the text, looking at the table of contents and paging through multiple chapters.

Sections 1-3 below should be completed to produce a comprehensive picture of the strengths and weaknesses of the materials under evaluation. Information about areas in need of improvement or supplementation should be shared with internal and external stakeholders.

Navigating the Tool

Begin with Section 1: Non-Negotiable Alignment Criteria

- The Non-Negotiable Alignment Criteria must each be met in full for materials to be considered aligned to the Shifts and the major features of the Common Core State Standards. Each Non-Negotiable Alignment Criterion has one or more metrics associated with it; every one of these metrics must be met in order for the criterion as a whole to be met.

- Examine the relevant materials and use evidence to rate the materials against each criterion and its associated metric(s).

- Record and explain the evidence upon which the rating is based.

Continue to Section 2: Alignment Criteria

- The Alignment Criteria must each be met for materials to be considered aligned to the Shifts and the major features of the Common Core State Standards. Each Alignment Criterion has one or more metric associated with it; a specific number of these metrics must be met or partially met in order for the criterion as a whole to be met.

- Examine the materials in relation to these criteria, assigning each metric a point value. Rate the criterion as "Meets" or "Does Note Meet" based on the number of points assigned. The more points the materials receive on the alignment Criteria, the better they are aligned.

Metric NN2D: **Materials gi[illegible]l students extensive work with on-grade-level problems.** **How to Find the Evidence:** Evaluate both student and teacher materials. If the materials provide resources for differentiated learning, consider whether lower-performing students have opportunities to engage with grade-level problems. Also consider whether higher-performing students are given opportunities to learn current grade-level content in greater depth. For context, read Criterion #5b in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Differentiation is p[illegible]ided through online videos and intervention lessons for students without prerequisite knowledge. The teacher's manual includes Assessment and Remediation activities as well as Challenge Activities. The online Teachers Toolbox also provides extension activities for higher achieving students. Models and step by step procedures are provided throughout most lessons. The sequence is Picture It, Model It, Connect It, and Try It. This instructional pattern almost gives the sense that this textbook could be used as an intervention rather than as a core textbook. There is an opportunity for guided practice and independent practice within each lesson. The Practice and Problem Solving Workbook provides more opportunities for practice. Related games are also opportunities for on grade level practice.	**(Reviewer only.)** **__X__Meets** **____Does Not Meet/** **Insufficient Evidence**
Metric NN2E: **Materials relate on-grade-level concepts explicitly to prior knowledge from earlier grades.** **How to Find the Evidence:** Evaluate both student and teacher materials. NOTE: Examples of evaluating this Criterion might include looking at the way the materials extend basic ideas of place value across the decimal point; or the role that properties of operations play when the materials extend arithmetic beyond whole numbers to fractions, variables, and expressions. More generally, cluster headings in the Standards sometimes signal key moments where reorganizing and extending previous knowledge is important in order to accommodate new knowledge (e.g., see cluster headings that use the phrase "Apply and extend previous understanding"). For context, read Criterion #5c in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Each lesson begins with a reminder of what the student learned in previous grades or in a previous lesson. For example, the lesson on Common Factors and Multiples reminds the students they have worked with factors in the past. Students are invited to "Use the math you already know to solve this problem," in the Explore It section of each lesson. Another example can be found in the reminder to use what the students know about place value when extending the division algorithm to decimal division. Example: p. 90 student workbook p. 102 student workbook p. 206 student workbook	**(Reviewer only.)** **__X__Meets** **____Does Not Meet/** **Insufficient Evidence**

Metric NN2F: **Review of material from previous grades is clearly identified as such to the teacher, and teacher and students can see what their specific responsibility is for the current year.** **How to Find the Evidence:** Evaluate the table of contents, but do not stop there; also evaluate units, chapters, lessons, homework assignments and assessments. (Evaluate both student and teacher materials.) Identify any content from previous grades and check whether it is identified as such. For context, read Criterion #5a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** The structure of the lessons ensures that the students and the teacher are reminded of previous learning and then pointed to "Find out More." The content progressions provided for the teacher at the beginning of each unit clearly delineate the responsibility for learning at the sixth grade. The assessments, particularly the Common Core Assessment, also help students and teachers understand the learning responsibility for the sixth grade. There are no content standards taught outside of 6th grade content in this curriculum.	**(Reviewer only.)** **__X__Meets** **____Does Not Meet/ Insufficient Evidence**
Metric NN2G: **Materials include learning objectives that are visibly shaped by CCSSM cluster headings.** **How to Find the Evidence:** Select several clusters from the Major Work in the grade being evaluated. Evaluate teacher and student materials in relation to these clusters. For context, read Criterion #6a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	Evidence- The Ready Math Content is organized to reflect the domain sequence and the cluster to cluster sequence of the CCSS. The lesson objectives are essentially lifted from the CCSS clusters. For example, "Understand the concept of a ratio as a way of expressing relationships between quantities."	**(Reviewer only.)** **__X__Meets** **____Does Not Meet/ Insufficient Evidence**
Metric NN2H: **Materials include problems and activities that serve to connect two or more clusters in a domain, or two or more domains in a grade, in cases where these connections are natural and important.** **How to Find the Evidence:** In the grade being evaluated, choose two or more clusters or two or more domains for which connections are natural and important. Evaluate the units, chapters, and lessons that deal with the chosen topics, looking for problems and activities that serve to connect the chosen clusters or domains. NOTE: An example of evaluating this Criterion might include looking at whether problems in grade 4 sometimes or often involve students applying their developing computation skills (detailed in domain NBT) in the context of solving word problems (detailed in domain OA). For context, read Criterion #6b in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	Evidence- Lessons build towards application and problem solving. While there is not extensive evidence of an effort to connect clusters, the operations within the geometry unit and the coordinate graphing of polygons connect to work completed from Number System clusters. There is also some connections with proportional reasoning with percentages in the development of box and whiskers plots.	**(Reviewer only.)** **__X__Meets (but weak)** **____Does Not Meet/ Insufficient Evidence**

Non-Negotiable 2:

Focus and Coherence

Materials must focus coherently on the Major Work of the grade in a way that is consistent with the progressions in the Standards.

NN 2 If all Metrics 2A – 2H were rated as Meets, then rate Non-Negotiable 2 as Meets. If one or more Metric was rated Does Not Meet/Insufficient Evidence, then rate Non-Negotiable 2 as Does Not Meet. Check the final rating.
Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)**

Before moving to Alignment Criterion 1, record the final Meets or Does Not Meet rating in the Evaluation Summary.

(Reviewer only.)

X
____Meets

____Does Not Meet

Strengths/Weaknesses:

Now continue by evaluating the Alignment Criterion 1 for Rigor and Balance.

Directions for Alignment Criterion 1

Rigor and Balance

Alignment Criterion 1: Rigor and Balance

Materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.

The Standards set expectations for attention to all three aspects of rigor: conceptual understanding, procedural skill and fluency, and applications. Thus, materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.

Required Materials

- Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf)
- Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)
- Focus by Grade Level for the grade being evaluated (achievethecore.org/focus)
- Situation Types for the Operations in Word Problems (achievethecore.org/situation-types)
- From the materials being evaluated: teacher guides, student texts and workbooks

Rating this Criterion:

Alignment Criterion 1 is rated as Meets or Does Not Meet.

To rate Alignment Criterion 1, first rate metrics 1A, 1B, and 1C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). For each metric, guiding questions are provided to aid in gathering evidence.
Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 1 if the materials rate 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as rigor and balance, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.

Metric AC1A: **The materials support the development of students' conceptual understanding of key mathematical concepts, especially where called for in specific content Standards or cluster headings.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Major Work for the grade being evaluated that relate specifically conceptual understanding to use throughout the questions associated with this metric. NOTE: Some examples of clusters or Standards that call for conceptual understanding include: K.OA.A.1, (1.NBT.B, 1.NBT.C), (2.NBT.A, 2.NBT.B), (3.OA.A.1, 3.OA.A.2), 4.NF.A, (4.NBT.A, 4.NBT.B), 5.NF.B, (5.NBT.A, 5.NBT.B), 6.RP.A, 6.EE.A.3, 7.NS.A, 7.EE.A, 8.EE.B, 8.F.A, 8.G.A Clusters or Standards grouped by parentheses are closely connected and could be analyzed together. For context, read Criterion #4a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	-Choose a cluster/Standard from the Major Work that is aligned to each aspect of rigor and use to evaluate these metrics. It is most helpful if the same clusters/Standards are chosen for all of the programs being evaluated. (Guidance in choosing clusters/Standards is included in "How to Find the Evidence".)	**Use the questions for AC Metric 1A to evaluate Metric 1A. Record evidence for each question and rate Metric 1A.** **___X_Meets (2)** **___Partially Meets (1)** **____Does Not Meet (0)**
Is conceptual understanding attended to thoroughly where the Standards set explicit expectations for understanding or interpreting? Evaluate lessons, chapter/unit assessments and homework assignments, paying attention to work aligned to Standards that explicitly call for understanding or interpreting. NOTE: Examples of evaluating this Criterion might include looking at how well the multi-digit addition and subtraction algorithms are developed and explained on the basis of place value and properties of operations; or how well the multi-digit multiplication and division algorithms are developed and explained on the basis of place value and properties of operations; or how well solving equations is presented and explained as a process of reasoning.	**Evidence-** Conceptual understanding is attended to throughout the curriculum. Teacher manual p. 17 – Students are working with ratios and gaining a conceptual understanding of the relationship between ratios fractions and division and real world problems.	
Do the materials feature high-quality conceptual problems and conceptual discussion questions? Evaluate lessons, chapter/unit assessments, and homework assignments. NOTE: Example of conceptual problems might include such questions as "Find a number greater than 1/5 and less than 1/4," or "If the divisor does not change and the dividend increases, what happens to the quotient?"	**Evidence-** The Concept Extension questions (see TRB pg. 31,90, 131) do provide for conceptual discussion questions. Hands on activities also enhance conceptual development. (p. 30, 47, 69) In the Practice and Problem Solving workbook, the students are given word problems and are directed to use a model to solve the problem. The students are asked to critique the reasoning of other fictitious students during practice.	

Do the materials feature opportunities to identify correspondences across mathema[illegible]epresentations? Evaluate lessons, chapter/unit assessments and homework assignments. NOTE: Examples of evaluating this Criterion might include looking at whether students are supported in identifying correspondences among: the verbal description of a situation, the diagrams that distill its mathematical features, and the equations that model it; or equivalent forms of numbers (e.g., 3 and 6/2) and the number line; or rational number operations and representations of them via models such as the vector model; or the expression that defines a function and the graph that shows the relationship.	**Evidence-** A strength of this p[illegible]ram is that it continuously asks students to make correspondences across multiple representations. Students use ratio tables, bar models, double number lines, and grids throughout the lessons on 6.RP. They are asked to connect these representations and to connect the representations with words. p.117, 125, 136-137, 156, 298, 316	
Metric AC1B: **The materials are designed so that students attain the fluencies and procedural skills required by the Standards.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Major Work for the grade being evaluated that relate specifically to fluency and procedural skill to use throughout the questions associated with this metric. NOTE: Some examples of Standards that call for procedural skill and fluency include: K.OA.A.5, 1.OA.C.6, 2.OA.B.2, 2.NBT.B.5, 3.OA.C.7, 3.NBT.A.2, 4.NBT.B.4, 5.NBT.B.5, 6.NS.B.2, and 6.NS.B.3, 6.EE.A, 7.NS.A, 7.EE.A.1,7.EE.B.4a, 8.EE.C.7, 8.EE.C.8b For context, read Criterion #4b in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).		**Use the questions for Metric 1B to evaluate Metric 1 B. Record evidence for each question and rate Metric 1B.** **(Reviewer only.)** **__X__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**

Is progress toward fluency and procedural skill interwoven with students' develo conceptual understanding of the operations in question? Evaluate lessons, chapter/unit assessments, daily routines, and homework assignments for evidence that the development of fluency and procedural skill is supported by conceptual understanding.	Evidence- 6.NS.B.2 Emphasis is place place value in the development of the division algorithm. Hands on activities are suggested along with opportunities for mathematical discourse through a discussion question. Students are asked to connect the partial quotients model with the standard algorithm. There is a question related to the use of halving and doubling. There is an emphasis on estimation/number sense. 6.NS.B.3 Again there is an emphasis on place value and estimation. Students are asked to consider the commutative and associative properties in adding decimals. Hands on activities and discussion questions are provided. Students are asked to find the errors in the work of fictitious students. Lessons 15-17 cover standards 6.EE.A with procedural skills interwoven with developing conceptual understanding.	
Are purely procedural problems and exercises present that include cases in which opportunistic strategies are valuable and generic cases that require efficient algorithms present? Evaluate lessons, chapter/unit assessments, daily routines, and homework assignments. NOTE: Examples of problems in which opportunistic strategies are valuable might include the sum 698 + 240 or the system $x + y = 1$, $2x + 2y = 3$. Examples of generic cases that require efficient algorithms might include the sum 8767+2286 or the system $6y + x = x + 3$, $-x = 1 + 2y$.	**Evidence-** 6.NS.A – Students are taught how to perform operations with rational numbers using models, and number lines and algorithm. The use these opportunistic strategies to solve real world problems. Example: Student Workbook p. 59-64	
Do the materials in grades K–6 provide repeated practice toward attainment of fluency Standards? Evaluate lessons, daily routines, and homework assignments for evidence of repeated practice toward attainment of the following K–6 Standards that set an explicit expectation of fluent (accurate and reasonably fast) computation: K.OA.A.5, 1.OA.C.6, 2.OA.B.2, 2.NBT.B.5, 3.OA.C.7, 3.NBT.A.2, 4.NBT.B.4, 5.NBT.B.5, 6.NS.B.2, 6.NS.B.3.	Evidence- Multiple opportunities for practice are provided during the lesson and in the Practice Workbook. The workbook includes contextual problems as well as pages of "naked number" problems called fluency practice.	

Metric AC1C: **The materials are designed so that teachers and students spend sufficient time working with engaging applications, without losing focus on the Major Work of each grade.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Major Work for the grade being evaluated that relate specifically application to use throughout the questions associated with this metric. NOTE: Some examples of clusters or Standards that call for application include: K.OA.A.2, 1.OA.A, 2.OA.A, 3.OA.A.3, 3.OA.D.8, 4.OA.A.3, 4.NF.B.3d, 4.NF.B.4c, 5.NF.B.6, 5.NF.B.7c, 6.RP.A.3, 6.NS.A.1, 6.EE.B.7, 6.EE.C.9, 7.RP.A, 7.NS.A.3, 7.EE.B.3, 8.EE.C.8c, 8.F.B For context, read Criterion #4c in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** All applications are connected to the major work. Lessons include visual models, math discourse, real world connections, hands on activities and challenge activities. Example:Teacher Manual- p. 222-230	**Use the questions for Metric 1C to evaluate Metric 1C. Record evidence for each question and rate Metric 1C.** **(Reviewer only.)** **_X_ Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Are there are single- and multi-step contextual problems, including non-routine problems, that develop the mathematics of the grade, afford opportunities for practice, and engage students in problem solving? Do the problems attend thoroughly to those places in the content Standards where expectations for multi-step and real-world problems are explicit? Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** 6.RP.A.3 Students are provided contexts with real world applications but are provided a series of questions to walk them through a path to the solution. Towards the end of the lesson, students are given problems similar to the ones they have just walked through. The Interim Assessments and the Performance task do provide an opportunity for multiple step problems as well as non-routine problems.	
Do application problems particularly stress applying the Major Work of the grade? Evaluate lessons, chapter/unit assessments, and homework assignments. NOTE: Examples of evaluating this Criterion might include looking at: how well, by the end of grade 2, students using the materials as designed can represent and solve a full range of one-step addition and subtraction word problems; or how well, by the end of grade 3, students using the materials as designed can represent and solve a full range of one-step multiplication and division word problems; or how well these basic situation types for each operation are carried coherently across the grades, (e.g., with fractions and algebraic expressions); or, in all grades, whether the problems connect concepts, Standards, and domains in ways that are natural and important. For a list of situation types for one-step addition, subtraction, multiplication, and division problems, see Situation Types for the Operations in Word Problems	Evidence- The application lessons are linked directly to the Major Work of sixth grade. All lessons have real world applications that link directly to the Major Work. Assessments include application problems and the performance tasks provide non-routine application of the Major Work.	

Does modeling build slowly across K–8, with applications that are relatively simple in earlier grades and when students are encountering new content? In grades 6–8, do the problems begin to provide opportunities for students to make their own assumptions or simplifications in order to model a situation mathematically? Read Standard for Mathematical Practice 4, Model with Mathematics. Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** The students are provided extensive instruction in the use of common models associated with the grade level content. Students are asked to make sense of models the book provides and are asked to provide models when given a context. Students are asked to use multiple representations throughout the Major Work lessons.	

Alignment Criterion 1: Rigor and Balance

Materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.

AC1 Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 out of 6 points, the Criterion has not been met. Check the final rating.
Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)**

Before moving to Alignment Criterion 2, record the final Meets or Does Not Meet rating in the Evaluation Summary.

(Reviewer only.)

_X___Meets

____Does Not Meet

Strengths/Weaknesses:
The program is very strong in application. The major weakness is in the area of conceptual understanding. The conceptual lessons are very "step by step" and do not rely on student thinking. Instead, student thinking is funneled by the textbook provided questions. This instruction tends to send a message to students that mathematics is less about them mathematizing their world and more about figuring out the author's reasoning. The procedural lessons are less problematic but are very directed toward developing the traditional algorithm. There is little consideration given to asking students to recognize when the traditional algorithm is the most efficient method.

Directions for Alignment Criterion 2

Standards for Mathematical Practice

Alignment Criterion 2: Standards for Mathematical Practice **Materials must demonstrate authentic connections between content Standards and practice Standards.** The Standards require that designers of instructional materials connect the mathematical practices to mathematical content in instruction. Thus, materials must demonstrate authentic connections between content Standards and practice Standards.	**Required Materials:** • Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf) • Focus by Grade Level for the grade being evaluated (www.achievethecore.org/focus) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion** Alignment Criterion 2 is rated as Meets or Does Not Meet. To rate Alignment Criterion 2, first rate metrics 2A, 2B, and 2C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). For each metric, guiding questions are provided to aid in gathering evidence. Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 2 if the materials earn 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as mathematical practices, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.
Metric AC2A: **Materials address the practice Standards in such a way as to enrich the Major Work of the grade; practices strengthen the focus on Major Work instead of detracting from it, in both teacher and student materials.** **How to Find the Evidence:** Familiarize yourself with the Major Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate teacher and student materials for evidence that the mathematical practices support and connect to the focus of the grade. NOTE: Examples of evaluating this Criterion might include looking at whether, in grades K–5, students using the materials are supported to look for and express regularity in repeated reasoning about the addition table, the multiplication table, the properties of operations, the relationship between addition and subtraction or multiplication and division, and the place value system; or whether, in grades 6–8, students using the materials are supported to look for and express regularity in repeated reasoning about proportional relationships and linear functions. For context, read Criterion #8 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013).	**Evidence-** The Practice Standards are explained for the teacher in the Teacher Resource Book. There are also references to the Practice Standards associated with each lesson in the Teacher Resource Book. While not directly stated, the students are given the opportunity to demonstrate the Practice Standards within the lessons and within the Performance tasks. The students are not specifically made aware of this mathematical behavior. The students are asked to look for regularity in repeated reasoning as they develop algorithms for dividing decimals. Fluency practice in the Practice and Problem Solving workbook are actually labeled Repeated Reasoning and ask the students to find and use patterns.	**(Reviewer only.)** **_X_ Meets (2)** **___ Partially Meets (1)** **___ Does Not Meet (0)**

Metric AC2B: **Materials attend to the full meaning of each practice Standard.** **How to Find the Evidence:** For context, read Criterion #7 and Criterion #9 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).		**Use the questions for Metric 2B to evaluate Metric 2B. Record evidence for each question and rate Metric 2B.** **(Reviewer only.)** **__X__Meets (2)** **___Partially Meets (1)** **____Does Not Meet (0)**
Over the course of any given year of instruction, is each mathematical practice Standard meaningfully present in the form of assignments, activities, or problems that stimulate students to develop the habits of mind described in the practice Standard? Evaluate lessons, chapter/ unit assessments, and homework assignments for evidence of each mathematical practice being meaningfully present in instruction.	Evidence- Students are asked to use multiple representations throughout lessons. There are opportunities for mathematical reasoning and for critiquing the reasoning of fictitious others. As the authors state: "Each Ready lesson leads students through new problems by using what they already know, demonstrates multiple approaches and access points, and gives encouraging tips and opportunities for cooperative dialogue.	
Do the materials treat the practice Standards as developing across grades or grade bands? Are the practice Standards in early grades appropriately simple? Do they display an arc of growing sophistication across the grades?	Evidence- Yes	
Are there teacher-directed materials that explain the role of the practice Standards in the classroom and in students' mathematical development? Are alignments to practice Standards accurate?	Evidence- This information is comprehensively provided in the Teacher Resource Book in the introduction and in each lesson.	
Metric AC2C: **Materials support the Standards' emphasis on mathematical reasoning.** **How to Find the Evidence:** For context, read Criterion #10 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).		**Use the questions for Metric 2C to evaluate Metric 2C. Record evidence for each question and rate Metric 2C.** **(Reviewer only.)** **__X__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Do the materials support students in constructing viable arguments and critiquing the arguments of others concerning grade-level mathematics that is detailed in the content Standards? Read Standard for Mathematical Practice 3. Evaluate teacher and student materials to ensure that students are given opportunities to reason with grade-level mathematics.	Evidence- Students are given multiple opportunities to demonstrate MP3 through questioning strategies during small group discussions as well as in whole group discussions. Students also are required to explain their thinking in assignments and to critique and respond to fictitious students.	

Do the materials support students in producing not only answers and solutions, but also a grade-appropriate way, arguments, explanations, diagrams, mathematical models, etc., especially in the Major Work of the grade? Familiarize yourself with the Major Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate teacher and student materials, to understand the types of work students are expected to produce.	Evidence- Students are asked to provide explanations, diagrams, and models throughout lessons and assignments. The use of models and diagrams is a strength of this program.	
Do materials explicitly attend to the specialized language of mathematics? Is the language of argument, problem solving, and mathematical explanations taught rather than assumed? Evaluate teacher and student materials, paying attention to how mathematical language is taught. NOTE: Examples of evaluating this Criterion might include looking at whether students are supported in: basing arguments on definitions; using the method of providing a counterexample; or recognizing that examples alone do not establish a general statement.	Evidence- Each lesson provides the teacher with specific suggestions for teaching the associated vocabulary with a link to MP6. The Student Practice and Problem Solving Workbook includes a section on vocabulary associated with a lesson. Examples: Student Workbook p. 55, 155, 241, 293, 347	

Alignment Criterion 2:
Standards for Mathematical Practice

Materials must demonstrate authentic connections between content Standards and practice Standards.

AC2 Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 out of 6 points, the Criterion has not been met. Check the final rating.
Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion.
(Reviewer only.)

Before moving to Alignment Criterion 3, record the final Meets or Does Not Meet rating in the Evaluation Summary.

(Reviewer only.)

__X__Meets

____Does Not Meet

Strengths/Weaknesses:
Teachers are provided instruction related to the Standards for Mathematical Practices. Unfortunately, the students are not provided explicit instruction related to these standards. There is somewhat of a misalignment between Ready's interpretation of MP1 and that of the Publisher's Criteria. E

Alignment Criterion 3: **Access to the Standards for All Students** **Materials must provide supports for English Language Learners and other special populations.** Because Standards are for all students, alignment requires thoughtful support to ensure all students are able to meet the Standards. Thus, aligned materials must provide supports for English Language Learners and other special populations.	**Required Materials:** • Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion:** Alignment Criterion 3 is rated as Meets or Does Not Meet. To rate Alignment Criterion 3, first rate metrics 3A, 3B, and 3C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 3 if the materials earn 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as support for special population, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.
Metric AC3A: **Support for English Language Learners and other special populations is thoughtful and helps those students meet the same Standards as all other students. The language in which problems are posed is carefully considered.** **How to Find the Evidence:** Evaluate teacher and student materials, paying attention to supports offered for special populations.	**Evidence-** ELL support is specifically provided in the Ready lessons. Opportunities to address the needs of struggling or below grade level learners is provided in the Teachers Toolbox, through hands on activities, and in differentiated activities at the end of each lesson. Examples: Teacher Manual pgs. 113, 129, 139, 159	**Reviewer only.)** **__X__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Metric AC3B: **Materials provide appropriate level and type of scaffolding, differentiation, intervention, and support for a broad range of learners with gradual removal of supports, when needed, to allow students to demonstrate their mathematical understanding independently.** **How to Find the Evidence:** Evaluate teacher and student materials, paying attention to whether materials provide differentiation that will lead all learners to engage with on-grade-level content.	**Evidence-** Differentiation activities are provided at the end of each lesson and hands on activities are suggested at strategic points in the lesson. The Teachers Toolbox provides below grade level lessons and extension activities. The idea of gradual release is foundational to the program. Examples: Teacher Manual pgs. 166, 178, 210	**Reviewer only.)** **__X__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**

Metric AC3C: **Design of lessons recommends and facilitates a mix of instructional approaches for a variety of learners such as using multiple representations (e.g., including models, using a range of questions, checking for understanding, flexible grouping, pair-share).** **How to Find the Evidence:** Evaluate teacher materials, noting instructional approaches suggested for whole class and differentiated lessons and activities.	**Evidence-** Evidence can be found throughout lessons- multiple representations are provided; questions are used to guide student thinking; questions include both high and low level (DOK 1, 2, & 3); multiple opportunities for small group and pair work. Example: Cognitive Rigor Matrix A11	**Reviewer only.)** **_X_ Meets (2)** **___Partially Meets (1)** **___Does Not Meet (0)**

Alignment Criterion 3:

Access to the Standards for All Students

Materials must provide supports for English Language Learners and other special populations.

AC3 Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 points, the Criterion has not been met. Check the final rating.
Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion.**(Reviewer only.)**

Move to the Evaluation Summary and record the final Meets or Does Not Meet rating .

(Reviewer only.)

_X_ Meets

___Does Not Meet

Strengths/Weaknesses:
An effort has been made by the publisher to ensure all students have access to grade level content, with particular focus on providing for gradual release. If anything, too much support is provided.

Once an evaluation for alignment to the Shifts and major features of the CCSS has been conducted using Sections 1-3, it's important to evaluate for overall quality and best practices. A starting list of Indicators of Quality are suggested below. States, districts and others evaluating instructional materials are encouraged to add to this list to ensure materials reflect local contexts. For background information on some of the Indicators of Quality in this section, refer to pp.18–21 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).

Indicators of Quality	Evidence- Give specific examples.	Rating: (Reviewers only.)

1. Lessons are thoughtfully structured and support the teacher in leading the class through the learning paths at hand, with active participation by all students in their own learning and in the learning of their classmates.	Evidence- Lessons are thoroughly structured and lead the student through step by step learning. Student engagement is enhanced through questioning (student workbook- p. 59, 71) and opportunities for reflection (p 149, 153). Students are also asked to connect modeling with all operations and with concepts (p. 41, 45, 59)	**(Reviewer only.)** **__X__ Yes** **_____ No**
2. The underlying design of the materials includes both problems and exercises. (In solving problems, students learn new mathematics, whereas in working exercises, students apply what they have already learned to build mastery.) Each problem or exercise has a purpose. **NOTE: This Criterion does not require that the problems and exercises be labeled as such.**	Evidence- Students use both procedural and conceptual skills to solve problems and exercises throughout this curriculum. p. 83, 143, 145	**(Reviewer only.)** **__X__ Yes** **_____ No**
3. Design of assignments is not haphazard: exercises are given in intentional sequences in order to strengthen students' mathematical understanding.	Evidence- Assignments are aligned with the sequence of the cluster headings and standards. The assignments themselves build so that scaffolded support is withdrawn after extensive modeling and step by step sequencing. The SBAC Edition assessments reflect the rigor of the SBAC released items.	**(Reviewer only.)** **__X__ Yes** **_____ No**
4. There are separate teacher materials that support and **reward teacher study including, but not limited to: discussion of the mathematics of the units and the mathematical point of each lesson as it relates to the organizing concepts of the unit, discussion on student ways of thinking and anticipating a variety of students responses, guidance on lesson flow, guidance on questions that prompt students thinking, and discussion of desired mathematical behaviors being elicited among students.**	Evidence- Teacher materials include the Teacher Resource Book and the Teacher Toolbox. Progression charts are provided for each lesson and progression information is provided within some lessons. Teachers are alerted to opportunities and explanations for models as well as Error Alerts. The identified Step by Step flow of the lesson is identified and could serve as a source of professional learning. The Teacher Toolbox provides intervention and remediation, which directs teachers to content from previous grade levels. The progression charts and within lesson progression information helps the teacher see where the content is headed in the 7th and 8th grades. Refer to A13-A45 in Teacher Manual	**(Reviewer only.)** **__X__ Yes** **_____ No**

5. Manipulatives suggested in the materials are faithful representations of the mathematical objects they represent and are connected to written methods.	Evidence- Hands On activities are suggested throughout the lessons, including extensive work with models. The models are directly related to the content and associated written methods. Teachers Manual- p. 69, 77, 87	(Reviewer only.) __X__ Yes _____ No
6. Materials include a variety of curriculum-embedded assessments. Examples include pre-, formative, summative, and self-assessment resources.	Evidence- Formative Assessment is provided through the extensive use of questioning. Teachers are able to use verbal responses as well as student reflective responses to ascertain student achievement along progressions. Students are invited to self-assess at the beginning of a lesson. End of Unit Interim and SBAC Edition assessments are provided.	(Reviewer only.) __X__ Yes _____ No
7. Assessments contain aligned rubrics, answer keys, and scoring guidelines that provide sufficient guidance for interpreting student performance.	Evidence- Performance tasks include aligned rubrics. Answer keys and scoring guides are provided. The iReady Assessments provide teachers with data for interpretation of student performance. The SBAC Edition assessments are aligned with the item types identified by SBAC.	(Reviewer only.) __X__ Yes _____ No
8. Materials assess student proficiency using methods that are accessible and unbiased, including the use of course-level language in student prompts.	Evidence- For the most part, the prompts reflect contexts typical students would have some familiarity with. The vocabulary of the cluster headings are used in the prompts. (examples: student workbook- p. 88, 98, 110)	(Reviewer only.) __X__ Yes _____ No
9. Materials are carefully evaluated by qualified individuals, whose names are listed, in an effort to ensure freedom from mathematical errors and course-level appropriateness.	Evidence- A list of Teacher Advisors is provided in the Teacher Resource Book. The name of the project manager is also provided. A separate document, The Research behind Ready: Building an effective Common Core Program, provides further evidence.	(Reviewer only.) __X__ Yes _____ No
10. The visual design supports students in engaging thoughtfully with the subject. Navigation through the text is clear.	Evidence- The student material has very little color and has the flavor of a practice workbook. Salmon colored shading is used to highlight directions, thinking or specific problems. The book makes extensive use of models.	(Reviewer only.) __X__ Yes _____ No

11. The materials engage parents in appropriate ways. For example, homework assignments in elementary grades, consist of routine problems, practice with getting answers, and fluency-building exercises that parents can easily support.	Evidence- Each lesson in the Practice and Problem Solving Student book includes a letter to the parent with exemplary problems and models. (Examples: student workbook p. 97, 109, 119)	**(Reviewer only.)** **X** **_____ Yes** **_____ No**

Reviewer IMET Evaluation Summary **Title/Level: Ready Common Core Mathematics Grade 6**

Publisher: Curriculum Associates **Copyright: 2014**
ISBN: 9780760986417

Reviewer ID # [redacted] TS HC **Date Review Completed: March 5, 2016**

Non-Negotiable Criteria- Each Non-Negotiable must be met in order for the Non-Negotiable Alignment Criteria to be met overall.

Non-Negotiable 1: Freedom from Obstacles to Focus	Non- Negotiable 2: Focus and Coherence
X Meets	X Meets
_____ Does Not Meet	_____ Does Not Meet

Non-Negotiable Overall:

X Meets **_____ Does Not Meet**

Alignment Criteria- Each Alignment Criterion must be met with a sufficient number of points in order for Alignment Criteria to be labeled as "Meets" overall. The more points the materials receive on the Alignment Criteria, the better they are aligned.

Alignment Criterion 1: Rigor and Balance	Alignment Criterion 2: Standards of Mathematical Practice	Alignment Criterion 3: Access to Standards for All Learners
Points: 6 of 6 possible. (Materials must receive at least 5 of 6 points to align.)	Points: 6 of 6 possible. (Materials must receive at least 5 of 6 points to align.)	Points: 6 of 6 possible. (Materials must receive at least 5 of 6 points to align.)
X Meets	X Meets	X Meets
_____ Does Not Meet	_____ Does Not Meet	_____ Does Not Meet

Alignment Criteria Overall:

X Meets **_____ Does Not Meet**

If the materials meet both Non-Negotiables and relevant Alignment Criterion, they are aligned to the Shifts and major features of the Core Standards. **the materials meet every Non-Negotiable and Alignment Criterion? ___X__ Yes _____ No**

What are the specific areas of strength and weakness based on this evaluation? Publishers or others modifying or developing assessments can use this information to make improvements and/or to remedy gaps in the alignment of assessment materials.

Strengths: Fully aligned to standards, conceptual understanding attended to throughout, teacher and student friendly, vertical alignment charts, helps for differentiation

Weakness: Do not care for the salmon color paper.

2015-16 Mathematics Interim Review Recommendation & Summary

Publisher Name:	Curriculum Associates
Title:	Ready Common Core
ISBN #	978-1-4957-0487-1
Grade Level(s) or Course:	7th
Reviewer ID:	DA TR

RECOMMENDED AS:

____X___**Core Mathematics Program-** a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials. Substantial evidence clearly supports the designation of this program as Core.

_____**Other Mathematics Program-** a program that substantially, but partially, meets the *focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for* supplemental materials. Substantial evidence clearly supports the designation of this program as Other.

_____**Component Mathematics Program-** a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs. Substantial evidence clearly supports the designation of this program as Component.

_____**Intervention Program-** a program designed and intended to target and support students' specific needs. Substantial evidence clearly supports the designation of this program as Intervention.

_____ **Does not meet criteria** for recommendation as a Curricular Material or Online Resource for Mathematics.

EVIDENCE SUMMARY:

FOCUS-
There are 33 lessons in the series and 18 of them are devoted to the major work of the grade. This represents 55% which is a bit below the lower acceptable range of 65%. However, two things are worth mentioning, the Major Work of the grade includes 4 of the 9 clusters (44%) and At least three other lessons (Lessons 18, 22, and 23) directly incorporate components of the major work like using expressions and equations and rational number sets. This pushes the percentage closer to 66% which is acceptable.

COHERENCE-

At the beginning of each unit, there is a visual of the standards from previous grade levels that the unit is building on (grade 6 and also grade 7 standards that are related). Then the unit highlights the content standards that are the focus of the unit. Finally, The standards that students are moving toward from the unit are also listed.

RIGOR-

The application problems do stress the Major Work of the grade. All the lessons are focused around making sense of and working through a standard or two. Some of the lessons overlap such as the angles measures in Geometry and expressions and equations. By the end of the year, students should come away with a strong sense of early equations and expressions work and a solid foundation of proportional reasoning. Application problems are also evident in Common Core part 5 practice.

CONCEPTUAL UNDERSTANDING-

Ready Common Core progresses through Picture It→ Model It→ Connect It→ Try It to help students attain conceptual understanding. *Ready Common Core* provides ample time for students to discuss questions and includes a pair-share section to encourage discussion.

MATHEMATICAL PRACTICES-

All Mathematical Practices are evident throughout the book labeled in TE as SMP Tips. Multiple SMPs are embedded throughout the lessons and within each lesson many of are specifically addressed as major points of emphasis.

ACCESSIBILITY OF STANDARDS TO ALL STUDENTS-

Materials provide a range of learning styles support to help all students be successful.
The *Guided Instruction* sections do a nice job of providing some scaffolding for students that ELLs would benefit from. The lessons in general remove supports for students giving greater opportunity for independent work in places like the Common Core Practice section.

OTHER:

The materials are in a consumable workbook format which may be a significant cost. The series

also states that Professional Development is a requirement (at a cost).

2015-16 Interim Mathematics Review

Mathematics Evaluation Tool Grades K-8

Publisher: Curriculum Associates

Title of Material: Ready Common Core

Author: Curriculum Associates

ISBN #: 978-1-4957-0487-1 **Copyright** 2014

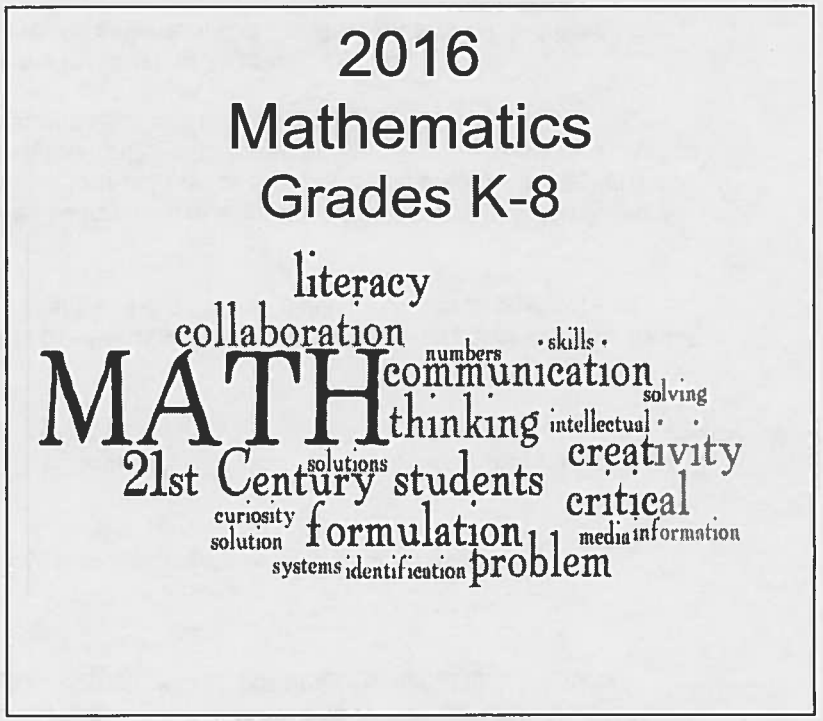
Reviewer ID: DATR

Core Mathematics Program- a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Core.

Other Mathematics Program- a program that substantially, but partially, meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Other.

Component Mathematics Program- a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs.
Substantial evidence clearly supports the designation of this program as Component.

Intervention Program- a program designed and intended to target and support students' specific needs.
Substantial evidence clearly supports the designation of this program as Intervention.



- Evaluation Form adapted from Instructional Materials Evaluation Toolkit (IMET).

The IMET was developed by Student Achievement Partners. Educators may use or adapt. http://creativecommons.org/licenses/by/3.0/ Download this tool at http://achievethecore.org/IMET

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Instructional Materials Evaluation Tool

Mathematics, Grades K-8

What Are the Purposes of the IMET?

This Math IMET is designed to help educators determine whether instructional materials are aligned to the Shifts and major features of the Common Core State Standards (CCSS). The substantial instructional Shifts (http://www.corestandards.org/other-resources/key-shifts-inmathematics/) at the heart of the Common Core State Standards are:

- **Focus** strongly where the Standards focus
- **Coherence**: Think across grades and link to major topics within the grade
- **Rigor**: In major topics, pursue conceptual understanding, procedural skill and fluency, and application with equal intensity.

The IMET draws directly from the following documents:

- Common Core State Standards for Mathematics (www.corestandards.org/Math)
- Publishers' Criteria for the Common Core State Standards in Mathematics grade K-8 (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)

When to use the IMET

1. Purchasing materials: Many factors go into local purchasing decisions. Alignment to the Standards is a critical factor to consider. This tool is designed to evaluate alignment of instructional materials to the Shifts and the major features of the CCSS. It also provides suggestions of additional indicators to consider in the materials evaluation and purchasing process.

2. Evaluating materials currently in use: The IMET can be used to analyze the degree of alignment of existing materials and help to highlight specific, concrete flaws in alignment. Even where materials and tools currently in use fail to meet one or more of these criteria, the pattern of failure is likely to be informative. States and districts can use the evaluation to create a thoughtful plan to modify or combine existing resources in such a way that students' actual learning experiences approach the focus, coherence, and rigor of the Standards.

3. Developing programs: Those developing new programs can use this tool as guidance for creating aligned curricula.
Please note this tool was designed for evaluating comprehensive curricula (including any supplemental or ancillary materials), but it was not designed for the evaluation of standalone supplemental materials.

Who Uses the IMET?

Evaluating instructional materials requires both subject-matter and pedagogical expertise. Evaluators should be well versed in the Standards (www.corestandards.org/Math) for all grades in which materials are being evaluated. This includes understanding the Major Work of the grade (www.achievethecore/focus), the Supporting and Additional work, how the content fits into the progressions in the Standards (www.achievethecore.org/progressions), and the expectations of the Standards with respect to conceptual understanding, procedural skill and fluency, and application. Evaluators also should be familiar with the substantial instructional Shifts (http:// www.corestandards.org/other-resources/key-shifts-in-mathematics/) of Focus, Coherence and Rigor that are listed above.

Getting Started

Prior to Evaluation

Assemble of the materials necessary for the evaluation. It is essential evaluators to have materials for all grades covered by the program, as some criteria cannot be rated without having access to each grade. In addition, each evaluator should have a reference copy of the Common Core State Standards for Mathematics (CCSSM) and the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013).

Before conducting the evaluation itself, it is important to develop a protocol for the evaluation process. The protocol should include having evaluators study the Publishers' Criteria and the IMET. It will also be helpful for evaluators to get a sense of each program overall before beginning the process. At a minimum, this would include reading the front matter of the text, looking at the table of contents and paging through multiple chapters.

Sections 1-3 below should be completed to produce a comprehensive picture of the strengths and weaknesses of the materials under evaluation. Information about areas in need of improvement or supplementation should be shared with internal and external stakeholders.

Navigating the Tool

Begin with Section 1: Non-Negotiable Alignment Criteria

- The Non-Negotiable Alignment Criteria must each be met in full for materials to be considered aligned to the Shifts and the major features of the Common Core State Standards. Each Non-Negotiable Alignment Criterion has one or more metrics associated with it; every one of these metrics must be met in order for the criterion as a whole to be met.
- Examine the relevant materials and use evidence to rate the materials against each criterion and its associated metric(s).
- Record and explain the evidence upon which the rating is based.

Continue to Section 2: Alignment Criteria

- The Alignment Criteria must each be met for materials to be considered aligned to the Shifts and the major features of the Common Core State Standards. Each Alignment Criterion has one or more metric associated with it; a specific number of these metrics must be met or partially met in order for the criterion as a whole to be met.
- Examine the materials in relation to these criteria, assigning each metric a point value. Rate the criterion as "Meets" or "Does Note Meet" based on the number of points assigned. The more points the materials receive on the alignment Criteria, the better they are aligned.
- Record and explain the evidence upon which the rating is based.

Proceed to Section 4: Indicators of Quality

- Indicators of Quality are important considerations that will help evaluators better understand the overall quality of instructional materials. These considerations are not criteria for alignment to the CCSS, but they provide valuable information about additional program characteristics. Evaluators may want to add their own indicators to the examples provided.

Directions for Non-Negotiable 1

Freedom from Obstacles to Focus

Criterion	Evidence- Give specific examples.	Rating: (Reviewer only.)
Non-Negotiable 1: **Freedom from Obstacles to Focus** **Materials must reflect the content architecture of the Standards by not assessing the topics named before the grade level where they first appear in the Standards.** The Standards foster students' progress to algebra by focusing strongly on arithmetic. Consistent with this focus, certain topics from outside of arithmetic appear only in later grades. Thus, to be aligned, materials must reflect the content architecture of the Standards by not assessing the topics named before the grade level where they first appear in the Standards. In this criterion, "topics named" means the topics that are explicitly named in Metric 1A. No other topics should be added to the list in Metric 1A. (Note that other topics in the standards are addressed in criterion NN2.)	**Required Materials** • Common Core State Standards for Mathematics (www.corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf) • From the materials being evaluated: teacher guides and all assessment components	**Rating this Criterion**: Non-Negotiable 1 is rated as Meets or Does Not Meet. To rate Non-Negotiable 1, begin by rating Metric 1A. Since Metric 1A is the only metric for Non-Negotiable 1, the rating for Non-Negotiable 1 is the same as the rating for Metric 1A. If Metric 1A is rated as Does Not Meet, include evidence of when the named topic(s) is/are assessed. If the metric is rated as Meets, list the grade(s) examined in the evaluation.
Metric NN1A: **Materials reflect the basic architecture of the Standards by not assessing the listed topics before the grade level indicated.** • Probability, including chance, likely outcomes, probability models. (Introduced in the CCSSM in grade 7) • Statistical distributions, including center, variation, clumping, outliers, mean, median, mode, range, quartiles; and statistical association or trends, including two-way tables, bivariate measurement data, scatter plots, trend line, line of best fit, correlation. (Introduced in the CCSSM in grade 6) • Similarity, congruence, or geometric transformations.	**Evidence-** No assessment items cover any grade 8 items on similarity, congruence, or geometric transformations. Probability standards for grade 7 are addressed in the assessment items both what are referred to as Interim Assessments (Unit tests) and the larger SBAC prep items.	**(Reviewer only.)** **X Meets** **____Does Not Meet**

(Introduced in CCSSM in grade 8)
• Symmetry of shapes, including line/ reflection symmetry, rotational symmetry. (Introduced in the CCSSM in grade 4)

How to Find the Evidence:
Evaluate the table of contents, all chapter tests, all unit tests, and other such assessment components (including rubrics).

For context, read Criterion #2 from the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013). NOTE: Grade alignments of other topics are addressed in Non-Negotiable 2, Focus and Coherence.)

In this criterion, "topics named" means the topics that are explicitly named in Metric 1A. No other topics should be added to the list in Metric 1A. (Note that other topics in the standards are addressed in criterion NN2.)

Non-Negotiable 1: Materials must reflect the content architecture of the Standards by not assessing the topics named* before the grade level where they first appear in the Standards.

NN 1 If Metric 1A was rated as Meets, then rate Non-Negotiable 1 as Meets. If Metric 1A was rated as Does Not Meet, then rate Non- Negotiable 1 as Does Not Meet. Check the final rating.

Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion.**(Reviewer only.)**

Strengths:

The Ready Common Core materials do assess the topics listed above in varied ways including SBAC style items such as choosing true or false for multiple items, multiple correct and assisted response questions and open-ended free response questions.

Weakness: There are not a lot of problems for students to work with.

Before moving to Non-Negotiable 2, record the final Meets or Does Not Meet rating in the Evaluation Summary.

(Reviewer only.)

X Meets

____Does Not Meet

Strengths/Weaknesses:

Directions for Non-Negotiable 2

Focus and Coherence

Non-Negotiable 2:

Focus and Coherence

Materials must focus coherently on the Major Work of the grade in a way that is consistent with the progressions in the Standards.

Focus and coherence are the two major evidence-based design principles of the Common Core State Standards for Mathematics (CCSSM, p. 3). Focus is necessary in order to fulfill the ambitious promise the states have made to their students by adopting the Standards: greater achievement at the college and career ready level; greater depth of understanding of mathematics; and a rich classroom environment in which reasoning, sense-making, applications, and a range of mathematical practices flourish. In simpler terms, a mile-wide, inch-deep curriculum translates to less time per topic. Less time means less depth and moving on without many students. Thus, materials must focus coherently on the Major Work of the grade in a way that is consistent with the progressions in the Standards.

Required Materials

- Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf)
- Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)
- Focus by Grade Level for the grade being evaluated (www.achievethecore.org/focus)
- From the materials being evaluated: teacher guides, student texts and workbooks

Rating this Criterion:

Non-Negotiable 2 is rated as Meets or Does Not Meet.

To rate Non-Negotiable 2, first rate metrics 2A–2H. Each of these eight metrics must be rated as Meets in order for Non-Negotiable 2 to be rated as Meets. Rate each metric 2A-2H as Meets or Does Not Meet/Insufficient Evidence. If the evidence examined shows that the Criterion is met, then mark the Criterion Meets. If the evidence examined shows that the Criterion is not met—or if there is insufficient evidence to make a determination—then mark the Criterion as Does Not Meet/Insufficient Evidence. Support all ratings with evidence.

Metric NN2A **In each grade K–8, students and teachers using the materials as designed devote the large majority of time to the Major Work of the grade.** **How to Find the Evidence:** Familiarize yourself with the Major Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, lessons, homework assignments, and assessments. (Evaluate both student and teacher materials.) Consider time spent on the Major Work of the grade and judge qualitatively whether students and teachers using the materials as designed will devote the large majority of time to the Major Work of the grade. For context, read Criterion #1 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013)	**Evidence-** There are 33 lessons in the series and 18 of them are devoted to the major work of the grade. This represents 55% which is a bit below the lower acceptable range of 65%. However, two things are worth mentioning, the Major Work of the grade includes 4 of the 9 clusters (44%) and At least three other lessons (Lessons 18, 22, and 23) directly incorporate components of the major work like using expressions and equations and rational number sets. This pushes the percentage closer to 66% which is acceptable.	**(Reviewer only.)** **X Meets** **____Does Not Meet/** **Insufficient Evidence**
Metric NN2B: **Supporting Work, where present, enhances focus and coherence simultaneously by also engaging students in the Major Work of the grade.** **How to Find the Evidence:** Familiarize yourself with the Major Work and Supporting Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate chapters and lessons that focus on Supporting Work. NOTE: Example of evaluating this Criterion might include looking at whether materials for K–5 generally treat data displays as an occasion for solving grade-level word problems using the four operations (e.g., see 3.MD.B.3); or whether materials for grade 7 take advantage of opportunities to use probability to support ratios, proportions, and percentages. For context, read Criterion #3 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** At least three other lessons (Lessons 18, 22, and 23) directly incorporate components of the major work like using expressions and equations and rational number sets. Support work is blended with the Major Work	**(Reviewer only.)** **X Meets** **____Does Not Meet/** **Insufficient Evidence**
Metric NN2C: **Materials base content progressions on the grade-by-grade progressions in the Standards. Content from previous or future grades does not unduly interfere with or displace on-grade-level content.** **How to Find the Evidence:** Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, and lessons in both student and teacher materials. NOTE: In some cases it may be possible that aligned materials might address some aspects of a topic in a strategic way before or after the grade level in which the topic is central in the Standards' progressions; for example, a curriculum author might	**Evidence-** Each lessons has at its core a clear 7th grade standard. Each lesson also includes the standards coming before and sets the context for moving into the current standard. For example, Lesson 14 references the 6th grade standard that asks students to solve a one-step equation. The lesson goes on to tackle the multi-step equation from the 7th grade standard.	**(Reviewer only.)** **X Meets** **____Does Not Meet/** **Insufficient Evidence**

purposefully cho[illegible]o explore adding fractions with unlike denominators in a way appropriate to grade four, recognizing that this work is not really required until the next grade. However, any such purposeful discrepancies in content progressions should enhance the required learning in each grade; not unduly interfere with or displace grade-level content; and be clearly aimed at helping students meet the Standards as written rather than effectively rewriting the progressions in the Standards. And in all cases, note that Non-Negotiable 1 must be met for materials to be aligned. For context, read Criterion #5a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).		
Metric NN2D: **Materials give all students extensive work with on-grade-level problems.** **How to Find the Evidence:** Evaluate both student and teacher materials. If the materials provide resources for differentiated learning, consider whether lower-performing students have opportunities to engage with grade-level problems. Also consider whether higher-performing students are given opportunities to learn current grade-level content in greater depth. For context, read Criterion #5b in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Each lesson includes a few problems in the lessons from the Instruction book, however, each problem does ask several layered questions surrounding the problem. For example in lesson 21, in the Modeled and Guided Instruction section, the problem is asking about areas of circles and rectangles and there are 6 questions all related to the one situation. Finally, there is an exercise that takes all the work and applies it in a similar way but a slightly different situation. There are also several problems/exercises for each lesson in the Practice and Problem solving book.	**(Reviewer only.)** **X Meets** **____Does Not Meet/** **Insufficient Evidence**
Metric NN2E: **Materials relate on-grade-level concepts explicitly to prior knowledge from earlier grades.** **How to Find the Evidence:** Evaluate both student and teacher materials. NOTE: Examples of evaluating this Criterion might include looking at the way the materials extend basic ideas of place value across the decimal point; or the role that properties of operations play when the materials extend arithmetic beyond whole numbers to fractions, variables, and expressions. More generally, cluster headings in the Standards sometimes signal key moments where reorganizing and extending previous knowledge is important in order to accommodate new knowledge (e.g., see cluster headings that use the phrase "Apply and extend previous understanding"). For context, read Criterion #5c in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Each lesson utilizes a section called The Learning Progression where the lesson is framed within the context of the standards previously taught and how it relates to the week's lesson. An example is Lesson 20 where students are asked to find area, volume, and surface area of composed figures. The explicit work leading to this is the area and volume of independent figures (triangles, prisms, special quadrilaterals) from grade 6.	**(Reviewer only.)** **X Meets** **____Does Not Meet/** **Insufficient Evidence**

Metric NN2F **Review of material from previous grades is clearly identified as such to the teacher, and teacher and students can see what their specific responsibility is for the current year.** **How to Find the Evidence:** Evaluate the table of contents, but do not stop there; also evaluate units, chapters, lessons, homework assignments and assessments. (Evaluate both student and teacher materials.) Identify any content from previous grades and check whether it is identified as such. For context, read Criterion #5a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** At the beginning of each unit, there is a visual of the standards from previous grade levels that the unit is building on (grade 6 and also grade 7 standards that are related). Then the unit highlights the content standards that are the focus of the unit. Finally, The standards that students are moving toward from the unit are also listed.	**(Reviewer only.)** **X Meets** **____Does Not Meet/** **Insufficient Evidence**
Metric NN2G: **Materials include learning objectives that are visibly shaped by CCSSM cluster headings.** **How to Find the Evidence:** Select several clusters from the Major Work in the grade being evaluated. Evaluate teacher and student materials in relation to these clusters. For context, read Criterion #6a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Each unit is titled after each of the Domains in the standards. The subsequent lessons are focused around cluster heading. For example the cluster heading: Analyze proportional relationships and use them to solve real-world and mathematical problems is from Unit 2. The first lesson in unit 2 focuses on complex fractions which is right out of the first standard under the cluster and the remaining lessons in Unit 2 are all focused on proportional relationships.	**(Reviewer only.)** **X Meets** **____Does Not Meet/** **Insufficient Evidence**
Metric NN2H: **Materials include problems and activities that serve to connect two or more clusters in a domain, or two or more domains in a grade, in cases where these connections are natural and important.** **How to Find the Evidence:** In the grade being evaluated, choose two or more clusters or two or more domains for which connections are natural and important. Evaluate the units, chapters, and lessons that deal with the chosen topics, looking for problems and activities that serve to connect the chosen clusters or domains. NOTE: An example of evaluating this Criterion might include looking at whether problems in grade 4 sometimes or often involve students applying their developing computation skills (detailed in domain NBT) in the context of solving word problems (detailed in domain OA). For context, read Criterion #6b in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Lesson 8 students solve multi-step problems and in Lesson 18 students are representing the angle measure with an expression that is then used as part of an equation to find angle measures. Many of the lessons include supporting standards that are explicitly stated along the with focus standard and the SMPs for the lesson. Connections are made bringing previous knowledge into newly taught concepts.	**(Reviewer only.)** **X Meets** **____Does Not Meet/** **Insufficient Evidence**

Non-Negotiable 2:

Focus and Coherence

Materials must focus coherently on the Major Work of the grade in a way that is consistent with the progressions in the Standards.

NN 2 If all Metrics 2A – 2H were rated as Meets, then rate Non-Negotiable 2 as Meets. If one or more Metric was rated Does Not Meet/Insufficient Evidence, then rate Non-Negotiable 2 as Does Not Meet. Check the final rating.
Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)**

Strengths: the lessons in the materials focus on the Major Work of the grade in ways that are consistent with the progression. The beginning of each unit and lesson describe the progression that is a focus. This is clear and concise in each unit. The weakness is that each of the standards is treated more individually and explicit connections are not made as often.

Before moving to Alignment Criterion 1, record the final Meets or Does Not Meet rating in the Evaluation Summary.

(Reviewer only.)

X Meets

____Does Not Meet

Strengths/Weaknesses:

Now continue by evaluating the Alignment Criterion 1 for Rigor and Balance.

Directions for Alignment Criterion 1

Rigor and Balance

Alignment Criterion 1: Rigor and Balance

Materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.

The Standards set expectations for attention to all three aspects of rigor: conceptual understanding, procedural skill and fluency, and applications. Thus, materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.

Required Materials

- Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf)
- Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)
- Focus by Grade Level for the grade being evaluated (achievethecore.org/focus)
- Situation Types for the Operations in Word Problems (achievethecore.org/situation-types)
- From the materials being evaluated: teacher guides, student texts and workbooks

Rating this Criterion:

Alignment Criterion 1 is rated as Meets or Does Not Meet.

To rate Alignment Criterion 1, first rate metrics 1A, 1B, and 1C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). For each metric, guiding questions are provided to aid in gathering evidence.

Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 1 if the materials rate 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as rigor and balance, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.

Metric AC1A:

The materials support the development of students' conceptual understanding of key mathematical concepts, especially where called for in specific content Standards or cluster headings.

How to Find the Evidence:

Select one or more cluster(s) or Standard(s) from the Major Work for the grade being evaluated that relate specifically conceptual understanding to use throughout the questions associated with this metric. NOTE: Some examples of clusters or Standards that call for conceptual understanding include: K.OA.A.1, (1.NBT.B, 1.NBT.C), (2.NBT.A, 2.NBT.B), (3.OA.A.1, 3.OA.A.2), 4.NF.A, (4.NBT.A, 4.NBT.B), 5.NF.B, (5.NBT.A, 5.NBT.B), 6.RP.A, 6.EE.A.3, 7.NS.A, 7.EE.A, 8.EE.B, 8.F.A, 8.G.A

Clusters or Standards grouped by parentheses are closely connected and could be analyzed together.

For context, read Criterion #4a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).

-Choose a cluster/Standard from the Major Work that is aligned to each aspect of rigor and use it to evaluate these metrics. It is most helpful if the same clusters/Standards are chosen for all of the programs being evaluated. (Guidance in choosing clusters/Standards is included in "How to Find the Evidence".)

Use the questions for AC Metric 1A to evaluate Metric 1A. Record evidence for each question and rate Metric 1A.

X Meets (2)

____Partially Meets (1)

____Does Not Meet (0)

Is conceptual u[illegible]tanding attended to thoroughly where the Standards set explicit expectations for understanding or interpreting? Evaluate lessons, chapter/unit assessments and homework assignments, paying attention to work aligned to Standards that explicitly call for understanding or interpreting. NOTE: Examples of evaluating this Criterion might include looking at how well the multi-digit addition and subtraction algorithms are developed and explained on the basis of place value and properties of operations; or how well the multi-digit multiplication and division algorithms are developed and explained on the basis of place value and properties of operations; or how well solving equations is presented and explained as a process of reasoning.	**Evidence-** *Ready Common Core* progresses through Picture It→ Model It→ Connect It→ Try It to help students attain conceptual understanding. The use of number lines in Lessons 1-3, and 7 support the conceptual understanding of operations with integers and rational numbers. The questions asked and problems posed ask students to make connections to the concept and also to work forward and backward in problems, helping to generalize the idea of addition and subtraction. The subtraction, however, does tend to rely on the procedure of changing subtraction expressions into related addition expressions. While this is not a major error, it does not conceptually underscore the notion of subtraction as distance between 2 points on the number line.	
Do the materials feature high-quality conceptual problems and conceptual discussion questions? Evaluate lessons, chapter/unit assessments, and homework assignments. NOTE: Example of conceptual problems might include such questions as "Find a number greater than 1/5 and less than 1/4," or "If the divisor does not change and the dividend increases, what happens to the quotient?"	**Evidence-** *Ready Common Core* provides ample time for students to discuss questions and includes a pair-share section to encourage discussion. There are several questions asking students to explain the relationship of one operation is to another: "how is _____similar/different to _____". There is nice question generalizing position on the number line and their sum (p 6, Analyze).	
Do the materials feature opportunities to identify correspondences across mathematical representations? Evaluate lessons, chapter/unit assessments and homework assignments. NOTE: Examples of evaluating this Criterion might include looking at whether students are supported in identifying correspondences among: the verbal description of a situation, the diagrams that distill its mathematical features, and the equations that model it; or equivalent forms of numbers (e.g., 3 and 6/2) and the number line; or rational number operations and representations of them via models such as the vector model; or the expression that defines a function and the graph that shows the relationship.	**Evidence-** Many lessons use different mathematical representations (tables, graphs, pictures, models). The materials seem to put a premium on number line but do use other models like bar model, coordinate plane, and equations to connect the concepts together. Lesson 3, for example uses number line, bar model, and an equation to represent a contextual problem.	

Metric AC1E **The materials are designed so that students attain the fluencies and procedural skills required by the Standards.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Major Work for the grade being evaluated that relate specifically to fluency and procedural skill to use throughout the questions associated with this metric. NOTE: Some examples of Standards that call for procedural skill and fluency include: K.OA.A.5, 1.OA.C.6, 2.OA.B.2, 2.NBT.B.5, 3.OA.C.7, 3.NBT.A.2, 4.NBT.B.4, 5.NBT.B.5, 6.NS.B.2, and 6.NS.B.3, 6.EE.A, 7.NS.A, 7.EE.A.1,7.EE.B.4a, 8.EE.C.7, 8.EE.C.8b For context, read Criterion #4b in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).		**Use the questions for Metric 1B to [illegible]ate Metric 1 B. Record evidence for each question and rate Metric 1B.** **(Reviewer only.)** **X Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Is progress toward fluency and procedural skill interwoven with students' developing conceptual understanding of the operations in question? Evaluate lessons, chapter/unit assessments, daily routines, and homework assignments for evidence that the development of fluency and procedural skill is supported by conceptual understanding.	**Evidence-** Each lesson progresses in similar fashion in that there is an exploration followed by Modeled and Guided Instruction components. In these areas there are still several models to build and underscore conceptual understanding and several places where students are asked to explain thinking. The final pages of the lessons are can be considered more procedural fluency questions offering a variety of question types (MC, open ended, explain thinking). Multiple practice opportunities can be found in the Practice and Problem Solving book.	
Are purely procedural problems and exercises present that include cases in which opportunistic strategies are valuable and generic cases that require efficient algorithms present? Evaluate lessons, chapter/unit assessments, daily routines, and homework assignments. NOTE: Examples of problems in which opportunistic strategies are valuable might include the sum 698 + 240 or the system x + y = 1, 2x + 2y = 3. Examples of generic cases that require efficient algorithms might include the sum 8767+2286 or the system 6y + x = x + 3, – x = 1 + 2y.	**Evidence-** Practice and problems solving is included with each lesson. In Lesson 14 in the Practice and Problem Solving book, there are procedural exercises that present students with opportunities to experience the "long way" to do things along with the more efficient strategy like using the distributive property. In the same lesson, are asked to work the distributive property in reverse which requires understanding of the property and an efficiency to produce the correct expression.	

Do the materials in grades K–6 provide repeated practice toward attainment of fluency Standards? Evaluate lessons, daily routines, and homework assignments for evidence of repeated practice toward attainment of the following K–6 Standards that set an explicit expectation of fluent (accurate and reasonably fast) computation: K.OA.A.5, 1.OA.C.6, 2.OA.B.2, 2.NBT.B.5, 3.OA.C.7, 3.NBT.A.2, 4.NBT.B.4, 5.NBT.B.5, 6.NS.B.2, 6.NS.B.3.	**Evidence-**	
Metric AC1C: **The materials are designed so that teachers and students spend sufficient time working with engaging applications, without losing focus on the Major Work of each grade.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Major Work for the grade being evaluated that relate specifically application to use throughout the questions associated with this metric. NOTE: Some examples of clusters or Standards that call for application include: K.OA.A.2, 1.OA.A, 2.OA.A, 3.OA.A.3, 3.OA.D.8, 4.OA.A.3, 4.NF.B.3d, 4.NF.B.4c, 5.NF.B.6, 5.NF.B.7c, 6.RP.A.3, 6.NS.A.1, 6.EE.B.7, 6.EE.C.9, 7.RP.A, 7.NS.A.3, 7.EE.B.3, 8.EE.C.8c, 8.F.B For context, read Criterion #4c in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Each lesson engages students in a variety of applications and contextual situations as well as some procedural practice. The Problem Solving and Practice book also add problems and exercises dedicating adequate time to the Major Work of the grade.	**Use the questions for Metric 1C to evaluate Metric 1C. Record evidence for each question and rate Metric 1C.** **(Reviewer only.)** **X Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Are there are single- and multi-step contextual problems, including non-routine problems, that develop the mathematics of the grade, afford opportunities for practice, and engage students in problem solving? Do the problems attend thoroughly to those places in the content Standards where expectations for multi-step and real-world problems are explicit? Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** All lessons have problems from basic practice to multi-step problems.	
Do application problems particularly stress applying the Major Work of the grade? Evaluate lessons, chapter/unit assessments, and homework assignments. NOTE: Examples of evaluating this Criterion might include looking at: how well, by the end of grade 2, students using the materials as designed can represent and solve a full range of one-step addition and subtraction word problems; or how well, by the end of grade 3, students using the materials as designed can represent and solve a full range of one-step multiplication and division word problems; or how well these basic situation types for each operation are carried coherently across the grades, (e.g., with fractions and algebraic expressions); or, in all grades, whether the problems connect concepts, Standards, and domains in ways that are	**Evidence-** The application problems do stress the Major Work of the grade. All the lessons are focused around making sense of and working through a standard or two. Some of the lessons overlap such as the angles measures in Geometry and expressions and equations. By the end of the year, students should come away with a strong sense of early equations and expressions work and a solid	

natural and imp[illegible]. For a list of situation types for one-step addition, subtraction, multiplication, and division problems, see Situation Types for the Operations in Word Problems	foundation of prop[illegible]onal reasoning. Application problems are also evident in Common Core part 5 practice.	
Does modeling build slowly across K–8, with applications that are relatively simple in earlier grades and when students are encountering new content? In grades 6–8, do the problems begin to provide opportunities for students to make their own assumptions or simplifications in order to model a situation mathematically? Read Standard for Mathematical Practice 4, Model with Mathematics. Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** Each lesson in a unit generally builds into the next in a logical progression. Students are encouraged to think independently and discuss their method of solving a problem. Within the lesson, the number sets do begin with manageable values. For example in lesson 12, the percents used in the early application and problems are more benchmark like 25%, 5%, and 10%. They do become more complicated using 8% and 2% as a commission rate. The previous models from earlier work in the lesson (like the bar model) can be useful in working these exercises.	

Alignment Criterion 1:
Rigor and Balance

Materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.

(Reviewer only.)

X Meets

____Does Not Meet

AC1 Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 out of 6 points, the Criterion has not been met. Check the final rating.
Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)**

Strengths/Weaknesses:

The strengths of the materials is in the application and attempts to include contextual problems in the materials. There is a good amount of opportunity to engage students in reflection of the content and trying to make connections within the content. There are many opportunities to include writing (even short) in the lessons and throughout the materials. A weakness is that there are occasional procedures that are emphasized where a deeper conceptual understanding should be encouraged, in particular the notion of subtracting integers as being a difference rather than encouraging adding the opposite as the primary means of arriving at the difference. Also, the multi-step problem seems mainly to be deconstructing a single problem rather than taking a single situation and ask students to work with in various ways looking at different problems to solve.

Before moving to Alignment Criterion 2, record the final Meets or Does Not Meet rating in the Evaluation Summary.

Directions for Alignment Criterion 2

Standards for Mathematical Practice

Alignment Criterion 2: Standards for Mathematical Practice **Materials must demonstrate authentic connections between content Standards and practice Standards.** The Standards require that designers of instructional materials connect the mathematical practices to mathematical content in instruction. Thus, materials must demonstrate authentic connections between content Standards and practice Standards.	**Required Materials**: • Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf) • Focus by Grade Level for the grade being evaluated (www.achievethecore.org/focus) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion** Alignment Criterion 2 is rated as Meets or Does Not Meet. To rate Alignment Criterion 2, first rate metrics 2A, 2B, and 2C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). For each metric, guiding questions are provided to aid in gathering evidence. Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 2 if the materials earn 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as mathematical practices, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.
Metric AC2A: **Materials address the practice Standards in such a way as to enrich the Major Work of the grade; practices strengthen the focus on Major Work instead of detracting from it, in both teacher and student materials.** **How to Find the Evidence:** Familiarize yourself with the Major Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate teacher and student materials for evidence that the mathematical practices support and connect to the focus of the grade. NOTE: Examples of evaluating this Criterion might include looking at whether, in grades K–5, students using the materials are supported to look for and express regularity in repeated reasoning about the addition table, the multiplication table, the properties of operations, the relationship between addition and subtraction or multiplication and division, and the place value system; or whether, in grades 6–8, students using the materials are supported to look for and express regularity in repeated reasoning about proportional relationships and linear functions. For context, read Criterion #8 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013).	**Evidence-** All Mathematical Practices are evident throughout the book labeled in TE as SMP Tips. Multiple SMPs are embedded throughout the lessons and within each lesson many of are specifically addressed as major points of emphasis. For example, attention is given explicitly to SMPs 1, 3, 4, and 7 in lessons 9, 10, 11, and 12.	**(Reviewer only.)** **X Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**

Metric AC2B **Materials attend to the full meaning of each practice Standard.** **How to Find the Evidence:** For context, read Criterion #7 and Criterion #9 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).		**Use the questions for Metric 2B to evaluate Metric 2B. Record evidence for each question and rate Metric 2B.** **(Reviewer only.)** **X Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Over the course of any given year of instruction, is each mathematical practice Standard meaningfully present in the form of assignments, activities, or problems that stimulate students to develop the habits of mind described in the practice Standard? Evaluate lessons, chapter/ unit assessments, and homework assignments for evidence of each mathematical practice being meaningfully present in instruction.	**Evidence-** Each SMP is addressed at some point throughout the year. Each chapter embeds and highlights specific SMPs including the use of a calculator to be used as a tool. Many of the questions posed on the interim assessments address SMP 3, critique reasoning and make viable arguments.	
Do the materials treat the practice Standards as developing across grades or grade bands? Are the practice Standards in early grades appropriately simple? Do they display an arc of growing sophistication across the grades?	**Evidence-** In the 7th grade the SMPs are continually being developed. For example, students are asked to compare and contrast in writing some of the major topics in proportional reasoning and at other times students are asked to examine and find error with another student's work.	
Are there teacher-directed materials that explain the role of the practice Standards in the classroom and in students' mathematical development? Are alignments to practice Standards accurate?	**Evidence-** Each lesson includes specific SMPs that are present and many of them are highlighted in a SMP Tip where the text provides insight into the purpose of the standard within the context of the lesson. For example, SMP 5 is highlighted in the statistics unit as a way to utilize calculators as a tool and in Lesson 12 SMP 1 is highlighted to be aware that students need encouragement when the problems become difficult and necessary information is not so obvious.	
Metric AC2C: **Materials support the Standards' emphasis on mathematical reasoning.** **How to Find the Evidence:** For context, read Criterion #10 in the Publishers' Criteria for the		**Use the questions for Metric 2C to evaluate Metric 2C. Record evidence for each question and rate Metric 2C.**

Common Core Standards for Mathematics, Grades K–8 (Spring 2013).		(Reviewer only.) X Meets (2)
Do the materials support students in constructing viable arguments and critiquing the arguments of others concerning grade-level mathematics that is detailed in the content Standards? Read Standard for Mathematical Practice 3. Evaluate teacher and student materials to ensure that students are given opportunities to reason with grade-level mathematics.	**Evidence-** *Ready Common Core* allows for students to discuss and critique others through justification and reasoning. Nearly two-thirds of the lessons include specifically SMP 3. Most of the interim assessments include some form of SMP 3. For example, Unit 1 interim assessment asks students to describe the factors considered when making a certain choice of stocks (constructing a viable argument). There are also many Pair/Share questions that encourage SMP 3 such as asking students to explain how an estimate shows an answer is reasonable.	____Partially Meets (1) ____Does Not Meet (0)
Do the materials support students in producing not only answers and solutions, but also, in a grade-appropriate way, arguments, explanations, diagrams, mathematical models, etc., especially in the Major Work of the grade? Familiarize yourself with the Major Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate teacher and student materials, to understand the types of work students are expected to produce.	**Evidence-** The materials consistently ask students to produce explanations and justification for procedures and underlying concepts. Some of them are questions posed in the margins like: "how do you know the answer is negative?" (Lesson 7) and others are part of a longer problem set asking students to "explain how to find the number of people that can ride in a rollercoaster with 10 cars?" (Lesson 11).	
Do materials explicitly attend to the specialized language of mathematics? Is the language of argument, problem solving, and mathematical explanations taught rather than assumed? Evaluate teacher and student materials, paying attention to how mathematical language is taught. NOTE: Examples of evaluating this Criterion might include looking at whether students are supported in: basing arguments on definitions; using the method of providing a counterexample; or recognizing that examples alone do not establish a general statement.	**Evidence-** Each Lesson pulls out the specific math vocabulary and uses it contextually, usually in the first part of the lesson. The vocabulary is used in the context of the lesson not just highlighted and written as a list.	
Alignment Criterion 2: **Standards for Mathematical Practice** **Materials must demonstrate authentic connections between content Standards and practice**		(Reviewer only.) X Meets

Standards **AC2** Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 out of 6 points, the Criterion has not been met. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)** **The Standards for Mathematical Practice are evident throughout the materials including many opportunities for writing and critiquing work. There are opportunities for students to create viable arguments in discussions and in open ended responses. The weakness is the lack SMP 5 being utilized in more of the chapters focusing on the Major Work of the grade level and instead is emphasized in the supporting standards.** **Before moving to Alignment Criterion 3, record the final Meets or Does Not Meet rating in the Evaluation Summary.**		**____Does Not Meet** **Strengths/Weaknesses:**
Alignment Criterion 3: **Access to the Standards for All Students** **Materials must provide supports for English Language Learners and other special populations.** Because Standards are for all students, alignment requires thoughtful support to ensure all students are able to meet the Standards. Thus, aligned materials must provide supports for English Language Learners and other special populations.	**Required Materials:** • Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion:** Alignment Criterion 3 is rated as Meets or Does Not Meet. To rate Alignment Criterion 3, first rate metrics 3A, 3B, and 3C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 3 if the materials earn 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as support for special population, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.
Metric AC3A: **Support for English Language Learners and other special populations is thoughtful and helps those students meet the same Standards as all other students. The language in which problems are posed is carefully considered.** **How to Find the Evidence:** Evaluate teacher and student materials, paying attention to supports	**Evidence-** Many of the lessons include specific ELL support reminding teachers of small things they can do to support ELLs. For example, lesson 9 encourages that the teacher explicitly write down the unit 1 pound on the board and describe what we measure in pounds. This helps ELL by being able	**Reviewer only.)** **X Meets (2)** **____Partially Meets (1)**

offered for spec pulations.	to see the word in t and have examples. This is a frequent strategy but should also include not just describing what we measure in pounds but also to show images of items and also related words.	____Does Not Meet (0)
Metric AC3B: **Materials provide appropriate level and type of scaffolding, differentiation, intervention, and support for a broad range of learners with gradual removal of supports, when needed, to allow students to demonstrate their mathematical understanding independently.** **How to Find the Evidence:** Evaluate teacher and student materials, paying attention to whether materials provide differentiation that will lead all learners to engage with on-grade-level content.	**Evidence-** Materials provide a range of learning styles support to help all students be successful. The *Guided Instruction* sections do a nice job of providing some scaffolding for students that ELLs would benefit from. The lessons in general remove supports for students giving greater opportunity for independent work in places like the Common Core Practice section.	**Reviewer only.)** **X Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Metric AC3C: **Design of lessons recommends and facilitates a mix of instructional approaches for a variety of learners such as using multiple representations (e.g., including models, using a range of questions, checking for understanding, flexible grouping, pair-share).** **How to Find the Evidence:** Evaluate teacher materials, noting instructional approaches suggested for whole class and differentiated lessons and activities.	**Evidence-** Each lesson includes either the use of a visual model or some sort of hands-on activity or both. Modeling, Guided Instruction, Questions, Try It questions , Pair-Share, and Guided Practice are all evident. There are Mathematical Discourse guides within each lesson that helps to tease out of students those ideas that are important. They also include expected responses from students.	**Reviewer only.)** **X Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Alignment Criterion 3: **Access to the Standards for All Students** **Materials must provide supports for English Language Learners and other special populations.** **AC3** Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 points, the Criterion has not been met. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion.**(Reviewer only.)**		**(Reviewer only.)** **X Meets** **____Does Not Meet** **Strengths/Weaknesses:**

Strength: There are a number of solid suggestions for teachers to provide support to ELL students, including writing things on the board, discussion in pairs and small groups, and modeling correct language. **Weakness: there are not many suggestions that include bringing in realia or at least images of the vocabulary that is a focus of the lesson and this can be very helpful for ELL students to make sense of the mathematics.** **Move to the Evaluation Summary and record the final Meets or Does Not Meet rating .**	

Once an evaluation for alignment to the Shifts and major features of the CCSS has been conducted using Sections 1-3, it's important to evaluate for overall quality and best practices. A starting list of Indicators of Quality are suggested below. States, districts and others evaluating instructional materials are encouraged to add to this list to ensure materials reflect local contexts. For background information on some of the Indicators of Quality in this section, refer to pp.18–21 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).

Indicators of Quality	Evidence- Give specific examples.	Rating: (Reviewers only.)
1. Lessons are thoughtfully structured and support the teacher in leading the class through the learning paths at hand, with active participation by all students in their own learning and in the learning of their classmates.	**Evidence-** Each lesson includes a differentiation suggestion for Intervention, On-Level, and Challenge Activities. Throughout the series there are cartoon avatars in both the Student Instruction book and Problem Solving & Practice book. They are found in the margins and pose questions to students, offer the discussion strategy Pair-Share, and provide tips for problem solving.	**(Reviewer only.)** **X Yes** **_____ No**
2. The underlying design of the materials includes both problems and exercises. (In solving problems, students learn new mathematics, whereas in working exercises, students apply what they have already learned to build mastery.) Each problem or exercise has a purpose. **NOTE: This Criterion does not require that the problems and exercises be labeled as such.**	**Evidence-** Each lesson provides a variety of learning styles from Introduction to Discussion to Modeling to Practice. The section of each lesson titled: *Modeled Instruction* uses problems and the section titled: *Guided Instruction* uses exercises. Each is connected specifically to the topic and to each other.	**(Reviewer only.)** **X Yes** **_____ No**

3. Design of assignments is not haphazard: exercises are given in intentional sequences in order to strengthen students' mathematical understanding.	**Evidence-** Progression is systematic to help the students gain confidence as they progress to more difficult problems. Each lesson builds intentionally.	**(Reviewer only.)** **X Yes** **_____ No**
4. There are separate teacher materials that support and reward teacher study including, but not limited to: discussion of the mathematics of the units and the mathematical point of each lesson as it relates to the organizing concepts of the unit, discussion on student ways of thinking and anticipating a variety of students responses, guidance on lesson flow, guidance on questions that prompt students thinking, and discussion of desired mathematical behaviors being elicited among students.	**Evidence-** Each lesson begins with the mathematical progressions of students, key vocabulary and lesson objectives. In Part 1 of each lesson, there are tips for targeting Mathematical Practices and facilitating mathematical discourse. There is also a step-by-step guide for a teacher that is new to the content or grade level. Student misconceptions are addressed to assist the teacher.	**(Reviewer only.)** **X Yes** **_____ No**
5. Manipulatives suggested in the materials are faithful representations of the mathematical objects they represent and are connected to written methods.	**Evidence-** *Ready Common Core* utilizes many hands-on activities and the materials are usually items (number lines for instance) that are common in classrooms. For example, Lesson 9 utilizes small pieces of paper to represent fractional amounts that can be used as a model for dividing fractional amounts. The students would write the corresponding amounts down that are represented by the paper. Lesson 13's hands on activity uses grid paper for proportional relationships, and Lesson 14 uses Algebra tiles. Each of these can be connected to some iconic or abstract representation.	**(Reviewer only.)** **X Yes** **_____ No**
6. Materials include a variety of curriculum-embedded assessments. Examples include pre-, formative, summative, and self-assessment resources.	**Evidence-** The summative assessment tools are fine. Formative assessments seem to be embedded as sidebar questions that students should respond to. The online component does include diagnostic tools. There is also a SBAC format assessment that students can take 3 times in the year. This also includes a scoring guide and rubric.	**(Reviewer only.)** **X Yes** **_____ No**

	The formative assessments are implied and for teachers new to the profession this may not be at first obvious. Identifying in the Teacher Edition where formative assessment tools are would be helpful.	
7. Assessments contain aligned rubrics, answer keys, and scoring guidelines that provide sufficient guidance for interpreting student performance.	**Evidence-** Each unit has assessments aligned and scoring guides & rubrics that go along with them.	**(Reviewer only.)** **X Yes** **_____ No**
8. Materials assess student proficiency using methods that are accessible and unbiased, including the use of course-level language in student prompts.	**Evidence-** Everything seems to be unbiased. Course level language is used throughout the text. Assessments include assisted response (choosing correct and incorrect), true false, short written responses, and performance tasks.	**(Reviewer only.)** **X Yes** **_____ No**
9. Materials are carefully evaluated by qualified individuals, whose names are listed, in an effort to ensure freedom from mathematical errors and course-level appropriateness.	**Evidence-** There are 17 individuals listed as teacher advisors including classroom teachers, math coach, reading specialist, research scientist, and curriculum coordinator.	**(Reviewer only.)** **X Yes** **_____ No**
10. The visual design supports students in engaging thoughtfully with the subject. Navigation through the text is clear.	**Evidence-** Visually, the layout is clean. The pages are not densely packed with words or images. The margins include cartoon style students that pose questions to consider and suggest methods to do so (Pair/Share). The text is easy to read and make sense of. There are essentially no images taken from real world situations.	**(Reviewer only.)** **X Yes** **_____ No**

11. The materials engage parents in appropriate ways. For example, homework assignments in elementary grades, consist of routine problems, practice with getting answers, and fluency-building exercises that parents can easily support.	**Evidence-** Each week is a new lesson, and each lesson in the Practice and Problem Solving book begins with a letter to the Family. Each letter describes the content to be addressed that week along with showing some ways students will be working through the content. There is also an online component. Each lesson includes some procedural work that many parents have experience and are familiar with; there is not an abundance of this problem type and there are no answers in the back. These problems are balanced with more conceptual work and performance tasks.	**(Reviewer only.)** **X Yes** **_____ No**

Reviewer IMET Evaluation Summary **Title/Level: Ready Common Core 7**

Publisher: Curriculum Associates Copyright: 2010 **ISBN: 978-1-4957-0487-1**

Reviewer ID # TR DA **Date Review Completed: March 8, 2016**

Non-Negotiable Criteria- Each Non-Negotiable must be met in order for the Non-Negotiable Alignment Criteria to be met overall.

Non-Negotiable 1: Freedom from Obstacles to Focus	Non- Negotiable 2: Focus and Coherence
X Meets _____ Does Not Meet	X Meets _____ Does Not Meet

Non-Negotiable Overall:

X Meets **_____ Does Not Meet**

Alignment Criteria- Each Alignment Criterion must be met with a sufficient number of points in order for Alignment Criteria to be labeled as "Meets" overall. The more points the materials receive on the Alignment Criteria, the better they are aligned.

Alignment Criterion 1: Rigor and Balance	Alignment Criterion 2: Standards of Mathematical Practice	Alignment Criterion 3: Access to Standards for All Learners
Points: 6 of 6 possible. (Materials must receive at least 5 of 6 points to align.) X Meets _____ Does Not Meet	Points: 6 of 6 possible. (Materials must receive at least 5 of 6 points to align.) X Meets _____ Does Not Meet	Points: 6 of 6 possible. (Materials must receive at least 5 of 6 points to align.) X Meets _____ Does Not Meet

Alignment Criteria Overall:

_X_ Meets **_____ Does Not Meet**

If the materials meet both Non-Negotiables and relevant Alignment Criterion, they are aligned to the Shifts and major features of the Core Standards. **Do the materials meet every Non-Negotiable and Alignment Criterion? X Yes _____ No**

What are the specific areas of strength and weakness based on this evaluation? Publishers or others modifying or developing assessments can use this information to make improvements and/or to remedy gaps in the alignment of assessment materials.

The overall strengths of these materials is the commitment to encouraging the kind of thinking and work that is different in the Common Core standards. Getting away from an emphasis on rote procedure and instead placing more emphasis on conceptual understanding by asking students to think and respond to thoughtful questions and posing questions without obvious answers. The hands on activities are easy to implement as they often use common classroom supplies like paper or cutting paper. A weakness is that the material sometimes does not provide enough of the skill based practice, that procedural fluency piece; it is there, just not as balanced it seems.

2015-16 Mathematics Interim Review Recommendation & Summary

Publisher Name:	Curriculum Associates LLC
Title:	Ready Common Core Mathematics
ISBN #	9780760986431
Grade Level(s) or Course:	8th Grade
Reviewer ID:	TR & TC

RECOMMENDED AS:

___X_____**Core Mathematics Program-** a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials. Substantial evidence clearly supports the designation of this program as Core.

_____**Other Mathematics Program-** a program that substantially, but partially, meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for supplemental materials. Substantial evidence clearly supports the designation of this program as Other.

_____**Component Mathematics Program-** a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs. Substantial evidence clearly supports the designation of this program as Component.

_____**Intervention Program-** a program designed and intended to target and support students' specific needs. Substantial evidence clearly supports the designation of this program as Intervention.

_____ **Does not meet criteria** for recommendation as a Curricular Material or Online Resource for Mathematics.

EVIDENCE SUMMARY:

FOCUS-

No assessment items cover anything beyond grade 8 on similarity, congruence, or geometric transformations. Items on similarity, congruence, or geometric transformations can be found in the assessment items referred to as Interim Assessments (Unit tests) and the larger SBAC prep items.

COHERENCE-

There are 31 lessons in the series and 24 of them are devoted to the major work of the grade. This represents 77% which is within the acceptable range.

RIGOR-

Each lesson engages students in a variety of applications and contextual situations as well as some procedural practice. The Problem Solving and Practice book also add problems and exercises dedicating adequate time to the Major Work of the grade. All the lessons utilize an application and certainly a contextual situation at the beginning to ground the math in something real. However, not every lesson (in particular the geometry lessons) includes a real world based problem.

CONCEPTUAL UNDERSTANDING-

There are multi-step problems in most lessons, and it is often in the Connect It section. These sections ask questions that build on one single situation. For example, Lesson 10 shows a non-linear graph and several questions pertaining to the graph, culminating in asking students to summarize what the graph shows. Lesson 13 analyzes student work in a multi-step way and then asks students to choose a preferred method and explain why.

MATHEMATICAL PRACTICES-

Multiple SMPs are embedded throughout the lessons and within each lesson many of them are specifically addressed as major points of emphasis. The vocabulary in the text is taken straight from the SMPs. Page A9 of the TE explains the curriculum's approach to the SMPs.
For example, in Lesson 8, SMP 7 is a focus as a means of predicting linear or nonlinear functions. In Lesson 9, the focus is on SMP 8, repeated reasoning to make some sense of slope and the ratio it is born out of.

ACCESSIBILITY OF STANDARDS TO ALL STUDENTS-

The TE includes a coding method to differentiate instruction (B-basic, M-medium, C-challenging). Each lesson includes either the use of a visual model or some sort of hands-on activity or both. There does seem to be a shortage of models that represent the mathematics compared to a model such as underlining parts of numbers or expressions in certain colors (Lesson 3 and Lesson 5). There are some nice Mathematical Discourse guides within each lesson that helps to tease out of students those ideas that are important. They also include expected responses from students.

2015-16 Interim Mathematics Review

Mathematics Evaluation Tool Grades K-8

Publisher: CURRICULUM ASSOCIATES, LLC

Title of Material: READY COMMON CORE MATHEMATICS. 8th

Author: CURRICULUM ASSOCIATES

ISBN #: 978 0760986431 **Copyright** 2014

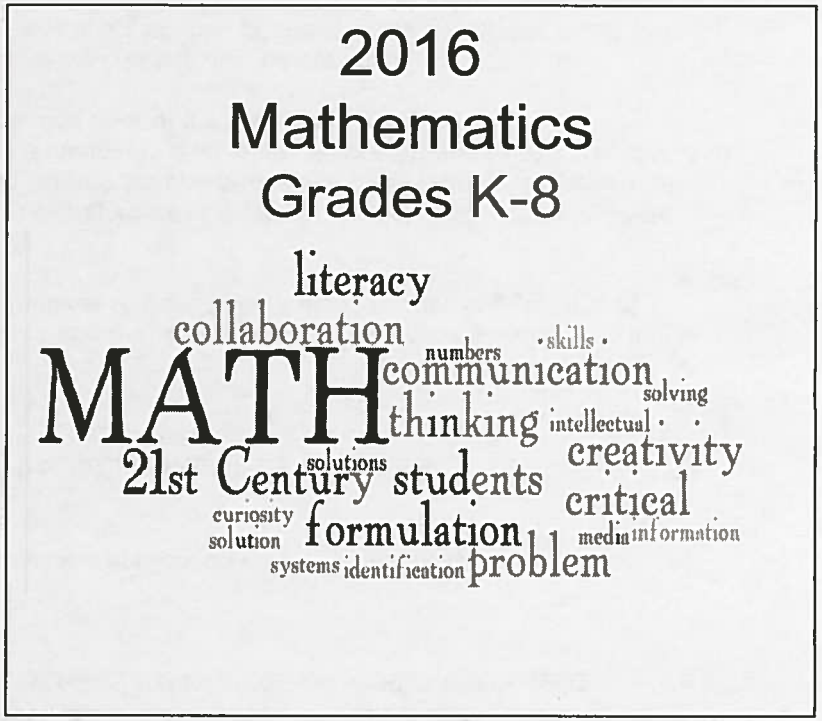
Reviewer ID: TC TR

Core Mathematics Program- a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Core.

Other Mathematics Program- a program that substantially, but partially, meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Other.

Component Mathematics Program- a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs.
Substantial evidence clearly supports the designation of this program as Component.

Intervention Program- a program designed and intended to target and support students' specific needs.
Substantial evidence clearly supports the designation of this program as Intervention.



- Evaluation Form adapted from Instructional Materials Evaluation Toolkit (IMET).

The IMET was developed by Student Achievement Partners. Educators may use or adapt. http://creativecommons.org/licenses/by/3.0/ Download this tool at http://achievethecore.org/IMET

Instructional Materials Evaluation Tool

Mathematics, Grades K-8

What Are the Purposes of the IMET?

This Math IMET is designed to help educators determine whether instructional materials are aligned to the Shifts and major features of the Common Core State Standards (CCSS). The substantial instructional Shifts (http://www.corestandards.org/other-resources/key-shifts-inmathematics/) at the heart of the Common Core State Standards are:

- **Focus** strongly where the Standards focus
- **Coherence**: Think across grades and link to major topics within the grade
- **Rigor**: In major topics, pursue conceptual understanding, procedural skill and fluency, and application with equal intensity.

The IMET draws directly from the following documents:

- Common Core State Standards for Mathematics (www.corestandards.org/Math)
- Publishers' Criteria for the Common Core State Standards in Mathematics grade K-8 (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)

When to use the IMET

1. Purchasing materials: Many factors go into local purchasing decisions. Alignment to the Standards is a critical factor to consider. This tool is designed to evaluate alignment of instructional materials to the Shifts and the major features of the CCSS. It also provides suggestions of additional indicators to consider in the materials evaluation and purchasing process.

2. Evaluating materials currently in use: The IMET can be used to analyze the degree of alignment of existing materials and help to highlight specific, concrete flaws in alignment. Even where materials and tools currently in use fail to meet one or more of these criteria, the pattern of failure is likely to be informative. States and districts can use the evaluation to create a thoughtful plan to modify or combine existing resources in such a way that students' actual learning experiences approach the focus, coherence, and rigor of the Standards.

3. Developing programs: Those developing new programs can use this tool as guidance for creating aligned curricula.
Please note this tool was designed for evaluating comprehensive curricula (including any supplemental or ancillary materials), but it was not designed for the evaluation of standalone supplemental materials.

Who Uses the IMET?

Evaluating instructional materials requires both subject-matter and pedagogical expertise. Evaluators should be well versed in the Standards (www.corestandards.org/Math) for all grades in which materials are being evaluated. This includes understanding the Major Work of the grade (www.achievethecore/focus), the Supporting and Additional work, how the content fits into the progressions in the Standards (www.achievethecore.org/progressions), and the expectations of the Standards with respect to conceptual understanding, procedural skill and fluency, and application. Evaluators also should be familiar with the substantial instructional Shifts (http:// www.corestandards.org/other-resources/key-shifts-in-mathematics/) of Focus, Coherence and Rigor that are listed above.

Getting Started

Prior to Evaluation

Assemble all of the materials necessary for the evaluation. It is essential for evaluators to have materials for all grades covered by the program, as some criteria cannot be rated without having access to each grade. In addition, each evaluator should have a reference copy of the Common Core State Standards for Mathematics (CCSSM) and the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013).

2015-16 Interim Mathematics Review

Mathematics Evaluation Tool Grades K-8

Publisher: Curriculum Associates

Title of Material: Ready Common Core Grade 8

Author: Mulitple Curriculum Associates

ISBN #: 9781495723261 **Copyright** 2014

Reviewer ID: TR & TC

Core Mathematics Program- a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Core.

Other Mathematics Program- a program that substantially, but partially, meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Other.

Component Mathematics Program- a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs.
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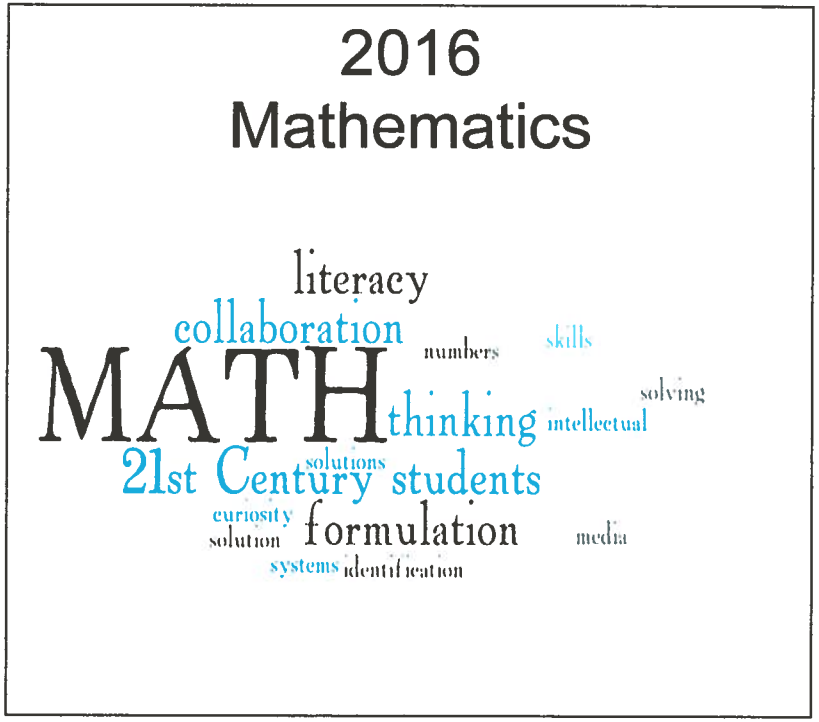
Intervention Program- a program designed and intended to target and support students' specific needs.
Substantial evidence clearly supports the designation of this program as Intervention.



- Evaluation Form adapted from Instructional Materials Evaluation Toolkit (IMET).

The IMET was developed by Student Achievement Partners. Educators may use or adapt. http://creativecommons.org/licenses/by/3.0/ Download this tool at http://achievethecore.org/IMET

Before conducting the evaluation itself, it is important to develop a protocol for the evaluation process. The protocol should include having evaluators study the Publishers' Criteria and the IMET. It will also be helpful for evaluators to get a sense of each program overall before beginning the process. At a minimum, this would include reading the front matter of the text, looking at the table of contents and paging through multiple chapters.

Sections 1-3 below should be completed to produce a comprehensive picture of the strengths and weaknesses of the materials under evaluation. Information about areas in need of improvement or supplementation should be shared with internal and external stakeholders.

Navigating the Tool

Begin with Section 1: Non-Negotiable Alignment Criteria

- The Non-Negotiable Alignment Criteria must each be met in full for materials to be considered aligned to the Shifts and the major features of the Common Core State Standards. Each Non-Negotiable Alignment Criterion has one or more metrics associated with it; every one of these metrics must be met in order for the criterion as a whole to be met.

- Examine the relevant materials and use evidence to rate the materials against each criterion and its associated metric(s).

- Record and explain the evidence upon which the rating is based.

Continue to Section 2: Alignment Criteria

- The Alignment Criteria must each be met for materials to be considered aligned to the Shifts and the major features of the Common Core State Standards. Each Alignment Criterion has one or more metric associated with it; a specific number of these metrics must be met or partially met in order for the criterion as a whole to be met.

- Examine the materials in relation to these criteria, assigning each metric a point value. Rate the criterion as "Meets" or "Does Note Meet" based on the number of points assigned. The more points the materials receive on the alignment Criteria, the better they are aligned.

- Record and explain the evidence upon which the rating is based.

Proceed to Section 4: Indicators of Quality

- Indicators of Quality are important considerations that will help evaluators better understand the overall quality of instructional materials. These considerations are not criteria for alignment to the CCSS, but they provide valuable information about additional program characteristics. Evaluators may want to add their own indicators to the examples provided.

Directions for Non-Negotiable 1

Freedom from Obstacles to Focus

Criterion	Evidence- Give specific examples.	Rating: (Reviewer only.)
Non-Negotiable 1: **Freedom from Obstacles to Focus** **Materials must reflect the content architecture of the Standards by not assessing the topics named before the grade level where they first appear in the Standards.** The Standards foster students' progress to algebra by focusing strongly on arithmetic. Consistent with this focus, certain topics from outside of arithmetic appear only in later grades. Thus, to be aligned, materials must reflect the content architecture of the Standards by not assessing the topics named before the grade level where they first appear in the Standards. In this criterion, "topics named" means the topics that are explicitly named in Metric 1A. No other topics should be added to the list in Metric 1A. (Note that other topics in the standards are addressed in criterion NN2.)	**Required Materials** • Common Core State Standards for Mathematics (www.corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf) • From the materials being evaluated: teacher guides and all assessment components	**Rating this Criterion:** Non-Negotiable 1 is rated as Meets or Does Not Meet. To rate Non-Negotiable 1, begin by rating Metric 1A. Since Metric 1A is the only metric for Non-Negotiable 1, the rating for Non-Negotiable 1 is the same as the rating for Metric 1A. If Metric 1A is rated as Does Not Meet, include evidence of when the named topic(s) is/are assessed. If the metric is rated as Meets, list the grade(s) examined in the evaluation.

Metric NN1A: **Materials reflect the basic architecture of the Standards by not assessing the listed topics before the grade level indicated.** • Probability, including chance, likely outcomes, probability models. (Introduced in the CCSSM in grade 7) • Statistical distributions, including center, variation, clumping, outliers, mean, median, mode, range, quartiles; and statistical association or trends, including two-way tables, bivariate measurement data, scatter plots, trend line, line of best fit, correlation. (Introduced in the CCSSM in grade 6) • Similarity, congruence, or geometric transformations. (Introduced in the CCSSM in grade 8) • Symmetry of shapes, including line/ reflection symmetry, rotational symmetry. (Introduced in the CCSSM in grade 4) **How to Find the Evidence:** Evaluate the table of contents, all chapter tests, all unit tests, and other such assessment components (including rubrics). For context, read Criterion #2 from the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013). NOTE: Grade alignments of other topics are addressed in Non-Negotiable 2, Focus and Coherence.) In this criterion, "topics named" means the topics that are explicitly named in Metric 1A. No other topics should be added to the list in Metric 1A. (Note that other topics in the standards are addressed in criterion NN2.)	**Evidence-** No assessment items cover anything beyond grade 8 on similarity, congruence, or geometric transformations. Items on similarity, congruence, or geometric transformations can be found in the assessment items referred to as Interim Assessments (Unit tests) and the larger SBAC prep items.	**(Reviewer only.)** **X Meets** **____Does Not Meet**
Non-Negotiable 1: Materials must reflect the content architecture of the Standards by not assessing the topics named* before the grade level where they first appear in the Standards. **NN 1** If Metric 1A was rated as Meets, then rate Non-Negotiable 1 as Meets. If Metric 1A was rated as Does Not Meet, then rate Non- Negotiable 1 as Does Not Meet. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion.**(Reviewer only.)** **Strengths: the items are varied in that there are some assisted response questions, some very in depth questions requiring students to produce writing to support a position, and some are multi-step items requiring moving on from one part to the next.** **Weaknesses: There is not an abundance of problems and exercises for students to work with.** **Before moving to Non-Negotiable 2, record the final Meets or Does Not Meet rating in the Evaluation Summary.**		**(Reviewer only.)** **X Meets** **____Does Not Meet** **Strengths/Weaknesses:**

Directions for Non-Negotiable 2

Focus and Coherence

Non-Negotiable 2:

Focus and Coherence

Materials must focus coherently on the Major Work of the grade in a way that is consistent with the progressions in the Standards.

Focus and coherence are the two major evidence-based design principles of the Common Core State Standards for Mathematics (CCSSM, p. 3). Focus is necessary in order to fulfill the ambitious promise the states have made to their students by adopting the Standards: greater achievement at the college and career ready level; greater depth of understanding of mathematics; and a rich classroom environment in which reasoning, sense-making, applications, and a range of mathematical practices flourish. In simpler terms, a mile-wide, inch-deep curriculum translates to less time per topic. Less time means less depth and moving on without many students. Thus, materials must focus coherently on the Major Work of the grade in a way that is consistent with the progressions in the Standards.

Required Materials

- Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf)
- Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)
- Focus by Grade Level for the grade being evaluated (www.achievethecore.org/focus)
- From the materials being evaluated: teacher guides, student texts and workbooks

Rating this Criterion:

Non-Negotiable 2 is rated as Meets or Does Not Meet.

To rate Non-Negotiable 2, first rate metrics 2A–2H. Each of these eight metrics must be rated as Meets in order for Non-Negotiable 2 to be rated as Meets. Rate each metric 2A-2H as Meets or Does Not Meet/Insufficient Evidence. If the evidence examined shows that the Criterion is met, then mark the Criterion Meets. If the evidence examined shows that the Criterion is not met—or if there is insufficient evidence to make a determination—then mark the Criterion as Does Not Meet/Insufficient Evidence. Support all ratings with evidence.

Metric NN2A:
In each grade K–8, students and teachers using the materials as designed devote the large majority of time to the Major Work of the grade.

How to Find the Evidence:

Familiarize yourself with the Major Work of the grade being evaluated (see the Focus by Grade Level documents.)

Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, lessons, homework assignments, and assessments. (Evaluate both student and teacher materials.)

Consider time spent on the Major Work of the grade and judge qualitatively whether students and teachers using the materials as designed will devote the large majority of time to the Major Work of the grade.

For context, read Criterion #1 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013)

Evidence-

There are 31 lessons in the series and 24 of them are devoted to the major work of the grade. This represents 77% which is within the acceptable range.

(Reviewer only.)

X Meets

____Does Not Meet/

Insufficient Evidence

Metric NN2B: **Supporting work, where present, enhances focus and coherence simultaneously by also engaging students in the Major Work of the grade.** **How to Find the Evidence:** Familiarize yourself with the Major Work and Supporting Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate chapters and lessons that focus on Supporting Work. NOTE: Example of evaluating this Criterion might include looking at whether materials for K–5 generally treat data displays as an occasion for solving grade-level word problems using the four operations (e.g., see 3.MD.B.3); or whether materials for grade 7 take advantage of opportunities to use probability to support ratios, proportions, and percentages. For context, read Criterion #3 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Lessons 28, 29, and 30 all ask students to utilize their knowledge of linear equations and equations of lines and apply it to the supporting standards of scatter plots. This is used to describe a data set and also to predict with an algebraic model.	**(Reviewer only.)** **X Meets** **____Does Not Meet/** **Insufficient Evidence**
Metric NN2C: **Materials base content progressions on the grade-by-grade progressions in the Standards. Content from previous or future grades does not unduly interfere with or displace on-grade-level content.** **How to Find the Evidence:** Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, and lessons in both student and teacher materials. NOTE: In some cases it may be possible that aligned materials might address some aspects of a topic in a strategic way before or after the grade level in which the topic is central in the Standards' progressions; for example, a curriculum author might purposefully choose to explore adding fractions with unlike denominators in a way appropriate to grade four, recognizing that this work is not really required until the next grade. However, any such purposeful discrepancies in content progressions should enhance the required learning in each grade; not unduly interfere with or displace grade-level content; and be clearly aimed at helping students meet the Standards as written rather than effectively rewriting the progressions in the Standards. And in all cases, note that Non-Negotiable 1 must be met for materials to be aligned. For context, read Criterion #5a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Each lessons has at its core a clear 8th grade standard. Each lesson also includes the standards coming before and sets the context for moving into the current standard. For example, Lesson 14 references the 6th grade standard that asks students to generate equivalent expressions and solve one-step equations. Then it references the 7th grade standard that continues the trend of solving more complicated equations. Finally, the lesson extends understanding of solutions to include no solutions and infinite solutions, the 8th grade standard. There is also a reference to where the high school will extend these ideas further. Another example references other 8th grade standards that have been taught earlier in the book and the extension of those into other mathematical areas (Lesson 17). The Teacher Toolbox online allows easy access for reteaching concepts.	**(Reviewer only.)** **X Meets** **____Does Not Meet/** **Insufficient Evidence**

Metric NN2D: **Materials give all students extensive work with on-grade-level problems.** **How to Find the Evidence:** Evaluate both student and teacher materials. If the materials provide resources for differentiated learning, consider whether lower-performing students have opportunities to engage with grade-level problems. Also consider whether higher-performing students are given opportunities to learn current grade-level content in greater depth. For context, read Criterion #5b in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Each lesson includes a few problems in the lessons from the Instruction book, however, each problem does ask several layered questions surrounding the problem. For example in lesson 11, in the Modeled and Guided Instruction section, the problem is asking students to consider two graphs of lines that are proportional and there are 5 questions all related to the one situation. Finally, there is an exercise that takes all the work and applies it in a similar way but a slightly different situation. There are also several problems/exercises for each lesson in the Practice and Problem solving book.	**(Reviewer only.)** **X Meets** **____Does Not Meet/** **Insufficient Evidence**
Metric NN2E: **Materials relate on-grade-level concepts explicitly to prior knowledge from earlier grades.** **How to Find the Evidence:** Evaluate both student and teacher materials. NOTE: Examples of evaluating this Criterion might include looking at the way the materials extend basic ideas of place value across the decimal point; or the role that properties of operations play when the materials extend arithmetic beyond whole numbers to fractions, variables, and expressions. More generally, cluster headings in the Standards sometimes signal key moments where reorganizing and extending previous knowledge is important in order to accommodate new knowledge (e.g., see cluster headings that use the phrase "Apply and extend previous understanding"). For context, read Criterion #5c in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Each lesson utilizes a section called The Learning Progression where the lesson is framed within the context of the standards previously taught and how it relates to the week's lesson. Each lesson includes prerequisite skills and vocabulary.	**(Reviewer only.)** **X Meets** **____Does Not Meet/** **Insufficient Evidence**
Metric NN2F: **Review of material from previous grades is clearly identified as such to the teacher, and teacher and students can see what their specific responsibility is for the current year.** **How to Find the Evidence:** Evaluate the table of contents, but do not stop there; also evaluate units, chapters, lessons, homework assignments and assessments. (Evaluate both student and teacher materials.) Identify any content from previous grades and check whether it is identified as such. For context, read Criterion #5a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** At the beginning of each unit, there is a visual of the standards from previous grade levels that the unit is building on (grade 6 and grade 7 standards that are related). Then the unit highlights the content standards that are the focus of the unit. Finally, The standards that students are moving toward from the unit are also listed.	**(Reviewer only.)** **X Meets** **____Does Not Meet/** **Insufficient Evidence**

Metric NN2G: **Materials in[illegible]e learning objectives that are visibly shaped by CCSSM cluster headings.** **How to Find the Evidence:** Select several clusters from the Major Work in the grade being evaluated. Evaluate teacher and student materials in relation to these clusters. For context, read Criterion #6a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Each unit is esse[illegible]lly titled after each of the Domains in the standards (Expressions and Equations Domain is split into 2 units, one focused on exponents and some of the Number System, the other on linear equations). The subsequent lessons are focused around cluster headings. For example, lessons 1, 2, 4, and 5 all support the cluster: Expressions and equations work with radical and integer exponents. In Unit 3 (the other half of the Expressions and Equations Domain), all the lessons in the unit are expressly tied to the proportional relationships and linear equations from the cluster: Understand the connections between proportional relationships, lines, and linear equations.	**(Reviewer only.)** **X Meets** **____Does Not Meet/** **Insufficient Evidence**
Metric NN2H: **Materials include problems and activities that serve to connect two or more clusters in a domain, or two or more domains in a grade, in cases where these connections are natural and important.** **How to Find the Evidence:** In the grade being evaluated, choose two or more clusters or two or more domains for which connections are natural and important. Evaluate the units, chapters, and lessons that deal with the chosen topics, looking for problems and activities that serve to connect the chosen clusters or domains. NOTE: An example of evaluating this Criterion might include looking at whether problems in grade 4 sometimes or often involve students applying their developing computation skills (detailed in domain NBT) in the context of solving word problems (detailed in domain OA). For context, read Criterion #6b in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Topics are taught and then used repeatedly throughout the text. Lessons 23 and 24 both are focused on the Pythagorean theorem, but it is necessary to incorporate the concepts of squares and square roots as well as rational approximations. Lesson 5 focuses on using scientific notation (8.EE.A.4) which requires the overlap of standard 8.EE.A.1, using negative exponents.	**(Reviewer only.)** **X Meets** **____Does Not Meet/** **Insufficient Evidence**

Non-Negotiable 2:

Focus and Coherence

Materials must focus coherently on the Major Work of the grade in a way that is consistent with the progressions in the Standards.

NN 2 If all Metrics 2A – 2H were rated as Meets, then rate Non-Negotiable 2 as Meets. If one or more Metric was rated Does Not Meet/Insufficient Evidence, then rate Non-Negotiable 2 as Does Not Meet. Check the final rating.
Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)**

Strengths: Many resources available including the I-Ready online tool and the Diagnostic Test. The lessons in the materials focus on the Major Work of the grade in ways that are consistent with the progression. The beginning of each unit and lesson describe the progression that is a focus. This is clear and concise in each unit. The weakness is that each of the standards is treated more individually and explicit connections are not made as often.

Before moving to Alignment Criterion 1, record the final Meets or Does Not Meet rating in the Evaluation Summary.

(Reviewer only.)

X Meets

____Does Not Meet

Strengths/Weaknesses:

Now continue by evaluating the Alignment Criterion 1 for Rigor and Balance.

Directions for Alignment Criterion 1

Rigor and Balance

Alignment Criterion 1: Rigor and Balance

Materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.

The Standards set expectations for attention to all three aspects of rigor: conceptual understanding, procedural skill and fluency, and applications. Thus, materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.

Required Materials

- Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf)
- Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)
- Focus by Grade Level for the grade being evaluated (achievethecore.org/focus)
- Situation Types for the Operations in Word Problems (achievethecore.org/situation-types)
- From the materials being evaluated: teacher guides, student texts and workbooks

Rating this Criterion:

Alignment Criterion 1 is rated as Meets or Does Not Meet.

To rate Alignment Criterion 1, first rate metrics 1A, 1B, and 1C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). For each metric, guiding questions are provided to aid in gathering evidence.
Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 1 if the materials rate 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as rigor and balance, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.

Metric AC1A: **The materials support the development of students' conceptual understanding of key mathematical concepts, especially where called for in specific content Standards or cluster headings.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Major Work for the grade being evaluated that relate specifically conceptual understanding to use throughout the questions associated with this metric. NOTE: Some examples of clusters or Standards that call for conceptual understanding include: K.OA.A.1, (1.NBT.B, 1.NBT.C), (2.NBT.A, 2.NBT.B), (3.OA.A.1, 3.OA.A.2), 4.NF.A, (4.NBT.A, 4.NBT.B), 5.NF.B, (5.NBT.A, 5.NBT.B), 6.RP.A, 6.EE.A.3, 7.NS.A, 7.EE.A, 8.EE.B, 8.F.A, 8.G.A Clusters or Standards grouped by parentheses are closely connected and could be analyzed together. For context, read Criterion #4a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	-Choose a cluster/Standard from the Major Work that is aligned to each aspect of rigor and use to evaluate these metrics. It is most helpful if the same clusters/Standards are chosen for all of the programs being evaluated. (Guidance in choosing clusters/Standards is included in "How to Find the Evidence".)	**Use the questions for AC Metric 1A to evaluate Metric 1A. Record evidence for each question and rate Metric 1A.** **X Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Is conceptual understanding attended to thoroughly where the Standards set explicit expectations for understanding or interpreting? Evaluate lessons, chapter/unit assessments and homework assignments, paying attention to work aligned to Standards that explicitly call for understanding or interpreting. NOTE: Examples of evaluating this Criterion might include looking at how well the multi-digit addition and subtraction algorithms are developed and explained on the basis of place value and properties of operations; or how well the multi-digit multiplication and division algorithms are developed and explained on the basis of place value and properties of operations; or how well solving equations is presented and explained as a process of reasoning.	**Evidence-** The use of number lines in Lessons 3 supports the conceptual understanding of irrational numbers and that they exist as a number on the number line. Lesson 6 utilizes the mapping diagram to model the big idea that with a function every input has exactly one output. Lesson 12 uses similar triangles to build understanding of slope.	
Do the materials feature high-quality conceptual problems and conceptual discussion questions? Evaluate lessons, chapter/unit assessments, and homework assignments. NOTE: Example of conceptual problems might include such questions as "Find a number greater than 1/5 and less than 1/4," or "If the divisor does not change and the dividend increases, what happens to the quotient?"	**Evidence-** The Reflect section asks thoughtful questions that are often stumbling places for students like Lesson 2 where students are asked the difference between dividing 16 by two and finding the square root of 16. In Lesson 12, the analyze question asks to critique another student's work and take a position of agree or disagree and defend it. In Lesson 18 problem 15, students are asked to identify the transformation in a design and then asked to create their own.	

Do the materials feature opportunities to identify correspondences across mathematical representations? Evaluate lessons, chapter/unit assessments and homework assignments. NOTE: Examples of evaluating this Criterion might include looking at whether students are supported in identifying correspondences among: the verbal description of a situation, the diagrams that distill its mathematical features, and the equations that model it; or equivalent forms of numbers (e.g., 3 and 6/2) and the number line; or rational number operations and representations of them via models such as the vector model; or the expression that defines a function and the graph that shows the relationship.	**Evidence-** The materials use a wide variety of commonly used items such as tables, mapping diagrams and graphs all found in the unit on Functions. Each of these is usually related to a context or situation. The number line is still used to represent rational amounts (unit 1). Scales and balances are used to represent the linear equation (Lesson 14). The students are asked to not only solve but also to explain. The Pair-Share tool is a valuable resource.	
Metric AC1B: **The materials are designed so that students attain the fluencies and procedural skills required by the Standards.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Major Work for the grade being evaluated that relate specifically to fluency and procedural skill to use throughout the questions associated with this metric. NOTE: Some examples of Standards that call for procedural skill and fluency include: K.OA.A.5, 1.OA.C.6, 2.OA.B.2, 2.NBT.B.5, 3.OA.C.7, 3.NBT.A.2, 4.NBT.B.4, 5.NBT.B.5, 6.NS.B.2, and 6.NS.B.3, 6.EE.A, 7.NS.A, 7.EE.A.1,7.EE.B.4a, 8.EE.C.7, 8.EE.C.8b For context, read Criterion #4b in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).		**Use the questions for Metric 1B to evaluate Metric 1 B. Record evidence for each question and rate Metric 1B.** **(Reviewer only.)** **X Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Is progress toward fluency and procedural skill interwoven with students' developing conceptual understanding of the operations in question? Evaluate lessons, chapter/unit assessments, daily routines, and homework assignments for evidence that the development of fluency and procedural skill is supported by conceptual understanding.	**Evidence-** Each lesson progresses in similar fashion in that there is an exploration followed by Modeled and Guided Instruction components. In these areas there are still several models to build and underscore conceptual understanding and several places where students are asked to explain thinking. The final pages of the lessons are can be considered more procedural fluency questions offering a variety of question types (MC, open ended, explain thinking).	

Are purely procedural problems and exercises present that include cases in which opportunistic strategies are valuable and generic cases that require efficient algorithms present? Evaluate lessons, chapter/unit assessments, daily routines, and homework assignments. NOTE: Examples of problems in which opportunistic strategies are valuable might include the sum 698 + 240 or the system x + y = 1, 2x + 2y = 3. Examples of generic cases that require efficient algorithms might include the sum 8767+2286 or the system 6y + x = x + 3, – x = 1 + 2y.	**Evidence-** The tutorials in the already online component walk the students through problems. The Try It sections of the lessons are places where students can practice procedural problems and apply what they have learned in the lesson. For Example, in Lesson 13, students are asked to solve a linear equation and the examples provide multiple, efficient methods to arrive at the solution. Lesson 4 poses a question about scientific notation that might lead students to think of a simpler problem to solve, then move into a more efficient strategy to apply to the current problem.	
Do the materials in grades K–6 provide repeated practice toward attainment of fluency Standards? Evaluate lessons, daily routines, and homework assignments for evidence of repeated practice toward attainment of the following K–6 Standards that set an explicit expectation of fluent (accurate and reasonably fast) computation: K.OA.A.5, 1.OA.C.6, 2.OA.B.2, 2.NBT.B.5, 3.OA.C.7, 3.NBT.A.2, 4.NBT.B.4, 5.NBT.B.5, 6.NS.B.2, 6.NS.B.3.	**Evidence-**	
Metric AC1C: **The materials are designed so that teachers and students spend sufficient time working with engaging applications, without losing focus on the Major Work of each grade.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Major Work for the grade being evaluated that relate specifically application to use throughout the questions associated with this metric. NOTE: Some examples of clusters or Standards that call for application include: K.OA.A.2, 1.OA.A, 2.OA.A, 3.OA.A.3, 3.OA.D.8, 4.OA.A.3, 4.NF.B.3d, 4.NF.B.4c, 5.NF.B.6, 5.NF.B.7c, 6.RP.A.3, 6.NS.A.1, 6.EE.B.7, 6.EE.C.9, 7.RP.A, 7.NS.A.3, 7.EE.B.3, 8.EE.C.8c, 8.F.B For context, read Criterion #4c in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Each lesson engages students in a variety of applications and contextual situations as well as some procedural practice. The Problem Solving and Practice book also add problems and exercises dedicating adequate time to the Major Work of the grade. All the lessons utilize an application and certainly a contextual situation at the beginning to ground the math in something real. However, not every lesson (in particular the geometry lessons) includes a real world based problem.	**Use the questions for Metric 1C to evaluate Metric 1C. Record evidence for each question and rate Metric 1C.** **(Reviewer only.)** **_____ Meets (2)** **X Partially Meets (1)** **____Does Not Meet (0)**

Are there are single- and multi-step contextual problems, including non-routine problems, that develop the mathematics of the grade, afford opportunities for practice, and engage students in problem solving? Do the problems attend thoroughly to those places in the content Standards where expectations for multi-step and real-world problems are explicit? Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** There are multi-step problems in most lessons, and it is often in the Connect It section. These sections ask questions that build on one single situation. For example, Lesson 10 shows a non-linear graph and several questions pertaining to the graph, culminating in asking students to summarize what the graph shows. Lesson 13 analyzes student work in a multi-step way and then asks students to choose a preferred method and explain why.	
Do application problems particularly stress applying the Major Work of the grade? Evaluate lessons, chapter/unit assessments, and homework assignments. NOTE: Examples of evaluating this Criterion might include looking at: how well, by the end of grade 2, students using the materials as designed can represent and solve a full range of one-step addition and subtraction word problems; or how well, by the end of grade 3, students using the materials as designed can represent and solve a full range of one-step multiplication and division word problems; or how well these basic situation types for each operation are carried coherently across the grades, (e.g., with fractions and algebraic expressions); or, in all grades, whether the problems connect concepts, Standards, and domains in ways that are natural and important. For a list of situation types for one-step addition, subtraction, multiplication, and division problems, see Situation Types for the Operations in Word Problems	**Evidence-** The application problems do stress the Major Work of the grade. All the lessons are focused around making sense of and working through a standard or two. Most of the early work in each lesson is built around some sort of application.	
Does modeling build slowly across K–8, with applications that are relatively simple in earlier grades and when students are encountering new content? In grades 6–8, do the problems begin to provide opportunities for students to make their own assumptions or simplifications in order to model a situation mathematically? Read Standard for Mathematical Practice 4, Model with Mathematics. Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** Each lesson in a unit generally builds into the next in a logical progression. Within the lesson, the number sets do begin with manageable values. In Lesson 14, the models used are very simple scales to remind students of the nature of equality especially with linear equations. The models of functions (Lesson 6) also begin in a simple and iconic way with mapping diagrams. When looking at these diagrams, students can begin to formulate their own ideas of similarities and differences and apply that to early ideas of what makes a function.	

Alignment Criterion 1: Rigor and Balance

Materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.

AC1 Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 out of 6 points, the Criterion has not been met. Check the final rating.
Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)**

The strengths of the materials is in the application and attempts to include contextual problems in the materials. There is a good amount of opportunity to engage students in reflection of the content and trying to make connections within the content. There are many opportunities to include writing (even short) in the lessons and throughout the materials. Weaknesses include the missed opportunities in the Geometry unit to include application problems centered around real world situations. The multi-step problems are a weakness in that the Connect It portion of the lessons is very directed and not very open ended for a variety of student work.

Before moving to Alignment Criterion 2, record the final Meets or Does Not Meet rating in the Evaluation Summary.

(Reviewer only.)

X Meets

____Does Not Meet

Strengths/Weaknesses:

Directions for Alignment Criterion 2

Standards for Mathematical Practice

Alignment Criterion 2: Standards for Mathematical Practice

Materials must demonstrate authentic connections between content Standards and practice Standards.

The Standards require that designers of instructional materials connect the mathematical practices to mathematical content in instruction. Thus, materials must demonstrate authentic connections between content Standards and practice Standards.

Required Materials:

- Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf)
- Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)
- Focus by Grade Level for the grade being evaluated (www.achievethecore.org/focus)
- From the materials being evaluated: teacher guides, student texts and workbooks

Rating this Criterion

Alignment Criterion 2 is rated as Meets or Does Not Meet.

To rate Alignment Criterion 2, first rate metrics 2A, 2B, and 2C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). For each metric, guiding questions are provided to aid in gathering evidence.

Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 2 if the materials earn 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as mathematical practices, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.

Metric AC2A: **Materials address the practice Standards in such a way as to enrich the Major Work of the grade; practices strengthen the focus on Major Work instead of detracting from it, in both teacher and student materials.** **How to Find the Evidence:** Familiarize yourself with the Major Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate teacher and student materials for evidence that the mathematical practices support and connect to the focus of the grade. NOTE: Examples of evaluating this Criterion might include looking at whether, in grades K–5, students using the materials are supported to look for and express regularity in repeated reasoning about the addition table, the multiplication table, the properties of operations, the relationship between addition and subtraction or multiplication and division, and the place value system; or whether, in grades 6–8, students using the materials are supported to look for and express regularity in repeated reasoning about proportional relationships and linear functions. For context, read Criterion #8 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013).	**Evidence-** Multiple SMPs are embedded throughout the lessons and within each lesson many of them are specifically addressed as major points of emphasis. The vocabulary in the text is taken straight from the SMPs. Page A9 of the TE explains the curriculum's approach to the SMPs. For example, in Lesson 8, SMP 7 is a focus as a means of predicting linear or nonlinear functions. In Lesson 9, the focus is on SMP 8, repeated reasoning to make some sense of slope and the ratio it is born out of.	**(Reviewer only.)** **X Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Metric AC2B: **Materials attend to the full meaning of each practice Standard.** **How to Find the Evidence:** For context, read Criterion #7 and Criterion #9 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).		**Use the questions for Metric 2B to evaluate Metric 2B. Record evidence for each question and rate Metric 2B.** **(Reviewer only.)** **X Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Over the course of any given year of instruction, is each mathematical practice Standard meaningfully present in the form of assignments, activities, or problems that stimulate students to develop the habits of mind described in the practice Standard? Evaluate lessons, chapter/ unit assessments, and homework assignments for evidence of each mathematical practice being meaningfully present in instruction.	**Evidence-** Each SMP is addressed at some point throughout the year. There is a performance task at the end of each unit and it asks students to "Reflect on Mathematical Practices". Each chapter embeds and highlights specific SMPs including the use of a calculator to be used as a tool. Many of the questions posed on the interim assessments address SMP 3, critique reasoning and make viable arguments.	

Do the materials treat the practice Standards as developing across grades or grade bands? Are the practice Standards in early grades appropriately simple? Do they display an arc of growing sophistication across the grades?	**Evidence-** The materials treat the SMPs with a fair degree of sophistication at the 8th grade level but still recognizes the value of going to visual models like scales and balances (Lesson 14). In Lesson 15, students are examining different forms of linear systems (tables, graphs, equations) and analyzing them. This example of SMP4 is more sophisticated than the use of number lines or bar models to highlight SMP4.	
Are there teacher-directed materials that explain the role of the practice Standards in the classroom and in students' mathematical development? Are alignments to practice Standards accurate?	**Evidence-** Each lesson includes specific SMPs that are present and many of them are highlighted in a SMP Tip where the text provides insight into the purpose of the standard within the context of the lesson. For example, SMP Tip for Lesson 16 reminds teachers that modeling a problem can be accomplished by using the graph and the model can be abstract (equation) or visual (graph).	
Metric AC2C: **Materials support the Standards' emphasis on mathematical reasoning.** **How to Find the Evidence:** For context, read Criterion #10 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).		**Use the questions for Metric 2C to evaluate Metric 2C. Record evidence for each question and rate Metric 2C.** **(Reviewer only.)** **X Meets (2)**

Do the materials support students in constructing viable arguments and critiquing the arguments of others concerning grade-level mathematics that is detailed in the content Standards? Read Standard for Mathematical Practice 3. Evaluate teacher and student materials to ensure that students are given opportunities to reason with grade-level mathematics.	**Evidence-** Students are given many opportunities to Explore, Reflect, and Model. The Pair-Share prompts students by asking thoughtful questions. Nearly two-thirds of the lessons include specifically SMP3. Most of the interim assessments include some form of SMP3. For example, Lesson 4 asks students to explain the display a student got on a calculator. Lesson 5's Common Core Practice section asks students to compare 2 different students' answers and decide if one, both, or neither are correct and explain. Interim Assessment for Unit 2 has a performance task that explicitly asks students to "critique and argue."	____**Partially Meets (1)** ____**Does Not Meet (0)**
Do the materials support students in producing not only answers and solutions, but also, in a grade-appropriate way, arguments, explanations, diagrams, mathematical models, etc., especially in the Major Work of the grade? Familiarize yourself with the Major Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate teacher and student materials, to understand the types of work students are expected to produce.	**Evidence-** The materials consistently ask students to produce explanations for procedures and underlying concepts. Interim Assessment for Unit 2 has a performance task that explicitly asks students to "critique and argue." Lesson 11 asks students to reflect on proportional relationships and determine if it is possible that all proportional relationships are linear functions but not all linear functions are proportional relationships.	
Do materials explicitly attend to the specialized language of mathematics? Is the language of argument, problem solving, and mathematical explanations taught rather than assumed? Evaluate teacher and student materials, paying attention to how mathematical language is taught. NOTE: Examples of evaluating this Criterion might include looking at whether students are supported in: basing arguments on definitions; using the method of providing a counterexample; or recognizing that examples alone do not establish a general statement.	**Evidence-** Each Lesson pulls out the specific math vocabulary and uses it contextually, usually in the first part of the lesson. The vocabulary is used in the context of the lesson not just highlighted and written as a list.	

Alignment Criterion 2:
Standards for Mathematical Practice

Materials must demonstrate authentic connections between content Standards and practice Standards.

AC2 Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 out of 6 points, the Criterion has not been met. Check the final rating.
Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion.
(Reviewer only.)

The Standards for Mathematical Practice are evident throughout the materials including many opportunities for writing and critiquing work. There are opportunities for students to create viable arguments in discussions and in open ended responses.

Before moving to Alignment Criterion 3, record the final Meets or Does Not Meet rating in the Evaluation Summary.

(Reviewer only.)

X Meets

____Does Not Meet

Strengths/Weaknesses:

Alignment Criterion 3:
Access to the Standards for All Students

Materials must provide supports for English Language Learners and other special populations.

Because Standards are for all students, alignment requires thoughtful support to ensure all students are able to meet the Standards. Thus, aligned materials must provide supports for English Language Learners and other special populations.

Required Materials:

- Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf)
- Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)
- From the materials being evaluated: teacher guides, student texts and workbooks

Rating this Criterion:

Alignment Criterion 3 is rated as Meets or Does Not Meet.

To rate Alignment Criterion 3, first rate metrics 3A, 3B, and 3C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points).

Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 3 if the materials earn 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as support for special population, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.

Metric AC3A: **Support for English Language Learners and other special populations is thoughtful and helps those students meet the same Standards as all other students. The language in which problems are posed is carefully considered.** **How to Find the Evidence:** Evaluate teacher and student materials, paying attention to supports offered for special populations.	**Evidence-** Many of the lessons include specific ELL support reminding teachers of small things they can do to support ELLs. They use real-life examples like the vending machine in Lesson 6, and often encourage teachers to write things on the board and also to have students recite key words. There is also occasional connection to cognates like linea and lineal and linear (Lesson 8). Many of these strategies, however, do not necessarily seem like they are targeted to ELLs. Writing something down on the board is helpful to all students but is not necessarily focused on ELL learning.	Reviewer only.) ____**Meets (2)** **X Partially Meets (1)** ____**Does Not Meet (0)**
Metric AC3B: **Materials provide appropriate level and type of scaffolding, differentiation, intervention, and support for a broad range of learners with gradual removal of supports, when needed, to allow students to demonstrate their mathematical understanding independently.** **How to Find the Evidence:** Evaluate teacher and student materials, paying attention to whether materials provide differentiation that will lead all learners to engage with on-grade-level content.	**Evidence-** The *Guided Instruction* sections do a nice job of providing some scaffolding for students that ELLs would benefit from. For example, in Lesson 8, there is a section called Talk About It (always a good idea with ELLs) where students solve problems in group and are given a table to complete as a scaffolded element of instruction.	Reviewer only.) **X Meets (2)** ____**Partially Meets (1)** ____**Does Not Meet (0)**
Metric AC3C: **Design of lessons recommends and facilitates a mix of instructional approaches for a variety of learners such as using multiple representations (e.g., including models, using a range of questions, checking for understanding, flexible grouping, pair-share).** **How to Find the Evidence:** Evaluate teacher materials, noting instructional approaches suggested for whole class and differentiated lessons and activities.	**Evidence-** The TE includes a coding method to differentiate instruction (B-basic, M-medium, C-challenging). Each lesson includes either the use of a visual model or some sort of hands-on activity or both. There does seem to be a shortage of models that represent the mathematics compared to a model such as underlining parts of numbers or expressions in certain colors (Lesson 3 and Lesson 5). There are some nice Mathematical Discourse guides within each lesson that helps to tease out of students those ideas that are important. They also include expected responses from students.	Reviewer only.) **X Meets (2)** ____**Partially Meets (1)** ____**Does Not Meet (0)**

Alignment Criterion 3: Access to the Standards for All Students **Materials must provide supports for English Language Learners and other special populations.** **AC3** Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 points, the Criterion has not been met. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion.**(Reviewer only.)** **Strength: There are a number of solid suggestions for teachers to provide access to ELL students, including writing things on the board, discussion in pairs and small groups, and modeling correct language.** **Weakness: there are not many suggestions that include bringing in realia or at least images of the vocabulary that is a focus of the lesson and this can be very helpful for ELL students to make sense of the mathematics.** **Move to the Evaluation Summary and record the final Meets or Does Not Meet rating .**	**(Reviewer only.)** **X Meets** **____Does Not Meet** **Strengths/Weaknesses:**

Once an evaluation for alignment to the Shifts and major features of the CCSS has been conducted using Sections 1-3, it's important to evaluate for overall quality and best practices. A starting list of Indicators of Quality are suggested below. States, districts and others evaluating instructional materials are encouraged to add to this list to ensure materials reflect local contexts. For background information on some of the Indicators of Quality in this section, refer to pp.18–21 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).

Indicators of Quality	Evidence- Give specific examples.	Rating: (Reviewers only.)

1. Lessons are thoughtfully structured and support the teacher in leading the class through the learning paths at hand, with active participation by all students in their own learning and in the learning of their classmates.	**Evidence-** Pacing guide found on Page A14 & A15 of the TE. Recommend 1 lesson per week. The margins pose questions to students, offer the discussion strategy Pair-Share, and provide tips for problem solving. Each lesson includes a differentiation suggestion for Intervention, On-Level, and Challenge Activities. For example, in Lesson 8, the intervention activity uses a table of values that are easy to work with to find and compare rates of change to determine a function or not; the on-level activity asks students to create equations with specific numbers to choose from to form a linear and non-linear equation, and the challenge activity asks students to compare 2 equations that are reciprocal coefficients.	**(Reviewer only.)** **X Yes** **_____ No**
2. The underlying design of the materials includes both problems and exercises. (In solving problems, students learn new mathematics, whereas in working exercises, students apply what they have already learned to build mastery.) Each problem or exercise has a purpose. **NOTE: This Criterion does not require that the problems and exercises be labeled as such.**	**Evidence-** The section of each lesson titled *Modeled Instruction* uses problems and the section titled: *Guided Instruction* uses exercises. Each is connected specifically to the topic and to each other. Lesson 14 uses a balance to model the principles of balance when solving an equation (*Modeled Instruction*) then the *Guided Practice* provides a scaffold to solving the equations. The Practice and Problem Solving book includes a variety of exercises of varying types of questions. For example, in the same lesson 14, some exercises are multiple choice, some ask for multiple approaches, some ask for critiquing the work of others.	**(Reviewer only.)** **X Yes** **_____ No**
3. Design of assignments is not haphazard: exercises are given in intentional sequences in order to strengthen students' mathematical understanding.	**Evidence-** Each lesson builds intentionally. The flow charts "Which Lessons are Students Building Upon?" are helpful.	**(Reviewer only.)** **X Yes** **_____ No**

4. There are separate teacher materials that support and reward [illegible]her study including, but not limited to: discussion of the mathematics of the units and the mathematical point of each lesson as it relates to the organizing concepts of the unit, discussion on student ways of thinking and anticipating a variety of students responses, guidance on lesson flow, guidance on questions that prompt students thinking, and discussion of desired mathematical behaviors being elicited among students.	**Evidence-** Each lesson begin[illegible]th the mathematical progressions of students, key vocabulary and lesson objectives. In Part 1 of each lesson, there are tips for targeting Mathematical Practices and facilitating mathematical discourse. There is also a step-by-step guide for teacher that is new to the content or grade level. The answer key gives more than just answers, but also includes brief explanations including alternative solutions and ways to solve, the DOK level, and item analysis.	**(Reviewer only.)** **X Yes** **_____ No**
5. Manipulatives suggested in the materials are faithful representations of the mathematical objects they represent and are connected to written methods.	**Evidence-** Many hands-on activities. Materials are ubiquitous and easy to use like cubes to compare functions and rates of change (Lesson7); cubes, tape and string to simulate slope/rate of change (Lesson 9); use of Algebra tiles (Lesson 13); using nickels and pennies to model equations and solve equations (Lesson 14).	**(Reviewer only.)** **X Yes** **_____ No**
6. Materials include a variety of curriculum-embedded assessments. Examples include pre-, formative, summative, and self-assessment resources.	**Evidence-** The summative assessment and performance tasks are fine. The online component includes quizzes. There is a comprehensive diagnostic component. There is also a SBAC format assessment that students can take 3 times in the year. This also includes a scoring guide and rubric.	**(Reviewer only.)** **X Yes** **_____ No**
7. Assessments contain aligned rubrics, answer keys, and scoring guidelines that provide sufficient guidance for interpreting student performance.	**Evidence-** Each unit has assessments aligned and scoring guides & rubrics that go along with them.	**(Reviewer only.)** **X Yes** **_____ No**
8. Materials assess student proficiency using methods that are accessible and unbiased, including the use of course-level language in student prompts.	**Evidence-** Everything seems to be unbiased. Course level language is used throughout the text. Assessments include assisted response (choosing correct and incorrect), true false, short written responses, and performance tasks.	**(Reviewer only.)** **X Yes** **_____ No**

9. Materials are carefully evaluated by qualified individuals, whose names are listed, in an effort to ensure freedom from mathematical errors and course-level appropriateness.	**Evidence-** There are 17 individuals listed as teacher advisors including classroom teachers, math coach, reading specialist, research scientist, and curriculum coordinator.	**(Reviewer only.)** **X Yes** **_____ No**
10. The visual design supports students in engaging thoughtfully with the subject. Navigation through the text is clear.	**Evidence-** Visually, the layout is clean. The pages are not densely packed with words or images. The margins include cartoon style students that pose questions to consider and suggest methods to do so (Pair/Share). The text is easy to read and make sense of. There are essentially no images taken from real world situations. The choice to use the same shade of green (or blue or orange) might become monotonous.	**(Reviewer only.)** **X Yes** **_____ No**
11. The materials engage parents in appropriate ways. For example, homework assignments in elementary grades, consist of routine problems, practice with getting answers, and fluency-building exercises that parents can easily support.	**Evidence-** Each week is a new lesson, and each lesson begins with a letter to the Family. Each letter describes the content to be addressed that week along with showing some ways students will be working through the content. Each lesson includes some procedural work that many parents have experience and are familiar with; there is not an abundance of this problem type and there are no answers in the back. These problems are balanced with more conceptual work and performance tasks.	**(Reviewer only.)** **X Yes** **_____ No**

Reviewer IMET Evaluation Summary **Title/Level: Ready Common Core Mathematics / 8th Grade**

Publisher: Curriculum Associates LLC **Copyright: 2014** **ISBN: 9780760986431**

Reviewer ID # TR & TC **Date Review Completed: March 8, 2016**

Non-Negotiable Criteria- Each Non-Negotiable must be met in order for the Non-Negotiable Alignment Criteria to be met overall.

Non-Negotiable 1: Freedom from Obstacles to Focus	Non- Negotiable 2: Focus and Coherence
X Meets	X Meets
_____ Does Not Meet	_____ Does Not Meet

Non-Negotiable Overall:

X **Meets** _____ **Does Not Meet**

Alignment Criteria- Each Alignment Criterion must be met with a sufficient number of points in order for Alignment Criteria to be labeled as "Meets" overall. The more points the materials receive on the Alignment Criteria, the better they are aligned.

Alignment Criterion 1: Rigor and Balance	Alignment Criterion 2: Standards of Mathematical Practice	Alignment Criterion 3: Access to Standards for All Learners
Points: 5 of 6 possible. (Materials must receive at least 5 of 6 points to align.)	Points: 6 of 6 possible. (Materials must receive at least 5 of 6 points to align.)	Points: 5 of 6 possible. (Materials must receive at least 5 of 6 points to align.)
X Meets	X Meets	X Meets
_____ Does Not Meet	_____ Does Not Meet	_____ Does Not Meet

If the materials meet both Non-Negotiables and relevant Alignment Criterion, they are aligned to the Shifts and major features of the Core Standards. **Do the materials meet every Non-Negotiable and Alignment Criterion? X Yes _____ No**

What are the specific areas of strength and weakness based on this evaluation? Publishers or others modifying or developing assessments can use this information to make improvements and/or to remedy gaps in the alignment of assessment materials.

Strengths:

These materials commit to encouraging the kind of thinking and work that is different in the Common Core standards. Getting away from an emphasis on rote procedure and instead placing more emphasis on conceptual understanding by asking students to think and respond to thoughtful questions and posing questions without obvious answers. The hands on activities are easy to implement as they often use common classroom supplies like paper or cutting paper. New teachers would find this to be a good resource. The I-Ready and Teacher toolbox are useful online components. The Diagnostic test would be very useful to assess student grade level.

Weaknesses:

The consumable workbook format may be costly. The materials state that Professional Development is a requirement (at a cost). The material sometimes does not provide enough of the skill based practice (procedural fluency piece); it is there, just not as balanced.

2015-16 Mathematics Interim Review Recommendation & Summary

Publisher Name:	Explore Learning
Title:	Reflex K-5
ISBN #	978-1-4916-0801-2
Grade Level(s) or Course:	K-5
Reviewer ID:	LS, JM, TR, SB, CJ

RECOMMENDED AS:

_____**Core Mathematics Program-** a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials. Substantial evidence clearly supports the designation of this program as Core.

_____**Other Mathematics Program-** a program that substantially, but partially, meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for supplemental materials. Substantial evidence clearly supports the designation of this program as Other.

__X__**Component Mathematics Program-** a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs. Substantial evidence clearly supports the designation of this program as Component.

_____**Intervention Program-** a program designed and intended to target and support students' specific needs. Substantial evidence clearly supports the designation of this program as Intervention.

_____ **Does not meet criteria** for recommendation as a Curricular Material or Online Resource for Mathematics.

2015-16 Interim Mathematics Review

Mathematics Evaluation Tool Grades K-8

Publisher: Explore Learning

Title of Material: Reflex K-5

Author: Explore Learning, LLC

ISBN #: 978-1-4916-0801-2 **Copyright** 2015

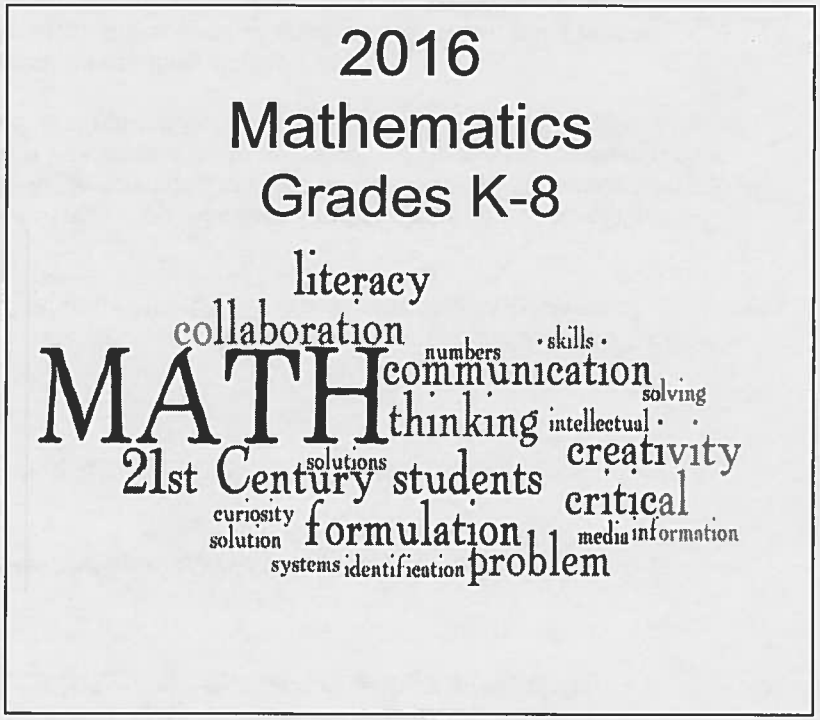
Reviewer ID: LS, JM, TR, SB, CJ

Core Mathematics Program- a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Core.

Other Mathematics Program- a program that substantially, but partially, meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Other.

Component Mathematics Program- a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs.
Substantial evidence clearly supports the designation of this program as Component.

Intervention Program- a program designed and intended to target and support students' specific needs.
Substantial evidence clearly supports the designation of this program as Intervention.



- Evaluation Form adapted from Instructional Materials Evaluation Toolkit (IMET).

The IMET was developed by Student Achievement Partners. Educators may use or adapt. http://creativecommons.org/licenses/by/3.0/ Download this tool at http://achievethecore.org/IMET

Instructional Materials Evaluation Tool

Mathematics, Grades K-8

What Are the Purposes of the IMET?

This Math IMET is designed to help educators determine whether instructional materials are aligned to the Shifts and major features of the Common Core State Standards (CCSS). The substantial instructional Shifts (http://www.corestandards.org/other-resources/key-shifts-inmathematics/) at the heart of the Common Core State Standards are:

- **Focus** strongly where the Standards focus
- **Coherence**: Think across grades and link to major topics within the grade
- **Rigor**: In major topics, pursue conceptual understanding, procedural skill and fluency, and application with equal intensity.

The IMET draws directly from the following documents:

- Common Core State Standards for Mathematics (www.corestandards.org/Math)
- Publishers' Criteria for the Common Core State Standards in Mathematics grade K-8 (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)

When to use the IMET

1. Purchasing materials: Many factors go into local purchasing decisions. Alignment to the Standards is a critical factor to consider. This tool is designed to evaluate alignment of instructional materials to the Shifts and the major features of the CCSS. It also provides suggestions of additional indicators to consider in the materials evaluation and purchasing process.

2. Evaluating materials currently in use: The IMET can be used to analyze the degree of alignment of existing materials and help to highlight specific, concrete flaws in alignment. Even where materials and tools currently in use fail to meet one or more of these criteria, the pattern of failure is likely to be informative. States and districts can use the evaluation to create a thoughtful plan to modify or combine existing resources in such a way that students' actual learning experiences approach the focus, coherence, and rigor of the Standards.

3. Developing programs: Those developing new programs can use this tool as guidance for creating aligned curricula.
Please note this tool was designed for evaluating comprehensive curricula (including any supplemental or ancillary materials), but it was not designed for the evaluation of standalone supplemental materials.

Who Uses the IMET?

Evaluating instructional materials requires both subject-matter and pedagogical expertise. Evaluators should be well versed in the Standards (www.corestandards.org/Math) for all grades in which materials are being evaluated. This includes understanding the Major Work of the grade (www.achievethecore/focus), the Supporting and Additional work, how the content fits into the progressions in the Standards (www.achievethecore.org/progressions), and the expectations of the Standards with respect to conceptual understanding, procedural skill and fluency, and application. Evaluators also should be familiar with the substantial instructional Shifts (http:// www.corestandards.org/other-resources/key-shifts-in-mathematics/) of Focus, Coherence and Rigor that are listed above.

Getting Started

Prior to Evaluation

Assemble all of the materials necessary for the evaluation. It is essential for evaluators to have materials for all grades covered by the program, as some criteria cannot be rated without having access to each grade. In addition, each evaluator should have a reference copy of the Common Core State Standards for Mathematics (CCSSM) and the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013).

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Before conducting the evaluation itself, it is important to develop a protocol for the evaluation process. The protocol should include having evaluators study the Publishers' Criteria and the IMET. It will also be helpful for evaluators to get a sense of each program overall before beginning the process. At a minimum, this would include reading the front matter of the text, looking at the table of contents and paging through multiple chapters.

Sections 1-3 below should be completed to produce a comprehensive picture of the strengths and weaknesses of the materials under evaluation. Information about areas in need of improvement or supplementation should be shared with internal and external stakeholders.

Navigating the Tool

Begin with Section 1: Non-Negotiable Alignment Criteria

- The Non-Negotiable Alignment Criteria must each be met in full for materials to be considered aligned to the Shifts and the major features of the Common Core State Standards. Each Non-Negotiable Alignment Criterion has one or more metrics associated with it; every one of these metrics must be met in order for the criterion as a whole to be met.

- Examine the relevant materials and use evidence to rate the materials against each criterion and its associated metric(s).

- Record and explain the evidence upon which the rating is based.

Continue to Section 2: Alignment Criteria

- The Alignment Criteria must each be met for materials to be considered aligned to the Shifts and the major features of the Common Core State Standards. Each Alignment Criterion has one or more metric associated with it; a specific number of these metrics must be met or partially met in order for the criterion as a whole to be met.

- **Examine the materials in relation to these criteria, assigning each metric a point value. Rate the criterion as "Meets" or "Does Not Meet" based on the number of points assigned. The more points the materials receive on the alignment Criteria, the better they are aligned.**

- **Record and explain the evidence upon which the rating is based.**

Proceed to Section 4: Indicators of Quality

- **Indicators of Quality are important considerations that will help evaluators better understand the overall quality of instructional materials. These considerations are not criteria for alignment to the CCSS, but they provide valuable information about additional program characteristics. Evaluators may want to add their own indicators to the examples provided.**

Directions for Non-Negotiable 1

Freedom from Obstacles to Focus

Criterion	Evidence- Give specific examples.	Rating: (Reviewer only.)
Non-Negotiable 1: **Freedom from Obstacles to Focus** **Materials must reflect the content architecture of the Standards by not assessing the topics named before the grade level where they first appear in the Standards.** The Standards foster students' progress to algebra by focusing strongly on arithmetic. Consistent with this focus, certain topics from outside of arithmetic appear only in later grades. Thus, to be aligned, materials must reflect the content architecture of the Standards by not assessing the topics named before the grade level where they first appear in the Standards. In this criterion, "topics named" means the topics that are explicitly named in Metric 1A. No other topics should be added to the list in Metric 1A. (Note that other topics in the standards are addressed in criterion NN2.)	**Required Materials** • Common Core State Standards for Mathematics (www.corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf) • From the materials being evaluated: teacher guides and all assessment components	**Rating this Criterion:** Non-Negotiable 1 is rated as Meets or Does Not Meet. To rate Non-Negotiable 1, begin by rating Metric 1A. Since Metric 1A is the only metric for Non-Negotiable 1, the rating for Non-Negotiable 1 is the same as the rating for Metric 1A. If Metric 1A is rated as Does Not Meet, include evidence of when the named topic(s) is/are assessed. If the metric is rated as Meets, list the grade(s) examined in the evaluation.
Metric NN1A: **Materials reflect the basic architecture of the Standards by not assessing the listed topics before the grade level indicated.**	**Evidence-** The listed topics are not assessed due to the nature of Reflex as a supplemental component program. Reflex is an adaptive, game-based	**(Reviewer only.)** **__x__ Meets**

• Probabi[illegible]ncluding chance, likely outcomes, probability models. (I[illegible]oduced in the CCSSM in grade 7) • Statistical distributions, including center, variation, clumping, outliers, mean, median, mode, range, quartiles; and statistical association or trends, including two-way tables, bivariate measurement data, scatter plots, trend line, line of best fit, correlation. (Introduced in the CCSSM in grade 6) • Similarity, congruence, or geometric transformations. (Introduced in the CCSSM in grade 8) • Symmetry of shapes, including line/ reflection symmetry, rotational symmetry. (Introduced in the CCSSM in grade 4) **How to Find the Evidence:** Evaluate the table of contents, all chapter tests, all unit tests, and other such assessment components (including rubrics). For context, read Criterion #2 from the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013). NOTE: Grade alignments of other topics are addressed in Non- Negotiable 2, Focus and Coherence.) In this criterion, "topics named" means the topics that are explicitly named in Metric 1A. No other topics should be added to the list in Metric 1A. (Note that other topics in the standards are addressed in criterion NN2.)	solution focus[illegible]on developing basic math fact fluency for students K-5.	____**Does Not Meet**
Non-Negotiable 1: Materials must reflect the content architecture of the Standards by not assessing the topics named* before the grade level where they first appear in the Standards. **NN 1** If Metric 1A was rated as Meets, then rate Non-Negotiable 1 as Meets. If Metric 1A was rated as Does Not Meet, then rate Non- Negotiable 1 as Does Not Meet. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion.**(Reviewer only.)** **Before moving to Non-Negotiable 2, record the final Meets or Does Not Meet rating in the Evaluation Summary.**		**(Reviewer only.)** _x___**Meets** ____**Does Not Meet** **Strengths/Weaknesses:** The program adapts to the student's knowledge and ability.

Directions for Non-Negotiable 2

Focus and Coherence

Non-Negotiable 2:

Focus and Coherence

Materials must focus coherently on the Major Work of the grade in a way that is consistent with the progressions in the Standards.

Focus and coherence are the two major evidence-based design principles of the Common Core State Standards for Mathematics (CCSSM, p. 3). Focus is necessary in order to fulfill the ambitious promise the states have made to their students by adopting the Standards: greater achievement at the college and career ready level; greater depth of understanding of mathematics; and a rich classroom environment in which reasoning, sense-making, applications, and a range of mathematical practices flourish. In simpler terms, a mile-wide, inch-deep curriculum translates to less time per topic. Less time means less depth and moving on without many students. Thus, materials must focus coherently on the Major Work of the grade in a way that is consistent with the progressions in the Standards.

Required Materials

- Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf)
- Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)
- Focus by Grade Level for the grade being evaluated (www.achievethecore.org/focus)
- From the materials being evaluated: teacher guides, student texts and workbooks

Rating this Criterion:
Non-Negotiable 2 is rated as Meets or Does Not Meet.

To rate Non-Negotiable 2, first rate metrics 2A–2H. Each of these eight metrics must be rated as Meets in order for Non-Negotiable 2 to be rated as Meets. Rate each metric 2A-2H as Meets or Does Not Meet/Insufficient Evidence. If the evidence examined shows that the Criterion is met, then mark the Criterion Meets. If the evidence examined shows that the Criterion is not met—or if there is insufficient evidence to make a determination—then mark the Criterion as Does Not Meet/Insufficient Evidence. Support all ratings with evidence.

Metric NN2A:
In each grade K–8, students and teachers using the materials as designed devote the large majority of time to the Major Work of the grade.

How to Find the Evidence:
Familiarize yourself with the Major Work of the grade being evaluated (see the Focus by Grade Level documents.)
Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, lessons, homework assignments, and assessments. (Evaluate both student and teacher materials.)
Consider time spent on the Major Work of the grade and judge qualitatively whether students and teachers using the materials as designed will devote the large majority of time to the Major Work of the grade.
For context, read Criterion #1 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013)

Evidence-
Reflex devotes the large majority of time to each grade level Major Work focussing on fluency in mathematical operations.

K.OA.E Fluently add and subtract within 5.

1.OA.F Add and subtract within 20 demonstrating fluency for addition and subtraction within 10.

2.OA.B Represent and solve problems involving addition and subtractions.

2.OA.B Add and subtract within 20 (adding and subtracting 0-10).

3.OA.G Fluently multiply and divide within 100, using strategies such as the relationship

(Reviewer only.)

_x___Meets

____Does Not Meet/

Insufficient Evidence

	between multi ation and division or properties of operations. 4.NBT.D Fluently add and subtract multi-digit whole numbers using the standard algorithm. 5.NBT.E Fluently multiply and divide multi-digit whole numbers using the standard algorithm.	
Metric NN2B: **Supporting Work, where present, enhances focus and coherence simultaneously by also engaging students in the Major Work of the grade.** **How to Find the Evidence:** Familiarize yourself with the Major Work and Supporting Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate chapters and lessons that focus on Supporting Work. NOTE: Example of evaluating this Criterion might include looking at whether materials for K–5 generally treat data displays as an occasion for solving grade-level word problems using the four operations (e.g., see 3.MD.B.3); or whether materials for grade 7 take advantage of opportunities to use probability to support ratios, proportions, and percentages. For context, read Criterion #3 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Reflex does not include any Supporting Work; it is intended to build basic math fact fluency.	**(Reviewer only.)** **__x__Meets** **____Does Not Meet/** **Insufficient Evidence**
Metric NN2C: **Materials base content progressions on the grade-by-grade progressions in the Standards. Content from previous or future grades does not unduly interfere with or displace on-grade-level content.** **How to Find the Evidence:** Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, and lessons in both student and teacher materials. NOTE: In some cases it may be possible that aligned materials might address some aspects of a topic in a strategic way before or after the grade level in which the topic is central in the Standards' progressions; for example, a curriculum author might purposefully choose to explore adding fractions with unlike denominators in a way appropriate to grade four, recognizing that this work is not really required until the next grade. However, any such purposeful discrepancies in content progressions should enhance the required learning in each grade; not unduly interfere with or displace grade-level content; and be clearly aimed at helping students meet the Standards as written rather than effectively rewriting the progressions in the Standards. And in all cases, note that Non-Negotiable 1 must be met for materials to be aligned.	**Evidence-** The Reflex program has a built-in adaptive component that allows students to work inside their personal knowledge base regardless if it matches the grade level of the student. Content from future grades does not interfere; it isn't even presented to the student until the adaptive lessons filter in the content. The teacher can assign different operational sets based on grade level curriculum and student need.	**(Reviewer only.)** **_x___Meets** **____Does Not Meet/** **Insufficient Evidence**

For context, read Criterion #5a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).		
Metric NN2D: **Materials give all students extensive work with on-grade-level problems.** **How to Find the Evidence:** Evaluate both student and teacher materials. If the materials provide resources for differentiated learning, consider whether lower-performing students have opportunities to engage with grade-level problems. Also consider whether higher-performing students are given opportunities to learn current grade-level content in greater depth. For context, read Criterion #5b in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Students are presented with fluency problems that lie within fact-families. As students answer the questions, the program adapts to needed areas of focus. A typical session of Reflex lasts 15-20 minutes. Teachers have access to detailed reports.	**(Reviewer only.)** **__x__Meets** **____Does Not Meet/ Insufficient Evidence**
Metric NN2E: **Materials relate on-grade-level concepts explicitly to prior knowledge from earlier grades.** **How to Find the Evidence:** Evaluate both student and teacher materials. NOTE: Examples of evaluating this Criterion might include looking at the way the materials extend basic ideas of place value across the decimal point; or the role that properties of operations play when the materials extend arithmetic beyond whole numbers to fractions, variables, and expressions. More generally, cluster headings in the Standards sometimes signal key moments where reorganizing and extending previous knowledge is important in order to accommodate new knowledge (e.g., see cluster headings that use the phrase "Apply and extend previous understanding"). For context, read Criterion #5c in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Reflex will assess fact families that students already know as well as those the students have not yet mastered fluently. The program continually monitors the student's' progress and uses the data to individualize instruction.	**(Reviewer only.)** **__x__Meets** **____Does Not Meet/ Insufficient Evidence**
Metric NN2F: **Review of material from previous grades is clearly identified as such to the teacher, and teacher and students can see what their specific responsibility is for the current year.** **How to Find the Evidence:** Evaluate the table of contents, but do not stop there; also evaluate units, chapters, lessons, homework assignments and assessments. (Evaluate both student and teacher materials.) Identify any content from previous grades and check whether it is identified as such. For context, read Criterion #5a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** The material is not separated into grade levels for the teacher or students. All material is presented as fact families that students may or may not know fluently. Student and teacher reports show where each student is performing and uses unassessed, not fluent, or fluent to delineate student performance.	**(Reviewer only.)** **__x__Meets** **____Does Not Meet/ Insufficient Evidence**
Metric NN2G: **Materials include learning objectives that are visibly shaped by CCSSM cluster headings.**	**Evidence-** There are no posted objectives for separate lessons; however there is an overall objective in	**(Reviewer only.)** **__x__Meets**

How to Find Evidence: Select several clusters from the Major Work in the grade being evaluated. Evaluate teacher and student materials in relation to these clusters. For context, read Criterion #6a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	the teacher's guide that states to build fluency in mathematical operations. The program supports the following Standards: K.OA.E Fluently add and subtract within 5. 1.OA.F Add and subtract within 20 demonstrating fluency for addition and subtraction within 10. 2.OA.B Represent and solve problems involving addition and subtractions. 2.OA.B Add and subtract within 20 (adding and subtracting 0-10). 3.OA.G Fluently multiply and divide within 100, using strategies such as the relationship between multiplication and division or properties of operations. 4.NBT.D Fluently add and subtract multi-digit whole numbers using the standard algorithm. 5.NBT.E Fluently multiply and divide multi-digit whole numbers using the standard algorithm.	**____Does Not Meet/** **Insufficient Evidence**
Metric NN2H: **Materials include problems and activities that serve to connect two or more clusters in a domain, or two or more domains in a grade, in cases where these connections are natural and important.** **How to Find the Evidence:** In the grade being evaluated, choose two or more clusters or two or more domains for which connections are natural and important. Evaluate the units, chapters, and lessons that deal with the chosen topics, looking for problems and activities that serve to connect the chosen clusters or domains. NOTE: An example of evaluating this Criterion might include looking at whether problems in grade 4 sometimes or often involve students applying their developing computation skills (detailed in domain NBT) in the context of solving word problems (detailed in domain OA). For context, read Criterion #6b in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** The main purpose of Reflex is to build basic math fact fluency. Reflex does touch on commutative property and fact families during the coaching/instructional portion but students are assessed solely on automaticity of fact recall.	**(Reviewer only.)** **_x___Meets** **____Does Not Meet/** **Insufficient Evidence**

Non-Negotiable 2:

Focus and Coherence

Materials must focus coherently on the Major Work of the grade in a way that is consistent with the progressions in the Standards.

NN 2 If all Metrics 2A – 2H were rated as Meets, then rate Non-Negotiable 2 as Meets. If one or more Metric was rated Does Not Meet/Insufficient Evidence, then rate Non-Negotiable 2 as Does Not Meet. Check the final rating.
Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)**

Before moving to Alignment Criterion 1, record the final Meets or Does Not Meet rating in the Evaluation Summary.

(Reviewer only.)

__x__Meets

____Does Not Meet

Strengths/Weaknesses:

Strength: individualized instruction is provided to master basic math fact fluency within grade level standards.

Now continue by evaluating the Alignment Criterion 1 for Rigor and Balance.

Directions for Alignment Criterion 1

Rigor and Balance

Alignment Criterion 1: Rigor and Balance

Materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.

The Standards set expectations for attention to all three aspects of rigor: conceptual understanding, procedural skill and fluency, and applications. Thus, materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.

Required Materials

- Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf)
- Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)
- Focus by Grade Level for the grade being evaluated (achievethecore.org/focus)
- Situation Types for the Operations in Word Problems (achievethecore.org/situation-types)
- From the materials being evaluated: teacher guides, student texts and workbooks

Rating this Criterion:

Alignment Criterion 1 is rated as Meets or Does Not Meet.

To rate Alignment Criterion 1, first rate metrics 1A, 1B, and 1C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). For each metric, guiding questions are provided to aid in gathering evidence.

Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 1 if the materials rate 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as rigor and balance, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.

Metric AC1A: **The materials support the development of students' conceptual understanding of key mathematical concepts, especially where called for in specific content Standards or cluster headings.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Major Work for the grade being evaluated that relate specifically conceptual understanding to use throughout the questions associated with this metric. NOTE: Some examples of clusters or Standards that call for conceptual understanding include: K.OA.A.1, (1.NBT.B, 1.NBT.C), (2.NBT.A, 2.NBT.B), (3.OA.A.1, 3.OA.A.2), 4.NF.A, (4.NBT.A, 4.NBT.B), 5.NF.B, (5.NBT.A, 5.NBT.B), 6.RP.A, 6.EE.A.3, 7.NS.A, 7.EE.A, 8.EE.B, 8.F.A, 8.G.A Clusters or Standards grouped by parentheses are closely connected and could be analyzed together. For context, read Criterion #4a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	-Choose a cluster/Standard from the Major Work that is aligned to each aspect of rigor and use it to evaluate these metrics. It is most helpful if the same clusters/Standards are chosen for all of the programs being evaluated. (Guidance in choosing clusters/Standards is included in "How to Find the Evidence".)	**Use the questions for AC Metric 1A to evaluate Metric 1A. Record evidence for each question and rate Metric 1A.** **____Meets (2)** **__1_Partially Meets (1)** **____Does Not Meet (0)**
Is conceptual understanding attended to thoroughly where the Standards set explicit expectations for understanding or interpreting? Evaluate lessons, chapter/unit assessments and homework assignments, paying attention to work aligned to Standards that explicitly call for understanding or interpreting. NOTE: Examples of evaluating this Criterion might include looking at how well the multi-digit addition and subtraction algorithms are developed and explained on the basis of place value and properties of operations; or how well the multi-digit multiplication and division algorithms are developed and explained on the basis of place value and properties of operations; or how well solving equations is presented and explained as a process of reasoning.	**Evidence-** Reflex teaches math fluency as conceptually as possible by introducing fact families to show students the relationship between numbers and operations; however, conceptual understanding is not the program focus.	
Do the materials feature high-quality conceptual problems and conceptual discussion questions? Evaluate lessons, chapter/unit assessments, and homework assignments. NOTE: Example of conceptual problems might include such questions as "Find a number greater than 1/5 and less than 1/4," or "If the divisor does not change and the dividend increases, what happens to the quotient?"	**Evidence-** Fact families are presented in a variety of games. Conceptual understanding is not the focus of Reflex and so there are not high-quality conceptual problems.	

Do the materials feature opportunities to identify correspondences across mathematical representations? Evaluate lessons, chapter/unit assessments and homework assignments. NOTE: Examples of evaluating this Criterion might include looking at whether students are supported in identifying correspondences among: the verbal description of a situation, the diagrams that distill its mathematical features, and the equations that model it; or equivalent forms of numbers (e.g., 3 and 6/2) and the number line; or rational number operations and representations of them via models such as the vector model; or the expression that defines a function and the graph that shows the relationship.	**Evidence-** There is no variety in the mathematical representations: 9 x 4 or 4 x 9 is always just that. However, because the program focuses on fact families 9 x 4 and 4 x 9 is presented together with 36 / 9 and 36 / 4. Conceptual understanding is not the focus of Reflex. Other than the introduction of new facts through fact families, Reflex does not identify correspondences across mathematical representations.	
Metric AC1B: **The materials are designed so that students attain the fluencies and procedural skills required by the Standards.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Major Work for the grade being evaluated that relate specifically to fluency and procedural skill to use throughout the questions associated with this metric. NOTE: Some examples of Standards that call for procedural skill and fluency include: K.OA.A.5, 1.OA.C.6, 2.OA.B.2, 2.NBT.B.5, 3.OA.C.7, 3.NBT.A.2, 4.NBT.B.4, 5.NBT.B.5, 6.NS.B.2, and 6.NS.B.3, 6.EE.A, 7.NS.A, 7.EE.A.1,7.EE.B.4a, 8.EE.C.7, 8.EE.C.8b For context, read Criterion #4b in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).		**Use the questions for Metric 1B to evaluate Metric 1 B. Record evidence for each question and rate Metric 1B.** **(Reviewer only.)** **____Meets (2)** **__1__Partially Meets (1)** **____Does Not Meet (0)**
Is progress toward fluency and procedural skill interwoven with students' developing conceptual understanding of the operations in question? Evaluate lessons, chapter/unit assessments, daily routines, and homework assignments for evidence that the development of fluency and procedural skill is supported by conceptual understanding.	**Evidence-** The program focuses completely on building student fluency in addition, subtraction, multiplication, and division. Students are exposed to all related facts in a fact family therefore students are exposed to commutative and inverse operations at the same time within their grade level standards.	
Are purely procedural problems and exercises present that include cases in which opportunistic strategies are valuable and generic cases that require efficient algorithms present? Evaluate lessons, chapter/unit assessments, daily routines, and homework assignments. NOTE: Examples of problems in which opportunistic strategies are valuable might include the sum 698 + 240 or the system $x + y = 1$, $2x + 2y = 3$. Examples of generic cases that require efficient algorithms might include the sum 8767+2286 or the system $6y + x = x + 3$, $-x = 1 + 2y$.	**Evidence-** This program focuses on instant recall and does not provide opportunistic strategy type problems.	

Do the mat[illegible] in grades K–6 provide repeated practice toward attainment o[illegible]ency Standards? Evaluate lessons, daily routines, and homework assignments for evidence of repeated practice toward attainment of the following K–6 Standards that set an explicit expectation of fluent (accurate and reasonably fast) computation: K.OA.A.5, 1.OA.C.6, 2.OA.B.2, 2.NBT.B.5, 3.OA.C.7, 3.NBT.A.2, 4.NBT.B.4, 5.NBT.B.5, 6.NS.B.2, 6.NS.B.3.	**Evidence-** Students have repeated practice toward fluency Standards. Reflex sessions are built to last 15-20 minutes to build basic math fact fluency. Each session includes a diagnostic piece, coaching session, practice session, and constantly assesses and reports progress.	
Metric AC1C: **The materials are designed so that teachers and students spend sufficient time working with engaging applications, without losing focus on the Major Work of each grade.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Major Work for the grade being evaluated that relate specifically application to use throughout the questions associated with this metric. NOTE: Some examples of clusters or Standards that call for application include: K.OA.A.2, 1.OA.A, 2.OA.A, 3.OA.A.3, 3.OA.D.8, 4.OA.A.3, 4.NF.B.3d, 4.NF.B.4c, 5.NF.B.6, 5.NF.B.7c, 6.RP.A.3, 6.NS.A.1, 6.EE.B.7, 6.EE.C.9, 7.RP.A, 7.NS.A.3, 7.EE.B.3, 8.EE.C.8c, 8.F.B For context, read Criterion #4c in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Students spend 15-20 minutes in Reflex engaged in games that build their fluency in fact families.	**Use the questions for Metric 1C to evaluate Metric 1C. Record evidence for each question and rate Metric 1C.** **(Reviewer only.)** **____Meets (2)** **__1__Partially Meets (1)** **____Does Not Meet (0)**
Are there are single- and multi-step contextual problems, including non-routine problems, that develop the mathematics of the grade, afford opportunities for practice, and engage students in problem solving? Do the problems attend thoroughly to those places in the content Standards where expectations for multi-step and real-world problems are explicit? Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** There are no multi-step problems, nor are there problems related to real-world situations. Reflex focuses on automaticity; however, as the students progress through the games they are forced to recall basic facts with less attention as to ensure ability to recall facts in other situations.	
Do application problems particularly stress applying the Major Work of the grade? Evaluate lessons, chapter/unit assessments, and homework assignments. NOTE: Examples of evaluating this Criterion might include looking at: how well, by the end of grade 2, students using the materials as designed can represent and solve a full range of one-step addition and subtraction word problems; or how well, by the end of grade 3, students using the materials as designed can represent and solve a full range of one-step multiplication and division word problems; or how well these basic situation types for each operation are carried coherently across the grades, (e.g., with fractions and algebraic expressions); or, in all grades, whether the problems connect concepts, Standards, and domains in ways that are natural and important. For a list of situation types for one-step addition, subtraction, multiplication, and division problems, see Situation Types for the Operations in Word Problems	**Evidence-** All problems are focused on Major Work Standards that stress fluency. During the coaching sessions the students are asked to answer facts with unknown variables based on the fact family being introduced.	

Does model[illegible]uild slowly across K–8, with applications that are relatively sim[illegible] in earlier grades and when students are encountering new content? In grades 6–8, do the problems begin to provide opportunities for students to make their own assumptions or simplifications in order to model a situation mathematically? Read Standard for Mathematical Practice 4, Model with Mathematics. Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** Reflex does not provide instruction on modeling problems and does not assess students on modeling problems. It's sole purpose is to build basic math fact fluency.	

Alignment Criterion 1: Rigor and Balance

Materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.

AC1 Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 out of 6 points, the Criterion has not been met. Check the final rating.
Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)**

Before moving to Alignment Criterion 2, record the final Meets or Does Not Meet rating in the Evaluation Summary.

(Reviewer only.)

____Meets

__3__Does Not Meet

Strengths/Weaknesses:

Strength: Reflex is intended to be used to build math fact fluency in all operations. Reflex uses student's speed and accuracy to demonstrate mastery of these skills only. The teacher can differentiate addition/subtraction problems versus multiplication/division based on student skill set. Student is progress is continually monitored, updated, and reported to both student and teacher.

Directions for Alignment Criterion 2

Standards for Mathematical Practice

Alignment Criterion 2: Standards for Mathematical Practice

Materials must demonstrate authentic connections between content Standards and practice Standards.

Required Materials:

- Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf)
- Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)

Rating this Criterion
Alignment Criterion 2 is rated as Meets or Does Not Meet.
To rate Alignment Criterion 2, first rate metrics 2A, 2B, and 2C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). For each metric, guiding questions are provided to aid in gathering evidence.
Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all

The Standards require that designers of instructional materials connect the mathematical practices to mathematical content in instruction. Thus, materials must demonstrate authentic connections between content Standards and practice Standards.	• Focus by Grade Level for the grade being evaluated (www.achievethecore.org/focus) • From the materials being evaluated: teacher guides, student texts and workbooks	three metrics is 6 points. Ideally, all materials will earn all 6 points; materials are judged to have met Alignment Criterion 2 if the materials earn 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as mathematical practices, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.
Metric AC2A: **Materials address the practice Standards in such a way as to enrich the Major Work of the grade; practices strengthen the focus on Major Work instead of detracting from it, in both teacher and student materials.** **How to Find the Evidence:** Familiarize yourself with the Major Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate teacher and student materials for evidence that the mathematical practices support and connect to the focus of the grade. NOTE: Examples of evaluating this Criterion might include looking at whether, in grades K–5, students using the materials are supported to look for and express regularity in repeated reasoning about the addition table, the multiplication table, the properties of operations, the relationship between addition and subtraction or multiplication and division, and the place value system; or whether, in grades 6–8, students using the materials are supported to look for and express regularity in repeated reasoning about proportional relationships and linear functions. For context, read Criterion #8 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013).	**Evidence-** The program does not explicitly address practice standards however it uses fact families and the commutative property as it introduces new math facts and then continuously has students review basic math facts until they demonstrate mastery of fluency. Students may apply practices such as reason abstractly and quantitatively; look for and make use of structure; and look for and express regularity in repeated reasoning.	**(Reviewer only.)** **____Meets (2)** **__1__Partially Meets (1)** **____Does Not Meet (0)**
Metric AC2B: **Materials attend to the full meaning of each practice Standard.** **How to Find the Evidence:** For context, read Criterion #7 and Criterion #9 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).		**Use the questions for Metric 2B to evaluate Metric 2B. Record evidence for each question and rate Metric 2B.** **(Reviewer only.)** **____Meets (2)** **__1__Partially Meets (1)** **____Does Not Meet (0)**
Over the course of any given year of instruction, is each mathematical practice Standard meaningfully present in the form of assignments, activities, or problems that stimulate students to develop the habits of mind described in the practice Standard? Evaluate lessons, chapter/ unit assessments, and homework assignments for evidence of each mathematical practice being meaningfully present in instruction.	**Evidence-** Not all of the practices are present due to the nature of the program as supplemental component program that focuses strictly fluency.	

Do the materials treat the practice Standards as developing across grades or grade bands? Are the practice Standards in early grades appropriately simple? Do they display an arc of growing sophistication across the grades?	**Evidence-** The program focuses on instant recall of basic math facts and does not have a strong focus on the practice standards.	
Are there teacher-directed materials that explain the role of the practice Standards in the classroom and in students' mathematical development? Are alignments to practice Standards accurate?	**Evidence-** The teacher's guide provides background and implementation strategies but does not focus on the practice standards. It provides a brief tutorial for teachers that is sufficient to know what the program provides for teachers and students.	
Metric AC2C: **Materials support the Standards' emphasis on mathematical reasoning.** **How to Find the Evidence:** For context, read Criterion #10 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).		**Use the questions for Metric 2C to evaluate Metric 2C. Record evidence for each question and rate Metric 2C.** **(Reviewer only.)** **____Meets (2)** **____Partially Meets (1)** **__0__Does Not Meet (0)**
Do the materials support students in constructing viable arguments and critiquing the arguments of others concerning grade-level mathematics that is detailed in the content Standards? Read Standard for Mathematical Practice 3. Evaluate teacher and student materials to ensure that students are given opportunities to reason with grade-level mathematics.	**Evidence-** There are no materials that ask students to construct viable arguments and critique arguments of others.	
Do the materials support students in producing not only answers and solutions, but also, in a grade-appropriate way, arguments, explanations, diagrams, mathematical models, etc., especially in the Major Work of the grade? Familiarize yourself with the Major Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate teacher and student materials, to understand the types of work students are expected to produce.	**Evidence-** There are no explanations, arguments, diagrams, or models as part of the Reflex program.	
Do materials explicitly attend to the specialized language of mathematics? Is the language of argument, problem solving, and mathematical explanations taught rather than assumed? Evaluate teacher and student materials, paying attention to how mathematical language is taught. NOTE: Examples of evaluating this Criterion might include looking at whether students are supported in: basing arguments on definitions; using the method of providing a counterexample; or recognizing that examples alone do not establish a general statement.	**Evidence-** Mathematical language is present, but none that elicits argument, problem solving, and explanations.	
Alignment Criterion 2: **Standards for Mathematical Practice** **Materials must demonstrate authentic connections between content Standards and practice Standards.**		**(Reviewer only.)** **____Meets** **__x__Does Not Meet**

AC2 Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 out of 6 points, the Criterion has not been met. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)** **Before moving to Alignment Criterion 3, record the final Meets or Does Not Meet rating in the Evaluation Summary.**		**Strengths/Weaknesses:** The Reflex program builds fluency during interventions that will help students be able to problem solve and explain their thinking during core class time.
Alignment Criterion 3: **Access to the Standards for All Students** **Materials must provide supports for English Language Learners and other special populations.** Because Standards are for all students, alignment requires thoughtful support to ensure all students are able to meet the Standards. Thus, aligned materials must provide supports for English Language Learners and other special populations.	**Required Materials:** • Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion:** Alignment Criterion 3 is rated as Meets or Does Not Meet. To rate Alignment Criterion 3, first rate metrics 3A, 3B, and 3C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 3 if the materials earn 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as support for special population, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.
Metric AC3A: **Support for English Language Learners and other special populations is thoughtful and helps those students meet the same Standards as all other students. The language in which problems are posed is carefully considered.** **How to Find the Evidence:** Evaluate teacher and student materials, paying attention to supports offered for special populations.	**Evidence-** The program is available in English, Spanish, and French. Reflex does not require much reading and the characters speak directly to the students. The instructions for the games are simple and easy to comprehend.	**Reviewer only.)** **__2__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Metric AC3B: **Materials provide appropriate level and type of scaffolding, differentiation, intervention, and support for a broad range of learners with gradual removal of supports, when needed, to allow**	**Evidence-** The program builds fluency and adapts to students' learning as they work on their fluency skills with Reflex over time. It reviews mastered facts to maintain retention. Students are introduced to small amounts of materials and must demonstrate	**Reviewer only.)** **__2__Meets (2)** **____Partially Meets (1)**

student demonstrate their mathematical understanding independently. **How to Find the Evidence:** Evaluate teacher and student materials, paying attention to whether materials provide differentiation that will lead all learners to engage with on-grade-level content.	mastery before they are overwhelmed with more instructions.	____**Does Not Meet (0)**
Metric AC3C: **Design of lessons recommends and facilitates a mix of instructional approaches for a variety of learners such as using multiple representations (e.g., including models, using a range of questions, checking for understanding, flexible grouping, pair-share).** **How to Find the Evidence:** Evaluate teacher materials, noting instructional approaches suggested for whole class and differentiated lessons and activities.	**Evidence-** Students are given a lesson of mathematical fluency problems followed by a variety of games that focus on the fact families. Reflex automatically individualizes instruction based on students' performance as they complete each activity.	**Reviewer only.)** **__2__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Alignment Criterion 3: **Access to the Standards for All Students** **Materials must provide supports for English Language Learners and other special populations.** **AC3** Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 points, the Criterion has not been met. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion.**(Reviewer only.)** **Move to the Evaluation Summary and record the final Meets or Does Not Meet rating .**		**(Reviewer only.)** **_6___Meets** **____Does Not Meet** **Strengths/Weaknesses:**

Once an evaluation for alignment to the Shifts and major features of the CCSS has been conducted using Sections 1-3, it's important to evaluate for overall quality and best practices. A starting list of Indicators of Quality are suggested below. States, districts and others evaluating instructional materials are encouraged to add to this list to ensure materials reflect local contexts. For background information on some of the Indicators of Quality in this section, refer to pp.18–21 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).

Indicators of Quality	**Evidence- Give specific examples.**	**Rating: (Reviewers only.)**

1. Lesso[illegible]re thoughtfully structured and support the teacher in leading the class through the learning paths at hand, with active participation by all students in their own learning and in the learning of their classmates.	**Evidence-** The Teacher's Guide provides in depth information to implement Reflex. The program itself is self guided for students and adjusts instruction for student needs. It allows the teacher to monitor student growth.	**(Reviewer only.)** __x____ **Yes** _____ **No**
2. The underlying design of the materials includes both problems and exercises. (In solving problems, students learn new mathematics, whereas in working exercises, students apply what they have already learned to build mastery.) Each problem or exercise has a purpose. **NOTE: This Criterion does not require that the problems and exercises be labeled as such.**	**Evidence-** Students master fluency with a fact family introduced in a sequential method. Facts are introduced and practiced in coaching sessions. As students demonstrate success they can play games that involve recall of the facts in a way that demands more complexity as they continue through the game.	**(Reviewer only.)** ___x___ **Yes** _____ **No**
3. Design of assignments is not haphazard: exercises are given in intentional sequences in order to strengthen students' mathematical understanding.	**Evidence-** The facts are given until mastered and then revisited to ensure student retention.	**(Reviewer only.)** __x____ **Yes** _____ **No**
4. There are separate teacher materials that support and **reward teacher study including, but not limited to: discussion of the mathematics of the units and the mathematical point of each lesson as it relates to the organizing concepts of the unit, discussion on student ways of thinking and anticipating a variety of students responses, guidance on lesson flow, guidance on questions that prompt students thinking, and discussion of desired mathematical behaviors being elicited among students.**	**Evidence-** There are teacher materials on the website for implementations, monitoring students, class setup, tutorials, and a quick reference guide. Teachers can also print out motivational materials to award student progress.	**(Reviewer only.)** __x____ **Yes** _____ **No**
5. Manipulatives suggested in the materials are faithful representations of the mathematical objects they represent and are connected to written methods.	**Evidence-** There are no manipulatives required.	**(Reviewer only.)** ____x__ **Yes** _____ **No**

6. Mater include a variety of curriculum-embedded assessments. Examples include pre-, formative, summative, and self-assessment resources.	**Evidence-** The first time students login they are given a baseline assessment that determines the facts students need to focus on, brief progress checks during Fact Fair to measure retention, and Certificates of achievement when students have mastered their fluency. Each time students login they are presented with fact families from their last session to test and ensure retention.	**(Reviewer only.)** ___x___ **Yes** _____ **No**
7. Assessments contain aligned rubrics, answer keys, and scoring guidelines that provide sufficient guidance for interpreting student performance.	**Evidence-** Reflex monitors student progress continually. Teachers can print reports to share with students and parents. The growth chart could be used for RtI purposes.	**(Reviewer only.)** __x____ **Yes** _____ **No**
8. Materials assess student proficiency using methods that are accessible and unbiased, including the use of course-level language in student prompts.	**Evidence-** Reflex focuses strictly on proficiency for all fact families. At the beginning of each session students are required to type in several numbers so that Reflex can account for typing skills as opposed to fact fluency.	**(Reviewer only.)** ___x___ **Yes** _____ **No**
9. Materials are carefully evaluated by qualified individuals, whose names are listed, in an effort to ensure freedom from mathematical errors and course-level appropriateness.	**Evidence-** Evaluators are present.	**(Reviewer only.)** ___x___ **Yes** _____ **No**
10. The visual design supports students in engaging thoughtfully with the subject. Navigation through the text is clear.	**Evidence-** The visual design completely engages students with characters, cartoon interactions, and minimal reading requirements.	**(Reviewer only.)** ___x___ **Yes** _____ **No**
11. The materials engage parents in appropriate ways. For example, homework assignments in elementary grades, consist of routine problems, practice with getting answers, and fluency-building exercises that parents can easily support.	**Evidence-** Parents are offered a free parent account to monitor their student's progress.	**(Reviewer only.)** ____x__ **Yes**

		_____ No

Reviewer IMET Evaluation Summary **Title/Level:** __Reflex_K-5_____

Publisher: __Exploring Learning_____ **Copyright:** _2015____ **ISBN:**__978-1-4916-0801-2_____

Reviewer ID # ____LS, JM, TR, SB, CJ_____ **Date Review Completed:** ___07 March 2016_____

Non-Negotiable Criteria- Each Non-Negotiable must be met in order for the Non-Negotiable Alignment Criteria to be met overall.	
Non-Negotiable 1: Freedom from Obstacles to Focus __x_____ **Meets** _____ **Does Not Meet**	**Non- Negotiable 2: Focus and Coherence** ___x__ **Meets** _____ **Does Not Meet**
Non-Negotiable Overall: __x___ **Meets** _____ **Does Not Meet**	

Alignment Criteria- Each Alignment Criterion must be met with a sufficient number of points in order for Alignment Criteria to be labeled "Meets" overall. The more points the materials receive on the Alignment Criteria, the better they are aligned.

Alignment Criterion 1: Rigor and Balance	Alignment Criterion 2: Standards of Mathematical Practice	Alignment Criterion 3: Access to Standards for All Learners
Points: __3___ of 6 possible. **(Materials must receive at least 5 of 6 points to align.)**	**Points: __2___ of 6 possible.** **(Materials must receive at least 5 of 6 points to align.)**	**Points: __6___ of 6 possible.** **(Materials must receive at least 5 of 6 points to align.)**
_____ Meets	**_____ Meets**	**___x____ Meets**
___x____ Does Not Meet	**__x_____ Does Not Meet**	**_____ Does Not Meet**

Alignment Criteria Overall:

_____ Meets **__x___ Does Not Meet**

If the materials meet both Non-Negotiables and relevant Alignment Criterion, they are aligned to the Shifts and major features of the Core Standards. **Do the materials meet every Non-Negotiable and Alignment Criterion? _____ Yes __x___ No**

What are the specific areas of strength and weakness based on this evaluation? Publishers or others modifying or developing assessments can use this information to make improvements and/or to remedy gaps in the alignment of assessment materials.

Strengths: The Reflex program does a great job accomplishing its objective which is to build basic math fact fluency. The program engages and optimizes each student's individual learning experience. The program is most successful when used for 15-20 minutes each day rather than larger chunks of class or homework time sporadically. It can be accessed anywhere with internet and there is an app available.

Weakness: Reflex was not created to develop conceptual understanding and therefore does not cover requirements needed to meet the necessary evidence required for those categories (Rigor and Balance, Standards of Mathematical Practice).

2015-16 Mathematics Interim Review Recommendation & Summary

Publisher Name:	Great Minds
Title:	Eureka Math-A Story of Units
ISBN #	**978-1-63255-650-9**
Grade Level(s) or Course:	Kindergarten
Reviewer ID:	BKC,KC

RECOMMENDED AS:

___x_____**Core Mathematics Program-** a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials. Substantial evidence clearly supports the designation of this program as Core.

_____**Other Mathematics Program-** a program that substantially, but partially, meets the *focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for* supplemental materials. Substantial evidence clearly supports the designation of this program as Other.

_____**Component Mathematics Program-** a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs. Substantial evidence clearly supports the designation of this program as Component.

_____**Intervention Program-** a program designed and intended to target and support students' specific needs. Substantial evidence clearly supports the designation of this program as Intervention.

_____ **Does not meet criteria** for recommendation as a Curricular Material or Online Resource for Mathematics.

EVIDENCE SUMMARY:

FOCUS-

Mid module and end of module assessments do not assess any topics before the grade level in which the topic is introduced.

COHERENCE-

More than 70% of the lessons are focused on the major work of the grade level. Major work is also included within the supporting work lessons.

RIGOR-

Program moves through 3 components of a mathematics curriculum. Conceptual understanding is developed first, followed by procedural skill and fluency. Experiences are provided to practice conceptual understanding.

CONCEPTUAL UNDERSTANDING-

Program moves through 3 components of a mathematics curriculum. Conceptual understanding is developed first, followed by procedural skill and fluency. Experiences are provided to practice conceptual understanding.

MATHEMATICAL PRACTICES-

A majority of instruction is allotted to the major work of the grade.

ACCESSIBILITY OF STANDARDS TO ALL STUDENTS-

ELL supports are evident. Notes in the margins of Teacher manuals give teachers scaffolds to use. Lessons have 4 components: fluency practice, concept development, application problems, and student debriefs.

OTHER:

2015-16 Interim Mathematics Review

Mathematics Evaluation Tool Grades K-8

Publisher: Great Minds

Title of Material: Eureka Math A Kindergarte

Author: _____

ISBN #: 978-1-63255-650-9 **Copyright** _____

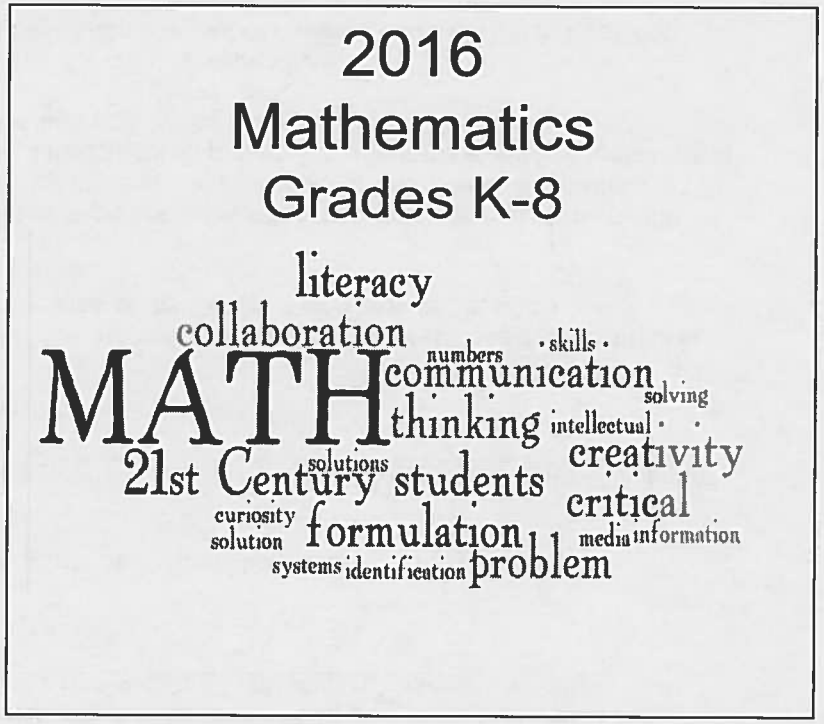
Reviewer ID: BKC KC

Core Mathematics Program- a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Core.

Other Mathematics Program- a program that substantially, but partially, meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Other.

Component Mathematics Program- a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs.
Substantial evidence clearly supports the designation of this program as Component.

Intervention Program- a program designed and intended to target and support students' specific needs.
Substantial evidence clearly supports the designation of this program as Intervention.



- Evaluation Form adapted from Instructional Materials Evaluation Toolkit (IMET).

The IMET was developed by Student Achievement Partners. Educators may use or adapt. http://creativecommons.org/licenses/by/3.0/ Download this tool at http://achievethecore.org/IMET

Instructional Materials Evaluation Tool
Mathematics, Grades K-8

What Are the Purposes of the IMET?
This Math IMET is designed to help educators determine whether instructional materials are aligned to the Shifts and major features of the Common Core State Standards (CCSS). The substantial instructional Shifts (http://www.corestandards.org/other-resources/key-shifts-inmathematics/) at the heart of the Common Core State Standards are:
- **Focus** strongly where the Standards focus
- **Coherence**: Think across grades and link to major topics within the grade
- **Rigor**: In major topics, pursue conceptual understanding, procedural skill and fluency, and application with equal intensity.

The IMET draws directly from the following documents:
- Common Core State Standards for Mathematics (www.corestandards.org/Math)
- Publishers' Criteria for the Common Core State Standards in Mathematics grade K-8 (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)

When to use the IMET
1. Purchasing materials: Many factors go into local purchasing decisions. Alignment to the Standards is a critical factor to consider. This tool is designed to evaluate alignment of instructional materials to the Shifts and the major features of the CCSS. It also provides suggestions of additional indicators to consider in the materials evaluation and purchasing process.

2. Evaluating materials currently in use: The IMET can be used to analyze the degree of alignment of existing materials and help to highlight specific, concrete flaws in alignment. Even where materials and tools currently in use fail to meet one or more of these criteria, the pattern of failure is likely to be informative. States and districts can use the evaluation to create a thoughtful plan to modify or combine existing resources in such a way that students' actual learning experiences approach the focus, coherence, and rigor of the Standards.

3. Developing programs: Those developing new programs can use this tool as guidance for creating aligned curricula.
Please note this tool was designed for evaluating comprehensive curricula (including any supplemental or ancillary materials), but it was not designed for the evaluation of standalone supplemental materials.

Who Uses the IMET?
Evaluating instructional materials requires both subject-matter and pedagogical expertise. Evaluators should be well versed in the Standards (www.corestandards.org/Math) for all grades in which materials are being evaluated. This includes understanding the Major Work of the grade (www.achievethecore/focus), the Supporting and Additional work, how the content fits into the progressions in the Standards (www.achievethecore.org/progressions), and the expectations of the Standards with respect to conceptual understanding, procedural skill and fluency, and application. Evaluators also should be familiar with the substantial instructional Shifts (http:// www.corestandards.org/other-resources/key-shifts-in-mathematics/) of Focus, Coherence and Rigor that are listed above.

Getting Started
Prior to Evaluation

Assemble all of the materials necessary for the evaluation. It is essential for evaluators to have materials for all grades covered by the program, as some criteria cannot be rated without having access to each grade. In addition, each evaluator should have a reference copy of the Common Core State Standards for Mathematics (CCSSM) and the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013).

Before conducting the evaluation itself, it is important to develop a protocol for the evaluation process. The protocol should include having evaluators study the Publishers' Criteria and the IMET. It will also be helpful for evaluators to get a sense of each program overall before beginning the process. At a minimum, this would include reading the front matter of the text, looking at the table of contents and paging through multiple chapters.

Sections 1-3 below should be completed to produce a comprehensive picture of the strengths and weaknesses of the materials under evaluation. Information about areas in need of improvement or supplementation should be shared with internal and external stakeholders.

Navigating the Tool

Begin with Section 1: Non-Negotiable Alignment Criteria

- The Non-Negotiable Alignment Criteria must each be met in full for materials to be considered aligned to the Shifts and the major features of the Common Core State Standards. Each Non-Negotiable Alignment Criterion has one or more metrics associated with it; every one of these metrics must be met in order for the criterion as a whole to be met.

- Examine the relevant materials and use evidence to rate the materials against each criterion and its associated metric(s).

- Record and explain the evidence upon which the rating is based.

Continue to Section 2: Alignment Criteria

- The Alignment Criteria must each be met for materials to be considered aligned to the Shifts and the major features of the Common Core State Standards. Each Alignment Criterion has one or more metric associated with it; a specific number of these metrics must be met or partially met in order for the criterion as a whole to be met.

- Examine the materials in relation to these criteria, assigning each metric a point value. Rate the criterion as "Meets" or "Does Note Meet" based on the number of points assigned. The more points the materials receive on the alignment Criteria, the better they are aligned.

- Record and explain the evidence upon which the rating is based.

Proceed to Section 4: Indicators of Quality

- Indicators of Quality are important considerations that will help evaluators better understand the overall quality of instructional materials. These considerations are not criteria for alignment to the CCSS, but they provide valuable information about additional program characteristics. Evaluators may want to add their own indicators to the examples provided.

Directions for Non-Negotiable 1

Freedom from Obstacles to Focus

Criterion	Evidence- Give specific examples.	Rating: (Reviewer only.)
Non-Negotiable 1: **Freedom from Obstacles to Focus** **Materials must reflect the content architecture of the Standards by not assessing the topics named before the grade level where they first appear in the Standards.** The Standards foster students' progress to algebra by focusing strongly on arithmetic. Consistent with this focus, certain topics from outside of arithmetic appear only in later grades. Thus, to be aligned, materials must reflect the content architecture of the Standards by not assessing the topics named before the grade level where they first appear in the Standards. In this criterion, "topics named" means the topics that are explicitly named in Metric 1A. No other topics should be added to the list in Metric 1A. (Note that other topics in the standards are addressed in criterion NN2.)	**Required Materials** • Common Core State Standards for Mathematics (www.corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf) • From the materials being evaluated: teacher guides and all assessment components	**Rating this Criterion**: Non-Negotiable 1 is rated as Meets or Does Not Meet. To rate Non-Negotiable 1, begin by rating Metric 1A. Since Metric 1A is the only metric for Non-Negotiable 1, the rating for Non-Negotiable 1 is the same as the rating for Metric 1A. If Metric 1A is rated as Does Not Meet, include evidence of when the named topic(s) is/are assessed. If the metric is rated as Meets, list the grade(s) examined in the evaluation.

Metric NN1A: **Materials re[illegible] the basic architecture of the Standards by not assessing the listed topics before the grade level indicated.** • Probability, including chance, likely outcomes, probability models. (Introduced in the CCSSM in grade 7) • Statistical distributions, including center, variation, clumping, outliers, mean, median, mode, range, quartiles; and statistical association or trends, including two-way tables, bivariate measurement data, scatter plots, trend line, line of best fit, correlation. (Introduced in the CCSSM in grade 6) • Similarity, congruence, or geometric transformations. (Introduced in the CCSSM in grade 8) • Symmetry of shapes, including line/ reflection symmetry, rotational symmetry. (Introduced in the CCSSM in grade 4) **How to Find the Evidence:** Evaluate the table of contents, all chapter tests, all unit tests, and other such assessment components (including rubrics). For context, read Criterion #2 from the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013). NOTE: Grade alignments of other topics are addressed in Non-Negotiable 2, Focus and Coherence.) In this criterion, "topics named" means the topics that are explicitly named in Metric 1A. No other topics should be added to the list in Metric 1A. (Note that other topics in the standards are addressed in criterion NN2.)	**Evidence-** **Mid module and en[illegible]module assessments do not assess any topics before the grade level in which the topic is introduced.**	**(Reviewer only.)** **___x_Meets** **____Does Not Meet**
Non-Negotiable 1: Materials must reflect the content architecture of the Standards by not assessing the topics named* before the grade level where they first appear in the Standards. NN 1 If Metric 1A was rated as Meets, then rate Non-Negotiable 1 as Meets. If Metric 1A was rated as Does Not Meet, then rate Non- Negotiable 1 as Does Not Meet. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion.**(Reviewer only.)** **Before moving to Non-Negotiable 2, record the final Meets or Does Not Meet rating in the Evaluation Summary.**		**(Reviewer only.)** **___x_Meets** **____Does Not Meet** **Strengths/Weaknesses:**

Directions for Non-Negotiable 2

Focus and Coherence

Non-Negotiable 2: **Focus and Coherence** **Materials must focus coherently on the Major Work of the grade in a way that is consistent with the progressions in the Standards.** Focus and coherence are the two major evidence-based design principles of the Common Core State Standards for Mathematics (CCSSM, p. 3). Focus is necessary in order to fulfill the ambitious promise the states have made to their students by adopting the Standards: greater achievement at the college and career ready level; greater depth of understanding of mathematics; and a rich classroom environment in which reasoning, sense-making, applications, and a range of mathematical practices flourish. In simpler terms, a mile-wide, inch-deep curriculum translates to less time per topic. Less time means less depth and moving on without many students. Thus, materials must focus coherently on the Major Work of the grade in a way that is consistent with the progressions in the Standards.	**Required Materials** • Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf) • Focus by Grade Level for the grade being evaluated (www.achievethecore.org/focus) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion:** Non-Negotiable 2 is rated as Meets or Does Not Meet. To rate Non-Negotiable 2, first rate metrics 2A–2H. Each of these eight metrics must be rated as Meets in order for Non-Negotiable 2 to be rated as Meets. Rate each metric 2A-2H as Meets or Does Not Meet/Insufficient Evidence. If the evidence examined shows that the Criterion is met, then mark the Criterion Meets. If the evidence examined shows that the Criterion is not met—or if there is insufficient evidence to make a determination—then mark the Criterion as Does Not Meet/Insufficient Evidence. Support all ratings with evidence.
Metric NN2A: **In each grade K–8, students and teachers using the materials as designed devote the large majority of time to the Major Work of the grade.** **How to Find the Evidence:** Familiarize yourself with the Major Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, lessons, homework assignments, and assessments. (Evaluate both student and teacher materials.) Consider time spent on the Major Work of the grade and judge qualitatively whether students and teachers using the materials as designed will devote the large majority of time to the Major Work of the grade. For context, read Criterion #1 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013)	**Evidence-** **More than 70% of the lessons are focused on the major work of the grade level. Major work is also included within the supporting work lessons.**	**(Reviewer only.)** **__x__Meets** **____Does Not Meet/** **Insufficient Evidence**

Metric NN2B: **Supporting work, where present, enhances focus and coherence simultaneously by also engaging students in the Major Work of the grade.** **How to Find the Evidence:** Familiarize yourself with the Major Work and Supporting Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate chapters and lessons that focus on Supporting Work. NOTE: Example of evaluating this Criterion might include looking at whether materials for K–5 generally treat data displays as an occasion for solving grade-level word problems using the four operations (e.g., see 3.MD.B.3); or whether materials for grade 7 take advantage of opportunities to use probability to support ratios, proportions, and percentages. For context, read Criterion #3 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** **All modules taught in their entirety will cover the major work of the grade level. All the supporting work enhances the major work.**	(Reviewer only.) **___x_Meets** **____Does Not Meet/ Insufficient Evidence**
Metric NN2C: **Materials base content progressions on the grade-by-grade progressions in the Standards. Content from previous or future grades does not unduly interfere with or displace on-grade-level content.** **How to Find the Evidence:** Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, and lessons in both student and teacher materials. NOTE: In some cases it may be possible that aligned materials might address some aspects of a topic in a strategic way before or after the grade level in which the topic is central in the Standards' progressions; for example, a curriculum author might purposefully choose to explore adding fractions with unlike denominators in a way appropriate to grade four, recognizing that this work is not really required until the next grade. However, any such purposeful discrepancies in content progressions should enhance the required learning in each grade; not unduly interfere with or displace grade-level content; and be clearly aimed at helping students meet the Standards as written rather than effectively rewriting the progressions in the Standards. And in all cases, note that Non-Negotiable 1 must be met for materials to be aligned. For context, read Criterion #5a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** **Content progressions are evident in a strong foundation of skills built upon by subsequent modules, and does not interfere with on grade level content.**	(Reviewer only.) **__x__Meets** **____Does Not Meet/ Insufficient Evidence**

Metric NN2D: **Materials g[redacted]ll students extensive work with on-grade-level problems.** **How to Find the Evidence:** Evaluate both student and teacher materials. If the materials provide resources for differentiated learning, consider whether lower-performing students have opportunities to engage with grade-level problems. Also consider whether higher-performing students are given opportunities to learn current grade-level content in greater depth. For context, read Criterion #5b in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** **Daily work is on gr[redacted]level content and is sequential from simple to complex with plenty of scaffolding.**	(Reviewer only.) __x__Meets ____Does Not Meet/ Insufficient Evidence
Metric NN2E: **Materials relate on-grade-level concepts explicitly to prior knowledge from earlier grades.** **How to Find the Evidence:** Evaluate both student and teacher materials. NOTE: Examples of evaluating this Criterion might include looking at the way the materials extend basic ideas of place value across the decimal point; or the role that properties of operations play when the materials extend arithmetic beyond whole numbers to fractions, variables, and expressions. More generally, cluster headings in the Standards sometimes signal key moments where reorganizing and extending previous knowledge is important in order to accommodate new knowledge (e.g., see cluster headings that use the phrase "Apply and extend previous understanding"). For context, read Criterion #5c in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** **Program is not a spiraling curriculum it build on each topic so that students develop a deep understanding on previously learned topics. Curriculum builds upon itself.**	(Reviewer only.) ___x_Meets ____Does Not Meet/ Insufficient Evidence
Metric NN2F: **Review of material from previous grades is clearly identified as such to the teacher, and teacher and students can see what their specific responsibility is for the current year.** **How to Find the Evidence:** Evaluate the table of contents, but do not stop there; also evaluate units, chapters, lessons, homework assignments and assessments. (Evaluate both student and teacher materials.) Identify any content from previous grades and check whether it is identified as such. For context, read Criterion #5a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** **Pre-assessment is available to teachers to determine gaps in content knowledge. Teachers can then use this information to drive instruction within the classroom. Teachers are provided with a curriculum overview document so they know responsibilities for the year.**	(Reviewer only.) _x___Meets ____Does Not Meet/ Insufficient Evidence

Metric NN2G: **Materials include learning objectives that are visibly shaped by CCSSM cluster headings.** **How to Find the Evidence:** Select several clusters from the Major Work in the grade being evaluated. Evaluate teacher and student materials in relation to these clusters. For context, read Criterion #6a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** **In the curriculum overview the CCSS major cluster headings are provided.**	**(Reviewer only.)** **___x_Meets** **____Does Not Meet/** **Insufficient Evidence**
Metric NN2H: **Materials include problems and activities that serve to connect two or more clusters in a domain, or two or more domains in a grade, in cases where these connections are natural and important.** **How to Find the Evidence:** In the grade being evaluated, choose two or more clusters or two or more domains for which connections are natural and important. Evaluate the units, chapters, and lessons that deal with the chosen topics, looking for problems and activities that serve to connect the chosen clusters or domains. NOTE: An example of evaluating this Criterion might include looking at whether problems in grade 4 sometimes or often involve students applying their developing computation skills (detailed in domain NBT) in the context of solving word problems (detailed in domain OA). For context, read Criterion #6b in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** **Major works of each module cover 75% of the major clusters for the grade level. Supporting clusters are also included in modules and interwoven throughout lessons.**	**(Reviewer only.)** **_x___Meets** **____Does Not Meet/** **Insufficient Evidence**
Non-Negotiable 2: **Focus and Coherence** **Materials must focus coherently on the Major Work of the grade in a way that is consistent with the progressions in the Standards.** NN 2 If all Metrics 2A – 2H were rated as Meets, then rate Non-Negotiable 2 as Meets. If one or more Metric was rated Does Not Meet/Insufficient Evidence, then rate Non-Negotiable 2 as Does Not Meet. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)** **Before moving to Alignment Criterion 1, record the final Meets or Does Not Meet rating in the Evaluation Summary.**		**(Reviewer only.)** **__x__Meets** **____Does Not Meet** **Strengths/Weaknesses:**

Now continue by evaluating the Alignment Criterion 1 for Rigor and Balance.

Directions for Alignment Criterion 1

Rigor and Balance

Alignment Criterion 1: Rigor and Balance **Materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.** The Standards set expectations for attention to all three aspects of rigor: conceptual understanding, procedural skill and fluency, and applications. Thus, materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.	**Required Materials** • Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf) • Focus by Grade Level for the grade being evaluated (achievethecore.org/focus) • Situation Types for the Operations in Word Problems (achievethecore.org/situation-types) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion:** Alignment Criterion 1 is rated as Meets or Does Not Meet. To rate Alignment Criterion 1, first rate metrics 1A, 1B, and 1C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). For each metric, guiding questions are provided to aid in gathering evidence. Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 1 if the materials rate 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as rigor and balance, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.
Metric AC1A: **The materials support the development of students' conceptual understanding of key mathematical concepts, especially where called for in specific content Standards or cluster headings.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Major Work for the grade being evaluated that relate specifically conceptual understanding to use throughout the questions associated with this metric. NOTE: Some examples of clusters or Standards that call for conceptual understanding include: K.OA.A.1, (1.NBT.B, 1.NBT.C), (2.NBT.A, 2.NBT.B), (3.OA.A.1, 3.OA.A.2), 4.NF.A, (4.NBT.A, 4.NBT.B), 5.NF.B, (5.NBT.A, 5.NBT.B), 6.RP.A, 6.EE.A.3, 7.NS.A, 7.EE.A, 8.EE.B, 8.F.A, 8.G.A Clusters or Standards grouped by parentheses are closely connected and could be analyzed together. For context, read Criterion #4a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	-Choose a cluster/Standard from the Major Work that is aligned to each aspect of rigor and use it to evaluate these metrics. It is most helpful if the same clusters/Standards are chosen for all of the programs being evaluated. (Guidance in choosing clusters/Standards is included in "How to Find the Evidence".)	**Use the questions for AC Metric 1A to evaluate Metric 1A. Record evidence for each question and rate Metric 1A.** **__x__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**

Is conceptual understanding attended to thoroughly where the Standards set [illegible]t expectations for understanding or interpreting? Evaluate lessons, chapter/unit assessments and homework assignments, paying attention to work aligned to Standards that explicitly call for understanding or interpreting. NOTE: Examples of evaluating this Criterion might include looking at how well the multi-digit addition and subtraction algorithms are developed and explained on the basis of place value and properties of operations; or how well the multi-digit multiplication and division algorithms are developed and explained on the basis of place value and properties of operations; or how well solving equations is presented and explained as a process of reasoning.	**Evidence-** **Program moves thro[illegible]3 components of a mathematics curriculum. Conceptual understanding is developed first, followed by procedural skill and fluency. Experiences are provided to practice conceptual understanding.**	
Do the materials feature high-quality conceptual problems and conceptual discussion questions? Evaluate lessons, chapter/unit assessments, and homework assignments. NOTE: Example of conceptual problems might include such questions as "Find a number greater than 1/5 and less than 1/4," or "If the divisor does not change and the dividend increases, what happens to the quotient?"	**Evidence-** **Lessons incorporate 25-35 minutes each day of conceptual development. In lessons, an application problem will follow concept development. Students are urged to apply learning to real world situations. At the end of each lesson is a student debrief where students can reflect and discuss.**	
Do the materials feature opportunities to identify correspondences across mathematical representations? Evaluate lessons, chapter/unit assessments and homework assignments. NOTE: Examples of evaluating this Criterion might include looking at whether students are supported in identifying correspondences among: the verbal description of a situation, the diagrams that distill its mathematical features, and the equations that model it; or equivalent forms of numbers (e.g., 3 and 6/2) and the number line; or rational number operations and representations of them via models such as the vector model; or the expression that defines a function and the graph that shows the relationship.	**Evidence-** **Lessons flow from concrete to pictorial to abstract representations.**	
Metric AC1B: **The materials are designed so that students attain the fluencies and procedural skills required by the Standards.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Major Work for the grade being evaluated that relate specifically to fluency and procedural skill to use throughout the questions associated with this metric. NOTE: Some examples of Standards that call for procedural skill and fluency include: K.OA.A.5, 1.OA.C.6, 2.OA.B.2, 2.NBT.B.5, 3.OA.C.7, 3.NBT.A.2, 4.NBT.B.4, 5.NBT.B.5, 6.NS.B.2, and 6.NS.B.3, 6.EE.A, 7.NS.A, 7.EE.A.1,7.EE.B.4a, 8.EE.C.7, 8.EE.C.8b For context, read Criterion #4b in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).		**Use the questions for Metric 1B to evaluate Metric 1 B. Record evidence for each question and rate Metric 1B.** **(Reviewer only.)** **__x__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**

Is progress toward fluency and procedural skill interwoven with students' develo conceptual understanding of the operations in question? Evaluate lessons, chapter/unit assessments, daily routines, and homework assignments for evidence that the development of fluency and procedural skill is supported by conceptual understanding.	**Evidence-** **Conceptual understa g, procedural skill, fluency and application are interwoven throughout the program.**	
Are purely procedural problems and exercises present that include cases in which opportunistic strategies are valuable and generic cases that require efficient algorithms present? Evaluate lessons, chapter/unit assessments, daily routines, and homework assignments. NOTE: Examples of problems in which opportunistic strategies are valuable might include the sum 698 + 240 or the system x + y = 1, 2x + 2y = 3. Examples of generic cases that require efficient algorithms might include the sum 8767+2286 or the system 6y + x = x + 3, – x = 1 + 2y.	**Evidence-** **A variety of strategies are introduced to students before they are introduced to the algorithm.**	
Do the materials in grades K–6 provide repeated practice toward attainment of fluency Standards? Evaluate lessons, daily routines, and homework assignments for evidence of repeated practice toward attainment of the following K–6 Standards that set an explicit expectation of fluent (accurate and reasonably fast) computation: K.OA.A.5, 1.OA.C.6, 2.OA.B.2, 2.NBT.B.5, 3.OA.C.7, 3.NBT.A.2, 4.NBT.B.4, 5.NBT.B.5, 6.NS.B.2, 6.NS.B.3.	**Evidence-** **Fluency activities are part of the program on a daily basis.**	
Metric AC1C: **The materials are designed so that teachers and students spend sufficient time working with engaging applications, without losing focus on the Major Work of each grade.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Major Work for the grade being evaluated that relate specifically application to use throughout the questions associated with this metric. NOTE: Some examples of clusters or Standards that call for application include: K.OA.A.2, 1.OA.A, 2.OA.A, 3.OA.A.3, 3.OA.D.8, 4.OA.A.3, 4.NF.B.3d, 4.NF.B.4c, 5.NF.B.6, 5.NF.B.7c, 6.RP.A.3, 6.NS.A.1, 6.EE.B.7, 6.EE.C.9, 7.RP.A, 7.NS.A.3, 7.EE.B.3, 8.EE.C.8c, 8.F.B For context, read Criterion #4c in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** **Most lessons have at least one application problem.**	**Use the questions for Metric 1C to evaluate Metric 1C. Record evidence for each question and rate Metric 1C.** **(Reviewer only.)** **__x__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Are there are single- and multi-step contextual problems, including non-routine problems, that develop the mathematics of the grade, afford opportunities for practice, and engage students in problem solving? Do the problems attend thoroughly to those places in the content Standards where expectations for multi-step and real-world problems are explicit? Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** **Real world problems are used instead of rote memorization to help students become fluent.**	

Do application problems particularly stress applying the Major Work of the grade? Evaluate lessons, chapter/unit assessments, and homework assignments. NOTE: Examples of evaluating this Criterion might include looking at: how well, by the end of grade 2, students using the materials as designed can represent and solve a full range of one-step addition and subtraction word problems; or how well, by the end of grade 3, students using the materials as designed can represent and solve a full range of one-step multiplication and division word problems; or how well these basic situation types for each operation are carried coherently across the grades, (e.g., with fractions and algebraic expressions); or, in all grades, whether the problems connect concepts, Standards, and domains in ways that are natural and important. For a list of situation types for one-step addition, subtraction, multiplication, and division problems, see Situation Types for the Operations in Word Problems	**Evidence-** **A majority of time is devoted to the major work of the grade. Daily application problems are given in almost every lesson.**	
Does modeling build slowly across K–8, with applications that are relatively simple in earlier grades and when students are encountering new content? In grades 6–8, do the problems begin to provide opportunities for students to make their own assumptions or simplifications in order to model a situation mathematically? Read Standard for Mathematical Practice 4, Model with Mathematics. Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** **Modeling builds slowly and continues and continues across grade levels.**	

Alignment Criterion 1: Rigor and Balance

Materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.

AC1 Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 out of 6 points, the Criterion has not been met. Check the final rating.
Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)**

Before moving to Alignment Criterion 2, record the final Meets or Does Not Meet rating in the Evaluation Summary.

(Reviewer only.)

__x__Meets

____Does Not Meet

Strengths/Weaknesses:

Directions for Alignment Criterion 2

Standards for Mathematical Practice

Alignment Criterion 2: Standards for Mathematical Practice **Materials must demonstrate authentic connections between content Standards and practice Standards.** The Standards require that designers of instructional materials connect the mathematical practices to mathematical content in instruction. Thus, materials must demonstrate authentic connections between content Standards and practice Standards.	**Required Materials:** • Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf) • Focus by Grade Level for the grade being evaluated (www.achievethecore.org/focus) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion** Alignment Criterion 2 is rated as Meets or Does Not Meet. To rate Alignment Criterion 2, first rate metrics 2A, 2B, and 2C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). For each metric, guiding questions are provided to aid in gathering evidence. Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 2 if the materials earn 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as mathematical practices, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.
Metric AC2A: **Materials address the practice Standards in such a way as to enrich the Major Work of the grade; practices strengthen the focus on Major Work instead of detracting from it, in both teacher and student materials.** **How to Find the Evidence:** Familiarize yourself with the Major Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate teacher and student materials for evidence that the mathematical practices support and connect to the focus of the grade. NOTE: Examples of evaluating this Criterion might include looking at whether, in grades K–5, students using the materials are supported to look for and express regularity in repeated reasoning about the addition table, the multiplication table, the properties of operations, the relationship between addition and subtraction or multiplication and division, and the place value system; or whether, in grades 6–8, students using the materials are supported to look for and express regularity in repeated reasoning about proportional relationships and linear functions. For context, read Criterion #8 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013).	**Evidence-** **A majority of instruction is allotted to the major work of the grade.**	**(Reviewer only.)** **__x__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**

Metric AC2B: **Materials a[illegible]d to the full meaning of each practice Standard.** **How to Find the Evidence:** For context, read Criterion #7 and Criterion #9 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).		**Use the questions for Metric 2B to evaluate Metric 2B. Record evidence for each qu[illegible]n and rate Metric 2B.** **(Reviewer only.)** **__x__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Over the course of any given year of instruction, is each mathematical practice Standard meaningfully present in the form of assignments, activities, or problems that stimulate students to develop the habits of mind described in the practice Standard? Evaluate lessons, chapter/ unit assessments, and homework assignments for evidence of each mathematical practice being meaningfully present in instruction.	**Evidence-** **Each CCSS is present in the program. The standards are listed in the beginning of each module.**	
Do the materials treat the practice Standards as developing across grades or grade bands? Are the practice Standards in early grades appropriately simple? Do they display an arc of growing sophistication across the grades?	**Evidence-** **The content builds upon itself across grade levels over time. Content grows in complexity each time it is presented.**	
Are there teacher-directed materials that explain the role of the practice Standards in the classroom and in students' mathematical development? Are alignments to practice Standards accurate?	**Evidence-** **Each module has an overview that provides teachers insight into practice standards covered in the module.**	
Metric AC2C: **Materials support the Standards' emphasis on mathematical reasoning.** **How to Find the Evidence:** For context, read Criterion #10 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).		**Use the questions for Metric 2C to evaluate Metric 2C. Record evidence for each question and rate Metric 2C.** **(Reviewer only.)** **__x__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Do the materials support students in constructing viable arguments and critiquing the arguments of others concerning grade-level mathematics that is detailed in the content Standards? Read Standard for Mathematical Practice 3. Evaluate teacher and student materials to ensure that students are given opportunities to reason with grade-level mathematics.	**Evidence-** **Opportunities are given for students to construct arguments and critique others.**	
Do the materials support students in producing not only answers and solutions, but also, in a grade-appropriate way, arguments, explanations, diagrams, mathematical models, etc., especially in the Major Work of the grade? Familiarize yourself with the Major Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate teacher and student materials, to understand the types of work students are expected to produce.	**Evidence-** **Student debrief is for students to reflect on lessons. During the problem set or application problem students are asked to explain their thinking.**	

Do materials explicitly attend to the specialized language of mathematics? language of argument, problem solving, and mathematical explanations taught rather than assumed? Evaluate teacher and student materials, paying attention to how mathematical language is taught. NOTE: Examples of evaluating this Criterion might include looking at whether students are supported in: basing arguments on definitions; using the method of providing a counterexample; or recognizing that examples alone do not establish a general statement.	**Evidence-** **In the module review mathematical language is introduced. This language is taught to students in each module, rather than assumed.**	

Alignment Criterion 2:
Standards for Mathematical Practice

Materials must demonstrate authentic connections between content Standards and practice Standards.

AC2 Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 out of 6 points, the Criterion has not been met. Check the final rating.
Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion.
(Reviewer only.)

Before moving to Alignment Criterion 3, record the final Meets or Does Not Meet rating in the Evaluation Summary.

(Reviewer only.)

___x_Meets

____Does Not Meet

Strengths/Weaknesses:

Alignment Criterion 3:
Access to the Standards for All Students

Materials must provide supports for English Language Learners and other special populations.

Because Standards are for all students, alignment requires thoughtful support to ensure all students are able to meet the Standards. Thus, aligned materials must provide supports for English Language Learners and other special populations.

Required Materials:

- Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf)
- Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)
- From the materials being evaluated: teacher guides, student texts and workbooks

Rating this Criterion:
Alignment Criterion 3 is rated as Meets or Does Not Meet.

To rate Alignment Criterion 3, first rate metrics 3A, 3B, and 3C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points).

Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 3 if the materials earn 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as support for special population, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.

Metric AC3A: **Support for [illegible]lish Language Learners and other special populations is thoughtful and helps those students meet the same Standards as all other students. The language in which problems are posed is carefully considered.** **How to Find the Evidence:** Evaluate teacher and student materials, paying attention to supports offered for special populations.	**Evidence-** **ELL supports are evi[illegible]. Notes in the margins of Teacher manuals give teachers scaffolds to use.**	**Reviewer only.)** **___x_Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Metric AC3B: **Materials provide appropriate level and type of scaffolding, differentiation, intervention, and support for a broad range of learners with gradual removal of supports, when needed, to allow students to demonstrate their mathematical understanding independently.** **How to Find the Evidence:** Evaluate teacher and student materials, paying attention to whether materials provide differentiation that will lead all learners to engage with on-grade-level content.	**Evidence-** **Lessons are in a simple to complex structure. Teacher note boxes provide suggestions for scaffolding student learning.**	**Reviewer only.)** **__x__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Metric AC3C: **Design of lessons recommends and facilitates a mix of instructional approaches for a variety of learners such as using multiple representations (e.g., including models, using a range of questions, checking for understanding, flexible grouping, pair-share).** **How to Find the Evidence:** Evaluate teacher materials, noting instructional approaches suggested for whole class and differentiated lessons and activities.	**Evidence-** **Lessons have 4 components: fluency practice, concept development, application problems, and student debriefs.**	**Reviewer only.)** **__x__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**

Alignment Criterion 3: Access to the Standards for All Students **Materials must provide supports for English Language Learners and other special populations.** AC3 Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 points, the Criterion has not been met. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion.**(Reviewer only.)** **Move to the Evaluation Summary and record the final Meets or Does Not Meet rating .**	**(Reviewer only.)** **_x___Meets** **____Does Not Meet** **Strengths/Weaknesses:**

Once an evaluation for alignment to the Shifts and major features of the CCSS has been conducted using Sections 1-3, it's important to evaluate for overall quality and best practices. A starting list of Indicators of Quality are suggested below. States, districts and others evaluating instructional materials are encouraged to add to this list to ensure materials reflect local contexts. For background information on some of the Indicators of Quality in this section, refer to pp.18–21 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).

Indicators of Quality	Evidence- Give specific examples.	Rating: (Reviewers only.)
1. Lessons are thoughtfully structured and support the teacher in leading the class through the learning paths at hand, with active participation by all students in their own learning and in the learning of their classmates.	**Evidence-** **Lessons are 60 minutes with 4 components. Pacing and Preparation guides are offered as support and on a website. Sprints are also provided for individual goal setting.**	**(Reviewer only.)** **___x___ Yes** **_____ No**
2. The underlying design of the materials includes both problems and exercises. (In solving problems, students learn new mathematics, whereas in working exercises, students apply what they have already learned to build mastery.) Each problem or exercise has a purpose. **NOTE: This Criterion does not require that the problems and exercises be labeled as such.**	**Evidence-** **Problem sets and Application problems are offered on a daily basis to provide understanding of new mathematics. Every problem or exercise has a purpose.**	**(Reviewer only.)** **___x___ Yes** **_____ No**

3. Design of assignments is not haphazard: exercises are given in intentional sequences in order to strengthen students' mathematical understanding.	Evidence- Scope and sequence is precise and intentional. Standards at each grade level help students build understanding and make connections with prior knowledge.	(Reviewer only.) ____x__ Yes _____ No
4. There are separate teacher materials that support and reward teacher study including, but not limited to: discussion of the mathematics of the units and the mathematical point of each lesson as it relates to the organizing concepts of the unit, discussion on student ways of thinking and anticipating a variety of students responses, guidance on lesson flow, guidance on questions that prompt students thinking, and discussion of desired mathematical behaviors being elicited among students.	Evidence- Teacher supports are evident with student sample works, pacing guides, curriculum overview and video galleries, to name a few.	(Reviewer only.) ____x__ Yes _____ No
5. Manipulatives suggested in the materials are faithful representations of the mathematical objects they represent and are connected to written methods.	Evidence- Partial manipulatives given as pictorials. If hands-on manipulatives are needed, they can be purchased through a separate company, Didax.	(Reviewer only.) ____x__ Yes _____ No
6. Materials include a variety of curriculum-embedded assessments. Examples include pre-, formative, summative, and self-assessment resources.	Evidence- Assessments come in the form of daily exit tickets, mid and end module assessments.	(Reviewer only.) ___x___ Yes _____ No
7. Assessments contain aligned rubrics, answer keys, and scoring guidelines that provide sufficient guidance for interpreting student performance.	Evidence- RUBRICS provide a progression towards mastery. Answer keys can be found online. Answers and solutions for assessments can be found at the end of the Teacher Editions.	(Reviewer only.) ____x__ Yes _____ No
8. Materials assess student proficiency using methods that are accessible and unbiased, including the use of course-level language in student prompts.	Evidence- Assessments are accessible and unbiased using appropriate mathematical language.	(Reviewer only.) ____x__ Yes _____ No

9. Materials are carefully evaluated by qualified individuals, whose names are listed, in an effort to ensure freedom from mathematical errors and course-level appropriateness.	**Evidence-** **Authors are listed.**	**(Reviewer only.)** **____x__ Yes** **_____ No**
10. The visual design supports students in engaging thoughtfully with the subject. Navigation through the text is clear.	**Evidence-** **There are not distractions that take away from the students' focus as the program is clean and simple with minimal pictures.**	**(Reviewer only.)** **___x___ Yes** **_____ No**
11. The materials engage parents in appropriate ways. For example, homework assignments in elementary grades, consist of routine problems, practice with getting answers, and fluency-building exercises that parents can easily support.	**Evidence-** **Parent support page on line has a number of supports to use. Access to the entire curriculum is available to parents online.**	**(Reviewer only.)** **___x___ Yes** **_____ No**

Reviewer IMET Evaluation Summary **Title/Level: ____Great Minds___**

Publisher: __Eureka Math – A Story of Units-Kindergarten_____ Copyright: _2015_____

ISBN:_____ 978-1-63255-650-9_____

Reviewer ID # _____BKC, KC_____ Date Review Completed:__March, 8, 2016

Non-Negotiable Criteria- Each Non-Negotiable must be met in order for the Non-Negotiable Alignment Criteria to be met overall.

Non-Negotiable 1: Freedom from Obstacles to Focus	Non- Negotiable 2: Focus and Coherence
_____x__ Meets _____ Does Not Meet	___x__ Meets _____ Does Not Meet

Non-Negotiable Overall:

___x__ Meets _____ Does Not Meet

Alignment Criteria- Each Alignment Criterion must be met with a sufficient number of points in order for Alignment Criteria to be labeled as "Meets" overall. The more points the materials receive on the Alignment Criteria, the better they are aligned.

Alignment Criterion 1: Rigor and Balance	Alignment Criterion 2: Standards of Mathematical Practice	Alignment Criterion 3: Access to Standards for All Learners
Points: __6___ of 6 possible. (Materials must receive at least 5 of 6 points to align.) ____x___ Meets _____ Does Not Meet	Points: __6___ of 6 possible. (Materials must receive at least 5 of 6 points to align.) _____x__ Meets _____ Does Not Meet	Points: ___6__ of 6 possible. (Materials must receive at least 5 of 6 points to align.) ____x___ Meets _____ Does Not Meet

Alignment Criteria Overall:

___x__ Meets _____ Does Not Meet

If the materials meet both Non-Negotiables and relevant Alignment Criterion, they are aligned to the Shifts and major features of the Core Standards. **Do the materials meet every Non-Negotiable and Alignment Criterion? ___x__ Yes _____ No**

What are the specific areas of strength and weakness based on this evaluation? Publishers or others modifying or developing assessments can use this information to make improvements and/or to remedy gaps in the alignment of assessment materials.

2015-16 Mathematics Interim Review Recommendation & Summary

Publisher Name:	Great Minds
Title:	Eureka Math-A Story of Units
ISBN #	**978-1-63255-692-9**
Grade Level(s) or Course:	First Grade
Reviewer ID:	BKC,SJ

RECOMMENDED AS:

___x_____**Core Mathematics Program-** a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials. Substantial evidence clearly supports the designation of this program as Core.

_____**Other Mathematics Program-** a program that substantially, but partially, meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for supplemental materials. Substantial evidence clearly supports the designation of this program as Other.

_____**Component Mathematics Program-** a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs. Substantial evidence clearly supports the designation of this program as Component.

_____**Intervention Program-** a program designed and intended to target and support students' specific needs. Substantial evidence clearly supports the designation of this program as Intervention.

_____ **Does not meet criteria** for recommendation as a Curricular Material or Online Resource for Mathematics.

EVIDENCE SUMMARY:

FOCUS-

Mid module and end of module assessments do not assess any topics before the grade level in which the topic is introduced.

COHERENCE-

More than 70% of the lessons are focused on the major work of the grade level. Major work is also included within the supporting work lessons.

RIGOR-

Program moves through 3 components of a mathematics curriculum. Conceptual understanding is developed first, followed by procedural skill and fluency. Experiences are provided to practice conceptual understanding.

CONCEPTUAL UNDERSTANDING-

Program moves through 3 components of a mathematics curriculum. Conceptual understanding is developed first, followed by procedural skill and fluency. Experiences are provided to practice conceptual understanding.

MATHEMATICAL PRACTICES-

A majority of instruction is allotted to the major work of the grade.

ACCESSIBILITY OF STANDARDS TO ALL STUDENTS-

ELL supports are evident. Notes in the margins of Teacher manuals give teachers scaffolds to use. Lessons have 4 components: fluency practice, concept development, application problems, and student debriefs.

OTHER:

Lack of color and graphics lends itself to less engagement.
Recommend that program be adopted in its entirety to lay a good foundation for later grades.

2015-16 Interim Mathematics Review

Mathematics Evaluation Tool Grades K-8

Publisher: Great Minds

Title of Material: Eureka Math - A Story of Units - Grade 1

Author: Great Minds

ISBN #: 978-1-63255-692-9 **Copyright** 2015

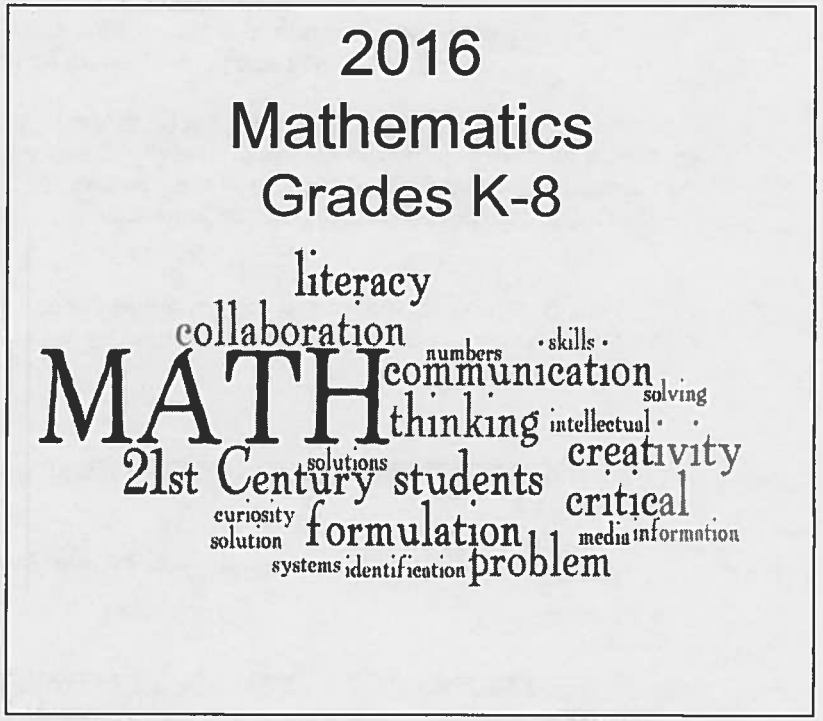
Reviewer ID: BKC, SJ

Core Mathematics Program- a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Core.

Other Mathematics Program- a program that substantially, but partially, meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Other.

Component Mathematics Program- a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs.
Substantial evidence clearly supports the designation of this program as Component.

Intervention Program- a program designed and intended to target and support students' specific needs.
Substantial evidence clearly supports the designation of this program as Intervention.



- Evaluation Form adapted from Instructional Materials Evaluation Toolkit (IMET).

The IMET was developed by Student Achievement Partners. Educators may use or adapt. http://creativecommons.org/licenses/by/3.0/ Download this tool at http://achievethecore.org/IMET

Instructional Materials Evaluation Tool
Mathematics, Grades K-8

What Are the Purposes of the IMET?
This Math IMET is designed to help educators determine whether instructional materials are aligned to the Shifts and major features of the Common Core State Standards (CCSS). The substantial instructional Shifts (http://www.corestandards.org/other-resources/key-shifts-inmathematics/) at the heart of the Common Core State Standards are:
- **Focus** strongly where the Standards focus
- **Coherence**: Think across grades and link to major topics within the grade
- **Rigor**: In major topics, pursue conceptual understanding, procedural skill and fluency, and application with equal intensity.

The IMET draws directly from the following documents:
- Common Core State Standards for Mathematics (www.corestandards.org/Math)
- Publishers' Criteria for the Common Core State Standards in Mathematics grade K-8 (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)

When to use the IMET
1. Purchasing materials: Many factors go into local purchasing decisions. Alignment to the Standards is a critical factor to consider. This tool is designed to evaluate alignment of instructional materials to the Shifts and the major features of the CCSS. It also provides suggestions of additional indicators to consider in the materials evaluation and purchasing process.

2. Evaluating materials currently in use: The IMET can be used to analyze the degree of alignment of existing materials and help to highlight specific, concrete flaws in alignment. Even where materials and tools currently in use fail to meet one or more of these criteria, the pattern of failure is likely to be informative. States and districts can use the evaluation to create a thoughtful plan to modify or combine existing resources in such a way that students' actual learning experiences approach the focus, coherence, and rigor of the Standards.

3. Developing programs: Those developing new programs can use this tool as guidance for creating aligned curricula.
Please note this tool was designed for evaluating comprehensive curricula (including any supplemental or ancillary materials), but it was not designed for the evaluation of standalone supplemental materials.

Who Uses the IMET?
Evaluating instructional materials requires both subject-matter and pedagogical expertise. Evaluators should be well versed in the Standards (www.corestandards.org/Math) for all grades in which materials are being evaluated. This includes understanding the Major Work of the grade (www.achievethecore/focus), the Supporting and Additional work, how the content fits into the progressions in the Standards (www.achievethecore.org/progressions), and the expectations of the Standards with respect to conceptual understanding, procedural skill and fluency, and application. Evaluators also should be familiar with the substantial instructional Shifts (http:// www.corestandards.org/other-resources/key-shifts-in-mathematics/) of Focus, Coherence and Rigor that are listed above.

Getting Started
Prior to Evaluation

Assemble all of the materials necessary for the evaluation. It is essential for evaluators to have materials for all grades covered by the program, as some criteria cannot be rated without having access to each grade. In addition, each evaluator should have a reference copy of the Common Core State Standards for Mathematics (CCSSM) and the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013).

Before conducting the evaluation itself, it is important to develop a protocol for the evaluation process. The protocol should include having evaluators study the Publishers' Criteria and the IMET. It will also be helpful for evaluators to get a sense of each program overall before beginning the process. At a minimum, this would include reading the front matter of the text, looking at the table of contents and paging through multiple chapters.

Sections 1-3 below should be completed to produce a comprehensive picture of the strengths and weaknesses of the materials under evaluation. Information about areas in need of improvement or supplementation should be shared with internal and external stakeholders.

Navigating the Tool

Begin with Section 1: Non-Negotiable Alignment Criteria

- The Non-Negotiable Alignment Criteria must each be met in full for materials to be considered aligned to the Shifts and the major features of the Common Core State Standards. Each Non-Negotiable Alignment Criterion has one or more metrics associated with it; every one of these metrics must be met in order for the criterion as a whole to be met.

- Examine the relevant materials and use evidence to rate the materials against each criterion and its associated metric(s).

- Record and explain the evidence upon which the rating is based.

Continue to Section 2: Alignment Criteria

- The Alignment Criteria must each be met for materials to be considered aligned to the Shifts and the major features of the Common Core State Standards. Each Alignment Criterion has one or more metric associated with it; a specific number of these metrics must be met or partially met in order for the criterion as a whole to be met.

- Examine the materials in relation to these criteria, assigning each metric a point value. Rate the criterion as "Meets" or "Does Note Meet" based on the number of points assigned. The more points the materials receive on the alignment Criteria, the better they are aligned.

- Record and explain the evidence upon which the rating is based.

Proceed to Section 4: Indicators of Quality

- Indicators of Quality are important considerations that will help evaluators better understand the overall quality of instructional materials. These considerations are not criteria for alignment to the CCSS, but they provide valuable information about additional program characteristics. Evaluators may want to add their own indicators to the examples provided.

Directions for Non-Negotiable 1

Freedom from Obstacles to Focus

Criterion	Evidence- Give specific examples.	Rating: (Reviewer only.)
Non-Negotiable 1: **Freedom from Obstacles to Focus** **Materials must reflect the content architecture of the Standards by not assessing the topics named before the grade level where they first appear in the Standards.** The Standards foster students' progress to algebra by focusing strongly on arithmetic. Consistent with this focus, certain topics from outside of arithmetic appear only in later grades. Thus, to be aligned, materials must reflect the content architecture of the Standards by not assessing the topics named before the grade level where they first appear in the Standards. In this criterion, "topics named" means the topics that are explicitly named in Metric 1A. No other topics should be added to the list in Metric 1A. (Note that other topics in the standards are addressed in criterion NN2.)	**Required Materials** • Common Core State Standards for Mathematics (www.corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf) • From the materials being evaluated: teacher guides and all assessment components	**Rating this Criterion**: Non-Negotiable 1 is rated as Meets or Does Not Meet. To rate Non-Negotiable 1, begin by rating Metric 1A. Since Metric 1A is the only metric for Non-Negotiable 1, the rating for Non-Negotiable 1 is the same as the rating for Metric 1A. If Metric 1A is rated as Does Not Meet, include evidence of when the named topic(s) is/are assessed. If the metric is rated as Meets, list the grade(s) examined in the evaluation.

Metric NN1A: **Materials ref the basic architecture of the Standards by not assessing the listed topics before the grade level indicated.** • Probability, including chance, likely outcomes, probability models. (Introduced in the CCSSM in grade 7) • Statistical distributions, including center, variation, clumping, outliers, mean, median, mode, range, quartiles; and statistical association or trends, including two-way tables, bivariate measurement data, scatter plots, trend line, line of best fit, correlation. (Introduced in the CCSSM in grade 6) • Similarity, congruence, or geometric transformations. (Introduced in the CCSSM in grade 8) • Symmetry of shapes, including line/ reflection symmetry, rotational symmetry. (Introduced in the CCSSM in grade 4) **How to Find the Evidence:** Evaluate the table of contents, all chapter tests, all unit tests, and other such assessment components (including rubrics). For context, read Criterion #2 from the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013). NOTE: Grade alignments of other topics are addressed in Non-Negotiable 2, Focus and Coherence.) In this criterion, "topics named" means the topics that are explicitly named in Metric 1A. No other topics should be added to the list in Metric 1A. (Note that other topics in the standards are addressed in criterion NN2.)	**Evidence-** **Mid module and end module assessments do not assess any topics before the grade level in which the topic is introduced.**	**(Reviewer only.)** **___x_Meets** **____Does Not Meet**
Non-Negotiable 1: Materials must reflect the content architecture of the Standards by not assessing the topics named* before the grade level where they first appear in the Standards. **NN 1** If Metric 1A was rated as Meets, then rate Non-Negotiable 1 as Meets. If Metric 1A was rated as Does Not Meet, then rate Non- Negotiable 1 as Does Not Meet. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion.**(Reviewer only.)** **Before moving to Non-Negotiable 2, record the final Meets or Does Not Meet rating in the Evaluation Summary.**		**(Reviewer only.)** **___x_Meets** **____Does Not Meet** **Strengths/Weaknesses:**

Directions for Non-Negotiable 2

Focus and Coherence

Non-Negotiable 2: **Focus and Coherence** **Materials must focus coherently on the Major Work of the grade in a way that is consistent with the progressions in the Standards.** Focus and coherence are the two major evidence-based design principles of the Common Core State Standards for Mathematics (CCSSM, p. 3). Focus is necessary in order to fulfill the ambitious promise the states have made to their students by adopting the Standards: greater achievement at the college and career ready level; greater depth of understanding of mathematics; and a rich classroom environment in which reasoning, sense-making, applications, and a range of mathematical practices flourish. In simpler terms, a mile-wide, inch-deep curriculum translates to less time per topic. Less time means less depth and moving on without many students. Thus, materials must focus coherently on the Major Work of the grade in a way that is consistent with the progressions in the Standards.	**Required Materials** • Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf) • Focus by Grade Level for the grade being evaluated (www.achievethecore.org/focus) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion:** Non-Negotiable 2 is rated as Meets or Does Not Meet. To rate Non-Negotiable 2, first rate metrics 2A–2H. Each of these eight metrics must be rated as Meets in order for Non-Negotiable 2 to be rated as Meets. Rate each metric 2A-2H as Meets or Does Not Meet/Insufficient Evidence. If the evidence examined shows that the Criterion is met, then mark the Criterion Meets. If the evidence examined shows that the Criterion is not met—or if there is insufficient evidence to make a determination—then mark the Criterion as Does Not Meet/Insufficient Evidence. Support all ratings with evidence.
Metric NN2A: **In each grade K–8, students and teachers using the materials as designed devote the large majority of time to the Major Work of the grade.** **How to Find the Evidence:** Familiarize yourself with the Major Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, lessons, homework assignments, and assessments. (Evaluate both student and teacher materials.) Consider time spent on the Major Work of the grade and judge qualitatively whether students and teachers using the materials as designed will devote the large majority of time to the Major Work of the grade. For context, read Criterion #1 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013)	**Evidence-** **More than 70% of the lessons are focused on the major work of the grade level. Major work is also included within the supporting work lessons.**	**(Reviewer only.)** **__x__Meets** **____Does Not Meet/** **Insufficient Evidence**

Metric NN2B: **Supporting work, where present, enhances focus and coherence simultaneously by also engaging students in the Major Work of the grade.** **How to Find the Evidence:** Familiarize yourself with the Major Work and Supporting Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate chapters and lessons that focus on Supporting Work. NOTE: Example of evaluating this Criterion might include looking at whether materials for K–5 generally treat data displays as an occasion for solving grade-level word problems using the four operations (e.g., see 3.MD.B.3); or whether materials for grade 7 take advantage of opportunities to use probability to support ratios, proportions, and percentages. For context, read Criterion #3 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** **All modules taught in their entirety will cover the major work of the grade level. All the supporting work enhances the major work.**	**(Reviewer only.)** **___x_Meets** **____Does Not Meet/** **Insufficient Evidence**
Metric NN2C: **Materials base content progressions on the grade-by-grade progressions in the Standards. Content from previous or future grades does not unduly interfere with or displace on-grade-level content.** **How to Find the Evidence:** Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, and lessons in both student and teacher materials. NOTE: In some cases it may be possible that aligned materials might address some aspects of a topic in a strategic way before or after the grade level in which the topic is central in the Standards' progressions; for example, a curriculum author might purposefully choose to explore adding fractions with unlike denominators in a way appropriate to grade four, recognizing that this work is not really required until the next grade. However, any such purposeful discrepancies in content progressions should enhance the required learning in each grade; not unduly interfere with or displace grade-level content; and be clearly aimed at helping students meet the Standards as written rather than effectively rewriting the progressions in the Standards. And in all cases, note that Non-Negotiable 1 must be met for materials to be aligned. For context, read Criterion #5a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** **Content progressions are evident in a strong foundation of skills built upon by subsequent modules, and does not interfere with on grade level content.**	**(Reviewer only.)** **__x__Meets** **____Does Not Meet/** **Insufficient Evidence**

Metric NN2D: **Materials gi[illegible] students extensive work with on-grade-level problems.** **How to Find the Evidence:** Evaluate both student and teacher materials. If the materials provide resources for differentiated learning, consider whether lower-performing students have opportunities to engage with grade-level problems. Also consider whether higher-performing students are given opportunities to learn current grade-level content in greater depth. For context, read Criterion #5b in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** **Daily work is on gra[illegible]evel content and is sequential from simple to complex with plenty of scaffolding.**	(Reviewer only.) __x__Meets ____Does Not Meet/ Insufficient Evidence
Metric NN2E: **Materials relate on-grade-level concepts explicitly to prior knowledge from earlier grades.** **How to Find the Evidence:** Evaluate both student and teacher materials. NOTE: Examples of evaluating this Criterion might include looking at the way the materials extend basic ideas of place value across the decimal point; or the role that properties of operations play when the materials extend arithmetic beyond whole numbers to fractions, variables, and expressions. More generally, cluster headings in the Standards sometimes signal key moments where reorganizing and extending previous knowledge is important in order to accommodate new knowledge (e.g., see cluster headings that use the phrase "Apply and extend previous understanding"). For context, read Criterion #5c in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** **Program is not a spiraling curriculum it build on each topic so that students develop a deep understanding on previously learned topics. Curriculum builds upon itself.**	(Reviewer only.) ___x_Meets ____Does Not Meet/ Insufficient Evidence
Metric NN2F: **Review of material from previous grades is clearly identified as such to the teacher, and teacher and students can see what their specific responsibility is for the current year.** **How to Find the Evidence:** Evaluate the table of contents, but do not stop there; also evaluate units, chapters, lessons, homework assignments and assessments. (Evaluate both student and teacher materials.) Identify any content from previous grades and check whether it is identified as such. For context, read Criterion #5a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** **Pre-assessment is available to teachers to determine gaps in content knowledge. Teachers can then use this Information to drive instruction within the classroom. Teachers are provided with a curriculum overview document so they know responsibilities for the year.**	(Reviewer only.) _x___Meets ____Does Not Meet/ Insufficient Evidence

Metric NN2G: **Materials in[illegible]e learning objectives that are visibly shaped by CCSSM cluster headings.** **How to Find the Evidence:** Select several clusters from the Major Work in the grade being evaluated. Evaluate teacher and student materials in relation to these clusters. For context, read Criterion #6a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** **In the curriculum o[illegible]iew the CCSS major cluster headings are provided.**	**(Reviewer only.)** **___x_Meets** **____Does Not Meet/ Insufficient Evidence**
Metric NN2H: **Materials include problems and activities that serve to connect two or more clusters in a domain, or two or more domains in a grade, in cases where these connections are natural and important.** **How to Find the Evidence:** In the grade being evaluated, choose two or more clusters or two or more domains for which connections are natural and important. Evaluate the units, chapters, and lessons that deal with the chosen topics, looking for problems and activities that serve to connect the chosen clusters or domains. NOTE: An example of evaluating this Criterion might include looking at whether problems in grade 4 sometimes or often involve students applying their developing computation skills (detailed in domain NBT) in the context of solving word problems (detailed in domain OA). For context, read Criterion #6b in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** **Major works of each module cover 75% of the major clusters for the grade level. Supporting clusters are also included in modules and interwoven throughout lessons.**	**(Reviewer only.)** **_x___Meets** **____Does Not Meet/ Insufficient Evidence**
Non-Negotiable 2: **Focus and Coherence** **Materials must focus coherently on the Major Work of the grade in a way that is consistent with the progressions in the Standards.** NN 2 If all Metrics 2A – 2H were rated as Meets, then rate Non-Negotiable 2 as Meets. If one or more Metric was rated Does Not Meet/Insufficient Evidence, then rate Non-Negotiable 2 as Does Not Meet. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)** **Before moving to Alignment Criterion 1, record the final Meets or Does Not Meet rating in the Evaluation Summary.**		**(Reviewer only.)** **__x__Meets** **____Does Not Meet** **Strengths/Weaknesses:**
Now continue by evaluating the Alignment Criterion 1 for Rigor and Balance.		

Directions for Alignment Criterion 1

Rigor and Balance

Alignment Criterion 1: Rigor and Balance **Materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.** The Standards set expectations for attention to all three aspects of rigor: conceptual understanding, procedural skill and fluency, and applications. Thus, materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.	**Required Materials** • Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf) • Focus by Grade Level for the grade being evaluated (achievethecore.org/focus) • Situation Types for the Operations in Word Problems (achievethecore.org/situation-types) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion:** Alignment Criterion 1 is rated as Meets or Does Not Meet. To rate Alignment Criterion 1, first rate metrics 1A, 1B, and 1C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). For each metric, guiding questions are provided to aid in gathering evidence. Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 1 if the materials rate 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as rigor and balance, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.
Metric AC1A: **The materials support the development of students' conceptual understanding of key mathematical concepts, especially where called for in specific content Standards or cluster headings.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Major Work for the grade being evaluated that relate specifically conceptual understanding to use throughout the questions associated with this metric. NOTE: Some examples of clusters or Standards that call for conceptual understanding include: K.OA.A.1, (1.NBT.B, 1.NBT.C), (2.NBT.A, 2.NBT.B), (3.OA.A.1, 3.OA.A.2), 4.NF.A, (4.NBT.A, 4.NBT.B), 5.NF.B, (5.NBT.A, 5.NBT.B), 6.RP.A, 6.EE.A.3, 7.NS.A, 7.EE.A, 8.EE.B, 8.F.A, 8.G.A Clusters or Standards grouped by parentheses are closely connected and could be analyzed together. For context, read Criterion #4a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	-Choose a cluster/Standard from the Major Work that is aligned to each aspect of rigor and use it to evaluate these metrics. It is most helpful if the same clusters/Standards are chosen for all of the programs being evaluated. (Guidance in choosing clusters/Standards is included in "How to Find the Evidence".)	**Use the questions for AC Metric 1A to evaluate Metric 1A. Record evidence for each question and rate Metric 1A.** **__x__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**

Is conceptual understanding attended to thoroughly where the Standards set ex[illegible] expectations for understanding or interpreting? Evaluate lessons, chapter/unit assessments and homework assignments, paying attention to work aligned to Standards that explicitly call for understanding or interpreting. NOTE: Examples of evaluating this Criterion might include looking at how well the multi-digit addition and subtraction algorithms are developed and explained on the basis of place value and properties of operations; or how well the multi-digit multiplication and division algorithms are developed and explained on the basis of place value and properties of operations; or how well solving equations is presented and explained as a process of reasoning.	**Evidence-** **Program moves throu[illegible]3 components of a mathematics curriculum. Conceptual understanding is developed first, followed by procedural skill and fluency. Experiences are provided to practice conceptual understanding.**	
Do the materials feature high-quality conceptual problems and conceptual discussion questions? Evaluate lessons, chapter/unit assessments, and homework assignments. NOTE: Example of conceptual problems might include such questions as "Find a number greater than 1/5 and less than 1/4," or "If the divisor does not change and the dividend increases, what happens to the quotient?"	**Evidence-** **Lessons incorporate 25-35 minutes each day of conceptual development. In lessons, an application problem will follow concept development. Students are urged to apply learning to real world situations. At the end of each lesson is a student debrief where students can reflect and discuss.**	
Do the materials feature opportunities to identify correspondences across mathematical representations? Evaluate lessons, chapter/unit assessments and homework assignments. NOTE: Examples of evaluating this Criterion might include looking at whether students are supported in identifying correspondences among: the verbal description of a situation, the diagrams that distill its mathematical features, and the equations that model it; or equivalent forms of numbers (e.g., 3 and 6/2) and the number line; or rational number operations and representations of them via models such as the vector model; or the expression that defines a function and the graph that shows the relationship.	**Evidence-** **Lessons flow from concrete to pictorial to abstract representations.**	
Metric AC1B: **The materials are designed so that students attain the fluencies and procedural skills required by the Standards.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Major Work for the grade being evaluated that relate specifically to fluency and procedural skill to use throughout the questions associated with this metric. NOTE: Some examples of Standards that call for procedural skill and fluency include: K.OA.A.5, 1.OA.C.6, 2.OA.B.2, 2.NBT.B.5, 3.OA.C.7, 3.NBT.A.2, 4.NBT.B.4, 5.NBT.B.5, 6.NS.B.2, and 6.NS.B.3, 6.EE.A, 7.NS.A, 7.EE.A.1,7.EE.B.4a, 8.EE.C.7, 8.EE.C.8b For context, read Criterion #4b in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).		**Use the questions for Metric 1B to evaluate Metric 1 B. Record evidence for each question and rate Metric 1B.** **(Reviewer only.)** **__x__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**

Is progress toward fluency and procedural skill interwoven with students' develo conceptual understanding of the operations in question? Evaluate lessons, chapter/unit assessments, daily routines, and homework assignments for evidence that the development of fluency and procedural skill is supported by conceptual understanding.	**Evidence-** **Conceptual understa g, procedural skill, fluency and application are interwoven throughout the program.**	
Are purely procedural problems and exercises present that include cases in which opportunistic strategies are valuable and generic cases that require efficient algorithms present? Evaluate lessons, chapter/unit assessments, daily routines, and homework assignments. NOTE: Examples of problems in which opportunistic strategies are valuable might include the sum 698 + 240 or the system x + y = 1, 2x + 2y = 3. Examples of generic cases that require efficient algorithms might include the sum 8767+2286 or the system 6y + x = x + 3, – x = 1 + 2y.	**Evidence-** **A variety of strategies are introduced to students before they are introduced to the algorithm.**	
Do the materials in grades K–6 provide repeated practice toward attainment of fluency Standards? Evaluate lessons, daily routines, and homework assignments for evidence of repeated practice toward attainment of the following K–6 Standards that set an explicit expectation of fluent (accurate and reasonably fast) computation: K.OA.A.5, 1.OA.C.6, 2.OA.B.2, 2.NBT.B.5, 3.OA.C.7, 3.NBT.A.2, 4.NBT.B.4, 5.NBT.B.5, 6.NS.B.2, 6.NS.B.3.	**Evidence-** **Fluency activities are part of the program on a daily basis.**	
Metric AC1C: **The materials are designed so that teachers and students spend sufficient time working with engaging applications, without losing focus on the Major Work of each grade.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Major Work for the grade being evaluated that relate specifically application to use throughout the questions associated with this metric. NOTE: Some examples of clusters or Standards that call for application include: K.OA.A.2, 1.OA.A, 2.OA.A, 3.OA.A.3, 3.OA.D.8, 4.OA.A.3, 4.NF.B.3d, 4.NF.B.4c, 5.NF.B.6, 5.NF.B.7c, 6.RP.A.3, 6.NS.A.1, 6.EE.B.7, 6.EE.C.9, 7.RP.A, 7.NS.A.3, 7.EE.B.3, 8.EE.C.8c, 8.F.B For context, read Criterion #4c in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** **Most lessons have at least one application problem.**	**Use the questions for Metric 1C to evaluate Metric 1C. Record evidence for each question and rate Metric 1C.** **(Reviewer only.)** **__x__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Are there are single- and multi-step contextual problems, including non-routine problems, that develop the mathematics of the grade, afford opportunities for practice, and engage students in problem solving? Do the problems attend thoroughly to those places in the content Standards where expectations for multi-step and real-world problems are explicit? Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** **Real world problems are used instead of rote memorization to help students become fluent.**	

Do application problems particularly stress applying the Major Work of the grade? Evaluate lessons, chapter/unit assessments, and homework assignments. NOTE: Examples of evaluating this Criterion might include looking at: how well, by the end of grade 2, students using the materials as designed can represent and solve a full range of one-step addition and subtraction word problems; or how well, by the end of grade 3, students using the materials as designed can represent and solve a full range of one-step multiplication and division word problems; or how well these basic situation types for each operation are carried coherently across the grades, (e.g., with fractions and algebraic expressions); or, in all grades, whether the problems connect concepts, Standards, and domains in ways that are natural and important. For a list of situation types for one-step addition, subtraction, multiplication, and division problems, see Situation Types for the Operations in Word Problems	**Evidence-** **A majority of time is devoted to the major work of the grade. Daily application problems are given in almost every lesson.**	
Does modeling build slowly across K–8, with applications that are relatively simple in earlier grades and when students are encountering new content? In grades 6–8, do the problems begin to provide opportunities for students to make their own assumptions or simplifications in order to model a situation mathematically? Read Standard for Mathematical Practice 4, Model with Mathematics. Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** **Modeling builds slowly and continues and continues across grade levels.**	

Alignment Criterion 1: Rigor and Balance

Materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.

AC1 Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 out of 6 points, the Criterion has not been met. Check the final rating.
Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)**

Before moving to Alignment Criterion 2, record the final Meets or Does Not Meet rating in the Evaluation Summary.

(Reviewer only.)

__x__Meets

____Does Not Meet

Strengths/Weaknesses:

Directions for Alignment Criterion 2

Standards for Mathematical Practice

Alignment Criterion 2: Standards for Mathematical Practice

Materials must demonstrate authentic connections between content Standards and practice Standards.

The Standards require that designers of instructional materials connect the mathematical practices to mathematical content in instruction. Thus, materials must demonstrate authentic connections between content Standards and practice Standards.

Required Materials:

- Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf)
- Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)
- Focus by Grade Level for the grade being evaluated (www.achievethecore.org/focus)
- From the materials being evaluated: teacher guides, student texts and workbooks

Rating this Criterion

Alignment Criterion 2 is rated as Meets or Does Not Meet.

To rate Alignment Criterion 2, first rate metrics 2A, 2B, and 2C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). For each metric, guiding questions are provided to aid in gathering evidence.

Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 2 if the materials earn 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as mathematical practices, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.

Metric AC2A:
Materials address the practice Standards in such a way as to enrich the Major Work of the grade; practices strengthen the focus on Major Work instead of detracting from it, in both teacher and student materials.

How to Find the Evidence:

Familiarize yourself with the Major Work of the grade being evaluated (see the Focus by Grade Level documents.)

Evaluate teacher and student materials for evidence that the mathematical practices support and connect to the focus of the grade.

NOTE: Examples of evaluating this Criterion might include looking at whether, in grades K–5, students using the materials are supported to look for and express regularity in repeated reasoning about the addition table, the multiplication table, the properties of operations, the relationship between addition and subtraction or multiplication and division, and the place value system; or whether, in grades 6–8, students using the materials are supported to look for and express regularity in repeated reasoning about proportional relationships and linear functions.

For context, read Criterion #8 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013).

Evidence-
A majority of instruction is allotted to the major work of the grade.

(Reviewer only.)

__x__Meets (2)

____Partially Meets (1)

____Does Not Meet (0)

Metric AC2B: **Materials attend to the full meaning of each practice Standard.** **How to Find the Evidence:** For context, read Criterion #7 and Criterion #9 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).		**Use the questions for Metric 2B to evaluate Metric 2B. Record evidence for each question and rate Metric 2B.** **(Reviewer only.)** **__x__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Over the course of any given year of instruction, is each mathematical practice Standard meaningfully present in the form of assignments, activities, or problems that stimulate students to develop the habits of mind described in the practice Standard? Evaluate lessons, chapter/ unit assessments, and homework assignments for evidence of each mathematical practice being meaningfully present in instruction.	**Evidence-** **Each CCSS is present in the program. The standards are listed in the beginning of each module.**	
Do the materials treat the practice Standards as developing across grades or grade bands? Are the practice Standards in early grades appropriately simple? Do they display an arc of growing sophistication across the grades?	**Evidence-** **The content builds upon itself across grade levels over time. Content grows in complexity each time it is presented.**	
Are there teacher-directed materials that explain the role of the practice Standards in the classroom and in students' mathematical development? Are alignments to practice Standards accurate?	**Evidence-** **Each module has an overview that provides teachers insight into practice standards covered in the module.**	
Metric AC2C: **Materials support the Standards' emphasis on mathematical reasoning.** **How to Find the Evidence:** For context, read Criterion #10 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).		**Use the questions for Metric 2C to evaluate Metric 2C. Record evidence for each question and rate Metric 2C.** **(Reviewer only.)** **__x__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Do the materials support students in constructing viable arguments and critiquing the arguments of others concerning grade-level mathematics that is detailed in the content Standards? Read Standard for Mathematical Practice 3. Evaluate teacher and student materials to ensure that students are given opportunities to reason with grade-level mathematics.	**Evidence-** **Opportunities are given for students to construct arguments and critique others.**	
Do the materials support students in producing not only answers and solutions, but also, in a grade-appropriate way, arguments, explanations, diagrams, mathematical models, etc., especially in the Major Work of the grade? Familiarize yourself with the Major Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate teacher and student materials, to understand the types of work students are expected to produce.	**Evidence-** **Student debrief is for students to reflect on lessons. During the problem set or application problem students are asked to explain their thinking.**	

Do materials explicitly attend to the specialized language of mathematics? Is the language of argument, problem solving, and mathematical explanations taught rather than assumed? Evaluate teacher and student materials, paying attention to how mathematical language is taught. NOTE: Examples of evaluating this Criterion might include looking at whether students are supported in: basing arguments on definitions; using the method of providing a counterexample; or recognizing that examples alone do not establish a general statement.	**Evidence-** **In the module review mathematical language is introduced. This language is taught to students in each module, rather than assumed.**	

Alignment Criterion 2:
Standards for Mathematical Practice

Materials must demonstrate authentic connections between content Standards and practice Standards.

AC2 Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 out of 6 points, the Criterion has not been met. Check the final rating.
Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion.
(Reviewer only.)

Before moving to Alignment Criterion 3, record the final Meets or Does Not Meet rating in the Evaluation Summary.

(Reviewer only.)

___x_Meets

____Does Not Meet

Strengths/Weaknesses:

Alignment Criterion 3:
Access to the Standards for All Students

Materials must provide supports for English Language Learners and other special populations.

Because Standards are for all students, alignment requires thoughtful support to ensure all students are able to meet the Standards. Thus, aligned materials must provide supports for English Language Learners and other special populations.

Required Materials:

- Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf)
- Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)
- From the materials being evaluated: teacher guides, student texts and workbooks

Rating this Criterion:
Alignment Criterion 3 is rated as Meets or Does Not Meet.

To rate Alignment Criterion 3, first rate metrics 3A, 3B, and 3C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points).

Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 3 if the materials earn 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as support for special population, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.

Metric AC3A: **Support for [illegible]ish Language Learners and other special populations is thoughtful and helps those students meet the same Standards as all other students. The language in which problems are posed is carefully considered.** **How to Find the Evidence:** Evaluate teacher and student materials, paying attention to supports offered for special populations.	**Evidence-** **ELL supports are evi[illegible]. Notes in the margins of Teacher manuals give teachers scaffolds to use.**	**Reviewer only.)** **___x_Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Metric AC3B: **Materials provide appropriate level and type of scaffolding, differentiation, intervention, and support for a broad range of learners with gradual removal of supports, when needed, to allow students to demonstrate their mathematical understanding independently.** **How to Find the Evidence:** Evaluate teacher and student materials, paying attention to whether materials provide differentiation that will lead all learners to engage with on-grade-level content.	**Evidence-** **Lessons are in a simple to complex structure. Teacher note boxes provide suggestions for scaffolding student learning.**	**Reviewer only.)** **__x__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Metric AC3C: **Design of lessons recommends and facilitates a mix of instructional approaches for a variety of learners such as using multiple representations (e.g., including models, using a range of questions, checking for understanding, flexible grouping, pair-share).** **How to Find the Evidence:** Evaluate teacher materials, noting instructional approaches suggested for whole class and differentiated lessons and activities.	**Evidence-** **Lessons have 4 components: fluency practice, concept development, application problems, and student debriefs.**	**Reviewer only.)** **__x__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**

Alignment Criterion 3: Access to the Standards for All Students Materials must provide supports for English Language Learners and other special populations. AC3 Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 points, the Criterion has not been met. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion.(Reviewer only.) Move to the Evaluation Summary and record the final Meets or Does Not Meet rating .	(Reviewer only.) _x___Meets ____Does Not Meet Strengths/Weaknesses:

Once an evaluation for alignment to the Shifts and major features of the CCSS has been conducted using Sections 1-3, it's important to evaluate for overall quality and best practices. A starting list of Indicators of Quality are suggested below. States, districts and others evaluating instructional materials are encouraged to add to this list to ensure materials reflect local contexts. For background information on some of the Indicators of Quality in this section, refer to pp.18–21 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).

Indicators of Quality	Evidence- Give specific examples.	Rating: (Reviewers only.)
1. Lessons are thoughtfully structured and support the teacher in leading the class through the learning paths at hand, with active participation by all students in their own learning and in the learning of their classmates.	Evidence- Lessons are 60 minutes with 4 components. Pacing and Preparation guides are offered as support and on a website. Sprints are also provided for individual goal setting.	(Reviewer only.) ___x___ Yes _____ No
2. The underlying design of the materials includes both problems and exercises. (In solving problems, students learn new mathematics, whereas in working exercises, students apply what they have already learned to build mastery.) Each problem or exercise has a purpose. NOTE: This Criterion does not require that the problems and exercises be labeled as such.	Evidence- Problem sets and Application problems are offered on a daily basis to provide understanding of new mathematics. Every problem or exercise has a purpose.	(Reviewer only.) ___x___ Yes _____ No

3. Design of assignments is not haphazard: exercises are given in intentional sequences in order to strengthen students' mathematical understanding.	Evidence- Scope and sequence precise and intentional. Standards at each grade level help students build understanding and make connections with prior knowledge.	(Reviewer only.) ____x__ Yes _____ No
4. There are separate teacher materials that support and reward teacher study including, but not limited to: discussion of the mathematics of the units and the mathematical point of each lesson as it relates to the organizing concepts of the unit, discussion on student ways of thinking and anticipating a variety of students responses, guidance on lesson flow, guidance on questions that prompt students thinking, and discussion of desired mathematical behaviors being elicited among students.	Evidence- Teacher supports are evident with student sample works, pacing guides, curriculum overview and video galleries, to name a few.	(Reviewer only.) ____x__ Yes _____ No
5. Manipulatives suggested in the materials are faithful representations of the mathematical objects they represent and are connected to written methods.	Evidence- Partial manipulatives given as pictorials. If hands-on manipulatives are needed, they can be purchased through a separate company, Didax.	(Reviewer only.) ____x__ Yes _____ No
6. Materials include a variety of curriculum-embedded assessments. Examples include pre-, formative, summative, and self-assessment resources.	Evidence- Assessments come in the form of daily exit tickets, mid and end module assessments.	(Reviewer only.) ___x___ Yes _____ No
7. Assessments contain aligned rubrics, answer keys, and scoring guidelines that provide sufficient guidance for interpreting student performance.	Evidence- RUBRICS provide a progression towards mastery. Answer keys can be found online. Answers and solutions for assessments can be found at the end of the Teacher Editions.	(Reviewer only.) ____x__ Yes _____ No
8. Materials assess student proficiency using methods that are accessible and unbiased, including the use of course-level language in student prompts.	Evidence- Assessments are accessible and unbiased using appropriate mathematical language.	(Reviewer only.) ____x__ Yes _____ No

9. Materials are carefully evaluated by qualified individuals, whose names are listed, in an effort to ensure freedom from mathematical errors and course-level appropriateness.	Evidence- Authors are listed.	(Reviewer only.) ____x__ Yes _____ No
10. The visual design supports students in engaging thoughtfully with the subject. Navigation through the text is clear.	Evidence- There are not distractions that take away from the students' focus as the program is clean and simple with minimal pictures. However, lack of color and graphics contributes to less engagement.	(Reviewer only.) ___x___ Yes _____ No
11. The materials engage parents in appropriate ways. For example, homework assignments in elementary grades, consist of routine problems, practice with getting answers, and fluency-building exercises that parents can easily support.	Evidence- Parent support page on line has a number of supports to use. Access to the entire curriculum is available to parents online.	(Reviewer only.) ___x___ Yes _____ No

Reviewer IMET Evaluation Summary Title/Level: ____Great Minds___

Publisher: __Eureka Math – A Story of Units-Grade 1_____ Copyright: _2015_____ ISBN:_____
978-1-63255-650-9_____

Reviewer ID # _____BKC, KC_____ Date Review Completed:__March, 8, 2016

Non-Negotiable Criteria- Each Non-Negotiable must be met in order for the Non-Negotiable Alignment Criteria to be met overall.

Non-Negotiable 1: Freedom from Obstacles to Focus	Non- Negotiable 2: Focus and Coherence
_____x__ Meets _____ Does Not Meet	___x__ Meets _____ Does Not Meet

Non-Negotiable Overall:

___x__ Meets _____ Does Not Meet

Alignment Criteria- Each Alignment Criterion must be met with a sufficient number of points in order for Alignment Criteria to be labeled as "Meets" overall. The more points the materials receive on the Alignment Criteria, the better they are aligned.

Alignment Criterion 1: Rigor and Balance	Alignment Criterion 2: Standards of Mathematical Practice	Alignment Criterion 3: Access to Standards for All Learners
Points: __6___ of 6 possible. (Materials must receive at least 5 of 6 points to align.) ____x___ Meets _____ Does Not Meet	Points: __6___ of 6 possible. (Materials must receive at least 5 of 6 points to align.) _____x__ Meets _____ Does Not Meet	Points: ___6__ of 6 possible. (Materials must receive at least 5 of 6 points to align.) ____x___ Meets _____ Does Not Meet

Alignment Criteria Overall:

___x__ Meets _____ Does Not Meet

If the materials meet both Non-Negotiables and relevant Alignment Criterion, they are aligned to the Shifts and major features of the Core Standards. **Do the materials meet every Non-Negotiable and Alignment Criterion? ___x__ Yes _____ No**

What are the specific areas of strength and weakness based on this evaluation? Publishers or others modifying or developing assessments can use this information to make improvements and/or to remedy gaps in the alignment of assessment materials.

2015-16 Mathematics Interim Review Recommendation & Summary

Publisher Name:	Great Minds
Title:	Eureka Math – A Story of Units Grade 2
ISBN #	978-1-63255662-3
Grade Level(s) or Course:	2
Reviewer ID:	SLL and TG

RECOMMENDED AS:

___X_____**Core Mathematics Program-** a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials. Substantial evidence clearly supports the designation of this program as Core.

_____**Other Mathematics Program-** a program that substantially, but partially, meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for supplemental materials. Substantial evidence clearly supports the designation of this program as Other.

_____**Component Mathematics Program-** a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs. Substantial evidence clearly supports the designation of this program as Component.

_____**Intervention Program-** a program designed and intended to target and support students' specific needs. Substantial evidence clearly supports the designation of this program as Intervention.

_____ **Does not meet criteria** for recommendation as a Curricular Material or Online Resource for Mathematics.

EVIDENCE SUMMARY:

FOCUS-
Does not assess standards before grade level where they first appear in the standards.

The majority of the lessons are focused the major works of grade 2.

COHERENCE- The majority of the lessons are focused the major works of grade 2.

RIGOR-
Each lesson contains sample discussion dialogue between teacher and student as well as lesson reflection questions in the student debrief. 6 out of the 8 modules are focused on the major clusters. Student spend significant time working different types of problems.

CONCEPTUAL UNDERSTANDING- There is a progression to the types of strategies/models that students use and becoming more efficient by the end of 2nd grade.

MATHEMATICAL PRACTICES- The Mathematical Practices are embedded into the lessons during student debrief and concept development notated on the left side margin with brackets and MP#.

In the module overview, they also list the Focus Standards for Mathematical Practice highlighting which of the practices will be addressed in the module.

ACCESSIBILITY OF STANDARDS TO ALL STUDENTS- Within the lessons, the program refers to scaffolds (margin notes) that address many needs presented by EL students and other special populations. * In the module overview, the program refers to the document "How to Implement *A Story of Units*". **This piece was not included**. Each lesson has 4 steps: fluency practice, application problem, concept development and student debrief. There is a range of strategies, models, and groupings used throughout those four sections. In the module overview, there is a suggested tools and representation section for the teacher. In Module 1, there is a Suggested Methods of Instruction Delivery for teachers.

Due to the rigor of the program, it is recommended to use as a K-5/K-8 program- not just at 2nd.

2015-16 Interim Mathematics Review

Mathematics Evaluation Tool Grades K-8

Publisher: Great Minds

Title of Material: Eureka Math - Astory of units grade 2

Author: Great Minds

ISBN #: 978-1-63255-622-3 **Copyright** 2015

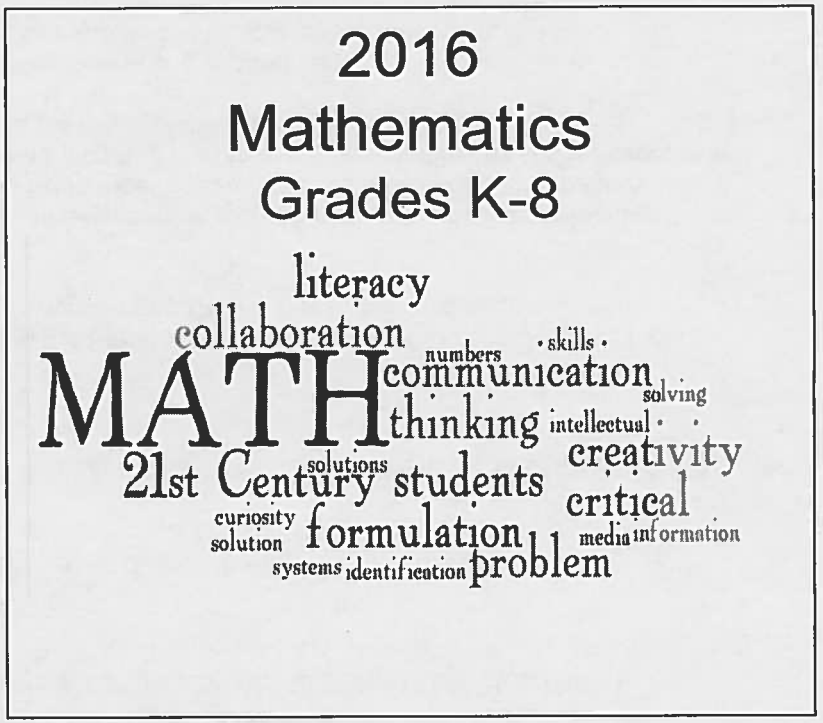
Reviewer ID: T.G. + S.L.L.

Core Mathematics Program- a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Core.

Other Mathematics Program- a program that substantially, but partially, meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Other.

Component Mathematics Program- a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs.
Substantial evidence clearly supports the designation of this program as Component.

Intervention Program- a program designed and intended to target and support students' specific needs.
Substantial evidence clearly supports the designation of this program as Intervention.



- Evaluation Form adapted from Instructional Materials Evaluation Toolkit (IMET).

The IMET was developed by Student Achievement Partners. Educators may use or adapt. http://creativecommons.org/licenses/by/3.0/ Download this tool at http://achievethecore.org/IMET

Instructional Materials Evaluation Tool
Mathematics, Grades K-8

What Are the Purposes of the IMET?
This Math IMET is designed to help educators determine whether instructional materials are aligned to the Shifts and major features of the Common Core State Standards (CCSS). The substantial instructional Shifts (http://www.corestandards.org/other-resources/key-shifts-inmathematics/) at the heart of the Common Core State Standards are:
- **Focus** strongly where the Standards focus
- **Coherence**: Think across grades and link to major topics within the grade
- **Rigor**: In major topics, pursue conceptual understanding, procedural skill and fluency, and application with equal intensity.

The IMET draws directly from the following documents:
- Common Core State Standards for Mathematics (www.corestandards.org/Math)
- Publishers' Criteria for the Common Core State Standards in Mathematics grade K-8 (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)

When to use the IMET
1. Purchasing materials: Many factors go into local purchasing decisions. Alignment to the Standards is a critical factor to consider. This tool is designed to evaluate alignment of instructional materials to the Shifts and the major features of the CCSS. It also provides suggestions of additional indicators to consider in the materials evaluation and purchasing process.

2. Evaluating materials currently in use: The IMET can be used to analyze the degree of alignment of existing materials and help to highlight specific, concrete flaws in alignment. Even where materials and tools currently in use fail to meet one or more of these criteria, the pattern of failure is likely to be informative. States and districts can use the evaluation to create a thoughtful plan to modify or combine existing resources in such a way that students' actual learning experiences approach the focus, coherence, and rigor of the Standards.

3. Developing programs: Those developing new programs can use this tool as guidance for creating aligned curricula.
Please note this tool was designed for evaluating comprehensive curricula (including any supplemental or ancillary materials), but it was not designed for the evaluation of standalone supplemental materials.

Who Uses the IMET?
Evaluating instructional materials requires both subject-matter and pedagogical expertise. Evaluators should be well versed in the Standards (www.corestandards.org/Math) for all grades in which materials are being evaluated. This includes understanding the Major Work of the grade (www.achievethecore/focus), the Supporting and Additional work, how the content fits into the progressions in the Standards (www.achievethecore.org/progressions), and the expectations of the Standards with respect to conceptual understanding, procedural skill and fluency, and application. Evaluators also should be familiar with the substantial instructional Shifts (http:// www.corestandards.org/other-resources/key-shifts-in-mathematics/) of Focus, Coherence and Rigor that are listed above.

Getting Started
Prior to Evaluation

Assemble all of the materials necessary for the evaluation. It is essential for evaluators to have materials for all grades covered by the program, as some criteria cannot be rated without having access to each grade. In addition, each evaluator should have a reference copy of the Common Core State Standards for Mathematics (CCSSM) and the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013).

Before conducting the evaluation itself, it is important to develop a protocol for the evaluation process. The protocol should include having evaluators study the Publishers' Criteria and the IMET. It will also be helpful for evaluators to get a sense of each program overall before beginning the process. At a minimum, this would include reading the front matter of the text, looking at the table of contents and paging through multiple chapters.

Sections 1-3 below should be completed to produce a comprehensive picture of the strengths and weaknesses of the materials under evaluation. Information about areas in need of improvement or supplementation should be shared with internal and external stakeholders.

Navigating the Tool

Begin with Section 1: Non-Negotiable Alignment Criteria

- The Non-Negotiable Alignment Criteria must each be met in full for materials to be considered aligned to the Shifts and the major features of the Common Core State Standards. Each Non-Negotiable Alignment Criterion has one or more metrics associated with it; every one of these metrics must be met in order for the criterion as a whole to be met.

- Examine the relevant materials and use evidence to rate the materials against each criterion and its associated metric(s).

- Record and explain the evidence upon which the rating is based.

Continue to Section 2: Alignment Criteria

- The Alignment Criteria must each be met for materials to be considered aligned to the Shifts and the major features of the Common Core State Standards. Each Alignment Criterion has one or more metric associated with it; a specific number of these metrics must be met or partially met in order for the criterion as a whole to be met.

- Examine the materials in relation to these criteria, assigning each metric a point value. Rate the criterion as "Meets" or "Does Note Meet" based on the number of points assigned. The more points the materials receive on the alignment Criteria, the better they are aligned.

Record and explain the evidence upon which the rating is based.

Proceed to Section 4: Indicators of Quality

- Indicators of Quality are important considerations that will help evaluators better understand the overall quality of instructional materials. These considerations are not criteria for alignment to the CCSS, but they provide valuable information about additional program characteristics. Evaluators may want to add their own indicators to the examples provided.

Directions for Non-Negotiable 1

Freedom from Obstacles to Focus

Criterion	Evidence- Give specific examples.	Rating: (Reviewer only.)
Non-Negotiable 1: **Freedom from Obstacles to Focus** **Materials must reflect the content architecture of the Standards by not assessing the topics named before the grade level where they first appear in the Standards.** The Standards foster students' progress to algebra by focusing strongly on arithmetic. Consistent with this focus, certain topics from outside of arithmetic appear only in later grades. Thus, to be aligned, materials must reflect the content architecture of the Standards by not assessing the topics named before the grade level where they first appear in the Standards. In this criterion, "topics named" means the topics that are explicitly named in Metric 1A. No other topics should be added to the list in Metric 1A. (Note that other topics in the standards are addressed in criterion NN2.)	**Required Materials** • Common Core State Standards for Mathematics (www.corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf) • From the materials being evaluated: teacher guides and all assessment components	**Rating this Criterion:** Non-Negotiable 1 is rated as Meets or Does Not Meet. To rate Non-Negotiable 1, begin by rating Metric 1A. Since Metric 1A is the only metric for Non-Negotiable 1, the rating for Non-Negotiable 1 is the same as the rating for Metric 1A. If Metric 1A is rated as Does Not Meet, include evidence of when the named topic(s) is/are assessed. If the metric is rated as Meets, list the grade(s) examined in the evaluation.

Metric NN1A: **Materials re[illegible] the basic architecture of the Standards by not assessing the listed topics before the grade level indicated.** • Probability, including chance, likely outcomes, probability models. (Introduced in the CCSSM in grade 7) • Statistical distributions, including center, variation, clumping, outliers, mean, median, mode, range, quartiles; and statistical association or trends, including two-way tables, bivariate measurement data, scatter plots, trend line, line of best fit, correlation. (Introduced in the CCSSM in grade 6) • Similarity, congruence, or geometric transformations. (Introduced in the CCSSM in grade 8) • Symmetry of shapes, including line/ reflection symmetry, rotational symmetry. (Introduced in the CCSSM in grade 4) **How to Find the Evidence:** Evaluate the table of contents, all chapter tests, all unit tests, and other such assessment components (including rubrics). For context, read Criterion #2 from the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013). NOTE: Grade alignments of other topics are addressed in Non-Negotiable 2, Focus and Coherence.) In this criterion, "topics named" means the topics that are explicitly named in Metric 1A. No other topics should be added to the list in Metric 1A. (Note that other topics in the standards are addressed in criterion NN2.)	**Evidence-** They do not teach or assess any of the items listed to the left.	**(Reviewer only.)** **__X__Meets** **____Does Not Meet**
Non-Negotiable 1: Materials must reflect the content architecture of the Standards by not assessing the topics named* before the grade level where they first appear in the Standards. **NN 1** If Metric 1A was rated as Meets, then rate Non-Negotiable 1 as Meets. If Metric 1A was rated as Does Not Meet, then rate Non- Negotiable 1 as Does Not Meet. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion.**(Reviewer only.)** **Before moving to Non-Negotiable 2, record the final Meets or Does Not Meet rating in the Evaluation Summary.**		**(Reviewer only.)** **__X__Meets** **____Does Not Meet** **Strengths/Weaknesses:**

Directions for Non-Negotiable 2

Focus and Coherence

Non-Negotiable 2:

Focus and Coherence

Materials must focus coherently on the Major Work of the grade in a way that is consistent with the progressions in the Standards.

Focus and coherence are the two major evidence-based design principles of the Common Core State Standards for Mathematics (CCSSM, p. 3). Focus is necessary in order to fulfill the ambitious promise the states have made to their students by adopting the Standards: greater achievement at the college and career ready level; greater depth of understanding of mathematics; and a rich classroom environment in which reasoning, sense-making, applications, and a range of mathematical practices flourish. In simpler terms, a mile-wide, inch-deep curriculum translates to less time per topic. Less time means less depth and moving on without many students. Thus, materials must focus coherently on the Major Work of the grade in a way that is consistent with the progressions in the Standards.

Required Materials

- Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf)
- Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)
- Focus by Grade Level for the grade being evaluated (www.achievethecore.org/focus)
- From the materials being evaluated: teacher guides, student texts and workbooks

Rating this Criterion:

Non-Negotiable 2 is rated as Meets or Does Not Meet.

To rate Non-Negotiable 2, first rate metrics 2A–2H. Each of these eight metrics must be rated as Meets in order for Non-Negotiable 2 to be rated as Meets. Rate each metric 2A-2H as Meets or Does Not Meet/Insufficient Evidence. If the evidence examined shows that the Criterion is met, then mark the Criterion Meets. If the evidence examined shows that the Criterion is not met—or if there is insufficient evidence to make a determination—then mark the Criterion as Does Not Meet/Insufficient Evidence. Support all ratings with evidence.

Metric NN2A:
In each grade K–8, students and teachers using the materials as designed devote the large majority of time to the Major Work of the grade.

How to Find the Evidence:

Familiarize yourself with the Major Work of the grade being evaluated (see the Focus by Grade Level documents.)

Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, lessons, homework assignments, and assessments. (Evaluate both student and teacher materials.)

Consider time spent on the Major Work of the grade and judge qualitatively whether students and teachers using the materials as designed will devote the large majority of time to the Major Work of the grade.

For context, read Criterion #1 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013)

Evidence-

In each module, they list the focus grade level standards. Overview gives all of the lessons and the standards tied to each lesson. Lessons, homework, and assessments cover the major works of 2nd grade.

(Reviewer only.)

___X_Meets

____Does Not Meet/

Insufficient Evidence

Metric NN2B: **Supporting Work, where present, enhances focus and coherence simultaneously by also engaging students in the Major Work of the grade.** **How to Find the Evidence:** Familiarize yourself with the Major Work and Supporting Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate chapters and lessons that focus on Supporting Work. NOTE: Example of evaluating this Criterion might include looking at whether materials for K–5 generally treat data displays as an occasion for solving grade-level word problems using the four operations (e.g., see 3.MD.B.3); or whether materials for grade 7 take advantage of opportunities to use probability to support ratios, proportions, and percentages. For context, read Criterion #3 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Every module has a focus standard. 2 out of the 8 modules focus on the Supporting Clusters. The majority of the work is focused on the Major Clusters.	(Reviewer only.) **__X__Meets** **____Does Not Meet/** **Insufficient Evidence**
Metric NN2C: **Materials base content progressions on the grade-by-grade progressions in the Standards. Content from previous or future grades does not unduly interfere with or displace on-grade-level content.** **How to Find the Evidence:** Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, and lessons in both student and teacher materials. NOTE: In some cases it may be possible that aligned materials might address some aspects of a topic in a strategic way before or after the grade level in which the topic is central in the Standards' progressions; for example, a curriculum author might purposefully choose to explore adding fractions with unlike denominators in a way appropriate to grade four, recognizing that this work is not really required until the next grade. However, any such purposeful discrepancies in content progressions should enhance the required learning in each grade; not unduly interfere with or displace grade-level content; and be clearly aimed at helping students meet the Standards as written rather than effectively rewriting the progressions in the Standards. And in all cases, note that Non-Negotiable 1 must be met for materials to be aligned. For context, read Criterion #5a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Module 1 refers to some foundational standards for review. The rest of the modules solely focus on grade 2 content.	(Reviewer only.) **__X__Meets** **____Does Not Meet/** **Insufficient Evidence**

Metric NN2D: **Materials gi[illegible]ll students extensive work with on-grade-level problems.** **How to Find the Evidence:** Evaluate both student and teacher materials. If the materials provide resources for differentiated learning, consider whether lower-performing students have opportunities to engage with grade-level problems. Also consider whether higher-performing students are given opportunities to learn current grade-level content in greater depth. For context, read Criterion #5b in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Each lesson has sections on multiple means of engagement, however they seem to be more "teacher notes" rather than explicit differentiation built into the lessons. It states in the TE that there are scaffolds embedded in lessons provide alternatives for how students access information, express/demonstrate their learning. (EL, students with disabilities, students at or above grade level, etc.) It also suggests how to implement a Story of Units, however it was not provided. Instruction on how to differentiate appears to be rather weak. Evidence of differentiation of problems example, extensions, remediation, reteach, extra practice, etc.	(Reviewer only.) **__X__Meets** **____Does Not Meet/** **Insufficient Evidence**
Metric NN2E: **Materials relate on-grade-level concepts explicitly to prior knowledge from earlier grades.** **How to Find the Evidence:** Evaluate both student and teacher materials. NOTE: Examples of evaluating this Criterion might include looking at the way the materials extend basic ideas of place value across the decimal point; or the role that properties of operations play when the materials extend arithmetic beyond whole numbers to fractions, variables, and expressions. More generally, cluster headings in the Standards sometimes signal key moments where reorganizing and extending previous knowledge is important in order to accommodate new knowledge (e.g., see cluster headings that use the phrase "Apply and extend previous understanding"). For context, read Criterion #5c in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** This was evident in module 1. The overviews of the modules define how its content relates to other module content as well as prior and future learning. Beginning of each lesson has fluency practice at the beginning that reviews concepts from prior grades. A statement such as "students should have learned this in first grade" is included.	(Reviewer only.) **__X__Meets** **____Does Not Meet/** **Insufficient Evidence**

Metric NN2F: **Review of material from previous grades is clearly identified as such to the teacher, and teacher and students can see what their specific responsibility is for the current year.** **How to Find the Evidence:** Evaluate the table of contents, but do not stop there; also evaluate units, chapters, lessons, homework assignments and assessments. (Evaluate both student and teacher materials.) Identify any content from previous grades and check whether it is identified as such. For context, read Criterion #5a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** It is clearly identified that in first grade we did this... In previous learning we did this.... It does not review materials, but if concepts are revisited, is clearly stated in the TE.	**(Reviewer only.)** **__X__Meets** **____Does Not Meet/** **Insufficient Evidence**
Metric NN2G: **Materials include learning objectives that are visibly shaped by CCSSM cluster headings.** **How to Find the Evidence:** Select several clusters from the Major Work in the grade being evaluated. Evaluate teacher and student materials in relation to these clusters. For context, read Criterion #6a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Each module tells what the cluster heading and is reinforced throughout each topic.	**(Reviewer only.)** **__X__Meets** **____Does Not Meet/** **Insufficient Evidence**
Metric NN2H: **Materials include problems and activities that serve to connect two or more clusters in a domain, or two or more domains in a grade, in cases where these connections are natural and important.** **How to Find the Evidence:** In the grade being evaluated, choose two or more clusters or two or more domains for which connections are natural and important. Evaluate the units, chapters, and lessons that deal with the chosen topics, looking for problems and activities that serve to connect the chosen clusters or domains. NOTE: An example of evaluating this Criterion might include looking at whether problems in grade 4 sometimes or often involve students applying their developing computation skills (detailed in domain NBT) in the context of solving word problems (detailed in domain OA). For context, read Criterion #6b in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Each module has at least 2 clusters that are being worked on and integrated. Module 1 lesson 1 starts with adding and subtracting to make 10, then to 20, then to 100 by lesson 8. These foundations are repeated to be used in future modules.	**(Reviewer only.)** **__X__Meets** **____Does Not Meet/** **Insufficient Evidence**

Non-Negotiable 2:

Focus and Coherence

Materials must focus coherently on the Major Work of the grade in a way that is consistent with the progressions in the Standards.

NN 2 If all Metrics 2A – 2H were rated as Meets, then rate Non-Negotiable 2 as Meets. If one or more Metric was rated Does Not Meet/Insufficient Evidence, then rate Non-Negotiable 2 as Does Not Meet. Check the final rating.
Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)**

Before moving to Alignment Criterion 1, record the final Meets or Does Not Meet rating in the Evaluation Summary.

(Reviewer only.)

___X_Meets

____Does Not Meet

Strengths/Weaknesses:

Now continue by evaluating the Alignment Criterion 1 for Rigor and Balance.

Directions for Alignment Criterion 1

Rigor and Balance

Alignment Criterion 1: Rigor and Balance

Materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.

The Standards set expectations for attention to all three aspects of rigor: conceptual understanding, procedural skill and fluency, and applications. Thus, materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.

Required Materials

- Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf)
- Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)
- Focus by Grade Level for the grade being evaluated (achievethecore.org/focus)
- Situation Types for the Operations in Word Problems (achievethecore.org/situation-types)
- From the materials being evaluated: teacher guides, student texts and workbooks

Rating this Criterion:

Alignment Criterion 1 is rated as Meets or Does Not Meet.

To rate Alignment Criterion 1, first rate metrics 1A, 1B, and 1C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). For each metric, guiding questions are provided to aid in gathering evidence.
Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 1 if the materials rate 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as rigor and balance, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.

Metric AC1A: **The materials support the development of students' conceptual understanding of key mathematical concepts, especially where called for in specific content Standards or cluster headings.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Major Work for the grade being evaluated that relate specifically conceptual understanding to use throughout the questions associated with this metric. NOTE: Some examples of clusters or Standards that call for conceptual understanding include: K.OA.A.1, (1.NBT.B, 1.NBT.C), (2.NBT.A, 2.NBT.B), (3.OA.A.1, 3.OA.A.2), 4.NF.A, (4.NBT.A, 4.NBT.B), 5.NF.B, (5.NBT.A, 5.NBT.B), 6.RP.A, 6.EE.A.3, 7.NS.A, 7.EE.A, 8.EE.B, 8.F.A, 8.G.A Clusters or Standards grouped by parentheses are closely connected and could be analyzed together. For context, read Criterion #4a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	-Choose a cluster/Standard from the Major Work that is aligned to each aspect of rigor and use to evaluate these metrics. It is most helpful if the same clusters/Standards are chosen for all of the programs being evaluated. (Guidance in choosing clusters/Standards is included in "How to Find the Evidence".)	**Use the questions for AC Metric 1A to evaluate Metric 1A. Record evidence for each question and rate Metric 1A.** **____Meets (2)** **__1__Partially Meets (1)** **____Does Not Meet (0)**
Is conceptual understanding attended to thoroughly where the Standards set explicit expectations for understanding or interpreting? Evaluate lessons, chapter/unit assessments and homework assignments, paying attention to work aligned to Standards that explicitly call for understanding or interpreting. NOTE: Examples of evaluating this Criterion might include looking at how well the multi-digit addition and subtraction algorithms are developed and explained on the basis of place value and properties of operations; or how well the multi-digit multiplication and division algorithms are developed and explained on the basis of place value and properties of operations; or how well solving equations is presented and explained as a process of reasoning.	**Evidence-** They use bundles of ten, place value blocks, hundred Rekenrek, ten frame cards to develop the understanding of place value. They also use a disk model that might be confusing for students. The TE references that this may be confusing for kids.	
Do the materials feature high-quality conceptual problems and conceptual discussion questions? Evaluate lessons, chapter/unit assessments, and homework assignments. NOTE: Example of conceptual problems might include such questions as "Find a number greater than 1/5 and less than 1/4," or "If the divisor does not change and the dividend increases, what happens to the quotient?"	**Evidence-** Each lesson contains sample discussion dialogue between teacher and student as well as lesson reflection questions in the student debrief.	

Do the materials feature opportunities to identify correspondences across mathem representations? Evaluate lessons, chapter/unit assessments and homework assignments. NOTE: Examples of evaluating this Criterion might include looking at whether students are supported in identifying correspondences among: the verbal description of a situation, the diagrams that distill its mathematical features, and the equations that model it; or equivalent forms of numbers (e.g., 3 and 6/2) and the number line; or rational number operations and representations of them via models such as the vector model; or the expression that defines a function and the graph that shows the relationship.	**Evidence-** In many lessons, the v l explanation, the picture and the equation are all connected and discussed as well as multiple uses of a model. Sometimes students are asked to model a problem in multiple ways and then discuss their thinking with classmates.	
Metric AC1B: **The materials are designed so that students attain the fluencies and procedural skills required by the Standards.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Major Work for the grade being evaluated that relate specifically to fluency and procedural skill to use throughout the questions associated with this metric. NOTE: Some examples of Standards that call for procedural skill and fluency include: K.OA.A.5, 1.OA.C.6, 2.OA.B.2, 2.NBT.B.5, 3.OA.C.7, 3.NBT.A.2, 4.NBT.B.4, 5.NBT.B.5, 6.NS.B.2, and 6.NS.B.3, 6.EE.A, 7.NS.A, 7.EE.A.1,7.EE.B.4a, 8.EE.C.7, 8.EE.C.8b For context, read Criterion #4b in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).		**Use the questions for Metric 1B to evaluate Metric 1 B. Record evidence for each question and rate Metric 1B.** **(Reviewer only.)** **__2__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Is progress toward fluency and procedural skill interwoven with students' developing conceptual understanding of the operations in question? Evaluate lessons, chapter/unit assessments, daily routines, and homework assignments for evidence that the development of fluency and procedural skill is supported by conceptual understanding.	**Evidence-** Every module contains "Sprints" which focus on efficient and accurate solutions within time limits. Practice is continued throughout assignments, homework and the exit tickets.	
Are purely procedural problems and exercises present that include cases in which opportunistic strategies are valuable and generic cases that require efficient algorithms present? Evaluate lessons, chapter/unit assessments, daily routines, and homework assignments. NOTE: Examples of problems in which opportunistic strategies are valuable might include the sum 698 + 240 or the system $x + y = 1$, $2x + 2y = 3$. Examples of generic cases that require efficient algorithms might include the sum 8767+2286 or the system $6y + x = x + 3$, $-x = 1 + 2y$.	**Evidence-** There is a progression to the types of strategies/models that students use and becoming more efficient by the end of 2nd grade. Multiple models are used, compared, and contrasted. (Make 10, arrow math, place value and number line)	

Do the materials in grades K–6 provide repeated practice toward attainment of fl[illegible] Standards? Evaluate lessons, daily routines, and homework assignments for evidence of repeated practice toward attainment of the following K–6 Standards that set an explicit expectation of fluent (accurate and reasonably fast) computation: K.OA.A.5, 1.OA.C.6, 2.OA.B.2, 2.NBT.B.5, 3.OA.C.7, 3.NBT.A.2, 4.NBT.B.4, 5.NBT.B.5, 6.NS.B.2, 6.NS.B.3.	**Evidence-** The sprints focus on add and subtract within 20 at second grade.	
Metric AC1C: **The materials are designed so that teachers and students spend sufficient time working with engaging applications, without losing focus on the Major Work of each grade.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Major Work for the grade being evaluated that relate specifically application to use throughout the questions associated with this metric. NOTE: Some examples of clusters or Standards that call for application include: K.OA.A.2, 1.OA.A, 2.OA.A, 3.OA.A.3, 3.OA.D.8, 4.OA.A.3, 4.NF.B.3d, 4.NF.B.4c, 5.NF.B.6, 5.NF.B.7c, 6.RP.A.3, 6.NS.A.1, 6.EE.B.7, 6.EE.C.9, 7.RP.A, 7.NS.A.3, 7.EE.B.3, 8.EE.C.8c, 8.F.B For context, read Criterion #4c in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** 6 out of the 8 modules are focused on the major clusters. Student spend significant time working different types of problems.	**Use the questions for Metric 1C to evaluate Metric 1C. Record evidence for each question and rate Metric 1C.** **(Reviewer only.)** **__2__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Are there are single- and multi-step contextual problems, including non-routine problems, that develop the mathematics of the grade, afford opportunities for practice, and engage students in problem solving? Do the problems attend thoroughly to those places in the content Standards where expectations for multi-step and real-world problems are explicit? Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** There is evidence of this. Many lessons have single and eventually multi-step problems. Use of manipulatives and strategies is required to solve the problems.	
Do application problems particularly stress applying the Major Work of the grade? Evaluate lessons, chapter/unit assessments, and homework assignments. NOTE: Examples of evaluating this Criterion might include looking at: how well, by the end of grade 2, students using the materials as designed can represent and solve a full range of one-step addition and subtraction word problems; or how well, by the end of grade 3, students using the materials as designed can represent and solve a full range of one-step multiplication and division word problems; or how well these basic situation types for each operation are carried coherently across the grades, (e.g., with fractions and algebraic expressions); or, in all grades, whether the problems connect concepts, Standards, and domains in ways that are natural and important. For a list of situation types for one-step addition, subtraction, multiplication, and division problems, see Situation Types for the Operations in Word Problems	**Evidence-** There is an application problem for every lesson that is designed to spark conversation around the math concept.	

Does modeling build slowly across K–8, with applications that are relatively simple in earlier grades and when students are encountering new content? In grades 6–8, do the problems begin to provide opportunities for students to make their own assumptions or simplifications in order to model a situation mathematically? Read Standard for Mathematical Practice 4, Model with Mathematics. Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** Builds on one another from lesson to lesson. Starts simple, gets more complex as the year progresses. An example would be starting with the ten frames and then moving to the disks.	

Alignment Criterion 1: Rigor and Balance

Materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.

AC1 Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 out of 6 points, the Criterion has not been met. Check the final rating.
Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)**

Before moving to Alignment Criterion 2, record the final Meets or Does Not Meet rating in the Evaluation Summary.

(Reviewer only.)

__X__Meets

____Does Not Meet

Strengths/Weaknesses:

Directions for Alignment Criterion 2

Standards for Mathematical Practice

Alignment Criterion 2: Standards for Mathematical Practice

Materials must demonstrate authentic connections between content Standards and practice Standards.

The Standards require that designers of instructional materials connect the mathematical practices to mathematical content in instruction. Thus, materials must demonstrate authentic connections between content Standards and practice Standards.

Required Materials:

- Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf)
- Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)
- Focus by Grade Level for the grade being evaluated (www.achievethecore.org/focus)
- From the materials being evaluated: teacher guides, student texts and workbooks

Rating this Criterion

Alignment Criterion 2 is rated as Meets or Does Not Meet.

To rate Alignment Criterion 2, first rate metrics 2A, 2B, and 2C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). For each metric, guiding questions are provided to aid in gathering evidence.
Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 2 if the materials earn 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as mathematical practices, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CC[illegible].

Metric AC2A: **Materials address the practice Standards in such a way as to enrich the Major Work of the grade; practices strengthen the focus on Major Work instead of detracting from it, in both teacher and student materials.** **How to Find the Evidence:** Familiarize yourself with the Major Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate teacher and student materials for evidence that the mathematical practices support and connect to the focus of the grade. NOTE: Examples of evaluating this Criterion might include looking at whether, in grades K–5, students using the materials are supported to look for and express regularity in repeated reasoning about the addition table, the multiplication table, the properties of operations, the relationship between addition and subtraction or multiplication and division, and the place value system; or whether, in grades 6–8, students using the materials are supported to look for and express regularity in repeated reasoning about proportional relationships and linear functions. For context, read Criterion #8 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013).	**Evidence-** The Mathematical Practices are embedded into the lessons during student debrief and concept development notated on the left side margin with brackets and MP#. In the module overview, they also list the Focus Standards for Mathematical Practice highlighting which of the practices will be addressed in the module.	**(Reviewer only.)** **__2__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Metric AC2B: **Materials attend to the full meaning of each practice Standard.** **How to Find the Evidence:** For context, read Criterion #7 and Criterion #9 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).		**Use the questions for Metric 2B to evaluate Metric 2B. Record evidence for each question and rate Metric 2B.** **(Reviewer only.)** **__2__Meets (2)**
Over the course of any given year of instruction, is each mathematical practice Standard meaningfully present in the form of assignments, activities, or problems that stimulate students to develop the habits of mind described in the practice Standard? Evaluate lessons, chapter/ unit assessments, and homework assignments for evidence of each mathematical practice being meaningfully present in instruction.	**Evidence-** The Mathematical Practices are embedded into the lessons during student debrief and concept development notated on the left side margin with brackets and MP#. In the module overview, they also list the Focus Standards for Mathematical Practice highlighting which of the practices will be addressed in the module.	**____Partially Meets (1)** **____Does Not Meet (0)**

Do the materials treat the practice Standards as developing across grades or grade bands? Are the practice Standards in early grades appropriately simple? Do they display an arc of growing sophistication across the grades?	**Evidence-** The Practice Standards are incorporated appropriately for grade 2. Example: Module 2 Lesson 1, Module 2 Lesson 5, Module 7 Lesson 10	
Are there teacher-directed materials that explain the role of the practice Standards in the classroom and in students' mathematical development? Are alignments to practice Standards accurate?	**Evidence-** Alignment of the standards is accurate. In the Focus Standards for Mathematical Practice section in the module overview in the TE, the standards are explained in relation to the content studied in the module.	
Metric AC2C: **Materials support the Standards' emphasis on mathematical reasoning.** **How to Find the Evidence:** For context, read Criterion #10 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).		**Use the questions for Metric 2C to evaluate Metric 2C. Record evidence for each question and rate Metric 2C.** **(Reviewer only.)** **__2__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Do the materials support students in constructing viable arguments and critiquing the arguments of others concerning grade-level mathematics that is detailed in the content Standards? Read Standard for Mathematical Practice 3. Evaluate teacher and student materials to ensure that students are given opportunities to reason with grade-level mathematics.	**Evidence-** Each lesson has a student debrief section which is intended to invite reflection and active discussion around the work the students did in the lesson.	
Do the materials support students in producing not only answers and solutions, but also, in a grade-appropriate way, arguments, explanations, diagrams, mathematical models, etc., especially in the Major Work of the grade? Familiarize yourself with the Major Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate teacher and student materials, to understand the types of work students are expected to produce.	**Evidence-** Each lesson has a student debrief section which is intended to invite reflection and active discussion around the work the students did in the lesson.	
Do materials explicitly attend to the specialized language of mathematics? Is the language of argument, problem solving, and mathematical explanations taught rather than assumed? Evaluate teacher and student materials, paying attention to how mathematical language is taught. NOTE: Examples of evaluating this Criterion might include looking at whether students are supported in: basing arguments on definitions; using the method of providing a counterexample; or recognizing that examples alone do not establish a general statement.	**Evidence-** Each lesson has a student debrief section which is intended to invite reflection and active discussion around the work the students did in the lesson. The module overview lists the terminology that will be used by both teacher and students in the lessons.	

Alignment Criterion 2:
Standards for Mathematical Practice

Materials must demonstrate authentic connections between content Standards and practice Standards.

AC2 Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 out of 6 points, the Criterion has not been met. Check the final rating.
Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion.
(Reviewer only.)

Before moving to Alignment Criterion 3, record the final Meets or Does Not Meet rating in the Evaluation Summary.

(Reviewer only.)

__6__Meets

____Does Not Meet

Strengths/Weaknesses:

Alignment Criterion 3:
Access to the Standards for All Students

Materials must provide supports for English Language Learners and other special populations.

Because Standards are for all students, alignment requires thoughtful support to ensure all students are able to meet the Standards. Thus, aligned materials must provide supports for English Language Learners and other special populations.

Required Materials:

- Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf)
- Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)
- From the materials being evaluated: teacher guides, student texts and workbooks

Rating this Criterion:
Alignment Criterion 3 is rated as Meets or Does Not Meet.

To rate Alignment Criterion 3, first rate metrics 3A, 3B, and 3C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points).

Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 3 if the materials earn 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as support for special population, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.

Metric AC3A:
Support for English Language Learners and other special populations is thoughtful and helps those students meet the same Standards as all other students. The language in which problems are posed is carefully considered.

How to Find the Evidence:
Evaluate teacher and student materials, paying attention to supports offered for special populations.

Evidence-

Within the lessons, the program refers to scaffolds (margin notes) that address many needs presented by EL students and other special populations. * In the module overview, the program refers to the document "How to Implement *A Story of Units*". **This piece was not included**.

Reviewer only.)

__2__Meets (2)

____Partially Meets (1)

____Does Not Meet (0)

Metric AC3B: **Materials provide appropriate level and type of scaffolding, differentiation, intervention, and support for a broad range of learners with gradual removal of supports, when needed, to allow students to demonstrate their mathematical understanding independently.** **How to Find the Evidence:** Evaluate teacher and student materials, paying attention to whether materials provide differentiation that will lead all learners to engage with on-grade-level content.	**Evidence-** Within the lessons, the program refers to scaffolds (margin notes) that address many needs presented by EL students and other special populations. * In the module overview, the program refers to the document "How to Implement *A Story of Units*". **This piece was not included**. There is no separate practice/enrichment available except for some suggestions in the margin notes.	**Reviewer only.)** **____Meets (2)** **__1__Partially Meets (1)** **____Does Not Meet (0)**
Metric AC3C: **Design of lessons recommends and facilitates a mix of instructional approaches for a variety of learners such as using multiple representations (e.g., including models, using a range of questions, checking for understanding, flexible grouping, pair-share).** **How to Find the Evidence:** Evaluate teacher materials, noting instructional approaches suggested for whole class and differentiated lessons and activities.	**Evidence-** Each lesson has 4 steps: fluency practice, application problem, concept development and student debrief. There is a range of strategies, models, and groupings used throughout those four sections. In the module overview, there is a suggested tools and representation section for the teacher. In Module 1, there is a Suggested Methods of Instruction Delivery for teachers.	**Reviewer only.)** **__2__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Alignment Criterion 3: **Access to the Standards for All Students** **Materials must provide supports for English Language Learners and other special populations.** **AC3** Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 points, the Criterion has not been met. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion.**(Reviewer only.)** **Move to the Evaluation Summary and record the final Meets or Does Not Meet rating.**		**(Reviewer only.)** **__5__Meets** **____Does Not Meet** **Strengths/Weaknesses:**

Once an evaluation for alignment to the Shifts and major features of the CCSS has been conducted using Sections 1-3, it's important to evaluate for overall quality and best practices. A starting list of Indicators of Quality are suggested below. States, districts and others evaluating instructional materials are encouraged to add to this list to ensure materials reflect local contexts. For background information on some of the Indicators of

Quality in this section, refer to pp.18–21 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2

Indicators of Quality	Evidence- Give specific examples.	Rating: (Reviewers only.)
1. Lessons are thoughtfully structured and support the teacher in leading the class through the learning paths at hand, with active participation by all students in their own learning and in the learning of their classmates.	**Evidence-** Each lesson has 4 steps: fluency practice, application problem, concept development and student debrief. There is a range of strategies, models, and groupings used throughout those four sections. Includes a teacher script and possible student answers if needed.	**(Reviewer only.)** **____X__ Yes** **_____ No**
2. The underlying design of the materials includes both problems and exercises. (In solving problems, students learn new mathematics, whereas in working exercises, students apply what they have already learned to build mastery.) Each problem or exercise has a purpose. **NOTE: This Criterion does not require that the problems and exercises be labeled as such.**	**Evidence-** There is a problem set with each lesson as well as homework. There are also Sprints which address the fluency. Application problem in each lesson allows students to solve new problems. Practice set and homework allow students to practice what was learned.	**(Reviewer only.)** **___X___ Yes** **_____ No**
3. Design of assignments is not haphazard: exercises are given in intentional sequences in order to strengthen students' mathematical understanding.	**Evidence-** Assignments throughout the grade 2 curriculum go from simple to more complex from concrete models to more abstract equations and representations. Each lesson builds on the previous lesson.	**(Reviewer only.)** **___X___ Yes** **_____ No**
4. There are separate teacher materials that support and **reward teacher study including, but not limited to: discussion of the mathematics of the units and the mathematical point of each lesson as it relates to the organizing concepts of the unit, discussion on student ways of thinking and anticipating a variety of students responses, guidance on lesson flow, guidance on questions that prompt students thinking, and discussion of desired mathematical behaviors being elicited among students.**	**Evidence-** The TE provides sample dialogue within the concept development section listing possible student answers, teacher to student dialogue, and student to student dialogue. Teach Eureka videos were referred to, but could not access.	**(Reviewer only.)** **__X___ Yes** **_____ No**

5. Manipulatives suggested in the materials are faithful representations of the mathematical objects they represent and are connected to written methods.	**Evidence-** The models are appropriate. Black line masters are included and explanations on how to use and what to use for are available. Place value disks?	**(Reviewer only.)** **____X__ Yes** **_____ No**
6. Materials include a variety of curriculum-embedded assessments. Examples include pre-, formative, summative, and self-assessment resources.	**Evidence-** Each lesson has an exit ticket and each module has an assessment provided. The student debrief provides opportunities for student self-assessment as well as peer feedback. No pre-assessment.	**(Reviewer only.)** **___X___ Yes** **_____ No**
7. Assessments contain aligned rubrics, answer keys, and scoring guidelines that provide sufficient guidance for interpreting student performance.	**Evidence-** Each end of module assessment contains a 4 point rubric that is a progression toward mastery as well as a 4 point student sample.	**(Reviewer only.)** **___X___ Yes** **_____ No**
8. Materials assess student proficiency using methods that are accessible and unbiased, including the use of course-level language in student prompts.	**Evidence-** The language used in the end of module assessments and exit tickets match the models, language and pictures used in the lessons.	**(Reviewer only.)** **___X___ Yes** **_____ No**
9. Materials are carefully evaluated by qualified individuals, whose names are listed, in an effort to ensure freedom from mathematical errors and course-level appropriateness.	**Evidence-** Ed reports Louisiana Department of Ed Education Evaluation of the Quality of Instructional Products	**(Reviewer only.)** **___X___ Yes** **_____ No**
10. The visual design supports students in engaging thoughtfully with the subject. Navigation through the text is clear.	**Evidence-** It is black and white and has lots of print for 2nd grade. The content is clear.	**(Reviewer only.)** **____X__ Yes** **_____ No**

11. The materials engage parents in appropriate ways. For example, homework assignments in elementary grades, consist of routine problems, practice with getting answers, and fluency-building exercises that parents can easily support.	**Evidence-** The brief form states that there are parent tip sheets and access to Zearn. They also have Homework Helpers online. There are parent tip sheets to help parents understand what kind of language in order to assist with homework. There are also videos for parents to help support the program.	**(Reviewer only.)** **___X___ Yes** **_____ No**

Reviewer IMET Evaluation Summary Title/Level: Eureka Math – A Story of Units

Publisher: Great Minds Copyright: 2015-16 ISBN:978-1-63255-652-3

Reviewer ID # SLL and TG Date Review Completed: 2/2/16

Non-Negotiable Criteria- Each Non-Negotiable must be met in order for the Non-Negotiable Alignment Criteria to be met overall.	
Non-Negotiable 1: Freedom from Obstacles to Focus **____X___ Meets** **_____ Does Not Meet**	**Non- Negotiable 2: Focus and Coherence** **___X__ Meets** **_____ Does Not Meet**
Non-Negotiable Overall: **___X__ Meets** **_____ Does Not Meet**	
Alignment Criteria- Each Alignment Criterion must be met with a sufficient number of points in order for Alignment Criteria to be labeled as "Meets" overall. The more points the materials receive on the Alignment Criteria, the better they are aligned.	

Alignment Criterion 1: Rigor and Balance	Alignment Criterion 2: Standards of Mathematical Practice	Alignment Criterion 3: Access to Standards for All Learners
Points: __5___ of 6 possible. **(Materials must receive at least 5 of 6 points to align.)** **___X____ Meets** **_____ Does Not Meet**	**Points: __6___ of 6 possible.** **(Materials must receive at least 5 of 6 points to align.)** **___X____ Meets** **_____ Does Not Meet**	**Points: ___5__ of 6 possible.** **(Materials must receive at least 5 of 6 points to align.)** **___X____ Meets** **_____ Does Not Meet**

Alignment Criteria Overall:

__X___ Meets **_____ Does Not Meet**

If the materials meet both Non-Negotiables and relevant Alignment Criterion, they are aligned to the Shifts and major features of the Core Standards. **the materials meet every Non-Negotiable and Alig ent Criterion? __X___ Yes _____ No**

What are the specific areas of strength and weakness based on this evaluation? Publishers or others modifying or developing assessments can use this information to make improvements and/or to remedy gaps in the alignment of assessment materials.

2015-16 Mathematics Interim Review Recommendation & Summary

Publisher Name:	Great Minds
Title:	Eureka Math – A Story of Units 3
ISBN #	987-63255-701-8
Grade Level(s) or Course:	3
Reviewer ID:	SA, TG

RECOMMENDED AS:

____X____**Core Mathematics Program-** a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials. Substantial evidence clearly supports the designation of this program as Core.

_____**Other Mathematics Program-** a program that substantially, but partially, meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for supplemental materials. Substantial evidence clearly supports the designation of this program as Other.

_____**Component Mathematics Program-** a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs. Substantial evidence clearly supports the designation of this program as Component.

_____**Intervention Program-** a program designed and intended to target and support students' specific needs. Substantial evidence clearly supports the designation of this program as Intervention.

_____ **Does not meet criteria** for recommendation as a Curricular Material or Online Resource for Mathematics.

EVIDENCE SUMMARY:

FOCUS-
Each teacher module provides an overview of Standards to be assessed for the unit. It includes focus standards for grade level and for the mathematical practices. For example, in Grade 3 Module 4, Geometric Assessment Measurement: Understand concepts of area and relate area to multiplication and addition. (CCSSM Grade 3).

Each module also includes a mid-module assessment task and rubric to assess progression toward mastery as well as an end of the unit assessment.

COHERENCE-
Instructional modules for each unit breaks down fluency practice, concept development, application problems, and student debriefs. The modules focus the majority of the time on building conceptual understanding for the major standards in third grade. About 70% of lessons, assignments, and homework appear to focus on the major works for grade level. Approximately 75-80% of class time is centered around building concepts and application.

RIGOR-
The first lesson in Module 1 focuses on CCSSM 3.O.A.A.1 to help students interpret products of whole numbers. The fluency practice helps build a foundation for multiplication in its relation to repeated addition. Concept development is built through problems done together in whole group lessons and practice in problem set activities in individual work. Time is spent at the end of each lesson to debrief and reflect on what was learned. Exit tickets are used to demonstrate understanding of concepts. Exit Tickets after each lesson
Mid-Module/End Module Assessments
Concept development modules: Use of manipulatives, pictures, and equations to build understanding.

CONCEPTUAL UNDERSTANDING-
In Module 1, conceptual understanding is built through introducing students to different strategies such as equal groups, count-bys, and arrays to build the conceptual understanding of multiplication. Once strategies have been taught the lessons move into the algorithms of multiplication and division.

Each lesson in the modules appears to build on the concept learned in the previous lesson. It is evident that conceptual understanding is built through math talks and practice on skills being taught. Problem Sets, Exit Tickets, and homework provide students with opportunities to apply and show what they have learned,

MATHEMATICAL PRACTICES-
Each Module not only provides the focus standards for the grade level, but highlighted standards for mathematical practice as well. For example, Module 4 covers the mathematical practices for MP .2, MP.3, MP.6, MP.7, and MP.8. All of the mathematical practices are covered in the modules used throughout the year.

ACCESSIBILITY OF STANDARDS TO ALL STUDENTS-
Scaffolds are provided throughout the lessons to support learning for ELL, Above and Below grade level, and special education students to succeed.

OTHER:

2015-16 Interim Mathematics Review

Mathematics Evaluation Tool Grades K-8

Publisher: Great Minds

Title of Material: Eureka Math- A story of units gr. 3

Author: Great Mind

ISBN #: 978-1-63255-701-8 **Copyright** 2015

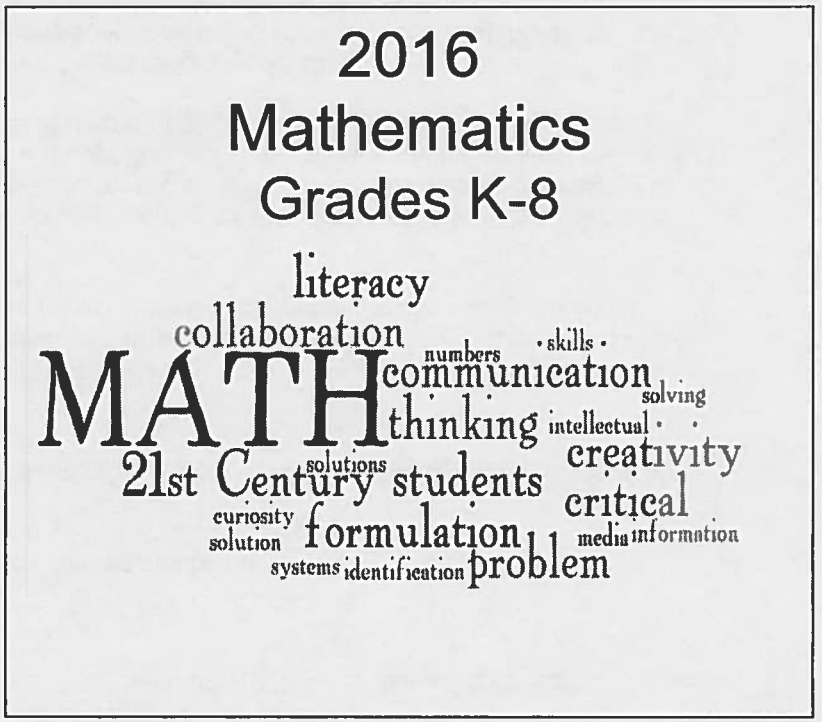
Reviewer ID: T.G. & S.A.

Core Mathematics Program- a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Core.

Other Mathematics Program- a program that substantially, but partially, meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Other.

Component Mathematics Program- a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs.
Substantial evidence clearly supports the designation of this program as Component.

Intervention Program- a program designed and intended to target and support students' specific needs.
Substantial evidence clearly supports the designation of this program as Intervention.



- Evaluation Form adapted from Instructional Materials Evaluation Toolkit (IMET).

The IMET was developed by Student Achievement Partners. Educators may use or adapt. http://creativecommons.org/licenses/by/3.0/ Download this tool at http://achievethecore.org/IMET

Instructional Materials Evaluation Tool
Mathematics, Grades K-8

What Are the Purposes of the IMET?
This Math IMET is designed to help educators determine whether instructional materials are aligned to the Shifts and major features of the Common Core State Standards (CCSS). The substantial instructional Shifts (http://www.corestandards.org/other-resources/key-shifts-inmathematics/) at the heart of the Common Core State Standards are:
- **Focus** strongly where the Standards focus
- **Coherence**: Think across grades and link to major topics within the grade
- **Rigor**: In major topics, pursue conceptual understanding, procedural skill and fluency, and application with equal intensity.

The IMET draws directly from the following documents:
- Common Core State Standards for Mathematics (www.corestandards.org/Math)
- Publishers' Criteria for the Common Core State Standards in Mathematics grade K-8 (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)

When to use the IMET
1. Purchasing materials: Many factors go into local purchasing decisions. Alignment to the Standards is a critical factor to consider. This tool is designed to evaluate alignment of instructional materials to the Shifts and the major features of the CCSS. It also provides suggestions of additional indicators to consider in the materials evaluation and purchasing process.

2. Evaluating materials currently in use: The IMET can be used to analyze the degree of alignment of existing materials and help to highlight specific, concrete flaws in alignment. Even where materials and tools currently in use fail to meet one or more of these criteria, the pattern of failure is likely to be informative. States and districts can use the evaluation to create a thoughtful plan to modify or combine existing resources in such a way that students' actual learning experiences approach the focus, coherence, and rigor of the Standards.

3. Developing programs: Those developing new programs can use this tool as guidance for creating aligned curricula.
Please note this tool was designed for evaluating comprehensive curricula (including any supplemental or ancillary materials), but it was not designed for the evaluation of standalone supplemental materials.

Who Uses the IMET?
Evaluating instructional materials requires both subject-matter and pedagogical expertise. Evaluators should be well versed in the Standards (www.corestandards.org/Math) for all grades in which materials are being evaluated. This includes understanding the Major Work of the grade (www.achievethecore/focus), the Supporting and Additional work, how the content fits into the progressions in the Standards (www.achievethecore.org/progressions), and the expectations of the Standards with respect to conceptual understanding, procedural skill and fluency, and application. Evaluators also should be familiar with the substantial instructional Shifts (http:// www.corestandards.org/other-resources/key-shifts-in-mathematics/) of Focus, Coherence and Rigor that are listed above.

Getting Started
Prior to Evaluation

Assemble all of the materials necessary for the evaluation. It is essential for evaluators to have materials for all grades covered by the program, as some criteria cannot be rated without having access to each grade. In addition, each evaluator should have a reference copy of the Common Core State Standards for Mathematics (CCSSM) and the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013).

Before conducting the evaluation itself, it is important to develop a protocol for the evaluation process. The protocol should include having evaluators study the Publishers' Criteria and the IMET. It will also be helpful for evaluators to get a sense of each program overall before beginning the process. At a minimum, this would include reading the front matter of the text, looking at the table of contents and paging through multiple chapters.

Sections 1-3 below should be completed to produce a comprehensive picture of the strengths and weaknesses of the materials under evaluation. Information about areas in need of improvement or supplementation should be shared with internal and external stakeholders.

Navigating the Tool

Begin with Section 1: Non-Negotiable Alignment Criteria

- The Non-Negotiable Alignment Criteria must each be met in full for materials to be considered aligned to the Shifts and the major features of the Common Core State Standards. Each Non-Negotiable Alignment Criterion has one or more metrics associated with it; every one of these metrics must be met in order for the criterion as a whole to be met.

- Examine the relevant materials and use evidence to rate the materials against each criterion and its associated metric(s).

- Record and explain the evidence upon which the rating is based.

Continue to Section 2: Alignment Criteria

- The Alignment Criteria must each be met for materials to be considered aligned to the Shifts and the major features of the Common Core State Standards. Each Alignment Criterion has one or more metric associated with it; a specific number of these metrics must be met or partially met in order for the criterion as a whole to be met.

- Examine the materials in relation to these criteria, assigning each metric a point value. Rate the criterion as "Meets" or "Does Note Meet" based on the number of points assigned. The more points the materials receive on the alignment Criteria, the better they are aligned.

- Record and explain the evidence upon which the rating is based.

Proceed to Section 4: Indicators of Quality

- Indicators of Quality are important considerations that will help evaluators better understand the overall quality of instructional materials. These considerations are not criteria for alignment to the CCSS, but they provide valuable information about additional program characteristics. Evaluators may want to add their own indicators to the examples provided.

Directions for Non-Negotiable 1

Freedom from Obstacles to Focus

Criterion	Evidence- Give specific examples.	Rating: (Reviewer only.)
Non-Negotiable 1: **Freedom from Obstacles to Focus** **Materials must reflect the content architecture of the Standards by not assessing the topics named before the grade level where they first appear in the Standards.** The Standards foster students' progress to algebra by focusing strongly on arithmetic. Consistent with this focus, certain topics from outside of arithmetic appear only in later grades. Thus, to be aligned, materials must reflect the content architecture of the Standards by not assessing the topics named before the grade level where they first appear in the Standards. In this criterion, "topics named" means the topics that are explicitly named in Metric 1A. No other topics should be added to the list in Metric 1A. (Note that other topics in the standards are addressed in criterion NN2.)	**Required Materials** • Common Core State Standards for Mathematics (www.corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf) • From the materials being evaluated: teacher guides and all assessment components	**Rating this Criterion:** Non-Negotiable 1 is rated as Meets or Does Not Meet. To rate Non-Negotiable 1, begin by rating Metric 1A. Since Metric 1A is the only metric for Non-Negotiable 1, the rating for Non-Negotiable 1 is the same as the rating for Metric 1A. If Metric 1A is rated as Does Not Meet, include evidence of when the named topic(s) is/are assessed. If the metric is rated as Meets, list the grade(s) examined in the evaluation.

Metric NN1A: **Materials reflect the basic architecture of the Standards by not assessing the listed topics before the grade level indicated.** • Probability, including chance, likely outcomes, probability models. (Introduced in the CCSSM in grade 7) • Statistical distributions, including center, variation, clumping, outliers, mean, median, mode, range, quartiles; and statistical association or trends, including two-way tables, bivariate measurement data, scatter plots, trend line, line of best fit, correlation. (Introduced in the CCSSM in grade 6) • Similarity, congruence, or geometric transformations. (Introduced in the CCSSM in grade 8) • Symmetry of shapes, including line/ reflection symmetry, rotational symmetry. (Introduced in the CCSSM in grade 4) **How to Find the Evidence:** Evaluate the table of contents, all chapter tests, all unit tests, and other such assessment components (including rubrics). For context, read Criterion #2 from the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013). NOTE: Grade alignments of other topics are addressed in Non-Negotiable 2, Focus and Coherence.) In this criterion, "topics named" means the topics that are explicitly named in Metric 1A. No other topics should be added to the list in Metric 1A. (Note that other topics in the standards are addressed in criterion NN2.)	**Evidence-** **Each teacher module provides an overview of Standards to be assessed for the unit. It includes focus standards for grade level and for the mathematical practices. For example, in Grade 3 Module 4, Geometric Assessment Measurement: Understand concepts of area and relate area to multiplication and addition. (CCSSM Grade 3).** **Each module also includes a mid-module assessment task and rubric to assess progression toward mastery as well as an end of the unit assessment.**	(Reviewer only.) **__X__Meets** **____Does Not Meet**
Non-Negotiable 1: Materials must reflect the content architecture of the Standards by not assessing the topics named* before the grade level where they first appear in the Standards. **NN 1** If Metric 1A was rated as Meets, then rate Non-Negotiable 1 as Meets. If Metric 1A was rated as Does Not Meet, then rate Non- Negotiable 1 as Does Not Meet. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion.**(Reviewer only.)** **Before moving to Non-Negotiable 2, record the final Meets or Does Not Meet rating in the Evaluation Summary.**		(Reviewer only.) **__X__Meets** **____Does Not Meet** **Strengths/Weaknesses:**

Directions for Non-Negotiable 2

Focus and Coherence

Non-Negotiable 2: **Focus and Coherence** **Materials must focus coherently on the Major Work of the grade in a way that is consistent with the progressions in the Standards.** Focus and coherence are the two major evidence-based design principles of the Common Core State Standards for Mathematics (CCSSM, p. 3). Focus is necessary in order to fulfill the ambitious promise the states have made to their students by adopting the Standards: greater achievement at the college and career ready level; greater depth of understanding of mathematics; and a rich classroom environment in which reasoning, sense-making, applications, and a range of mathematical practices flourish. In simpler terms, a mile-wide, inch-deep curriculum translates to less time per topic. Less time means less depth and moving on without many students. Thus, materials must focus coherently on the Major Work of the grade in a way that is consistent with the progressions in the Standards.	**Required Materials** • Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf) • Focus by Grade Level for the grade being evaluated (www.achievethecore.org/focus) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion:** Non-Negotiable 2 is rated as Meets or Does Not Meet. To rate Non-Negotiable 2, first rate metrics 2A–2H. Each of these eight metrics must be rated as Meets in order for Non-Negotiable 2 to be rated as Meets. Rate each metric 2A-2H as Meets or Does Not Meet/Insufficient Evidence. If the evidence examined shows that the Criterion is met, then mark the Criterion Meets. If the evidence examined shows that the Criterion is not met—or if there is insufficient evidence to make a determination—then mark the Criterion as Does Not Meet/Insufficient Evidence. Support all ratings with evidence.
Metric NN2A: **In each grade K–8, students and teachers using the materials as designed devote the large majority of time to the Major Work of the grade.** **How to Find the Evidence:** Familiarize yourself with the Major Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, lessons, homework assignments, and assessments. (Evaluate both student and teacher materials.) Consider time spent on the Major Work of the grade and judge qualitatively whether students and teachers using the materials as designed will devote the large majority of time to the Major Work of the grade. For context, read Criterion #1 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013)	**Evidence-** **Instructional modules for each unit breaks down fluency practice, concept development, application problems, and student debriefs. The modules focus the majority of the time on building conceptual understanding for the major standards in third grade. About 70% of lessons, assignments, and homework appear to focus on the major works for grade level. Approximately 75-80% of class time is centered around building concepts and application.**	**(Reviewer only.)** **__X__Meets** **____Does Not Meet/** **Insufficient Evidence**

Metric NN2B: **Supporting work, where present, enhances focus and coherence simultaneously by also engaging students in the Major Work of the grade.** **How to Find the Evidence:** Familiarize yourself with the Major Work and Supporting Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate chapters and lessons that focus on Supporting Work. NOTE: Example of evaluating this Criterion might include looking at whether materials for K–5 generally treat data displays as an occasion for solving grade-level word problems using the four operations (e.g., see 3.MD.B.3); or whether materials for grade 7 take advantage of opportunities to use probability to support ratios, proportions, and percentages. For context, read Criterion #3 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** **Eureka's Module 6 and 7 focus on supporting work in collecting and displaying data and geometry. For example, in Lesson 8 of Module 6, students build on operations and fractions as they create line plots to relate data from a chart on heights of plants. In Module 7 Lesson 17 students enhance understanding of operations as they solve problems involving perimeters with unknown measurements.**	(Reviewer only.) **__X__Meets** **____Does Not Meet/** **Insufficient Evidence**
Metric NN2C: **Materials base content progressions on the grade-by-grade progressions in the Standards. Content from previous or future grades does not unduly interfere with or displace on-grade-level content.** **How to Find the Evidence:** Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, and lessons in both student and teacher materials. NOTE: In some cases it may be possible that aligned materials might address some aspects of a topic in a strategic way before or after the grade level in which the topic is central in the Standards' progressions; for example, a curriculum author might purposefully choose to explore adding fractions with unlike denominators in a way appropriate to grade four, recognizing that this work is not really required until the next grade. However, any such purposeful discrepancies in content progressions should enhance the required learning in each grade; not unduly interfere with or displace grade-level content; and be clearly aimed at helping students meet the Standards as written rather than effectively rewriting the progressions in the Standards. And in all cases, note that Non-Negotiable 1 must be met for materials to be aligned. For context, read Criterion #5a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** **Modules relate to the focused grade level documents and teach the standards in order from grade level to grade level. Each module provides the foundational standards on which to build upon from the grade level before.**	(Reviewer only.) **__X__Meets** **____Does Not Meet/** **Insufficient Evidence**

Metric NN2D: **Materials gi[illegible]l students extensive work with on-grade-level problems.** **How to Find the Evidence:** Evaluate both student and teacher materials. If the materials provide resources for differentiated learning, consider whether lower-performing students have opportunities to engage with grade-level problems. Also consider whether higher-performing students are given opportunities to learn current grade-level content in greater depth. For context, read Criterion #5b in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** **Problem sets are p[illegible]ded for students after each lesson to practice g[illegible]de level skills. Homework also aligns with the daily lessons. "Scaffolds" are included in each lesson to help support ELL students, students with disabilities, and above and below grade level students' learning.**	(Reviewer only.) **__X__Meets** **____Does Not Meet/** **Insufficient Evidence**
Metric NN2E: **Materials relate on-grade-level concepts explicitly to prior knowledge from earlier grades.** **How to Find the Evidence:** Evaluate both student and teacher materials. NOTE: Examples of evaluating this Criterion might include looking at the way the materials extend basic ideas of place value across the decimal point; or the role that properties of operations play when the materials extend arithmetic beyond whole numbers to fractions, variables, and expressions. More generally, cluster headings in the Standards sometimes signal key moments where reorganizing and extending previous knowledge is important in order to accommodate new knowledge (e.g., see cluster headings that use the phrase "Apply and extend previous understanding"). For context, read Criterion #5c in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** **Each Module provides an overview off the standards to be taught in the unit. It includes focus grade level standards as well as foundational standards that are being built upon from the previous grade level. Each lesson builds upon the concepts from the lesson the day before (i.e. understanding equal groups of as multiplication moving into relating multiplication to the array model).**	(Reviewer only.) **__X__Meets** **____Does Not Meet/** **Insufficient Evidence**
Metric NN2F: **Review of material from previous grades is clearly identified as such to the teacher, and teacher and students can see what their specific responsibility is for the current year.** **How to Find the Evidence:** Evaluate the table of contents, but do not stop there; also evaluate units, chapters, lessons, homework assignments and assessments. (Evaluate both student and teacher materials.) Identify any content from previous grades and check whether it is identified as such. For context, read Criterion #5a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** **Each module provides a curriculum overview which covers standards to be taught, lesson objectives, terminology, suggested tools and representations, and methods of instructional delivery.** **The Navigator tool online gives you a snapshot of the year-long curriculum overview.**	(Reviewer only.) **_X___Meets** **____Does Not Meet/** **Insufficient Evidence**

Metric NN2G: **Materials include learning objectives that are visibly shaped by CCSSM cluster headings.** **How to Find the Evidence:** Select several clusters from the Major Work in the grade being evaluated. Evaluate teacher and student materials in relation to these clusters. For context, read Criterion #6a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** **The overviews in each module clearly explain the standards to be taught. Each lesson provides objectives that are tied to the clusters of the Major Work for third grade. For example, in Module 4 on of the focus standards is 3.MD.5. The objective for lesson 1 is to understand area as an attribute of plane figures.**	(Reviewer only.) **__X__Meets** **____Does Not Meet/** **Insufficient Evidence**
Metric NN2H: **Materials include problems and activities that serve to connect two or more clusters in a domain, or two or more domains in a grade, in cases where these connections are natural and important.** **How to Find the Evidence:** In the grade being evaluated, choose two or more clusters or two or more domains for which connections are natural and important. Evaluate the units, chapters, and lessons that deal with the chosen topics, looking for problems and activities that serve to connect the chosen clusters or domains. NOTE: An example of evaluating this Criterion might include looking at whether problems in grade 4 sometimes or often involve students applying their developing computation skills (detailed in domain NBT) in the context of solving word problems (detailed in domain OA). For context, read Criterion #6b in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** **Problems related to area in Module 4 connect 3.MD.7 relating area to properties of multiplication and division to 3.OA.4 determining the whole number in a multiplication or division equation relating three whole numbers. For example _ x 8 = 48 or 48/? =8.**	(Reviewer only.) **__X__Meets** **____Does Not Meet/** **Insufficient Evidence**
Non-Negotiable 2: **Focus and Coherence** **Materials must focus coherently on the Major Work of the grade in a way that is consistent with the progressions in the Standards.** **NN 2** If all Metrics 2A – 2H were rated as Meets, then rate Non-Negotiable 2 as Meets. If one or more Metric was rated Does Not Meet/Insufficient Evidence, then rate Non-Negotiable 2 as Does Not Meet. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)** **Before moving to Alignment Criterion 1, record the final Meets or Does Not Meet rating in the Evaluation Summary.**		(Reviewer only.) **__X__Meets** **____Does Not Meet** **Strengths/Weaknesses:**

Now continue by evaluating the Alignment Criterion 1 for Rigor and Balance.

Directions for Alignment Criterion 1

Rigor and Balance

Alignment Criterion 1: Rigor and Balance **Materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.** The Standards set expectations for attention to all three aspects of rigor: conceptual understanding, procedural skill and fluency, and applications. Thus, materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.	**Required Materials** • Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf) • Focus by Grade Level for the grade being evaluated (achievethecore.org/focus) • Situation Types for the Operations in Word Problems (achievethecore.org/situation-types) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion:** Alignment Criterion 1 is rated as Meets or Does Not Meet. To rate Alignment Criterion 1, first rate metrics 1A, 1B, and 1C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). For each metric, guiding questions are provided to aid in gathering evidence. Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 1 if the materials rate 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as rigor and balance, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.
Metric AC1A: **The materials support the development of students' conceptual understanding of key mathematical concepts, especially where called for in specific content Standards or cluster headings.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Major Work for the grade being evaluated that relate specifically conceptual understanding to use throughout the questions associated with this metric. NOTE: Some examples of clusters or Standards that call for conceptual understanding include: K.OA.A.1, (1.NBT.B, 1.NBT.C), (2.NBT.A, 2.NBT.B), (3.OA.A.1, 3.OA.A.2), 4.NF.A, (4.NBT.A, 4.NBT.B), 5.NF.B, (5.NBT.A, 5.NBT.B), 6.RP.A, 6.EE.A.3, 7.NS.A, 7.EE.A, 8.EE.B, 8.F.A, 8.G.A Clusters or Standards grouped by parentheses are closely connected and could be analyzed together. For context, read Criterion #4a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	-Choose a cluster/Standard from the Major Work that is aligned to each aspect of rigor and use it to evaluate these metrics. It is most helpful if the same clusters/Standards are chosen for all of the programs being evaluated. (Guidance in choosing clusters/Standards is included in "How to Find the Evidence".)	**Use the questions for AC Metric 1A to evaluate Metric 1A. Record evidence for each question and rate Metric 1A.** **_X___Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**

Is conceptual understanding attended to thoroughly where the Standards set e[illegible] expectations for understanding or interpreting? Evaluate lessons, chapter/unit assessments and homework assignments, paying attention to work aligned to Standards that explicitly call for understanding or interpreting. NOTE: Examples of evaluating this Criterion might include looking at how well the multi-digit addition and subtraction algorithms are developed and explained on the basis of place value and properties of operations; or how well the multi-digit multiplication and division algorithms are developed and explained on the basis of place value and properties of operations; or how well solving equations is presented and explained as a process of reasoning.	**Evidence-** **The first lesson in M[illegible]e 1 focuses on CCSSM 3.O.A.A.1 to help students interpret products of whole numbers. The fluency practice helps build a foundation for multiplication in its relation to repeated addition.**	
Do the materials feature high-quality conceptual problems and conceptual discussion questions? Evaluate lessons, chapter/unit assessments, and homework assignments. NOTE: Example of conceptual problems might include such questions as "Find a number greater than 1/5 and less than 1/4," or "If the divisor does not change and the dividend increases, what happens to the quotient?"	**Evidence-** **Concept development is built through problems done together in whole group lessons and practice in problem set activities in individual work. Time is spent at the end of each lesson to debrief and reflect on what was learned. Exit tickets are used to demonstrate understanding of concepts.**	
Do the materials feature opportunities to identify correspondences across mathematical representations? Evaluate lessons, chapter/unit assessments and homework assignments. NOTE: Examples of evaluating this Criterion might include looking at whether students are supported in identifying correspondences among: the verbal description of a situation, the diagrams that distill its mathematical features, and the equations that model it; or equivalent forms of numbers (e.g., 3 and 6/2) and the number line; or rational number operations and representations of them via models such as the vector model; or the expression that defines a function and the graph that shows the relationship.	**Evidence-** **Exit Tickets after each lesson** **Mid-Module/End Module Assessments** **Concept development modules: Use of manipulatives, pictures, and equations to build understanding.**	
Metric AC1B: **The materials are designed so that students attain the fluencies and procedural skills required by the Standards.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Major Work for the grade being evaluated that relate specifically to fluency and procedural skill to use throughout the questions associated with this metric. NOTE: Some examples of Standards that call for procedural skill and fluency include: K.OA.A.5, 1.OA.C.6, 2.OA.B.2, 2.NBT.B.5, 3.OA.C.7, 3.NBT.A.2, 4.NBT.B.4, 5.NBT.B.5, 6.NS.B.2, and 6.NS.B.3, 6.EE.A, 7.NS.A, 7.EE.A.1,7.EE.B.4a, 8.EE.C.7, 8.EE.C.8b For context, read Criterion #4b in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).		**Use the questions for Metric 1B to evaluate Metric 1 B. Record evidence for each question and rate Metric 1B.** **(Reviewer only.)** **__X__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**

Is progress toward fluency and procedural skill interwoven with students' develo conceptual understanding of the operations in question? Evaluate lessons, chapter/unit assessments, daily routines, and homework assignments for evidence that the development of fluency and procedural skill is supported by conceptual understanding.	**Evidence-** **Fluency practice occ in every module at the beginning of each lesson to build fluency in multiplication and division facts to 100. Application problems throughout the Modules as well as the problem sets and homework practice help build conceptual understanding and fluency through daily practice and review.**	
Are purely procedural problems and exercises present that include cases in which opportunistic strategies are valuable and generic cases that require efficient algorithms present? Evaluate lessons, chapter/unit assessments, daily routines, and homework assignments. NOTE: Examples of problems in which opportunistic strategies are valuable might include the sum 698 + 240 or the system x + y = 1, 2x + 2y = 3. Examples of generic cases that require efficient algorithms might include the sum 8767+2286 or the system 6y + x = x + 3, – x = 1 + 2y.	**Evidence-** **In Module 1, conceptual understanding is built through introducing students to different strategies such as equal groups, count-bys, and arrays to build the conceptual understanding of multiplication. Once strategies have been taught the lessons move into the algorithms of multiplication and division.**	
Do the materials in grades K–6 provide repeated practice toward attainment of fluency Standards? Evaluate lessons, daily routines, and homework assignments for evidence of repeated practice toward attainment of the following K–6 Standards that set an explicit expectation of fluent (accurate and reasonably fast) computation: K.OA.A.5, 1.OA.C.6, 2.OA.B.2, 2.NBT.B.5, 3.OA.C.7, 3.NBT.A.2, 4.NBT.B.4, 5.NBT.B.5, 6.NS.B.2, 6.NS.B.3.	**Evidence-** **Fluency is built in daily practice with the sprint and pattern practices. This begins in module 1 and continues through module 7 to give students plenty of opportunity to build conceptual understanding and build fluency.**	
Metric AC1C: **The materials are designed so that teachers and students spend sufficient time working with engaging applications, without losing focus on the Major Work of each grade.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Major Work for the grade being evaluated that relate specifically application to use throughout the questions associated with this metric. NOTE: Some examples of clusters or Standards that call for application include: K.OA.A.2, 1.OA.A, 2.OA.A, 3.OA.A.3, 3.OA.D.8, 4.OA.A.3, 4.NF.B.3d, 4.NF.B.4c, 5.NF.B.6, 5.NF.B.7c, 6.RP.A.3, 6.NS.A.1, 6.EE.B.7, 6.EE.C.9, 7.RP.A, 7.NS.A.3, 7.EE.B.3, 8.EE.C.8c, 8.F.B For context, read Criterion #4c in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** **Application problems are used frequently in the daily lessons to review concepts that have been previously taught. Usually 5-8 minutes of time is planned in each lesson for these problems.**	**Use the questions for Metric 1C to evaluate Metric 1C. Record evidence for each question and rate Metric 1C.** **(Reviewer only.)** **__X__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**

Are there are single- and multi-step contextual problems, including non-routine pro[illegible], that develop the mathematics of the grade, afford opportunities for practice, and engage students in problem solving? Do the problems attend thoroughly to those places in the content Standards where expectations for multi-step and real-world problems are explicit? Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** **Yes. Application pro[illegible]ns are given in lessons throughout the modules that provide opportunity to solve single and multi-step problems. The problem sets provided at the end of concept building, homework, and assessments also provide the practice students need to build problem solving skills.**	
Do application problems particularly stress applying the Major Work of the grade? Evaluate lessons, chapter/unit assessments, and homework assignments. NOTE: Examples of evaluating this Criterion might include looking at: how well, by the end of grade 2, students using the materials as designed can represent and solve a full range of one-step addition and subtraction word problems; or how well, by the end of grade 3, students using the materials as designed can represent and solve a full range of one-step multiplication and division word problems; or how well these basic situation types for each operation are carried coherently across the grades, (e.g., with fractions and algebraic expressions); or, in all grades, whether the problems connect concepts, Standards, and domains in ways that are natural and important. For a list of situation types for one-step addition, subtraction, multiplication, and division problems, see Situation Types for the Operations in Word Problems	**Evidence-** **Yes. Most lessons in each module have application problems to build skills and understanding in the major works for the grade level.**	
Does modeling build slowly across K–8, with applications that are relatively simple in earlier grades and when students are encountering new content? In grades 6–8, do the problems begin to provide opportunities for students to make their own assumptions or simplifications in order to model a situation mathematically? Read Standard for Mathematical Practice 4, Model with Mathematics. Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** **Each lesson in the modules appears to build on the concept learned in the previous lesson. It is evident that conceptual understanding is built through math talks and practice on skills being taught. Problem Sets, Exit Tickets, and homework provide students with opportunities to apply and show what they have learned,**	

Alignment Criterion 1: Rigor and Balance

Materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.

AC1 Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 out of 6 points, the Criterion has not been met. Check the final rating.
Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)**

Before moving to Alignment Criterion 2, record the final Meets or Does Not Meet rating in the Evaluation Summary.

(Reviewer only.)

__X__Meets

____Does Not Meet

Strengths/Weaknesses:

Directions for Alignment Criterion 2

Standards for Mathematical Practice

Alignment Criterion 2: Standards for Mathematical Practice

Materials must demonstrate authentic connections between content Standards and practice Standards.

The Standards require that designers of instructional materials connect the mathematical practices to mathematical content in instruction. Thus, materials must demonstrate authentic connections between content Standards and practice Standards.

Required Materials:

- Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf)
- Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)
- Focus by Grade Level for the grade being evaluated (www.achievethecore.org/focus)
- From the materials being evaluated: teacher guides, student texts and workbooks

Rating this Criterion

Alignment Criterion 2 is rated as Meets or Does Not Meet.

To rate Alignment Criterion 2, first rate metrics 2A, 2B, and 2C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). For each metric, guiding questions are provided to aid in gathering evidence.

Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 2 if the materials earn 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as mathematical practices, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.

Metric AC2A: **Materials address the practice Standards in such a way as to enrich the Major Work of the grade; practices strengthen the focus on Major Work instead of detracting from it, in both teacher and student materials.** **How to Find the Evidence:** Familiarize yourself with the Major Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate teacher and student materials for evidence that the mathematical practices support and connect to the focus of the grade. NOTE: Examples of evaluating this Criterion might include looking at whether, in grades K–5, students using the materials are supported to look for and express regularity in repeated reasoning about the addition table, the multiplication table, the properties of operations, the relationship between addition and subtraction or multiplication and division, and the place value system; or whether, in grades 6–8, students using the materials are supported to look for and express regularity in repeated reasoning about proportional relationships and linear functions. For context, read Criterion #8 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013).	**Evidence-** **Each Teacher Module provides and overview of the standards, which tie in to the major works for the grade level being taught. Each lesson in each module provides fluency practice, application problems, concept building, and problem sets that focus on the major works,**	(Reviewer only.) **__X__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Metric AC2B: **Materials attend to the full meaning of each practice Standard.** **How to Find the Evidence:** For context, read Criterion #7 and Criterion #9 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).		**Use the questions for Metric 2B to evaluate Metric 2B. Record evidence for each question and rate Metric 2B.** (Reviewer only.) **__X__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Over the course of any given year of instruction, is each mathematical practice Standard meaningfully present in the form of assignments, activities, or problems that stimulate students to develop the habits of mind described in the practice Standard? Evaluate lessons, chapter/ unit assessments, and homework assignments for evidence of each mathematical practice being meaningfully present in instruction.	**Evidence-** **Each Module not only provides the focus standards for the grade level, but highlighted standards for mathematical practice as well. For example, Module 4 covers the mathematical practices for MP .2, MP.3, MP.6, MP.7, and MP.8. All of the mathematical practices are covered in the modules used throughout the year.**	
Do the materials treat the practice Standards as developing across grades or grade bands? Are the practice Standards in early grades appropriately simple? Do they display an arc of growing sophistication across the grades?	**Evidence-** **Yes. Foundational standards are provided in each module that are to be built upon from the previous grade level. This shows the growth of complexity throughout the practices across each grade level.**	

Are there teacher-directed materials that explain the role of the practice Standards in the classroom and in students' mathematical development? Are alignments to practice Standards accurate?	**Evidence-** **Yes. In each Module overview provides a summary of each mathematical practice that will be focused on in the module and an example of how students will show they are meeting the standard practice.**	
Metric AC2C: **Materials support the Standards' emphasis on mathematical reasoning.** **How to Find the Evidence:** For context, read Criterion #10 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).		**Use the questions for Metric 2C to evaluate Metric 2C. Record evidence for each question and rate Metric 2C.** **(Reviewer only.)** **__X__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Do the materials support students in constructing viable arguments and critiquing the arguments of others concerning grade-level mathematics that is detailed in the content Standards? Read Standard for Mathematical Practice 3. Evaluate teacher and student materials to ensure that students are given opportunities to reason with grade-level mathematics.	**Evidence-** **Yes. The curriculum spends a majority of the time on building concepts. This is done through problems provided by the teacher where students participate in a great deal of math talk between each other and the teacher as concepts are introduced. Each lesson also has a student debrief that allows them to reflect on and process what they have learned. They have the opportunity to self assess their work as well as classmates and they discuss their solutions in the problem sets they have completed at this time.**	
Do the materials support students in producing not only answers and solutions, but also, in a grade-appropriate way, arguments, explanations, diagrams, mathematical models, etc., especially in the Major Work of the grade? Familiarize yourself with the Major Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate teacher and student materials, to understand the types of work students are expected to produce.	**Evidence-** **Yes. In the student debrief, students are encouraged to share their strategies used to solve problems and explain why they chose the strategies they did and compare them to others.**	
Do materials explicitly attend to the specialized language of mathematics? Is the language of argument, problem solving, and mathematical explanations taught rather than assumed? Evaluate teacher and student materials, paying attention to how mathematical language is taught. NOTE: Examples of evaluating this Criterion might include looking at whether students are supported in: basing arguments on definitions; using the method of providing a counterexample; or recognizing that examples alone do not establish a general statement.	**Evidence-** **Mathematical terminology is evident in each of the Modules. Key terminology is introduced in the first module and continues throughout the remaining modules. Key terms for the module are given in the module overview.**	

Alignment Criterion 2:
Standards for Mathematical Practice

Materials must demonstrate authentic connections between content Standards and practice Standards.

AC2 Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 out of 6 points, the Criterion has not been met. Check the final rating.
Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion.
(Reviewer only.)

Before moving to Alignment Criterion 3, record the final Meets or Does Not Meet rating in the Evaluation Summary.

(Reviewer only.)

__X__Meets

____Does Not Meet

Strengths/Weaknesses:

Alignment Criterion 3:
Access to the Standards for All Students

Materials must provide supports for English Language Learners and other special populations.

Because Standards are for all students, alignment requires thoughtful support to ensure all students are able to meet the Standards. Thus, aligned materials must provide supports for English Language Learners and other special populations.

Required Materials:

- Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf)
- Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)
- From the materials being evaluated: teacher guides, student texts and workbooks

Rating this Criterion:
Alignment Criterion 3 is rated as Meets or Does Not Meet.

To rate Alignment Criterion 3, first rate metrics 3A, 3B, and 3C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points).

Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 3 if the materials earn 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as support for special population, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.

Metric AC3A:
Support for English Language Learners and other special populations is thoughtful and helps those students meet the same Standards as all other students. The language in which problems are posed is carefully considered.

How to Find the Evidence:
Evaluate teacher and student materials, paying attention to supports offered for special populations.

Evidence-
Scaffolds are provided throughout the lessons to support learning for ELL, Above and Below grade level, and special education students to succeed.

Reviewer only.)

__X__Meets (2)

____Partially Meets (1)

____Does Not Meet (0)

Metric AC3B: **Materials pr[illegible]e appropriate level and type of scaffolding, differentiation, intervention, and support for a broad range of learners with gradual removal of supports, when needed, to allow students to demonstrate their mathematical understanding independently.** **How to Find the Evidence:** Evaluate teacher and student materials, paying attention to whether materials provide differentiation that will lead all learners to engage with on-grade-level content.	**Evidence-** **Scaffolds are provid[illegible]hroughout the lessons to support learning for ELL, Above and Below grade level, and special education students to succeed.**	**Reviewer only.)** **__X__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Metric AC3C: **Design of lessons recommends and facilitates a mix of instructional approaches for a variety of learners such as using multiple representations (e.g., including models, using a range of questions, checking for understanding, flexible grouping, pair-share).** **How to Find the Evidence:** Evaluate teacher materials, noting instructional approaches suggested for whole class and differentiated lessons and activities.	**Evidence-** **Each lesson is broken down into 3 major components:** **Fluency Practice** **Concept Development** **Student Debrief** **Each component provides a variety of instructional approaches from whole group, small group, partners, and individual practice to develop skills. The Exit Tickets and problem sets help check for understanding and any misconceptions that may occur.**	**Reviewer only.)** **__X__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Alignment Criterion 3: **Access to the Standards for All Students** **Materials must provide supports for English Language Learners and other special populations.** AC3 Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 points, the Criterion has not been met. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion.**(Reviewer only.)** **Move to the Evaluation Summary and record the final Meets or Does Not Meet rating .**		**(Reviewer only.)** **__X__Meets** **____Does Not Meet** **Strengths/Weaknesses:**

Once an evaluation for alignment to the Shifts and major features of the CCSS has been conducted using Sections 1-3, it's important to evaluate for overall quality and best practices. A starting list of Indicators of Quality are suggested below. States, districts and others evaluating instructional materials are encouraged to add to this list to ensure materials reflect local contexts. For background information on some of the Indicators of

Quality in this section, refer to pp.18–21 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2

Indicators of Quality	Evidence- Give specific examples.	Rating: (Reviewers only.)
1. Lessons are thoughtfully structured and support the teacher in leading the class through the learning paths at hand, with active participation by all students in their own learning and in the learning of their classmates.	Evidence- Students actively participate in their own learning through the fluency practice provided in each lesson. Rich conversations take place among teachers and students as they participate in the concept development portion of the lesson. Students also reflect on their own learning as well as the learning of their classmates as they discuss problems from the problem sets in the student debrief.	(Reviewer only.) ___X___ Yes _____ No
2. The underlying design of the materials includes both problems and exercises. (In solving problems, students learn new mathematics, whereas in working exercises, students apply what they have already learned to build mastery.) Each problem or exercise has a purpose. NOTE: This Criterion does not require that the problems and exercises be labeled as such.	Evidence- The curriculum's lessons are broken up in to 3 main components: Fluency, Concept Development, and Student Debrief. In the fluency piece students help build mastery by practicing skills they have already learned, this occurs in the application problems as well. In Concept development, new concepts are introduced to students that build on concepts they have learned in previous lessons. The problems in each lesson and component have a purpose to help build understanding.	(Reviewer only.) ___X___ Yes _____ No
3. Design of assignments is not haphazard: exercises are given in intentional sequences in order to strengthen students' mathematical understanding.	Evidence- Each lesson builds upon the skills and concepts taught in previous lessons throughout each module.	(Reviewer only.) ___X___ Yes _____ No
4. There are separate teacher materials that support and reward teacher study including, but not limited to: discussion of the mathematics of the units and the mathematical point of each lesson as it relates to the organizing concepts of the unit, discussion on student ways of thinking and anticipating a variety of students responses, guidance on lesson flow, guidance on questions that prompt students thinking, and discussion of desired mathematical behaviors being elicited among students.	Evidence- The Great Minds website offers teacher support through videos, homework helpers, pacing and preparation guides, online communities, curriculum maps and overviews, standards checklists, materials lists, and FAQs.	(Reviewer only.) ___X___ Yes _____ No

5. Manipulatives suggested in the materials are faithful representations of the mathematical objects they represent and are connected to written methods.	**Evidence-** **The Great Minds website offers a list of materials and tools (manipulatives) that tie in with each grade level's lessons for the year that can be purchased.**	**(Reviewer only.)** **___X___ Yes** **_____ No**
6. Materials include a variety of curriculum-embedded assessments. Examples include pre-, formative, summative, and self-assessment resources.	**Evidence-** **The curriculum offers a variety of embedded assessments through the daily fluency practice, discussion in concept development activities and problem sets, and exit tickets. Mid-module and End of module assessments are the summative assessments used within each of the modules.**	**(Reviewer only.)** **___X___ Yes** **_____ No**
7. Assessments contain aligned rubrics, answer keys, and scoring guidelines that provide sufficient guidance for interpreting student performance.	**Evidence-** **Teacher editions provide answer keys and rubrics (progression toward mastery) with each module assessment.**	**(Reviewer only.)** **___X___ Yes** **_____ No**
8. Materials assess student proficiency using methods that are accessible and unbiased, including the use of course-level language in student prompts.	**Evidence-** **Mid-module and end of module assessment tasks use the course level terminology and language to prompt students' thinking.**	**(Reviewer only.)** **___X___ Yes** **_____ No**
9. Materials are carefully evaluated by qualified individuals, whose names are listed, in an effort to ensure freedom from mathematical errors and course-level appropriateness.	**Evidence-** **In the News section of the Great Minds website, Louisiana State Superintendent of Education recommends the curriculum. Educators Evaluating the Quality of Instructional Products also found many of Eureka's math lessons exemplar through an evaluation process by Achieve.**	**(Reviewer only.)** **___X___ Yes** **_____ No**
10. The visual design supports students in engaging thoughtfully with the subject. Navigation through the text is clear.	**Evidence-** **The modules are printed in black and white and are organized neatly. There are no illustrations aside from those within the problem itself to distract students.**	**(Reviewer only.)** **___X___ Yes** **_____ No**

11. The materials engage parents in appropriate ways. For example, homework assignments in elementary grades, consist of routine problems, practice with getting answers, and fluency-building exercises that parents can easily support.	**Evidence-** **The Great Minds website provides a parent support page that offers videos, homework helpers, module tip sheets, grade road maps, FAQs, and additional resources to help parents support their children's learning.**	(Reviewer only.) **___X___ Yes** **_____ No**

Reviewer IMET Evaluation Summary **Title/Level: _Eureka Math-A Story of Units Grade 3_**

Publisher: _Great Minds_____ **Copyright: _2015_____** **ISBN:_978-1-63255-701-8_**

Reviewer ID # _____SA____TG_____ **Date Review Completed:_3/8/2016_____**

Non-Negotiable Criteria- Each Non-Negotiable must be met in order for the Non-Negotiable Alignment Criteria to be met overall.

Non-Negotiable 1: Freedom from Obstacles to Focus	Non- Negotiable 2: Focus and Coherence
____X___ Meets	___X__ Meets
_____ Does Not Meet	_____ Does Not Meet

Non-Negotiable Overall:

__X___ Meets **_____ Does Not Meet**

Alignment Criteria- Each Alignment Criterion must be met with a sufficient number of points in order for Alignment Criteria to be labeled as "Meets" overall. The more points the materials receive on the Alignment Criteria, the better they are aligned.

Alignment Criterion 1: Rigor and Balance	Alignment Criterion 2: Standards of Mathematical Practice	Alignment Criterion 3: Access to Standards for All Learners
Points: ___6__ of 6 possible. (Materials must receive at least 5 of 6 points to align.)	Points: ___6__ of 6 possible. (Materials must receive at least 5 of 6 points to align.)	Points: ___6__ of 6 possible. (Materials must receive at least 5 of 6 points to align.)
____X___ Meets	____X___ Meets	____X___ Meets
_____ Does Not Meet	_____ Does Not Meet	_____ Does Not Meet

Alignment Criteria Overall:

__X___ Meets **_____ Does Not Meet**

If the materials meet both Non-Negotiables and relevant Alignment Criterion, they are aligned to the Shifts and major features of the Core Standards. **the materials meet every Non-Negotiable and Alignment Criterion? ___X__ Yes _____ No**

What are the specific areas of strength and weakness based on this evaluation? Publishers or others modifying or developing assessments can use this information to make improvements and/or to remedy gaps in the alignment of assessment materials.

Eureka Math appears to be written specifically with the standards in mind. Each module builds upon concepts learned across lessons and grade levels. It focuses a great deal of time on building conceptual understanding and giving students the opportunities to practice these skills and build on them to mastery. Many supports are provided for teachers, students, and families through the Great Minds website.

2015-16 Mathematics Interim Review Recommendation & Summary

Publisher Name:	Great Minds
Title:	Eureka Math – A Story of Units 4
ISBN #	987-63255-701-8
Grade Level(s) or Course:	4
Reviewer ID:	SA, SA

RECOMMENDED AS:

____X____**Core Mathematics Program-** a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials. Substantial evidence clearly supports the designation of this program as Core.

_____**Other Mathematics Program-** a program that substantially, but partially, meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for supplemental materials. Substantial evidence clearly supports the designation of this program as Other.

_____**Component Mathematics Program-** a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs. Substantial evidence clearly supports the designation of this program as Component.

_____**Intervention Program-** a program designed and intended to target and support students' specific needs. Substantial evidence clearly supports the designation of this program as Intervention.

_____ **Does not meet criteria** for recommendation as a Curricular Material or Online Resource for Mathematics.

EVIDENCE SUMMARY:

FOCUS- **Each teacher module provides an overview of Standards to be assessed for the unit. It includes focus standards for grade level and for the mathematical practices. For example, in Grade 4 Module 4, Geometric Measurement: Understand concepts of angles and measure angles. (4.MD.5 4.MD.6 4.MD.7) Each module also includes a mid-module assessment task and rubric to assess progression toward mastery as well as an end of the unit assessment**

COHERENCE- **Instructional modules for each unit breaks down fluency practice, concept development, application problems, and student debriefs. The modules focus the majority of the time on building conceptual understanding for the major standards in fourth grade. About 70% of lessons, assignments, and homework appear to focus on the major works for grade level. Approximately 75-80% of class time is centered around building concepts and application.**

RIGOR- **Conceptual understanding is built through the use of opportunistic strategies before moving into more efficient algorithims. For example, in Module 1 students build a place value chart to build the conceptual understanding of digits representing 10 times the value of what it represents in its place to the right to build a place value chart to one million. They then use efficient algorithms to create multiplication problems.**

CONCEPTUAL UNDERSTANDING- **Concept development is built through problems done together in whole group lessons and practice in problem set activities in individual work. Time is spent at the end of each lesson to debrief and reflect on what was learned. Exit tickets are used to demonstrate understanding of concepts. Exit Tickets after each lesson, Mid-Module/End Module Assessments, Concept development modules: Use of manipulatives, pictures, and equations to build understanding.**

MATHEMATICAL PRACTICES-
Each Module not only provides the focus standards for the grade level, but highlighted standards for mathematical practice as well. For example, Module 4 covers the mathematical practices for MP .2, MP.3, MP.5, and MP.6. All of the mathematical practices are covered in the modules used throughout the year.

ACCESSIBILITY OF STANDARDS TO ALL STUDENTS-
Scaffolds are provided throughout the lessons to support learning for ELL, Above and Below grade level, and special education students to succeed.

OTHER: ~~TEPPS~~ It is essential for this curriculum to be adopted in K-6 if it is going to be used in 7-12. Because it is such a rigorous program 7-12 programs need the foundational skills taught in K-6.

2015-16 Interim Mathematics Review

Mathematics Evaluation Tool Grades K-8

Publisher: Great Minds

Title of Material: Eureka Math - A Story of Units Grade 4

Author: Great Minds

ISBN #: 978-1-63255-708 **Copyright** 2015

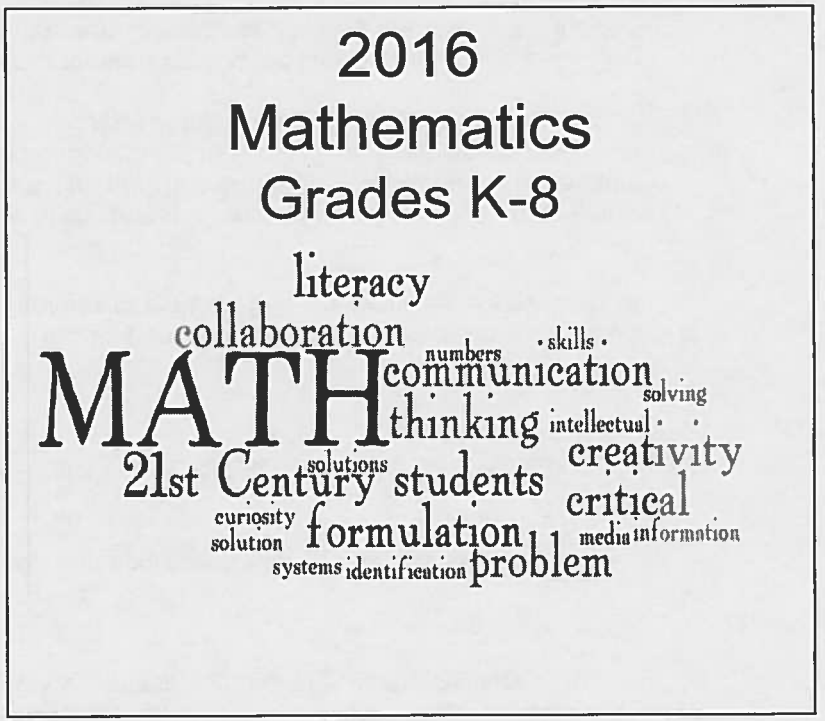
Reviewer ID: SA SA

Core Mathematics Program- a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Core.

Other Mathematics Program- a program that substantially, but partially, meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Other.

Component Mathematics Program- a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs.
Substantial evidence clearly supports the designation of this program as Component.

Intervention Program- a program designed and intended to target and support students' specific needs.
Substantial evidence clearly supports the designation of this program as Intervention.



- Evaluation Form adapted from Instructional Materials Evaluation Toolkit (IMET).

The IMET was developed by Student Achievement Partners. Educators may use or adapt. http://creativecommons.org/licenses/by/3.0/ Download this tool at http://achievethecore.org/IMET

Instructional Materials Evaluation Tool
Mathematics, Grades K-8

What Are the Purposes of the IMET?
This Math IMET is designed to help educators determine whether instructional materials are aligned to the Shifts and major features of the Common Core State Standards (CCSS). The substantial instructional Shifts (http://www.corestandards.org/other-resources/key-shifts-inmathematics/) at the heart of the Common Core State Standards are:
- **Focus** strongly where the Standards focus
- **Coherence**: Think across grades and link to major topics within the grade
- **Rigor**: In major topics, pursue conceptual understanding, procedural skill and fluency, and application with equal intensity.

The IMET draws directly from the following documents:
- Common Core State Standards for Mathematics (www.corestandards.org/Math)
- Publishers' Criteria for the Common Core State Standards in Mathematics grade K-8 (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)

When to use the IMET
1. Purchasing materials: Many factors go into local purchasing decisions. Alignment to the Standards is a critical factor to consider. This tool is designed to evaluate alignment of instructional materials to the Shifts and the major features of the CCSS. It also provides suggestions of additional indicators to consider in the materials evaluation and purchasing process.

2. Evaluating materials currently in use: The IMET can be used to analyze the degree of alignment of existing materials and help to highlight specific, concrete flaws in alignment. Even where materials and tools currently in use fail to meet one or more of these criteria, the pattern of failure is likely to be informative. States and districts can use the evaluation to create a thoughtful plan to modify or combine existing resources in such a way that students' actual learning experiences approach the focus, coherence, and rigor of the Standards.

3. Developing programs: Those developing new programs can use this tool as guidance for creating aligned curricula.
Please note this tool was designed for evaluating comprehensive curricula (including any supplemental or ancillary materials), but it was not designed for the evaluation of standalone supplemental materials.

Who Uses the IMET?
Evaluating instructional materials requires both subject-matter and pedagogical expertise. Evaluators should be well versed in the Standards (www.corestandards.org/Math) for all grades in which materials are being evaluated. This includes understanding the Major Work of the grade (www.achievethecore/focus), the Supporting and Additional work, how the content fits into the progressions in the Standards (www.achievethecore.org/progressions), and the expectations of the Standards with respect to conceptual understanding, procedural skill and fluency, and application. Evaluators also should be familiar with the substantial instructional Shifts (http:// www.corestandards.org/other-resources/key-shifts-in-mathematics/) of Focus, Coherence and Rigor that are listed above.

Getting Started
Prior to Evaluation

Assemble all of the materials necessary for the evaluation. It is essential for evaluators to have materials for all grades covered by the program, as some criteria cannot be rated without having access to each grade. In addition, each evaluator should have a reference copy of the Common Core State Standards for Mathematics (CCSSM) and the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013).

Before conducting the evaluation itself, it is important to develop a protocol for the evaluation process. The protocol should include having evaluators study the Publishers' Criteria and the IMET. It will also be helpful for evaluators to get a sense of each program overall before beginning the process. At a minimum, this would include reading the front matter of the text, looking at the table of contents and paging through multiple chapters.

Sections 1-3 below should be completed to produce a comprehensive picture of the strengths and weaknesses of the materials under evaluation. Information about areas in need of improvement or supplementation should be shared with internal and external stakeholders.

Navigating the Tool

Begin with Section 1: Non-Negotiable Alignment Criteria

- The Non-Negotiable Alignment Criteria must each be met in full for materials to be considered aligned to the Shifts and the major features of the Common Core State Standards. Each Non-Negotiable Alignment Criterion has one or more metrics associated with it; every one of these metrics must be met in order for the criterion as a whole to be met.

- Examine the relevant materials and use evidence to rate the materials against each criterion and its associated metric(s).

- Record and explain the evidence upon which the rating is based.

Continue to Section 2: Alignment Criteria

- The Alignment Criteria must each be met for materials to be considered aligned to the Shifts and the major features of the Common Core State Standards. Each Alignment Criterion has one or more metric associated with it; a specific number of these metrics must be met or partially met in order for the criterion as a whole to be met.

- Examine the materials in relation to these criteria, assigning each metric a point value. Rate the criterion as "Meets" or "Does Note Meet" based on the number of points assigned. The more points the materials receive on the alignment Criteria, the better they are aligned.

- Record and explain the evidence upon which the rating is based.

Proceed to Section 4: Indicators of Quality

- Indicators of Quality are important considerations that will help evaluators better understand the overall quality of instructional materials. These considerations are not criteria for alignment to the CCSS, but they provide valuable information about additional program characteristics. Evaluators may want to add their own indicators to the examples provided.

Directions for Non-Negotiable 1

Freedom from Obstacles to Focus

Criterion	Evidence- Give specific examples.	Rating: (Reviewer only.)
Non-Negotiable 1: **Freedom from Obstacles to Focus** **Materials must reflect the content architecture of the Standards by not assessing the topics named before the grade level where they first appear in the Standards.** The Standards foster students' progress to algebra by focusing strongly on arithmetic. Consistent with this focus, certain topics from outside of arithmetic appear only in later grades. Thus, to be aligned, materials must reflect the content architecture of the Standards by not assessing the topics named before the grade level where they first appear in the Standards. In this criterion, "topics named" means the topics that are explicitly named in Metric 1A. No other topics should be added to the list in Metric 1A. (Note that other topics in the standards are addressed in criterion NN2.)	**Required Materials** • Common Core State Standards for Mathematics (www.corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf) • From the materials being evaluated: teacher guides and all assessment components	**Rating this Criterion:** Non-Negotiable 1 is rated as Meets or Does Not Meet. To rate Non-Negotiable 1, begin by rating Metric 1A. Since Metric 1A is the only metric for Non-Negotiable 1, the rating for Non-Negotiable 1 is the same as the rating for Metric 1A. If Metric 1A is rated as Does Not Meet, include evidence of when the named topic(s) is/are assessed. If the metric is rated as Meets, list the grade(s) examined in the evaluation.

Metric NN1A: **Materials re[illegible] the basic architecture of the Standards by not assessing the listed topics before the grade level indicated.** • Probability, including chance, likely outcomes, probability models. (Introduced in the CCSSM in grade 7) • Statistical distributions, including center, variation, clumping, outliers, mean, median, mode, range, quartiles; and statistical association or trends, including two-way tables, bivariate measurement data, scatter plots, trend line, line of best fit, correlation. (Introduced in the CCSSM in grade 6) • Similarity, congruence, or geometric transformations. (Introduced in the CCSSM in grade 8) • Symmetry of shapes, including line/ reflection symmetry, rotational symmetry. (Introduced in the CCSSM in grade 4) **How to Find the Evidence:** Evaluate the table of contents, all chapter tests, all unit tests, and other such assessment components (including rubrics). For context, read Criterion #2 from the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013). NOTE: Grade alignments of other topics are addressed in Non-Negotiable 2, Focus and Coherence.) In this criterion, "topics named" means the topics that are explicitly named in Metric 1A. No other topics should be added to the list in Metric 1A. (Note that other topics in the standards are addressed in criterion NN2.)	**Evidence-** **Each teacher modu[illegible]rovides an overview of Standards to be ass[illegible]ssed for the unit. It includes focus standards for grade level and for the mathematical practices. For example, in Grade 4 Module 4, Geometric Measurement: Understand concepts of angles and measure angles. (4.MD.5 4.MD.6 4.MD.7)** **Each module also includes a mid-module assessment task and rubric to assess progression toward mastery as well as an end of the unit assessment.**	(Reviewer only.) **__X__Meets** **____Does Not Meet**

Non-Negotiable 1: Materials must reflect the content architecture of the Standards by not assessing the topics named* before the grade level where they first appear in the Standards.

NN 1 If Metric 1A was rated as Meets, then rate Non-Negotiable 1 as Meets. If Metric 1A was rated as Does Not Meet, then rate Non- Negotiable 1 as Does Not Meet. Check the final rating.

Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion.**(Reviewer only.)**

Before moving to Non-Negotiable 2, record the final Meets or Does Not Meet rating in the Evaluation Summary.

(Reviewer only.)

__X__Meets

____Does Not Meet

Strengths/Weaknesses:

Navigator on the website difficult to navigate through. Teachers need to click on many links to be able to navigate to lessons within the modules.

Directions for Non-Negotiable 2

Focus and Coherence

Non-Negotiable 2:

Focus and Coherence

Materials must focus coherently on the Major Work of the grade in a way that is consistent with the progressions in the Standards.

Focus and coherence are the two major evidence-based design principles of the Common Core State Standards for Mathematics (CCSSM, p. 3). Focus is necessary in order to fulfill the ambitious promise the states have made to their students by adopting the Standards: greater achievement at the college and career ready level; greater depth of understanding of mathematics; and a rich classroom environment in which reasoning, sense-making, applications, and a range of mathematical practices flourish. In simpler terms, a mile-wide, inch-deep curriculum translates to less time per topic. Less time means less depth and moving on without many students. Thus, materials must focus coherently on the Major Work of the grade in a way that is consistent with the progressions in the Standards.

Required Materials

- Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf)
- Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)
- Focus by Grade Level for the grade being evaluated (www.achievethecore.org/focus)
- From the materials being evaluated: teacher guides, student texts and workbooks

Rating this Criterion:

Non-Negotiable 2 is rated as Meets or Does Not Meet.

To rate Non-Negotiable 2, first rate metrics 2A–2H. Each of these eight metrics must be rated as Meets in order for Non-Negotiable 2 to be rated as Meets. Rate each metric 2A-2H as Meets or Does Not Meet/Insufficient Evidence. If the evidence examined shows that the Criterion is met, then mark the Criterion Meets. If the evidence examined shows that the Criterion is not met—or if there is insufficient evidence to make a determination—then mark the Criterion as Does Not Meet/Insufficient Evidence. Support all ratings with evidence.

Metric NN2A:

In each grade K–8, students and teachers using the materials as designed devote the large majority of time to the Major Work of the grade.

How to Find the Evidence:

Familiarize yourself with the Major Work of the grade being evaluated (see the Focus by Grade Level documents.)

Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, lessons, homework assignments, and assessments. (Evaluate both student and teacher materials.)

Consider time spent on the Major Work of the grade and judge qualitatively whether students and teachers using the materials as designed will devote the large majority of time to the Major Work of the grade.

For context, read Criterion #1 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013)

Evidence-

Instructional modules for each unit breaks down fluency practice, concept development, application problems, and student debriefs. The modules focus the majority of the time on building conceptual understanding for the major standards in fourth grade. About 70% of lessons, assignments, and homework appear to focus on the major works for grade level. Approximately 75-80% of class time is centered around building concepts and application.

(Reviewer only.)

__X__Meets

____Does Not Meet/

Insufficient Evidence

Metric NN2B: **Supporting work, where present, enhances focus and coherence simultaneously by also engaging students in the Major Work of the grade.** **How to Find the Evidence:** Familiarize yourself with the Major Work and Supporting Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate chapters and lessons that focus on Supporting Work. NOTE: Example of evaluating this Criterion might include looking at whether materials for K–5 generally treat data displays as an occasion for solving grade-level word problems using the four operations (e.g., see 3.MD.B.3); or whether materials for grade 7 take advantage of opportunities to use probability to support ratios, proportions, and percentages. For context, read Criterion #3 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** **Eureka's Module 5 focuses on supporting work with fractions. Students build on concepts learned in Grade 3 of unit fractions to extend to fraction equivalence and mixed numbers in grade 4.** **Lessons that contain supporting work also incorporate all major clusters in them as well.**	(Reviewer only.) **__X__Meets** **____Does Not Meet/** **Insufficient Evidence**
Metric NN2C: **Materials base content progressions on the grade-by-grade progressions in the Standards. Content from previous or future grades does not unduly interfere with or displace on-grade-level content.** **How to Find the Evidence:** Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, and lessons in both student and teacher materials. NOTE: In some cases it may be possible that aligned materials might address some aspects of a topic in a strategic way before or after the grade level in which the topic is central in the Standards' progressions; for example, a curriculum author might purposefully choose to explore adding fractions with unlike denominators in a way appropriate to grade four, recognizing that this work is not really required until the next grade. However, any such purposeful discrepancies in content progressions should enhance the required learning in each grade; not unduly interfere with or displace grade-level content; and be clearly aimed at helping students meet the Standards as written rather than effectively rewriting the progressions in the Standards. And in all cases, note that Non-Negotiable 1 must be met for materials to be aligned. For context, read Criterion #5a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** **Modules relate to the focused grade level documents and teach the standards in order from grade level to grade level. Each module provides the foundational standards on which to build upon from the grade level before.**	(Reviewer only.) **__X__Meets** **____Does Not Meet/** **Insufficient Evidence**

Metric NN2D: **Materials gi[illegible]l students extensive work with on-grade-level problems.** **How to Find the Evidence:** Evaluate both student and teacher materials. If the materials provide resources for differentiated learning, consider whether lower-performing students have opportunities to engage with grade-level problems. Also consider whether higher-performing students are given opportunities to learn current grade-level content in greater depth. For context, read Criterion #5b in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** **Problem sets are p[illegible]ded for students after each lesson to practice g[illegible]e level skills. Homework also aligns with the daily lessons. "Scaffolds" are included in each lesson to help support ELL students, students with disabilities, and above and below grade level students' learning.** **3-4 Problem set pgs.** **Exit tickets** **1-2 pgs. Homework** **Sprints/Fluency practice pgs.**	(Reviewer only.) **__X__Meets** **____Does Not Meet/** **Insufficient Evidence**
Metric NN2E: **Materials relate on-grade-level concepts explicitly to prior knowledge from earlier grades.** **How to Find the Evidence:** Evaluate both student and teacher materials. NOTE: Examples of evaluating this Criterion might include looking at the way the materials extend basic ideas of place value across the decimal point; or the role that properties of operations play when the materials extend arithmetic beyond whole numbers to fractions, variables, and expressions. More generally, cluster headings in the Standards sometimes signal key moments where reorganizing and extending previous knowledge is important in order to accommodate new knowledge (e.g., see cluster headings that use the phrase "Apply and extend previous understanding"). For context, read Criterion #5c in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** **Each Module provides an overview of the standards to be taught in the unit. It includes focus grade level standards as well as foundational standards that are being built upon from the previous grade level. Each lesson builds upon the concepts from the lesson the day before (i.e. in Grade 4 Module 4 Lesson 1 students learn to identify and draw points, line segments and angles and in lesson 2 they learn how to indentify and draw right angles, obtuse angles, and acute angles.)**	(Reviewer only.) **__X__Meets** **____Does Not Meet/** **Insufficient Evidence**
Metric NN2F: **Review of material from previous grades is clearly identified as such to the teacher, and teacher and students can see what their specific responsibility is for the current year.** **How to Find the Evidence:** Evaluate the table of contents, but do not stop there; also evaluate units, chapters, lessons, homework assignments and assessments. (Evaluate both student and teacher materials.) Identify any content from previous grades and check whether it is identified as such. For context, read Criterion #5a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** **Each module provides a curriculum overview which covers standards to be taught, lesson objectives, terminology, suggested tools and representations, and methods of instructional delivery.** **The Navigator tool online gives you a snapshot of the year-long curriculum overview.**	(Reviewer only.) **_X___Meets** **____Does Not Meet/** **Insufficient Evidence**

Metric NN2G: **Materials include learning objectives that are visibly shaped by CCSSM cluster headings.** **How to Find the Evidence:** Select several clusters from the Major Work in the grade being evaluated. Evaluate teacher and student materials in relation to these clusters. For context, read Criterion #6a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** **The overviews in each module clearly explain the standards to be taught. Each lesson provides objectives that are tied to the clusters of the Major Work for fourth grade. For example, in Module 4 one of the focus standards is 4.MD.5. The objective for lesson 1 is to identify and draw points, lines, line segments, rays and angles. Recognize them in various contexts and familiar figures.**	(Reviewer only.) **__X__Meets** **____Does Not Meet/** **Insufficient Evidence**
Metric NN2H: **Materials include problems and activities that serve to connect two or more clusters in a domain, or two or more domains in a grade, in cases where these connections are natural and important.** **How to Find the Evidence:** In the grade being evaluated, choose two or more clusters or two or more domains for which connections are natural and important. Evaluate the units, chapters, and lessons that deal with the chosen topics, looking for problems and activities that serve to connect the chosen clusters or domains. NOTE: An example of evaluating this Criterion might include looking at whether problems in grade 4 sometimes or often involve students applying their developing computation skills (detailed in domain NBT) in the context of solving word problems (detailed in domain OA). For context, read Criterion #6b in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** **The lessons in Module 7 connect the standards 4.OA Using the four operations with whole numbers to solve problems and 4. MD solving problems involving measurement and conversion of measurements from a larger unit to a smaller unit.** **Assessment rubrics at the end of each module show assessment questions that cover more than one standard. CCSS Standards checklist provides a view of when each standard is assessed.**	(Reviewer only.) **__X__Meets** **____Does Not Meet/** **Insufficient Evidence**
Non-Negotiable 2: **Focus and Coherence** **Materials must focus coherently on the Major Work of the grade in a way that is consistent with the progressions in the Standards.** **NN 2** If all Metrics 2A – 2H were rated as Meets, then rate Non-Negotiable 2 as Meets. If one or more Metric was rated Does Not Meet/Insufficient Evidence, then rate Non-Negotiable 2 as Does Not Meet. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)** **Before moving to Alignment Criterion 1, record the final Meets or Does Not Meet rating in the Evaluation Summary.**		(Reviewer only.) **__X__Meets** **____Does Not Meet** **Strengths/Weaknesses:**

Now continue by evaluating the Alignment Criterion 1 for Rigor and Balance.

Directions for Alignment Criterion 1

Rigor and Balance

Alignment Criterion 1: Rigor and Balance

Materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.

The Standards set expectations for attention to all three aspects of rigor: conceptual understanding, procedural skill and fluency, and applications. Thus, materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.

Required Materials

- Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf)
- Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)
- Focus by Grade Level for the grade being evaluated (achievethecore.org/focus)
- Situation Types for the Operations in Word Problems (achievethecore.org/situation-types)
- From the materials being evaluated: teacher guides, student texts and workbooks

Rating this Criterion:

Alignment Criterion 1 is rated as Meets or Does Not Meet.

To rate Alignment Criterion 1, first rate metrics 1A, 1B, and 1C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). For each metric, guiding questions are provided to aid in gathering evidence.

Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 1 if the materials rate 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as rigor and balance, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.

Metric AC1A:
The materials support the development of students' conceptual understanding of key mathematical concepts, especially where called for in specific content Standards or cluster headings.

How to Find the Evidence:

Select one or more cluster(s) or Standard(s) from the Major Work for the grade being evaluated that relate specifically conceptual understanding to use throughout the questions associated with this metric. NOTE: Some examples of clusters or Standards that call for conceptual understanding include: K.OA.A.1, (1.NBT.B, 1.NBT.C), (2.NBT.A, 2.NBT.B), (3.OA.A.1, 3.OA.A.2), 4.NF.A, (4.NBT.A, 4.NBT.B), 5.NF.B, (5.NBT.A, 5.NBT.B), 6.RP.A, 6.EE.A.3, 7.NS.A, 7.EE.A, 8.EE.B, 8.F.A, 8.G.A

Clusters or Standards grouped by parentheses are closely connected and could be analyzed together.

For context, read Criterion #4a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).

-Choose a cluster/Standard from the Major Work that is aligned to each aspect of rigor and use it to evaluate these metrics. It is most helpful if the same clusters/Standards are chosen for all of the programs being evaluated. (Guidance in choosing clusters/Standards is included in "How to Find the Evidence".)

Use the questions for AC Metric 1A to evaluate Metric 1A. Record evidence for each question and rate Metric 1A.

_X___Meets (2)

____Partially Meets (1)

____Does Not Meet (0)

Is conceptual understanding attended to thoroughly where the Standards set e[illegible] expectations for understanding or interpreting? Evaluate lessons, chapter/unit assessments and homework assignments, paying attention to work aligned to Standards that explicitly call for understanding or interpreting. NOTE: Examples of evaluating this Criterion might include looking at how well the multi-digit addition and subtraction algorithms are developed and explained on the basis of place value and properties of operations; or how well the multi-digit multiplication and division algorithms are developed and explained on the basis of place value and properties of operations; or how well solving equations is presented and explained as a process of reasoning.	**Evidence-** **Yes. Conceptual und[illegible]tanding is built through the use of opportunistic strategies before moving into more efficient algorithims. For example, in Module 1 students build a place value chart to build the conceptual understanding of digits representing 10 times the value of what it represents in its place to the right to build a place value chart to one million. They then use efficient algorithms to create multiplication problems.**	
Do the materials feature high-quality conceptual problems and conceptual discussion questions? Evaluate lessons, chapter/unit assessments, and homework assignments. NOTE: Example of conceptual problems might include such questions as "Find a number greater than 1/5 and less than 1/4," or "If the divisor does not change and the dividend increases, what happens to the quotient?"	**Evidence-** **Concept development is built through problems done together in whole group lessons and practice in problem set activities in individual work. Time is spent at the end of each lesson to debrief and reflect on what was learned. Exit tickets are used to demonstrate understanding of concepts.**	
Do the materials feature opportunities to identify correspondences across mathematical representations? Evaluate lessons, chapter/unit assessments and homework assignments. NOTE: Examples of evaluating this Criterion might include looking at whether students are supported in identifying correspondences among: the verbal description of a situation, the diagrams that distill its mathematical features, and the equations that model it; or equivalent forms of numbers (e.g., 3 and 6/2) and the number line; or rational number operations and representations of them via models such as the vector model; or the expression that defines a function and the graph that shows the relationship.	**Evidence-** **Exit Tickets after each lesson** **Mid-Module/End Module Assessments** **Concept development modules: Use of manipulatives, pictures, and equations to build understanding.**	
Metric AC1B: **The materials are designed so that students attain the fluencies and procedural skills required by the Standards.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Major Work for the grade being evaluated that relate specifically to fluency and procedural skill to use throughout the questions associated with this metric. NOTE: Some examples of Standards that call for procedural skill and fluency include: K.OA.A.5, 1.OA.C.6, 2.OA.B.2, 2.NBT.B.5, 3.OA.C.7, 3.NBT.A.2, 4.NBT.B.4, 5.NBT.B.5, 6.NS.B.2, and 6.NS.B.3, 6.EE.A, 7.NS.A, 7.EE.A.1,7.EE.B.4a, 8.EE.C.7, 8.EE.C.8b For context, read Criterion #4b in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).		**Use the questions for Metric 1B to evaluate Metric 1 B. Record evidence for each question and rate Metric 1B.** **(Reviewer only.)** **__X__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**

Is progress toward fluency and procedural skill interwoven with students' devel conceptual understanding of the operations in question? Evaluate lessons, chapter/unit assessments, daily routines, and homework assignments for evidence that the development of fluency and procedural skill is supported by conceptual understanding.	**Evidence-** **Fluency practice occ in every module at the beginning of each lesson to build fluency in multi-digit arithmetic. Application problems throughout the Modules as well as the problem sets and homework practice help build conceptual understanding and fluency through daily practice and review.**	
Are purely procedural problems and exercises present that include cases in which opportunistic strategies are valuable and generic cases that require efficient algorithms present? Evaluate lessons, chapter/unit assessments, daily routines, and homework assignments. NOTE: Examples of problems in which opportunistic strategies are valuable might include the sum 698 + 240 or the system x + y = 1, 2x + 2y = 3. Examples of generic cases that require efficient algorithms might include the sum 8767+2286 or the system 6y + x = x + 3, – x = 1 + 2y.	**Evidence-** **Yes. Conceptual understanding is built through the use of opportunistic strategies before moving into more efficient algorithims. For example, in Module 1 students build a place value chart to build the conceptual understanding of digits representing 10 times the value of what it represents in its place to the right to build a place value chart to one million. They then use efficient algorithms to create multiplication problems.**	
Do the materials in grades K–6 provide repeated practice toward attainment of fluency Standards? Evaluate lessons, daily routines, and homework assignments for evidence of repeated practice toward attainment of the following K–6 Standards that set an explicit expectation of fluent (accurate and reasonably fast) computation: K.OA.A.5, 1.OA.C.6, 2.OA.B.2, 2.NBT.B.5, 3.OA.C.7, 3.NBT.A.2, 4.NBT.B.4, 5.NBT.B.5, 6.NS.B.2, 6.NS.B.3.	**Evidence-** **Fluency is built in daily practice with the sprint and pattern practices. This begins in module 1 and continues through module 7 to give students plenty of opportunity to build conceptual understanding and build fluency.**	
Metric AC1C: **The materials are designed so that teachers and students spend sufficient time working with engaging applications, without losing focus on the Major Work of each grade.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Major Work for the grade being evaluated that relate specifically application to use throughout the questions associated with this metric. NOTE: Some examples of clusters or Standards that call for application include: K.OA.A.2, 1.OA.A, 2.OA.A, 3.OA.A.3, 3.OA.D.8, 4.OA.A.3, 4.NF.B.3d, 4.NF.B.4c, 5.NF.B.6, 5.NF.B.7c, 6.RP.A.3, 6.NS.A.1, 6.EE.B.7, 6.EE.C.9, 7.RP.A, 7.NS.A.3, 7.EE.B.3, 8.EE.C.8c, 8.F.B For context, read Criterion #4c in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** **Application problems are used frequently in the daily lessons to review concepts that have been previously taught. Usually 5-8 minutes of time is planned in each lesson for these problems.**	**Use the questions for Metric 1C to evaluate Metric 1C. Record evidence for each question and rate Metric 1C.** **(Reviewer only.)** **__X__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**

Are there are single- and multi-step contextual problems, including non-routine problems, that develop the mathematics of the grade, afford opportunities for practice, and engage students in problem solving? Do the problems attend thoroughly to those places in the content Standards where expectations for multi-step and real-world problems are explicit? Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** **Yes. Application problems are given in lessons throughout the modules that provide opportunity to solve single and multi-step problems. The problem sets provided at the end of concept building, homework, and assessments also provide the practice students need to build problem solving skills.**	
Do application problems particularly stress applying the Major Work of the grade? Evaluate lessons, chapter/unit assessments, and homework assignments. NOTE: Examples of evaluating this Criterion might include looking at: how well, by the end of grade 2, students using the materials as designed can represent and solve a full range of one-step addition and subtraction word problems; or how well, by the end of grade 3, students using the materials as designed can represent and solve a full range of one-step multiplication and division word problems; or how well these basic situation types for each operation are carried coherently across the grades, (e.g., with fractions and algebraic expressions); or, in all grades, whether the problems connect concepts, Standards, and domains in ways that are natural and important. For a list of situation types for one-step addition, subtraction, multiplication, and division problems, see Situation Types for the Operations in Word Problems	**Evidence-** **Yes. Most lessons in each module have application problems to build skills and understanding in the major works for the grade level.**	
Does modeling build slowly across K–8, with applications that are relatively simple in earlier grades and when students are encountering new content? In grades 6–8, do the problems begin to provide opportunities for students to make their own assumptions or simplifications in order to model a situation mathematically? Read Standard for Mathematical Practice 4, Model with Mathematics. Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** **Each lesson in the modules appears to build on the concept learned in the previous lesson. It is evident that conceptual understanding is built through math talks and practice on skills being taught. Problem Sets, Exit Tickets, and homework provide students with opportunities to apply and show what they have learned,**	

Alignment Criterion 1: Rigor and Balance **Materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.** **AC1** Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 out of 6 points, the Criterion has not been met. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)** **Before moving to Alignment Criterion 2, record the final Meets or Does Not Meet rating in the Evaluation Summary.**	**(Reviewer only.)** **__X__Meets** **____Does Not Meet** **Strengths/Weaknesses:**

Directions for Alignment Criterion 2

Standards for Mathematical Practice

Alignment Criterion 2: Standards for Mathematical Practice **Materials must demonstrate authentic connections between content Standards and practice Standards.** The Standards require that designers of instructional materials connect the mathematical practices to mathematical content in instruction. Thus, materials must demonstrate authentic connections between content Standards and practice Standards.	**Required Materials**: • Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf) • Focus by Grade Level for the grade being evaluated (www.achievethecore.org/focus) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion** Alignment Criterion 2 is rated as Meets or Does Not Meet. To rate Alignment Criterion 2, first rate metrics 2A, 2B, and 2C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). For each metric, guiding questions are provided to aid in gathering evidence. Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 2 if the materials earn 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as mathematical practices, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.

Metric AC2A: **Materials address the practice Standards in such a way as to enrich the Major Work of the grade; practices strengthen the focus on Major Work instead of detracting from it, in both teacher and student materials.** **How to Find the Evidence:** Familiarize yourself with the Major Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate teacher and student materials for evidence that the mathematical practices support and connect to the focus of the grade. NOTE: Examples of evaluating this Criterion might include looking at whether, in grades K–5, students using the materials are supported to look for and express regularity in repeated reasoning about the addition table, the multiplication table, the properties of operations, the relationship between addition and subtraction or multiplication and division, and the place value system; or whether, in grades 6–8, students using the materials are supported to look for and express regularity in repeated reasoning about proportional relationships and linear functions. For context, read Criterion #8 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013).	**Evidence-** **Each Teacher Module provides and overview of the standards, which tie in to the major works for the grade level being taught. Each lesson in each module provides fluency practice, application problems, concept building, and problem sets that focus on the major works,**	(Reviewer only.) **__X__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Metric AC2B: **Materials attend to the full meaning of each practice Standard.** **How to Find the Evidence:** For context, read Criterion #7 and Criterion #9 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).		**Use the questions for Metric 2B to evaluate Metric 2B. Record evidence for each question and rate Metric 2B.** (Reviewer only.) **__X__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Over the course of any given year of instruction, is each mathematical practice Standard meaningfully present in the form of assignments, activities, or problems that stimulate students to develop the habits of mind described in the practice Standard? Evaluate lessons, chapter/ unit assessments, and homework assignments for evidence of each mathematical practice being meaningfully present in instruction.	**Evidence-** **Each Module not only provides the focus standards for the grade level, but highlighted standards for mathematical practice as well. For example, Module 4 covers the mathematical practices for MP .2, MP.3, MP.5, and MP.6. All of the mathematical practices are covered in the modules used throughout the year.**	
Do the materials treat the practice Standards as developing across grades or grade bands? Are the practice Standards in early grades appropriately simple? Do they display an arc of growing sophistication across the grades?	**Evidence-** **Yes. Foundational standards are provided in each module that are to be built upon from the previous grade level. This shows the growth of complexity throughout the practices across each grade level.**	

Are there teacher-directed materials that explain the role of the practice Standards in the classroom and in students' mathematical development? Are alignments to practice Standards accurate?	**Evidence-** **Yes. In each Module the overview provides a summary of each mathematical practice that will be focused on in the module and an example of how students will show they are meeting the standard practice.**	
Metric AC2C: **Materials support the Standards' emphasis on mathematical reasoning.** **How to Find the Evidence:** For context, read Criterion #10 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).		**Use the questions for Metric 2C to evaluate Metric 2C. Record evidence for each question and rate Metric 2C.** **(Reviewer only.)** **__X__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Do the materials support students in constructing viable arguments and critiquing the arguments of others concerning grade-level mathematics that is detailed in the content Standards? Read Standard for Mathematical Practice 3. Evaluate teacher and student materials to ensure that students are given opportunities to reason with grade-level mathematics.	**Evidence-** **Yes. The curriculum spends a majority of the time on building concepts. This is done through problems provided by the teacher where students participate in a great deal of math talk between each other and the teacher as concepts are introduced. Each lesson also has a student debrief that allows them to reflect on and process what they have learned. They have the opportunity to self assess their work as well as classmates and they discuss their solutions in the problem sets they have completed at this time.**	
Do the materials support students in producing not only answers and solutions, but also, in a grade-appropriate way, arguments, explanations, diagrams, mathematical models, etc., especially in the Major Work of the grade? Familiarize yourself with the Major Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate teacher and student materials, to understand the types of work students are expected to produce.	**Evidence-** **Yes. In the student debrief, students are encouraged to share their strategies used to solve problems and explain why they chose the strategies they did and compare them to others.**	
Do materials explicitly attend to the specialized language of mathematics? Is the language of argument, problem solving, and mathematical explanations taught rather than assumed? Evaluate teacher and student materials, paying attention to how mathematical language is taught. NOTE: Examples of evaluating this Criterion might include looking at whether students are supported in: basing arguments on definitions; using the method of providing a counterexample; or recognizing that examples alone do not establish a general statement.	**Evidence-** **Mathematical terminology is evident in each of the Modules. Key terminology is introduced in the first module and continues throughout the remaining modules. Key terms for the module are given in the module overview.**	

Alignment Criterion 2:
Standards for Mathematical Practice

Materials must demonstrate authentic connections between content Standards and practice Standards.

AC2 Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 out of 6 points, the Criterion has not been met. Check the final rating.
Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion.
(Reviewer only.)

Before moving to Alignment Criterion 3, record the final Meets or Does Not Meet rating in the Evaluation Summary.

(Reviewer only.)

__X__Meets

____Does Not Meet

Strengths/Weaknesses:

Alignment Criterion 3:
Access to the Standards for All Students

Materials must provide supports for English Language Learners and other special populations.

Because Standards are for all students, alignment requires thoughtful support to ensure all students are able to meet the Standards. Thus, aligned materials must provide supports for English Language Learners and other special populations.

Required Materials:

- Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf)
- Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)
- From the materials being evaluated: teacher guides, student texts and workbooks

Rating this Criterion:
Alignment Criterion 3 is rated as Meets or Does Not Meet.

To rate Alignment Criterion 3, first rate metrics 3A, 3B, and 3C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points).

Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 3 if the materials earn 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as support for special population, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.

Metric AC3A:
Support for English Language Learners and other special populations is thoughtful and helps those students meet the same Standards as all other students. The language in which problems are posed is carefully considered.

How to Find the Evidence:
Evaluate teacher and student materials, paying attention to supports offered for special populations.

Evidence-
Scaffolds are provided throughout the lessons to support learning for ELL, Above and Below grade level, and special education students to succeed.

Reviewer only.)

__X__Meets (2)

____Partially Meets (1)

____Does Not Meet (0)

Metric AC3B: **Materials provide appropriate level and type of scaffolding, differentiation, intervention, and support for a broad range of learners with gradual removal of supports, when needed, to allow students to demonstrate their mathematical understanding independently.** **How to Find the Evidence:** Evaluate teacher and student materials, paying attention to whether materials provide differentiation that will lead all learners to engage with on-grade-level content.	**Evidence-** **Scaffolds are provided throughout the lessons to support learning for ELL, Above and Below grade level, and special education students to succeed.**	Reviewer only.) **__X__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Metric AC3C: **Design of lessons recommends and facilitates a mix of instructional approaches for a variety of learners such as using multiple representations (e.g., including models, using a range of questions, checking for understanding, flexible grouping, pair-share).** **How to Find the Evidence:** Evaluate teacher materials, noting instructional approaches suggested for whole class and differentiated lessons and activities.	**Evidence-** **Each lesson is broken down into 3 major components:** **Fluency Practice** **Concept Development** **Student Debrief** **Each component provides a variety of instructional approaches from whole group, small group, partners, and individual practice to develop skills. The Exit Tickets and problem sets help check for understanding and any misconceptions that may occur.**	Reviewer only.) **__X__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Alignment Criterion 3: **Access to the Standards for All Students** **Materials must provide supports for English Language Learners and other special populations.** AC3 Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 points, the Criterion has not been met. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion.**(Reviewer only.)** **Move to the Evaluation Summary and record the final Meets or Does Not Meet rating .**		(Reviewer only.) **__X__Meets** **____Does Not Meet** **Strengths/Weaknesses:**

Once an evaluation for alignment to the Shifts and major features of the CCSS has been conducted using Sections 1-3, it's important to evaluate for overall quality and best practices. A starting list of Indicators of Quality are suggested below. States, districts and others evaluating instructional materials are encouraged to add to this list to ensure materials reflect local contexts. For background information on some of the Indicators of

Quality in this section, refer to pp.18–21 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2

Indicators of Quality	Evidence- Give specific examples.	Rating: (Reviewers only.)
1. Lessons are thoughtfully structured and support the teacher in leading the class through the learning paths at hand, with active participation by all students in their own learning and in the learning of their classmates.	Evidence- Students actively participate in their own learning through the fluency practice provided in each lesson. Rich conversations take place among teachers and students as they participate in the concept development portion of the lesson. Students also reflect on their own learning as well as the learning of their classmates as they discuss problems from the problem sets in the student debrief.	(Reviewer only.) ___X___ Yes _____ No
2. The underlying design of the materials includes both problems and exercises. (In solving problems, students learn new mathematics, whereas in working exercises, students apply what they have already learned to build mastery.) Each problem or exercise has a purpose. NOTE: This Criterion does not require that the problems and exercises be labeled as such.	Evidence- The curriculum's lessons are broken up in to 3 main components: Fluency, Concept Development, and Student Debrief. In the fluency piece students help build mastery by practicing skills they have already learned, this occurs in the application problems as well. In Concept development, new concepts are introduced to students that build on concepts they have learned in previous lessons. The problems in each lesson and component have a purpose to help build understanding.	(Reviewer only.) ___X___ Yes _____ No
3. Design of assignments is not haphazard: exercises are given in intentional sequences in order to strengthen students' mathematical understanding.	Evidence- Each lesson builds upon the skills and concepts taught in previous lessons throughout each module. Rationale for module sequence found on pg. 44-45 of curriculum overview. Scope and sequence provides logical sequence.	(Reviewer only.) ___X___ Yes _____ No
4. There are separate teacher materials that support and reward teacher study including, but not limited to: discussion of the mathematics of the units and the mathematical point of each lesson as it relates to the organizing concepts of the unit, discussion on student ways of thinking and anticipating a variety of students responses, guidance on lesson flow, guidance on questions that prompt students thinking, and discussion of desired mathematical behaviors being elicited among students.	Evidence- The Great Minds website offers teacher support through videos, homework helpers, pacing and preparation guides, online communities, curriculum maps and overviews, standards checklists, materials lists, and FAQs.	(Reviewer only.) ___X___ Yes _____ No

5. Manipulatives suggested in the materials are faithful representations of the mathematical objects they represent and are connected to written methods.	**Evidence-** **The Great Minds website offers a list of materials and tools (manipulatives) that tie in with each grade level's lessons for the year that can be purchased.**	(Reviewer only.) **___X___ Yes** **_____ No**
6. Materials include a variety of curriculum-embedded assessments. Examples include pre-, formative, summative, and self-assessment resources.	**Evidence-** **The curriculum offers a variety of embedded assessments through the daily fluency practice, discussion in concept development activities and problem sets, and exit tickets. Mid-module and End of module assessments are the summative assessments used within each of the modules.**	(Reviewer only.) **___X___ Yes** **_____ No**
7. Assessments contain aligned rubrics, answer keys, and scoring guidelines that provide sufficient guidance for interpreting student performance.	**Evidence-** **Teacher editions provide answer keys and rubrics (progression toward mastery) with each module assessment.**	(Reviewer only.) **___X___ Yes** **_____ No**
8. Materials assess student proficiency using methods that are accessible and unbiased, including the use of course-level language in student prompts.	**Evidence-** **Mid-module and end of module assessment tasks use the course level terminology and language to prompt students' thinking.**	(Reviewer only.) **___X___ Yes** **_____ No**
9. Materials are carefully evaluated by qualified individuals, whose names are listed, in an effort to ensure freedom from mathematical errors and course-level appropriateness.	**Evidence-** **In the News section of the Great Minds website, Louisiana State Superintendent of Education recommends the curriculum. Educators Evaluating the Quality of Instructional Products also found many of Eureka's math lessons exemplar through an evaluation process by Achieve. EDReports.org and Edweek were also resources that recommend the curriculum.**	(Reviewer only.) **___X___ Yes** **_____ No**
10. The visual design supports students in engaging thoughtfully with the subject. Navigation through the text is clear.	**Evidence-** **The modules are printed in black and white and are organized neatly. There are no illustrations aside from those within the problem itself to distract students.**	(Reviewer only.) **___X___ Yes** **_____ No**

11. The materials engage parents in appropriate ways. For example, homework assignments in elementary grades, consist of routine problems, practice with getting answers, and fluency-building exercises that parents can easily support.	**Evidence-** **The Great Minds website provides a parent support page that offers videos, homework helpers, module tip sheets, grade road maps, FAQs, and additional resources to help parents support their children's learning.**	**(Reviewer only.)** **___X___ Yes** **_____ No**

Reviewer IMET Evaluation Summary **Title/Level: _Eureka Math-A Story of Units Grade 4_**

Publisher: _Great Minds_____ **Copyright: _2015_____** **ISBN:_978-1-63255-701-8_**

Reviewer ID # _____SA___SA_____ **Date Review Completed:__3/8/2016_____**

Non-Negotiable Criteria- Each Non-Negotiable must be met in order for the Non-Negotiable Alignment Criteria to be met overall.

Non-Negotiable 1: Freedom from Obstacles to Focus	Non- Negotiable 2: Focus and Coherence
____X___ Meets _____ Does Not Meet	___X__ Meets _____ Does Not Meet

Non-Negotiable Overall:

__X___ Meets **_____ Does Not Meet**

Alignment Criteria- Each Alignment Criterion must be met with a sufficient number of points in order for Alignment Criteria to be labeled as "Meets" overall. The more points the materials receive on the Alignment Criteria, the better they are aligned.

Alignment Criterion 1: Rigor and Balance	Alignment Criterion 2: Standards of Mathematical Practice	Alignment Criterion 3: Access to Standards for All Learners
Points: ___6__ of 6 possible. (Materials must receive at least 5 of 6 points to align.) ____X___ Meets _____ Does Not Meet	Points: ___6__ of 6 possible. (Materials must receive at least 5 of 6 points to align.) ____X___ Meets _____ Does Not Meet	Points: ___6__ of 6 possible. (Materials must receive at least 5 of 6 points to align.) ____X___ Meets _____ Does Not Meet

Alignment Criteria Overall:

__X___ Meets **_____ Does Not Meet**

If the materials meet both Non-Negotiables and relevant Alignment Criterion, they are aligned to the Shifts and major features of the Core Standards. **the materials meet every Non-Negotiable and Alignment Criterion? ___X__ Yes _____ No**

What are the specific areas of strength and weakness based on this evaluation? Publishers or others modifying or developing assessments can use this information to make improvements and/or to remedy gaps in the alignment of assessment materials.

Eureka Math appears to be written specifically with the standards in mind. Each module builds upon concepts learned across lessons and grade levels. It focuses a great deal of time on building conceptual understanding and giving students the opportunities to practice these skills and build on them to mastery. Many supports are provided for teachers, students, and families through the Great Minds website.

2015-16 Mathematics Interim Review Recommendation & Summary

Publisher Name:	Great Minds
Title:	Eureka Math – A Story of Units Grade 5
ISBN #	978-1-63255704-9
Grade Level(s) or Course:	5
Reviewer ID:	CB, LKE

RECOMMENDED AS:

____X____**Core Mathematics Program-** a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials. Substantial evidence clearly supports the designation of this program as Core.

_____**Other Mathematics Program-** a program that substantially, but partially, meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for supplemental materials. Substantial evidence clearly supports the designation of this program as Other.

_____**Component Mathematics Program-** a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs. Substantial evidence clearly supports the designation of this program as Component.

_____**Intervention Program-** a program designed and intended to target and support students' specific needs. Substantial evidence clearly supports the designation of this program as Intervention.

_____ **Does not meet criteria** for recommendation as a Curricular Material or Online Resource for Mathematics.

EVIDENCE SUMMARY:

FOCUS- **The pacing guides in the overview of the module topics and lesson objectives provide pacing and logical progression of standards. The majority of time is focused on the major clusters of the grade. Lessons incorporate the major work, the supporting work to enhance student ability.**

COHERENCE- Each new topic in the table of contents gives focus standards, instructional days, and coherence links.

RIGOR- **Concept development is built through problems done together in whole group lessons and practice in problem set activities in individual work. Time is spent at the end of each lesson to debrief and reflect on what was learned. Exit tickets are used to demonstrate understanding of concepts.**

CONCEPTUAL UNDERSTANDING- **Conceptual understanding is built through the use of opportunistic strategies before moving into more efficient algorithms.**

MATHEMATICAL PRACTICES- **Each Module not only provides the focus standards for the grade level, but highlighted standards for mathematical practice as well.**

ACCESSIBILITY OF STANDARDS TO ALL STUDENTS-
Side bar notes for Multiple means of Engagement and representation present in each lesson in all modules. Each lesson lists the standards and lesson objectives.

OTHER:
The curriculum needs to be adopted K-5, or K-6, so that it can be transferred to 7-12. This program starts in kindergarten and follows strict patterns for building foundational skills.

2015-16 Interim Mathematics Review

Mathematics Evaluation Tool Grades K-8

Publisher: Great Minds

Title of Material: Eureka Math - Grade 5

Author: _____

ISBN #: 978-1-63255-704-9 **Copyright** _____

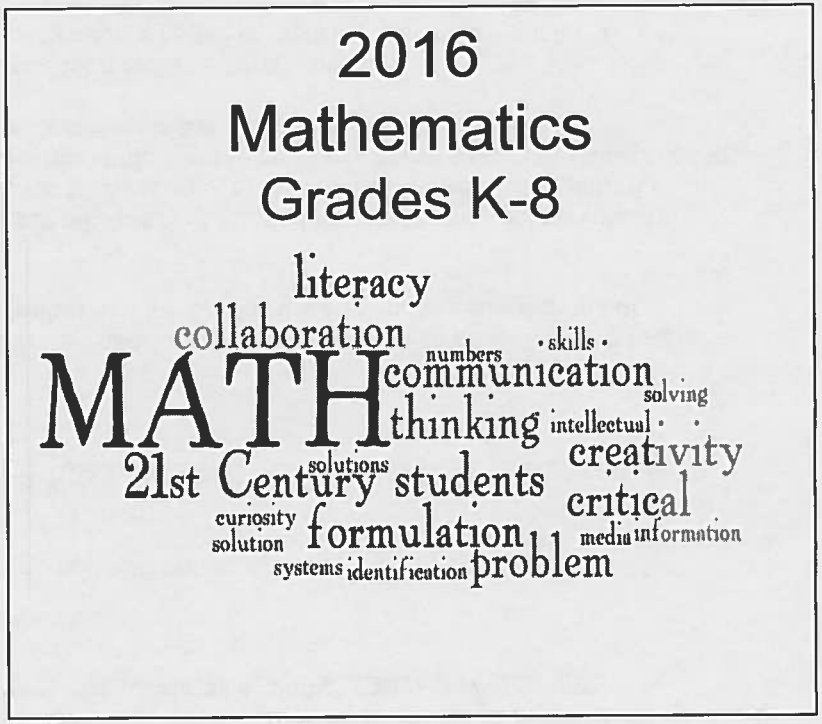
Reviewer ID: CB LKE

Core Mathematics Program- a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Core.

Other Mathematics Program- a program that substantially, but partially, meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Other.

Component Mathematics Program- a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs.
Substantial evidence clearly supports the designation of this program as Component.

Intervention Program- a program designed and intended to target and support students' specific needs.
Substantial evidence clearly supports the designation of this program as Intervention.



- Evaluation Form adapted from Instructional Materials Evaluation Toolkit (IMET).

The IMET was developed by Student Achievement Partners. Educators may use or adapt. http://creativecommons.org/licenses/by/3.0/ Download this tool at http://achievethecore.org/IMET

Instructional Materials Evaluation Tool

Mathematics, Grades K-8

What Are the Purposes of the IMET?

This Math IMET is designed to help educators determine whether instructional materials are aligned to the Shifts and major features of the Common Core State Standards (CCSS). The substantial instructional Shifts (http://www.corestandards.org/other-resources/key-shifts-inmathematics/) at the heart of the Common Core State Standards are:

- **Focus** strongly where the Standards focus
- **Coherence**: Think across grades and link to major topics within the grade
- **Rigor**: In major topics, pursue conceptual understanding, procedural skill and fluency, and application with equal intensity.

The IMET draws directly from the following documents:

- Common Core State Standards for Mathematics (www.corestandards.org/Math)
- Publishers' Criteria for the Common Core State Standards in Mathematics grade K-8 (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)

When to use the IMET

1. Purchasing materials: Many factors go into local purchasing decisions. Alignment to the Standards is a critical factor to consider. This tool is designed to evaluate alignment of instructional materials to the Shifts and the major features of the CCSS. It also provides suggestions of additional indicators to consider in the materials evaluation and purchasing process.

2. Evaluating materials currently in use: The IMET can be used to analyze the degree of alignment of existing materials and help to highlight specific, concrete flaws in alignment. Even where materials and tools currently in use fail to meet one or more of these criteria, the pattern of failure is likely to be informative. States and districts can use the evaluation to create a thoughtful plan to modify or combine existing resources in such a way that students' actual learning experiences approach the focus, coherence, and rigor of the Standards.

3. Developing programs: Those developing new programs can use this tool as guidance for creating aligned curricula.
Please note this tool was designed for evaluating comprehensive curricula (including any supplemental or ancillary materials), but it was not designed for the evaluation of standalone supplemental materials.

Who Uses the IMET?

Evaluating instructional materials requires both subject-matter and pedagogical expertise. Evaluators should be well versed in the Standards (www.corestandards.org/Math) for all grades in which materials are being evaluated. This includes understanding the Major Work of the grade (www.achievethecore/focus), the Supporting and Additional work, how the content fits into the progressions in the Standards (www.achievethecore.org/progressions), and the expectations of the Standards with respect to conceptual understanding, procedural skill and fluency, and application. Evaluators also should be familiar with the substantial instructional Shifts (http:// www.corestandards.org/other-resources/key-shifts-in-mathematics/) of Focus, Coherence and Rigor that are listed above.

Getting Started

Prior to Evaluation

Assemble all of the materials necessary for the evaluation. It is essential for evaluators to have materials for all grades covered by the program, as some criteria cannot be rated without having access to each grade. In addition, each evaluator should have a reference copy of the Common Core State Standards for Mathematics (CCSSM) and the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013).

2015-16 Interim Mathematics Review

Mathematics Evaluation Tool Grades K-8

Publisher: Great Minds

Title of Material: Eureka Math—A Story of Units—Grade 5

Author: Great Minds

ISBN #: 978-1-63255-704-9 **Copyright** 2015

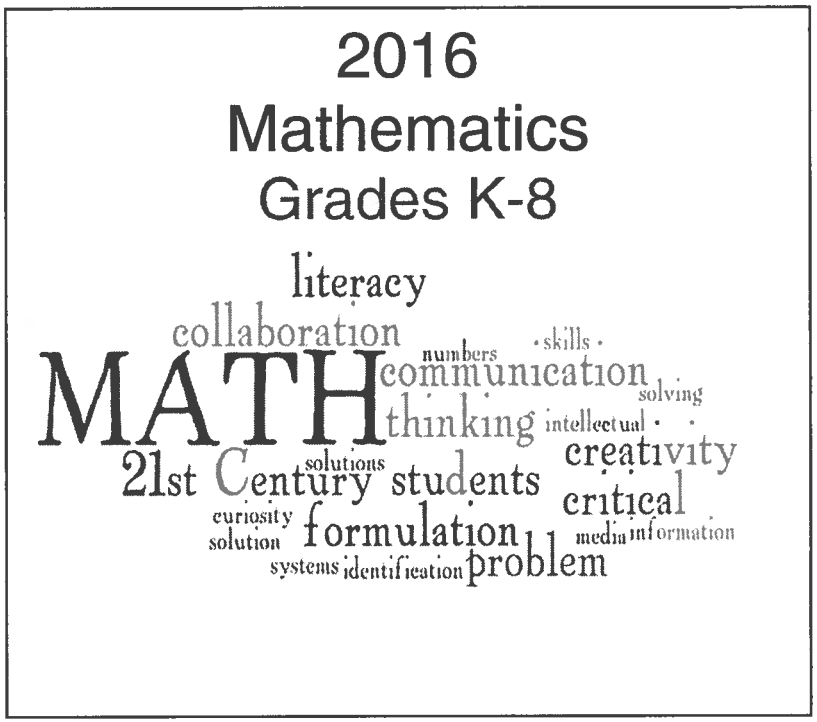
Reviewer ID: CB, LKE

Core Mathematics Program- a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Core.

Other Mathematics Program- a program that substantially, but partially, meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Other.

Component Mathematics Program- a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs.
Substantial evidence clearly supports the designation of this program as Component.

Intervention Program- a program designed and intended to target and support students' specific needs.
Substantial evidence clearly supports the designation of this program as Intervention.



- Evaluation Form adapted from Instructional Materials Evaluation Toolkit (IMET).

The IMET was developed by Student Achievement Partners. Educators may use or adapt. http://creativecommons.org/licenses/by/3.0/ Download this tool at http://achievethecore.org/IMET

Instructional Materials Evaluation Tool

Mathematics, Grades K-8

What Are the Purposes of the IMET?

This Math IMET is designed to help educators determine whether instructional materials are aligned to the Shifts and major features of the Common Core State Standards (CCSS). The substantial instructional Shifts (http://www.corestandards.org/other-resources/key-shifts-inmathematics/) at the heart of the Common Core State Standards are:

- **Focus** strongly where the Standards focus
- **Coherence**: Think across grades and link to major topics within the grade
- **Rigor**: In major topics, pursue conceptual understanding, procedural skill and fluency, and application with equal intensity.

The IMET draws directly from the following documents:

- Common Core State Standards for Mathematics (www.corestandards.org/Math)
- Publishers' Criteria for the Common Core State Standards in Mathematics grade K-8 (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)

When to use the IMET

1. Purchasing materials: Many factors go into local purchasing decisions. Alignment to the Standards is a critical factor to consider. This tool is designed to evaluate alignment of instructional materials to the Shifts and the major features of the CCSS. It also provides suggestions of additional indicators to consider in the materials evaluation and purchasing process.

2. Evaluating materials currently in use: The IMET can be used to analyze the degree of alignment of existing materials and help to highlight specific, concrete flaws in alignment. Even where materials and tools currently in use fail to meet one or more of these criteria, the pattern of failure is likely to be informative. States and districts can use the evaluation to create a thoughtful plan to modify or combine existing resources in such a way that students' actual learning experiences approach the focus, coherence, and rigor of the Standards.

3. Developing programs: Those developing new programs can use this tool as guidance for creating aligned curricula.
Please note this tool was designed for evaluating comprehensive curricula (including any supplemental or ancillary materials), but it was not designed for the evaluation of standalone supplemental materials.

Who Uses the IMET?

Evaluating instructional materials requires both subject-matter and pedagogical expertise. Evaluators should be well versed in the Standards (www.corestandards.org/Math) for all grades in which materials are being evaluated. This includes understanding the Major Work of the grade (www.achievethecore/focus), the Supporting and Additional work, how the content fits into the progressions in the Standards (www.achievethecore.org/progressions), and the expectations of the Standards with respect to conceptual understanding, procedural skill and fluency, and application. Evaluators also should be familiar with the substantial instructional Shifts (http:// www.corestandards.org/other-resources/key-shifts-in-mathematics/) of Focus, Coherence and Rigor that are listed above.

Getting Started

Prior to Evaluation

Assemble all of the materials necessary for the evaluation. It is essential for evaluators to have materials for all grades covered by the program, as some criteria cannot be rated without having access to each grade. In addition, each evaluator should have a reference copy of the Common Core State Standards for Mathematics (CCSSM) and the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013).

Before conducting the evaluation itself, it is important to develop a protocol for the evaluation process. The protocol should include having evaluators study the Publishers' Criteria and the IMET. It will also be helpful for evaluators to get a sense of each program overall before beginning the process. At a minimum, this would include reading the front matter of the text, looking at the table of contents and paging through multiple chapters.

Sections 1-3 below should be completed to produce a comprehensive picture of the strengths and weaknesses of the materials under evaluation. Information about areas in need of improvement or supplementation should be shared with internal and external stakeholders.

Navigating the Tool

Begin with Section 1: Non-Negotiable Alignment Criteria

- The Non-Negotiable Alignment Criteria must each be met in full for materials to be considered aligned to the Shifts and the major features of the Common Core State Standards. Each Non-Negotiable Alignment Criterion has one or more metrics associated with it; every one of these metrics must be met in order for the criterion as a whole to be met.

- Examine the relevant materials and use evidence to rate the materials against each criterion and its associated metric(s).

- Record and explain the evidence upon which the rating is based.

Continue to Section 2: Alignment Criteria

- The Alignment Criteria must each be met for materials to be considered aligned to the Shifts and the major features of the Common Core State Standards. Each Alignment Criterion has one or more metric associated with it; a specific number of these metrics must be met or partially met in order for the criterion as a whole to be met.

- Examine the materials in relation to these criteria, assigning each metric a point value. Rate the criterion as "Meets" or "Does Note Meet" based on the number of points assigned. The more points the materials receive on the alignment Criteria, the better they are aligned.

- Record and explain the evidence upon which the rating is based.

Proceed to Section 4: Indicators of Quality

- Indicators of Quality are important considerations that will help evaluators better understand the overall quality of instructional materials. These considerations are not criteria for alignment to the CCSS, but they provide valuable information about additional program characteristics. Evaluators may want to add their own indicators to the examples provided.

Directions for Non-Negotiable 1

Freedom from Obstacles to Focus

Criterion	Evidence- Give specific examples.	Rating: (Reviewer only.)
Non-Negotiable 1: **Freedom from Obstacles to Focus** **Materials must reflect the content architecture of the Standards by not assessing the topics named before the grade level where they first appear in the Standards.** The Standards foster students' progress to algebra by focusing strongly on arithmetic. Consistent with this focus, certain topics from outside of arithmetic appear only in later grades. Thus, to be aligned, materials must reflect the content architecture of the Standards by not assessing the topics named before the grade level where they first appear in the Standards. In this criterion, "topics named" means the topics that are explicitly named in Metric 1A. No other topics should be added to the list in Metric 1A. (Note that other topics in the standards are addressed in criterion NN2.)	**Required Materials** • Common Core State Standards for Mathematics (www.corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf) • From the materials being evaluated: teacher guides and all assessment components	**Rating this Criterion:** Non-Negotiable 1 is rated as Meets or Does Not Meet. To rate Non-Negotiable 1, begin by rating Metric 1A. Since Metric 1A is the only metric for Non-Negotiable 1, the rating for Non-Negotiable 1 is the same as the rating for Metric 1A. If Metric 1A is rated as Does Not Meet, include evidence of when the named topic(s) is/are assessed. If the metric is rated as Meets, list the grade(s) examined in the evaluation.

Metric NN1A: **Materials re[illegible] the basic architecture of the Standards by not assessing the listed topics before the grade level indicated.** • Probability, including chance, likely outcomes, probability models. (Introduced in the CCSSM in grade 7) • Statistical distributions, including center, variation, clumping, outliers, mean, median, mode, range, quartiles; and statistical association or trends, including two-way tables, bivariate measurement data, scatter plots, trend line, line of best fit, correlation. (Introduced in the CCSSM in grade 6) • Similarity, congruence, or geometric transformations. (Introduced in the CCSSM in grade 8) • Symmetry of shapes, including line/ reflection symmetry, rotational symmetry. (Introduced in the CCSSM in grade 4) **How to Find the Evidence:** Evaluate the table of contents, all chapter tests, all unit tests, and other such assessment components (including rubrics). For context, read Criterion #2 from the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013). NOTE: Grade alignments of other topics are addressed in Non-Negotiable 2, Focus and Coherence.) In this criterion, "topics named" means the topics that are explicitly named in Metric 1A. No other topics should be added to the list in Metric 1A. (Note that other topics in the standards are addressed in criterion NN2.)	**Evidence-** **All standards are re[illegible]ented in all modules except for module 4, which was misprinted as module 6. Module 4 was missing in the teacher edition set.**	**(Reviewer only.)** **__X__Meets** **_____Does Not Meet**
Non-Negotiable 1: Materials must reflect the content architecture of the Standards by not assessing the topics named* before the grade level where they first appear in the Standards. **NN 1** If Metric 1A was rated as Meets, then rate Non-Negotiable 1 as Meets. If Metric 1A was rated as Does Not Meet, then rate Non- Negotiable 1 as Does Not Meet. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion.**(Reviewer only.)** **Before moving to Non-Negotiable 2, record the final Meets or Does Not Meet rating in the Evaluation Summary.**		**(Reviewer only.)** **_X___Meets** **_____Does Not Meet** **Strengths/Weaknesses:** **Module 4 is actually module 6. It is unable to be reviewed thoroughly without module 4.**

Directions for Non-Negotiable 2

Focus and Coherence

Non-Negotiable 2:
Focus and Coherence

Materials must focus coherently on the Major Work of the grade in a way that is consistent with the progressions in the Standards.

Focus and coherence are the two major evidence-based design principles of the Common Core State Standards for Mathematics (CCSSM, p. 3). Focus is necessary in order to fulfill the ambitious promise the states have made to their students by adopting the Standards: greater achievement at the college and career ready level; greater depth of understanding of mathematics; and a rich classroom environment in which reasoning, sense-making, applications, and a range of mathematical practices flourish. In simpler terms, a mile-wide, inch-deep curriculum translates to less time per topic. Less time means less depth and moving on without many students. Thus, materials must focus coherently on the Major Work of the grade in a way that is consistent with the progressions in the Standards.

Required Materials

- Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf)
- Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)
- Focus by Grade Level for the grade being evaluated (www.achievethecore.org/focus)
- From the materials being evaluated: teacher guides, student texts and workbooks

Rating this Criterion:

Non-Negotiable 2 is rated as Meets or Does Not Meet.

To rate Non-Negotiable 2, first rate metrics 2A–2H. Each of these eight metrics must be rated as Meets in order for Non-Negotiable 2 to be rated as Meets. Rate each metric 2A-2H as Meets or Does Not Meet/Insufficient Evidence. If the evidence examined shows that the Criterion is met, then mark the Criterion Meets. If the evidence examined shows that the Criterion is not met—or if there is insufficient evidence to make a determination—then mark the Criterion as Does Not Meet/Insufficient Evidence. Support all ratings with evidence.

Metric NN2A:
In each grade K–8, students and teachers using the materials as designed devote the large majority of time to the Major Work of the grade.

How to Find the Evidence:

Familiarize yourself with the Major Work of the grade being evaluated (see the Focus by Grade Level documents.)

Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, lessons, homework assignments, and assessments. (Evaluate both student and teacher materials.)

Consider time spent on the Major Work of the grade and judge qualitatively whether students and teachers using the materials as designed will devote the large majority of time to the Major Work of the grade.

For context, read Criterion #1 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013)

Evidence-
The pacing guides in the overview of the module topics and lesson objectives provide pacing and logical progression of standards. The majority of time is focused on the major clusters of the grade.

(Reviewer only.)

_X___Meets

____Does Not Meet/

Insufficient Evidence

Metric NN2B: **Supporting work, where present, enhances focus and coherence simultaneously by also engaging students in the Major Work of the grade.** **How to Find the Evidence:** Familiarize yourself with the Major Work and Supporting Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate chapters and lessons that focus on Supporting Work. NOTE: Example of evaluating this Criterion might include looking at whether materials for K–5 generally treat data displays as an occasion for solving grade-level word problems using the four operations (e.g., see 3.MD.B.3); or whether materials for grade 7 take advantage of opportunities to use probability to support ratios, proportions, and percentages. For context, read Criterion #3 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** **Lessons incorporate the major work, the supporting work to enhance student ability. The major work in multiplying fractions showed the supporting work using data to multiply fractions.**	(Reviewer only.) **_X___Meets** **____Does Not Meet/** **Insufficient Evidence**
Metric NN2C: **Materials base content progressions on the grade-by-grade progressions in the Standards. Content from previous or future grades does not unduly interfere with or displace on-grade-level content.** **How to Find the Evidence:** Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, and lessons in both student and teacher materials. NOTE: In some cases it may be possible that aligned materials might address some aspects of a topic in a strategic way before or after the grade level in which the topic is central in the Standards' progressions; for example, a curriculum author might purposefully choose to explore adding fractions with unlike denominators in a way appropriate to grade four, recognizing that this work is not really required until the next grade. However, any such purposeful discrepancies in content progressions should enhance the required learning in each grade; not unduly interfere with or displace grade-level content; and be clearly aimed at helping students meet the Standards as written rather than effectively rewriting the progressions in the Standards. And in all cases, note that Non-Negotiable 1 must be met for materials to be aligned. For context, read Criterion #5a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Modules aligned with grade 5 overview. For example, see CCSS page 34.	(Reviewer only.) **_X___Meets** **____Does Not Meet/** **Insufficient Evidence**

Metric NN2D: **Materials give all students extensive work with on-grade-level problems.** **How to Find the Evidence:** Evaluate both student and teacher materials. If the materials provide resources for differentiated learning, consider whether lower-performing students have opportunities to engage with grade-level problems. Also consider whether higher-performing students are given opportunities to learn current grade-level content in greater depth. For context, read Criterion #5b in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** There are 3-4 problem set pages, plus exit tickets and 1-2 pages of homework per lesson.	(Reviewer only.) _X___Meets ____Does Not Meet/ Insufficient Evidence
Metric NN2E: **Materials relate on-grade-level concepts explicitly to prior knowledge from earlier grades.** **How to Find the Evidence:** Evaluate both student and teacher materials. NOTE: Examples of evaluating this Criterion might include looking at the way the materials extend basic ideas of place value across the decimal point; or the role that properties of operations play when the materials extend arithmetic beyond whole numbers to fractions, variables, and expressions. More generally, cluster headings in the Standards sometimes signal key moments where reorganizing and extending previous knowledge is important in order to accommodate new knowledge (e.g., see cluster headings that use the phrase "Apply and extend previous understanding"). For context, read Criterion #5c in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Each new topic in the table of contents gives focus standards, instructional days, and coherence links. For example, module 2.D.1.	(Reviewer only.) __X__Meets ____Does Not Meet/ Insufficient Evidence
Metric NN2F: **Review of material from previous grades is clearly identified as such to the teacher, and teacher and students can see what their specific responsibility is for the current year.** **How to Find the Evidence:** Evaluate the table of contents, but do not stop there; also evaluate units, chapters, lessons, homework assignments and assessments. (Evaluate both student and teacher materials.) Identify any content from previous grades and check whether it is identified as such. For context, read Criterion #5a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** At the beginning of each lesson in fluency practice standards are identified as current or previously learned standards.	(Reviewer only.) _X___ Meets ____Does Not Meet/ Insufficient Evidence

Metric NN2G: **Materials include learning objectives that are visibly shaped by CCSSM cluster headings.** **How to Find the Evidence:** Select several clusters from the Major Work in the grade being evaluated. Evaluate teacher and student materials in relation to these clusters. For context, read Criterion #6a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** **Curriculum overview lists standards at the beginning of each module. Each lesson lists the standards and they are noted in the alignment chart.**	(Reviewer only.) **_X___Meets** **____Does Not Meet/** **Insufficient Evidence**
Metric NN2H: **Materials include problems and activities that serve to connect two or more clusters in a domain, or two or more domains in a grade, in cases where these connections are natural and important.** **How to Find the Evidence:** In the grade being evaluated, choose two or more clusters or two or more domains for which connections are natural and important. Evaluate the units, chapters, and lessons that deal with the chosen topics, looking for problems and activities that serve to connect the chosen clusters or domains. NOTE: An example of evaluating this Criterion might include looking at whether problems in grade 4 sometimes or often involve students applying their developing computation skills (detailed in domain NBT) in the context of solving word problems (detailed in domain OA). For context, read Criterion #6b in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** **Assessment rubrics at the end of each module show standards that connect two or more domains.** **For example, lesson 5 of module 1 connects to understanding the place value system.**	(Reviewer only.) **_X___Meets** **____Does Not Meet/** **Insufficient Evidence**
Non-Negotiable 2: **Focus and Coherence** **Materials must focus coherently on the Major Work of the grade in a way that is consistent with the progressions in the Standards.** **NN 2** If all Metrics 2A – 2H were rated as Meets, then rate Non-Negotiable 2 as Meets. If one or more Metric was rated Does Not Meet/Insufficient Evidence, then rate Non-Negotiable 2 as Does Not Meet. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)** **Before moving to Alignment Criterion 1, record the final Meets or Does Not Meet rating in the Evaluation Summary.**		(Reviewer only.) **_X___Meets** **____Does Not Meet** **Strengths/Weaknesses:** **Student practice is connected to major works of 5th grade.**

Now continue by evaluating the Alignment Criterion 1 for Rigor and Balance.

Directions for Alignment Criterion 1

Rigor and Balance

Alignment Criterion 1: Rigor and Balance **Materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.** The Standards set expectations for attention to all three aspects of rigor: conceptual understanding, procedural skill and fluency, and applications. Thus, materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.	**Required Materials** • Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf) • Focus by Grade Level for the grade being evaluated (achievethecore.org/focus) • Situation Types for the Operations in Word Problems (achievethecore.org/situation-types) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion:** Alignment Criterion 1 is rated as Meets or Does Not Meet. To rate Alignment Criterion 1, first rate metrics 1A, 1B, and 1C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). For each metric, guiding questions are provided to aid in gathering evidence. Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 1 if the materials rate 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as rigor and balance, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.
Metric AC1A: **The materials support the development of students' conceptual understanding of key mathematical concepts, especially where called for in specific content Standards or cluster headings.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Major Work for the grade being evaluated that relate specifically conceptual understanding to use throughout the questions associated with this metric. NOTE: Some examples of clusters or Standards that call for conceptual understanding include: K.OA.A.1, (1.NBT.B, 1.NBT.C), (2.NBT.A, 2.NBT.B), (3.OA.A.1, 3.OA.A.2), 4.NF.A, (4.NBT.A, 4.NBT.B), 5.NF.B, (5.NBT.A, 5.NBT.B), 6.RP.A, 6.EE.A.3, 7.NS.A, 7.EE.A, 8.EE.B, 8.F.A, 8.G.A Clusters or Standards grouped by parentheses are closely connected and could be analyzed together. For context, read Criterion #4a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	-Choose a cluster/Standard from the Major Work that is aligned to each aspect of rigor and use it to evaluate these metrics. It is most helpful if the same clusters/Standards are chosen for all of the programs being evaluated. (Guidance in choosing clusters/Standards is included in "How to Find the Evidence".)	**Use the questions for AC Metric 1A to evaluate Metric 1A. Record evidence for each question and rate Metric 1A.** **__X__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**

Is conceptual understanding attended to thoroughly where the Standards set explicit expectations for understanding or interpreting? Evaluate lessons, chapter/unit assessments and homework assignments, paying attention to work aligned to Standards that explicitly call for understanding or interpreting. NOTE: Examples of evaluating this Criterion might include looking at how well the multi-digit addition and subtraction algorithms are developed and explained on the basis of place value and properties of operations; or how well the multi-digit multiplication and division algorithms are developed and explained on the basis of place value and properties of operations; or how well solving equations is presented and explained as a process of reasoning.	**Evidence-** **Conceptual understanding is built through the use of opportunistic strategies before moving into more efficient algorithms.** **For example, see grade 5, module 2.**	
Do the materials feature high-quality conceptual problems and conceptual discussion questions? Evaluate lessons, chapter/unit assessments, and homework assignments. NOTE: Example of conceptual problems might include such questions as "Find a number greater than 1/5 and less than 1/4," or "If the divisor does not change and the dividend increases, what happens to the quotient?"	**Evidence-** **Concept development is built through problems done together in whole group lessons and practice in problem set activities in individual work. Time is spent at the end of each lesson to debrief and reflect on what was learned. Exit tickets are used to demonstrate understanding of concepts.**	
Do the materials feature opportunities to identify correspondences across mathematical representations? Evaluate lessons, chapter/unit assessments and homework assignments. NOTE: Examples of evaluating this Criterion might include looking at whether students are supported in identifying correspondences among: the verbal description of a situation, the diagrams that distill its mathematical features, and the equations that model it; or equivalent forms of numbers (e.g., 3 and 6/2) and the number line; or rational number operations and representations of them via models such as the vector model; or the expression that defines a function and the graph that shows the relationship.	**Evidence-** **Exit Tickets after each lesson** **Mid-Module/End Module Assessments** **Concept development modules: Use of manipulatives, pictures, and equations to build understanding.**	
Metric AC1B: **The materials are designed so that students attain the fluencies and procedural skills required by the Standards.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Major Work for the grade being evaluated that relate specifically to fluency and procedural skill to use throughout the questions associated with this metric. NOTE: Some examples of Standards that call for procedural skill and fluency include: K.OA.A.5, 1.OA.C.6, 2.OA.B.2, 2.NBT.B.5, 3.OA.C.7, 3.NBT.A.2, 4.NBT.B.4, 5.NBT.B.5, 6.NS.B.2, and 6.NS.B.3, 6.EE.A, 7.NS.A, 7.EE.A.1,7.EE.B.4a, 8.EE.C.7, 8.EE.C.8b For context, read Criterion #4b in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).		**Use the questions for Metric 1B to evaluate Metric 1 B. Record evidence for each question and rate Metric 1B.** **(Reviewer only.)** **_X___Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**

Is progress toward fluency and procedural skill interwoven with students' developing conceptual understanding of the operations in question? Evaluate lessons, chapter/unit assessments, daily routines, and homework assignments for evidence that the development of fluency and procedural skill is supported by conceptual understanding.	**Evidence-** **Fluency practice occurs in every module at the beginning of each lesson to build fluency in multi-digit arithmetic. Application problems throughout the Modules as well as the problem sets and homework practice help build conceptual understanding and fluency through daily practice and review.** See 1.D.9 of module 1	
Are purely procedural problems and exercises present that include cases in which opportunistic strategies are valuable and generic cases that require efficient algorithms present? Evaluate lessons, chapter/unit assessments, daily routines, and homework assignments. NOTE: Examples of problems in which opportunistic strategies are valuable might include the sum 698 + 240 or the system $x + y = 1$, $2x + 2y = 3$. Examples of generic cases that require efficient algorithms might include the sum 8767+2286 or the system $6y + x = x + 3$, $-x = 1 + 2y$.	**Evidence-** **Conceptual understanding is built through the use of opportunistic strategies before moving into more efficient algorithms. See 3b on page 1.D.12 for module 1 for examples of strategies that use procedures.**	
Do the materials in grades K–6 provide repeated practice toward attainment of fluency Standards? Evaluate lessons, daily routines, and homework assignments for evidence of repeated practice toward attainment of the following K–6 Standards that set an explicit expectation of fluent (accurate and reasonably fast) computation: K.OA.A.5, 1.OA.C.6, 2.OA.B.2, 2.NBT.B.5, 3.OA.C.7, 3.NBT.A.2, 4.NBT.B.4, 5.NBT.B.5, 6.NS.B.2, 6.NS.B.3.	**Evidence-** **Fluency is built in daily practice with the sprint and pattern practices. For example, see 8-9 of module 2, which addresses 5NBT.5.**	
Metric AC1C: **The materials are designed so that teachers and students spend sufficient time working with engaging applications, without losing focus on the Major Work of each grade.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Major Work for the grade being evaluated that relate specifically application to use throughout the questions associated with this metric. NOTE: Some examples of clusters or Standards that call for application include: K.OA.A.2, 1.OA.A, 2.OA.A, 3.OA.A.3, 3.OA.D.8, 4.OA.A.3, 4.NF.B.3d, 4.NF.B.4c, 5.NF.B.6, 5.NF.B.7c, 6.RP.A.3, 6.NS.A.1, 6.EE.B.7, 6.EE.C.9, 7.RP.A, 7.NS.A.3, 7.EE.B.3, 8.EE.C.8c, 8.F.B For context, read Criterion #4c in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** **Application problems are used frequently in the daily lessons to review concepts that have been previously taught. Usually 5-8 minutes of time is planned in each lesson for these problems.**	**Use the questions for Metric 1C to evaluate Metric 1C. Record evidence for each question and rate Metric 1C.** **(Reviewer only.)** **__X__Meets (2)** **_____Partially Meets (1)** **_____Does Not Meet (0)**
Are there are single- and multi-step contextual problems, including non-routine problems, that develop the mathematics of the grade, afford opportunities for practice, and engage students in problem solving? Do the problems attend thoroughly to those places in the content Standards where expectations for multi-step and real-world problems are explicit? Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** **Application problems are given in lessons throughout the modules that provide opportunity to solve single and multi-step problems. The problem sets provided at the end of concept building, homework, and assessments also provide the practice students need to build problem solving skills.**	

Do application problems particularly stress applying the Major Work of the grade? Evaluate lessons, chapter/unit assessments, and homework assignments. NOTE: Examples of evaluating this Criterion might include looking at: how well, by the end of grade 2, students using the materials as designed can represent and solve a full range of one-step addition and subtraction word problems; or how well, by the end of grade 3, students using the materials as designed can represent and solve a full range of one-step multiplication and division word problems; or how well these basic situation types for each operation are carried coherently across the grades, (e.g., with fractions and algebraic expressions); or, in all grades, whether the problems connect concepts, Standards, and domains in ways that are natural and important. For a list of situation types for one-step addition, subtraction, multiplication, and division problems, see Situation Types for the Operations in Word Problems	**Evidence-** **Most lessons in each module have application problems to build skills and understanding in the major works for the grade level.**	
Does modeling build slowly across K–8, with applications that are relatively simple in earlier grades and when students are encountering new content? In grades 6–8, do the problems begin to provide opportunities for students to make their own assumptions or simplifications in order to model a situation mathematically? Read Standard for Mathematical Practice 4, Model with Mathematics. Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** **Each lesson in the modules appears to build on the concept learned in the previous lesson. It is evident that conceptual understanding is built through math talks and practice on skills being taught. Problem Sets, Exit Tickets, and homework provide students with opportunities to apply and show what they have learned.**	

Alignment Criterion 1: Rigor and Balance

Materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.

AC1 Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 out of 6 points, the Criterion has not been met. Check the final rating.
Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)**

Before moving to Alignment Criterion 2, record the final Meets or Does Not Meet rating in the Evaluation Summary.

(Reviewer only.)

__X__Meets

____Does Not Meet

Strengths/Weaknesses:

Directions for Alignment Criterion 2

Standards for Mathematical Practice

Alignment Criterion 2: Standards for Mathematical Practice **Materials must demonstrate authentic connections between content Standards and practice Standards.** The Standards require that designers of instructional materials connect the mathematical practices to mathematical content in instruction. Thus, materials must demonstrate authentic connections between content Standards and practice Standards.	**Required Materials:** • Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf) • Focus by Grade Level for the grade being evaluated (www.achievethecore.org/focus) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion** Alignment Criterion 2 is rated as Meets or Does Not Meet. To rate Alignment Criterion 2, first rate metrics 2A, 2B, and 2C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). For each metric, guiding questions are provided to aid in gathering evidence. Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 2 if the materials earn 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as mathematical practices, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.
Metric AC2A: **Materials address the practice Standards in such a way as to enrich the Major Work of the grade; practices strengthen the focus on Major Work instead of detracting from it, in both teacher and student materials.** **How to Find the Evidence:** Familiarize yourself with the Major Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate teacher and student materials for evidence that the mathematical practices support and connect to the focus of the grade. NOTE: Examples of evaluating this Criterion might include looking at whether, in grades K–5, students using the materials are supported to look for and express regularity in repeated reasoning about the addition table, the multiplication table, the properties of operations, the relationship between addition and subtraction or multiplication and division, and the place value system; or whether, in grades 6–8, students using the materials are supported to look for and express regularity in repeated reasoning about proportional relationships and linear functions. For context, read Criterion #8 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013).	**Evidence-** **Each Teacher Module provides and overview of the standards, which tie in to the major works for the grade level being taught. Each lesson in each module provides fluency practice, application problems, concept building, and problem sets that focus on the major works. The margin notes indicate when each Mathematical Practice is addressed in each lesson. Example Lesson 6 page 1.B.19 Module 1**	**(Reviewer only.)** **_X___Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**

Metric AC2B: **Materials attend to the full meaning of each practice Standard.** **How to Find the Evidence:** For context, read Criterion #7 and Criterion #9 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).		**Use the questions for Metric 2B to evaluate Metric 2B. Record evidence for each question and rate Metric 2B.** **(Reviewer only.)** **__X__Meets (2)** **_____Partially Meets (1)** **_____Does Not Meet (0)**
Over the course of any given year of instruction, is each mathematical practice Standard meaningfully present in the form of assignments, activities, or problems that stimulate students to develop the habits of mind described in the practice Standard? Evaluate lessons, chapter/ unit assessments, and homework assignments for evidence of each mathematical practice being meaningfully present in instruction.	**Evidence-** **Each Module not only provides the focus standards for the grade level, but highlighted standards for mathematical practice as well. For example, Module 2VI. All of the mathematical practices are covered in the modules used throughout the year.**	
Do the materials treat the practice Standards as developing across grades or grade bands? Are the practice Standards in early grades appropriately simple? Do they display an arc of growing sophistication across the grades?	**Evidence-** **Foundational standards are provided in each module that are to be built upon from the previous grade level. This shows the growth of complexity throughout the practices across each grade level.**	
Are there teacher-directed materials that explain the role of the practice Standards in the classroom and in students' mathematical development? Are alignments to practice Standards accurate?	**Evidence-** **In each Module the overview provides a summary of each mathematical practice that will be focused on in the module and an example of how students will show they are meeting the standard practice. Example: Module 2 V lists 4 MP's.**	
Metric AC2C: **Materials support the Standards' emphasis on mathematical reasoning.** **How to Find the Evidence:** For context, read Criterion #10 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).		**Use the questions for Metric 2C to evaluate Metric 2C. Record evidence for each question and rate Metric 2C.** **(Reviewer only.)** **__X__Meets (2)** **_____Partially Meets (1)** **_____Does Not Meet (0)**
Do the materials support students in constructing viable arguments and critiquing the arguments of others concerning grade-level mathematics that is detailed in the content Standards? Read Standard for Mathematical Practice 3. Evaluate teacher and student materials to ensure that students are given opportunities to reason with grade-level mathematics.	**Evidence-** **The curriculum spends a majority of the time on building concepts. This is done through problems provided by the teacher where students participate in a great deal of math talk between each other and the teacher as concepts are introduced. Open ended questions let students explain reasoning. Each lesson also has a student debrief that allows them to reflect on and process what they have learned. They have the opportunity to self-assess their work as well as classmates and they discuss their solutions in the problem sets they have completed at this time. Example: Module 3 Grade 5 Lesson 13.**	

Do the materials support students in producing not only answers and solutions, but also, in a grade-appropriate way, arguments, explanations, diagrams, mathematical models, etc., especially in the Major Work of the grade? Familiarize yourself with the Major Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate teacher and student materials, to understand the types of work students are expected to produce.	**Evidence-** **In the student debrief, students are encouraged to share their strategies used to solve problems and explain why they chose the strategies they did and compare them to others. The debrief allows for explanation and reflection.**	
Do materials explicitly attend to the specialized language of mathematics? Is the language of argument, problem solving, and mathematical explanations taught rather than assumed? Evaluate teacher and student materials, paying attention to how mathematical language is taught. NOTE: Examples of evaluating this Criterion might include looking at whether students are supported in: basing arguments on definitions; using the method of providing a counterexample; or recognizing that examples alone do not establish a general statement.	**Evidence-** **Mathematical terminology is evident in each of the Modules. Key terminology is introduced in the first module and continues throughout the remaining modules. Key terms for the module are given in the module overview.**	
Alignment Criterion 2: **Standards for Mathematical Practice** **Materials must demonstrate authentic connections between content Standards and practice Standards.** **AC2** Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 out of 6 points, the Criterion has not been met. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)** **Before moving to Alignment Criterion 3, record the final Meets or Does Not Meet rating in the Evaluation Summary.**		**(Reviewer only.)** **__X__Meets** **____Does Not Meet** **Strengths/Weaknesses:**

Alignment Criterion 3: **Access to the Standards for All Students** **Materials must provide supports for English Language Learners and other special populations.** Because Standards are for all students, alignment requires thoughtful support to ensure all students are able to meet the Standards. Thus, aligned materials must provide supports for English Language Learners and other special populations.	**Required Materials:** • Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion:** Alignment Criterion 3 is rated as Meets or Does Not Meet. To rate Alignment Criterion 3, first rate metrics 3A, 3B, and 3C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 3 if the materials earn 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as support for special population, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.
Metric AC3A: **Support for English Language Learners and other special populations is thoughtful and helps those students meet the same Standards as all other students. The language in which problems are posed is carefully considered.** **How to Find the Evidence:** Evaluate teacher and student materials, paying attention to supports offered for special populations.	**Evidence-** **Multiple means of engagement and representation represented in each lesson in all modules.** **Example: Grade 5 Module 3 Lesson 9.**	**Reviewer only.)** **_X___Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Metric AC3B: **Materials provide appropriate level and type of scaffolding, differentiation, intervention, and support for a broad range of learners with gradual removal of supports, when needed, to allow students to demonstrate their mathematical understanding independently.** **How to Find the Evidence:** Evaluate teacher and student materials, paying attention to whether materials provide differentiation that will lead all learners to engage with on-grade-level content.	**Evidence-** Note found in the margin of each lesson for teachers to help with scaffolding student engagement. Example: Lesson 9 Module 3 Grade 5 3.C.16	**Reviewer only.)** **__X__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**

Metric AC3C: **Design of lessons recommends and facilitates a mix of instructional approaches for a variety of learners such as using multiple representations (e.g., including models, using a range of questions, checking for understanding, flexible grouping, pair-share).** **How to Find the Evidence:** Evaluate teacher materials, noting instructional approaches suggested for whole class and differentiated lessons and activities.	**Evidence-** **Each lesson is broken down into 3 major components: Fluency Practice, Concept Development, Application problems, Student Debrief, Margin notes for scaffolding. Each component provides a variety of instructional approaches from whole group, small group, partners, and individual practice to develop skills. The Exit Tickets and problem sets help check for understanding and any misconceptions that may occur. This is evident in all modules.**	**Reviewer only.)** **_X___Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Alignment Criterion 3: **Access to the Standards for All Students** **Materials must provide supports for English Language Learners and other special populations.** **AC3** Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 points, the Criterion has not been met. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion.**(Reviewer only.)** **Move to the Evaluation Summary and record the final Meets or Does Not Meet rating .**		**(Reviewer only.)** **__X__Meets** **____Does Not Meet** **Strengths/Weaknesses:**

Once an evaluation for alignment to the Shifts and major features of the CCSS has been conducted using Sections 1-3, it's important to evaluate for overall quality and best practices. A starting list of Indicators of Quality are suggested below. States, districts and others evaluating instructional materials are encouraged to add to this list to ensure materials reflect local contexts. For background information on some of the Indicators of Quality in this section, refer to pp.18–21 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).

Indicators of Quality	Evidence- Give specific examples.	Rating: (Reviewers only.)

1. Lessons are thoughtfully structured and support the teacher leading the class through the learning paths at hand, with active participation by all students in their own learning and in the learning of their classmates.	Evidence- Each lesson is a 60 minute structure where students actively participate in their own learning through the fluency practice provided in each lesson. Conversations take place among teachers and students as they participate in the concept development portion of the lesson. Students also reflect on their own learning as well as the learning of their classmates as they discuss problems from the problem sets in the student debrief. Sprints promote individual growth.	(Reviewer only.) ___X___ Yes _____ No
2. The underlying design of the materials includes both problems and exercises. (In solving problems, students learn new mathematics, whereas in working exercises, students apply what they have already learned to build mastery.) Each problem or exercise has a purpose. NOTE: This Criterion does not require that the problems and exercises be labeled as such.	Evidence- Problem sets and application problems develop understanding of new mathematics. Homework and application problems plus fluency sessions practice previously learned materials as well as new content learned.	(Reviewer only.) ___X___ Yes _____ No
3. Design of assignments is not haphazard: exercises are given in intentional sequences in order to strengthen students' mathematical understanding.	Evidence- Each lesson builds upon the skills and concepts taught in previous lessons throughout each module. Rationale for module sequence is found in the curriculum overview. Scope and sequence provides logical sequence.	(Reviewer only.) ___X___ Yes _____ No
4. There are separate teacher materials that support and reward teacher study including, but not limited to: discussion of the mathematics of the units and the mathematical point of each lesson as it relates to the organizing concepts of the unit, discussion on student ways of thinking and anticipating a variety of students responses, guidance on lesson flow, guidance on questions that prompt students thinking, and discussion of desired mathematical behaviors being elicited among students.	Evidence- The Great Minds website offers teacher support through The Eureka navigator where they can find embedded demonstration videos, homework helpers, pacing and preparation guides, online communities, curriculum maps and overviews, standards checklists, materials lists, and FAQs.	(Reviewer only.) ___X___ Yes _____ No
5. Manipulatives suggested in the materials are faithful representations of the mathematical objects they represent and are connected to written methods.	Evidence- The Great Minds website offers a list of materials and tools (manipulatives) that tie in with each grade level's lessons for the year that can be purchased.	(Reviewer only.) ___X____ Yes _____ No

6. Materials include a variety of curriculum-embedded assessments. Examples include pre-, formative, summative, and self-assessment resources.	**Evidence-** **The curriculum offers a variety of embedded assessments through the daily fluency practice, discussion in concept development activities and problem sets, and exit tickets. Mid-module and End of module assessments are the summative assessments used within each of the modules.**	**(Reviewer only.)** **__X____ Yes** **_____ No**
7. Assessments contain aligned rubrics, answer keys, and scoring guidelines that provide sufficient guidance for interpreting student performance.	**Evidence-** **Teacher editions provide answer keys and rubrics (progression toward mastery) with each module assessment.**	**(Reviewer only.)** **___X___ Yes** **_____ No**
8. Materials assess student proficiency using methods that are accessible and unbiased, including the use of course-level language in student prompts.	**Evidence-** **Mid-module and end of module assessment tasks use the course level terminology and language to prompt students' thinking.**	**(Reviewer only.)** **__X____ Yes** **_____ No**
9. Materials are carefully evaluated by qualified individuals, whose names are listed, in an effort to ensure freedom from mathematical errors and course-level appropriateness.	**Evidence-** **In the News section of the Great Minds website, Louisiana State Superintendent of Education recommends the curriculum. Educators Evaluating the Quality of Instructional Products also found many of Eureka's math lessons exemplar through an evaluation process by Achieve. EdReports.org and Ed Week were also resources that recommend the curriculum.**	**(Reviewer only.)** **___X___ Yes** **_____ No**
10. The visual design supports students in engaging thoughtfully with the subject. Navigation through the text is clear.	**Evidence-** **The modules are printed in black and white and are organized neatly. There are no illustrations aside from those within the problem itself to distract students.**	**(Reviewer only.)** **___X___ Yes** **_____ No**
11. The materials engage parents in appropriate ways. For example, homework assignments in elementary grades, consist of routine problems, practice with getting answers, and fluency-building exercises that parents can easily support.	**Evidence-** **The Great Minds website provides a parent support page that offers videos, homework helpers, module tip sheets, grade road maps, FAQs, and additional resources to help parents support their children's learning.**	**(Reviewer only.)** **___X___ Yes** **_____ No**

Reviewer IMET Evaluation Summary **Title/Level:** _____**Great Minds**____

Publisher: _____**Eureka Math – A Story of Units**_____ **Copyright:** _____**2015**_____
ISBN:___**978-1-63255-704-9**_____

Reviewer ID # _**CB**_____**LKE**____ **Date Review Completed:**____**3/9/2016**_____

Non-Negotiable Criteria- Each Non-Negotiable must be met in order for the Non-Negotiable Alignment Criteria to be met overall.

Non-Negotiable 1: Freedom from Obstacles to Focus	**Non- Negotiable 2: Focus and Coherence**
____**X**___ **Meets** _____ **Does Not Meet**	__**X**___ **Meets** _____ **Does Not Meet**

Non-Negotiable Overall:

__**X**___ **Meets** _____ **Does Not Meet**

Alignment Criteria- Each Alignment Criterion must be met with a sufficient number of points in order for Alignment Criteria to be labeled as "Meets" overall. The more points the materials receive on the Alignment Criteria, the better they are aligned.

Alignment Criterion 1: Rigor and Balance	**Alignment Criterion 2: Standards of Mathematical Practice**	**Alignment Criterion 3: Access to Standards for All Learners**
Points: __**6**___ **of 6 possible.** **(Materials must receive at least 5 of 6 points to align.)** __**X**_____ **Meets** _____ **Does Not Meet**	**Points:** __**6**___ **of 6 possible.** **(Materials must receive at least 5 of 6 points to align.)** ___**X**____ **Meets** _____ **Does Not Meet**	**Points:** __**6**___ **of 6 possible.** **(Materials must receive at least 5 of 6 points to align.)** ____**X**___ **Meets** _____ **Does Not Meet**

Alignment Criteria Overall:

__**X**___ **Meets** _____ **Does Not Meet**

If the materials meet both Non-Negotiables and relevant Alignment Criterion, they are aligned to the Shifts and major features of the Core Standards. **Do the materials meet every Non-Negotiable and Alignment Criterion? ___X__ Yes _____ No**

What are the specific areas of strength and weakness based on this evaluation? Publishers or others modifying or developing assessments can use this information to make improvements and/or to remedy gaps in the alignment of assessment materials.

Eureka Math appears to be written specifically with the standards in mind. Each module builds upon concepts learned across lessons and grade levels. It focuses a great deal of time on building conceptual understanding and giving students the opportunities to practice these skills and build on them to mastery. Many supports are provided for teachers, students, and families through the Great Minds website.

2015-16 Mathematics Interim Review Recommendation & Summary

Publisher Name:	Great Minds
Title:	Eureka Maths - A Story of Units - Grade 6
ISBN #	978-1-63255-707-0
Grade Level(s) or Course:	6th
Reviewer ID:	AP TS

RECOMMENDED AS:

__X__ **Core Mathematics Program-** a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials. Substantial evidence clearly supports the designation of this program as Core.

_____ **Other Mathematics Program-** a program that substantially, but partially, meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for supplemental materials. Substantial evidence clearly supports the designation of this program as Other.

_____ **Component Mathematics Program-** a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs. Substantial evidence clearly supports the designation of this program as Component.

_____ **Intervention Program-** a program designed and intended to target and support students' specific needs. Substantial evidence clearly supports the designation of this program as Intervention.

_____ **Does not meet criteria** for recommendation as a Curricular Material or Online Resource for Mathematics.

EVIDENCE SUMMARY:

FOCUS- The curriculum focuses on the major work of the grade level with supporting work enhancing the major work.

COHERENCE- The coherence of the modules is aligned to the metric. ~~Students learn~~

RIGOR- Materials reflect the expectations for attention to all three aspects of rigor; conceptual understanding, procedural skill and fluency, and applications

CONCEPTUAL UNDERSTANDING- The materials support the development of students' conceptual understanding of key mathmatical concepts

MATHEMATICAL PRACTICES- Materials demonstrate authentic connections between content Standards & Practice Standards.

ACCESSIBILITY OF STANDARDS TO ALL STUDENTS- Excellent scaffolding within each lesson, however more differentiated resources are needed for EL population & Struggling learners.

OTHER: The curriculum is very rigourous. It would be best to adopt K-6 so students have the foundation they need to be successful in subsequent grades.

2015-16 Interim Mathematics Review

Mathematics Evaluation Tool Grades K-8

Publisher: Great Minds

Title of Material: Eureka Math - A Story of Units

Author: Great Minds

ISBN #: 978-1-63255-707-0 **Copyright** 2015

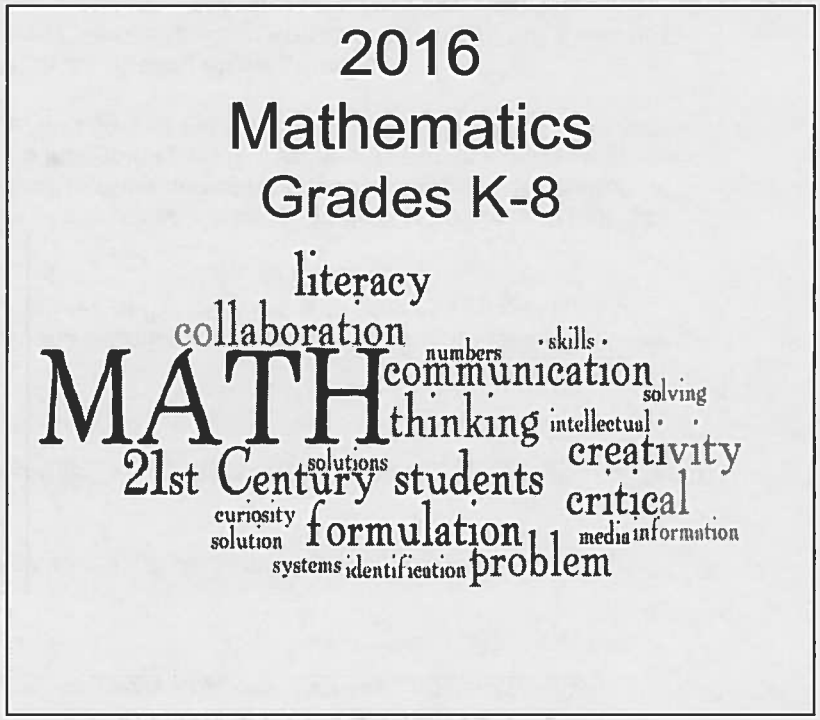
Reviewer ID: TS AP

Core Mathematics Program- a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Core.

Other Mathematics Program- a program that substantially, but partially, meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Other.

Component Mathematics Program- a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs.
Substantial evidence clearly supports the designation of this program as Component.

Intervention Program- a program designed and intended to target and support students' specific needs.
Substantial evidence clearly supports the designation of this program as Intervention.



- Evaluation Form adapted from Instructional Materials Evaluation Toolkit (IMET).

The IMET was developed by Student Achievement Partners. Educators may use or adapt. http://creativecommons.org/licenses/by/3.0/ Download this tool at http://achievethecore.org/IMET

Directions for Non-Negotiable 2

Focus and Coherence

Non-Negotiable 2:

Focus and Coherence

Materials must focus coherently on the Major Work of the grade in a way that is consistent with the progressions in the Standards.

Focus and coherence are the two major evidence-based design principles of the Common Core State Standards for Mathematics (CCSSM, p. 3). Focus is necessary in order to fulfill the ambitious promise the states have made to their students by adopting the Standards: greater achievement at the college and career ready level; greater depth of understanding of mathematics; and a rich classroom environment in which reasoning, sense-making, applications, and a range of mathematical practices flourish. In simpler terms, a mile-wide, inch-deep curriculum translates to less time per topic. Less time means less depth and moving on without many students. Thus, materials must focus coherently on the Major Work of the grade in a way that is consistent with the progressions in the Standards.

Required Materials

- Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf)
- Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)
- Focus by Grade Level for the grade being evaluated (www.achievethecore.org/focus)
- From the materials being evaluated: teacher guides, student texts and workbooks

Rating this Criterion:

Non-Negotiable 2 is rated as Meets or Does Not Meet.

To rate Non-Negotiable 2, first rate metrics 2A–2H. Each of these eight metrics must be rated as Meets in order for Non-Negotiable 2 to be rated as Meets. Rate each metric 2A-2H as Meets or Does Not Meet/Insufficient Evidence. If the evidence examined shows that the Criterion is met, then mark the Criterion Meets. If the evidence examined shows that the Criterion is not met—or if there is insufficient evidence to make a determination—then mark the Criterion as Does Not Meet/Insufficient Evidence. Support all ratings with evidence.

Metric NN2A:
In each grade K–8, students and teachers using the materials as designed devote the large majority of time to the Major Work of the grade.

How to Find the Evidence:

Familiarize yourself with the Major Work of the grade being evaluated (see the Focus by Grade Level documents.)

Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, lessons, homework assignments, and assessments. (Evaluate both student and teacher materials.)

Consider time spent on the Major Work of the grade and judge qualitatively whether students and teachers using the materials as designed will devote the large majority of time to the Major Work of the grade.

For context, read Criterion #1 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013)

Evidence- The curriculum has 6 modules based on CCSS. Modules 1-4 cover the major clusters for 6th grade. Module 5 covers supporting clusters and module 6 covers work relating to major and supporting work.

(Reviewer only.)

[X] **Meets**

[ ] **Does Not Meet/**

Insufficient Evidence

Metric NN2B: **Supporting Work, where present, enhances focus and coherence simultaneously by also engaging students in the Major Work of the grade.** **How to Find the Evidence:** Familiarize yourself with the Major Work and Supporting Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate chapters and lessons that focus on Supporting Work. NOTE: Example of evaluating this Criterion might include looking at whether materials for K–5 generally treat data displays as an occasion for solving grade-level word problems using the four operations (e.g., see 3.MD.B.3); or whether materials for grade 7 take advantage of opportunities to use probability to support ratios, proportions, and percentages. For context, read Criterion #3 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** The major work is front-loaded in the sequential modules, with final 2 modules utilizing supporting work to enhance the major work.	(Reviewer only.) X **Meets** ____ **Does Not Meet/ Insufficient Evidence**
Metric NN2C: **Materials base content progressions on the grade-by-grade progressions in the Standards. Content from previous or future grades does not unduly interfere with or displace on-grade-level content.** **How to Find the Evidence:** Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, and lessons in both student and teacher materials. NOTE: In some cases it may be possible that aligned materials might address some aspects of a topic in a strategic way before or after the grade level in which the topic is central in the Standards' progressions; for example, a curriculum author might purposefully choose to explore adding fractions with unlike denominators in a way appropriate to grade four, recognizing that this work is not really required until the next grade. However, any such purposeful discrepancies in content progressions should enhance the required learning in each grade; not unduly interfere with or displace grade-level content; and be clearly aimed at helping students meet the Standards as written rather than effectively rewriting the progressions in the Standards. And in all cases, note that Non-Negotiable 1 must be met for materials to be aligned. For context, read Criterion #5a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** The curriculum is aligned with common core Standards. In all teacher manuals it states the prerequisite skills needed that are addressed to build upon with Focus Standards Every module has a focus on grade level Content.	(Reviewer only.) X **Meets** ____ **Does Not Meet/ Insufficient Evidence**

Metric NN2D: **Materials give all students extensive work with on-grade-level problems.** **How to Find the Evidence:** Evaluate both student and teacher materials. If the materials provide resources for differentiated learning, consider whether lower-performing students have opportunities to engage with grade-level problems. Also consider whether higher-performing students are given opportunities to learn current grade-level content in greater depth. For context, read Criterion #5b in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Every lesson is scaffolding from simple to complex in the work & support. There are some suggestions for helping struggling students in margins. (minimal)	(Reviewer only.) X Meets ___ Does Not Meet/ Insufficient Evidence
Metric NN2E: **Materials relate on-grade-level concepts explicitly to prior knowledge from earlier grades.** **How to Find the Evidence:** Evaluate both student and teacher materials. NOTE: Examples of evaluating this Criterion might include looking at the way the materials extend basic ideas of place value across the decimal point; or the role that properties of operations play when the materials extend arithmetic beyond whole numbers to fractions, variables, and expressions. More generally, cluster headings in the Standards sometimes signal key moments where reorganizing and extending previous knowledge is important in order to accommodate new knowledge (e.g., see cluster headings that use the phrase "Apply and extend previous understanding"). For context, read Criterion #5c in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Each module overview states the foundational (previous) standards addressed in the module that grade level standards build upon. In each lesson the classwork begins with prerequisite skills and builds up to grade level complexity Example: 6.5 module 1 w/ fluency sprint, then naming shapes, and building to finding areas of parallelograms	(Reviewer only.) X Meets ___ Does Not Meet/ Insufficient Evidence
Metric NN2F: **Review of material from previous grades is clearly identified as such to the teacher, and teacher and students can see what their specific responsibility is for the current year.** **How to Find the Evidence:** Evaluate the table of contents, but do not stop there; also evaluate units, chapters, lessons, homework assignments and assessments. (Evaluate both student and teacher materials.) Identify any content from previous grades and check whether it is identified as such. For context, read Criterion #5a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** The teacher overview clearly identifies material from previous grades. Lessons state learning targets in Teacher manual only. Problem sets match learning objectives. Learning objectives are "revealed" to student through lesson	(Reviewer only.) X Meets ___ Does Not Meet/ Insufficient Evidence

Metric NN2G: **Materials include learning objectives that are visibly shaped by CCSSM cluster headings.** **How to Find the Evidence:** Select several clusters from the Major Work in the grade being evaluated. Evaluate teacher and student materials in relation to these clusters. For context, read Criterion #6a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Curriculum Overview provides standards addressed in lessons Module titles, learning outcomes are shaped by CCSS cluster headings	(Reviewer only.) X Meets ____Does Not Meet/ Insufficient Evidence
Metric NN2H: **Materials include problems and activities that serve to connect two or more clusters in a domain, or two or more domains in a grade, in cases where these connections are natural and important.** **How to Find the Evidence:** In the grade being evaluated, choose two or more clusters or two or more domains for which connections are natural and important. Evaluate the units, chapters, and lessons that deal with the chosen topics, looking for problems and activities that serve to connect the chosen clusters or domains. NOTE: An example of evaluating this Criterion might include looking at whether problems in grade 4 sometimes or often involve students applying their developing computation skills (detailed in domain NBT) in the context of solving word problems (detailed in domain OA). For context, read Criterion #6b in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Assessments rubrics and CCSS standards checklist identify multiple standards being taught in lessons Examples Module 6 – 6.EE.2 w/ 6.SP.1-5 Module 5 - 6.EE.7 w/ 6.NS.8 + 6.G.1-4 Module 4 - 6.EE.1-9 w/ 6.RP.3 & 6.NS.4	(Reviewer only.) X Meets ____Does Not Meet/ Insufficient Evidence
Non-Negotiable 2: **Focus and Coherence** **Materials must focus coherently on the Major Work of the grade in a way that is consistent with the progressions in the Standards.** **NN 2** If all Metrics 2A – 2H were rated as Meets, then rate Non-Negotiable 2 as Meets. If one or more Metric was rated Does Not Meet/Insufficient Evidence, then rate Non-Negotiable 2 as Does Not Meet. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)** **Before moving to Alignment Criterion 1, record the final Meets or Does Not Meet rating in the Evaluation Summary.**		(Reviewer only.) X Meets ____Does Not Meet **Strengths/Weaknesses:**

Now continue by evaluating the Alignment Criterion 1 for Rigor and Balance.

Directions for Alignment Criterion 1

Rigor and Balance

Alignment Criterion 1: Rigor and Balance

Materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.

The Standards set expectations for attention to all three aspects of rigor: conceptual understanding, procedural skill and fluency, and applications. Thus, materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.

Required Materials

- Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf)
- Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)
- Focus by Grade Level for the grade being evaluated (achievethecore.org/focus)
- Situation Types for the Operations in Word Problems (achievethecore.org/situation-types)
- From the materials being evaluated: teacher guides, student texts and workbooks

Rating this Criterion:

Alignment Criterion 1 is rated as Meets or Does Not Meet.

To rate Alignment Criterion 1, first rate metrics 1A, 1B, and 1C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). For each metric, guiding questions are provided to aid in gathering evidence.
Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 1 if the materials rate 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as rigor and balance, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.

Metric AC1A:
The materials support the development of students' conceptual understanding of key mathematical concepts, especially where called for in specific content Standards or cluster headings.

How to Find the Evidence:

Select one or more cluster(s) or Standard(s) from the Major Work for the grade being evaluated that relate specifically conceptual understanding to use throughout the questions associated with this metric. NOTE: Some examples of clusters or Standards that call for conceptual understanding include: K.OA.A.1, (1.NBT.B, 1.NBT.C), (2.NBT.A, 2.NBT.B), (3.OA.A.1, 3.OA.A.2), 4.NF.A, (4.NBT.A, 4.NBT.B), 5.NF.B, (5.NBT.A, 5.NBT.B), 6.RP.A, 6.EE.A.3, 7.NS.A, 7.EE.A, 8.EE.B, 8.F.A, 8.G.A

Clusters or Standards grouped by parentheses are closely connected and could be analyzed together.

For context, read Criterion #4a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).

-Choose a cluster/Standard from the Major Work that is aligned to each aspect of rigor and use it to evaluate these metrics. It is most helpful if the same clusters/Standards are chosen for all of the programs being evaluated. (Guidance in choosing clusters/Standards is included in "How to Find the Evidence".)

Use the questions for AC Metric 1A to evaluate Metric 1A. Record evidence for each question and rate Metric 1A.

☒ **Meets (2)**

____ **Partially Meets (1)**

____ **Does Not Meet (0)**

Is conceptual understanding attended to thoroughly where the Standards set ex[illegible] expectations for understanding or interpreting? Evaluate lessons, chapter/unit assessments and homework assignments, paying attention to work aligned to Standards that explicitly call for understanding or interpreting. NOTE: Examples of evaluating this Criterion might include looking at how well the multi-digit addition and subtraction algorithms are developed and explained on the basis of place value and properties of operations; or how well the multi-digit multiplication and division algorithms are developed and explained on the basis of place value and properties of operations; or how well solving equations is presented and explained as a process of reasoning.	**Evidence-** Lessons are scaffolded well - fro[illegible] simple to complex Uses models & diagrams & moves from concrete to abstract to build conceptual understanding Example; Module 1 lesson 3, Mod 2 lesson 1 Exploratory challenges Module 1 lesson 3, Module 5 lesson 2	
Do the materials feature high-quality conceptual problems and conceptual discussion questions? Evaluate lessons, chapter/unit assessments, and homework assignments. NOTE: Example of conceptual problems might include such questions as "Find a number greater than 1/5 and less than 1/4," or "If the divisor does not change and the dividend increases, what happens to the quotient?"	**Evidence-** Concepts are carried across lessons using 3 lesson types- ~~[illegible]~~ Socratic lessons, Exploration lessons an modeling lessons	
Do the materials feature opportunities to identify correspondences across mathematical representations? Evaluate lessons, chapter/unit assessments and homework assignments. NOTE: Examples of evaluating this Criterion might include looking at whether students are supported in identifying correspondences among: the verbal description of a situation, the diagrams that distill its mathematical features, and the equations that model it; or equivalent forms of numbers (e.g., 3 and 6/2) and the number line; or rational number operations and representations of them via models such as the vector model; or the expression that defines a function and the graph that shows the relationship.	**Evidence-** Manipulatives, pictoral models and concepts carried across lessons disclose connections between standards for grade level.	
Metric AC1B: **The materials are designed so that students attain the fluencies and procedural skills required by the Standards.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Major Work for the grade being evaluated that relate specifically to fluency and procedural skill to use throughout the questions associated with this metric. NOTE: Some examples of Standards that call for procedural skill and fluency include: K.OA.A.5, 1.OA.C.6, 2.OA.B.2, 2.NBT.B.5, 3.OA.C.7, 3.NBT.A.2, 4.NBT.B.4, 5.NBT.B.5, 6.NS.B.2, and 6.NS.B.3, 6.EE.A, 7.NS.A, 7.EE.A.1,7.EE.B.4a, 8.EE.C.7, 8.EE.C.8b For context, read Criterion #4b in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).		**Use the questions for Metric 1B to evaluate Metric 1 B. Record evidence for each question and rate Metric 1B.** **(Reviewer only.)** **____Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**

Is progress toward fluency and procedural skill interwoven with students' developing conceptual understanding of the operations in question? Evaluate lessons, chapter/unit assessments, daily routines, and homework assignments for evidence that the development of fluency and procedural skill is supported by conceptual understanding.	**Evidence-** All lessons build on procedural fluency Use white board exchanges, sprints, and counting activities	
Are purely procedural problems and exercises present that include cases in which opportunistic strategies are valuable and generic cases that require efficient algorithms present? Evaluate lessons, chapter/unit assessments, daily routines, and homework assignments. NOTE: Examples of problems in which opportunistic strategies are valuable might include the sum 698 + 240 or the system x + y = 1, 2x + 2y = 3. Examples of generic cases that require efficient algorithms might include the sum 8767+2286 or the system 6y + x = x + 3, – x = 1 + 2y.	**Evidence-** Daily lessons give opportunity to work with multiple methods to solve problems efficiently.	
Do the materials in grades K–6 provide repeated practice toward attainment of fluency Standards? Evaluate lessons, daily routines, and homework assignments for evidence of repeated practice toward attainment of the following K–6 Standards that set an explicit expectation of fluent (accurate and reasonably fast) computation: K.OA.A.5, 1.OA.C.6, 2.OA.B.2, 2.NBT.B.5, 3.OA.C.7, 3.NBT.A.2, 4.NBT.B.4, 5.NBT.B.5, 6.NS.B.2, 6.NS.B.3.	**Evidence-** Fewer Problems in lessons then other programs but much more in depth & complex	
Metric AC1C: **The materials are designed so that teachers and students spend sufficient time working with engaging applications, without losing focus on the Major Work of each grade.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Major Work for the grade being evaluated that relate specifically application to use throughout the questions associated with this metric. NOTE: Some examples of clusters or Standards that call for application include: K.OA.A.2, 1.OA.A, 2.OA.A, 3.OA.A.3, 3.OA.D.8, 4.OA.A.3, 4.NF.B.3d, 4.NF.B.4c, 5.NF.B.6, 5.NF.B.7c, 6.RP.A.3, 6.NS.A.1, 6.EE.B.7, 6.EE.C.9, 7.RP.A, 7.NS.A.3, 7.EE.B.3, 8.EE.C.8c, 8.F.B For context, read Criterion #4c in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Modeling lessons are one of the three types in this curriculum Students get ample practice using models to solve real world problems	**Use the questions for Metric 1C to evaluate Metric 1C. Record evidence for each question and rate Metric 1C.** **(Reviewer only.)** ✓ **Meets (2)** ____ **Partially Meets (1)** ____ **Does Not Meet (0)**
Are there are single- and multi-step contextual problems, including non-routine problems, that develop the mathematics of the grade, afford opportunities for practice, and engage students in problem solving? Do the problems attend thoroughly to those places in the content Standards where expectations for multi-step and real-world problems are explicit? Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** The lessons guide Students through process of working with single digit problems, to multistep problems in all major work,	

Do application problems particularly stress applying the Major Work of the grade? Evaluate lessons, chapter/unit assessments, and homework assignments. NOTE: Examples of evaluating this Criterion might include looking at: how well, by the end of grade 2, students using the materials as designed can represent and solve a full range of one-step addition and subtraction word problems; or how well, by the end of grade 3, students using the materials as designed can represent and solve a full range of one-step multiplication and division word problems; or how well these basic situation types for each operation are carried coherently across the grades, (e.g., with fractions and algebraic expressions); or, in all grades, whether the problems connect concepts, Standards, and domains in ways that are natural and important. For a list of situation types for one-step addition, subtraction, multiplication, and division problems, see Situation Types for the Operations in Word Problems	**Evidence-** The entire curriculum is focused on the major work of grade 6. Students have ample opportunity to work on application problems with major work Examples: Module 1 lesson 15 Module 4 lesson mid assessment Module 5 lesson 6 unit	
Does modeling build slowly across K–8, with applications that are relatively simple in earlier grades and when students are encountering new content? In grades 6–8, do the problems begin to provide opportunities for students to make their own assumptions or simplifications in order to model a situation mathematically? Read Standard for Mathematical Practice 4, Model with Mathematics. Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** Very strong in modeling throughout and across grade levels.	

Alignment Criterion 1: Rigor and Balance

Materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.

AC1 Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 out of 6 points, the Criterion has not been met. Check the final rating.
Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)**

Before moving to Alignment Criterion 2, record the final Meets or Does Not Meet rating in the Evaluation Summary.

(Reviewer only.)

X **Meets**

____ **Does Not Meet**

Strengths/Weaknesses:

Directions for Alignment Criterion 2

Standards for Mathematical Practice

Alignment Criterion 2: Standards for Mathematical Practice

Materials must demonstrate authentic connections between content Standards and practice Standards.

The Standards require that designers of instructional materials connect the mathematical practices to mathematical content in instruction. Thus, materials must demonstrate authentic connections between content Standards and practice Standards.

Required Materials:

- Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf)
- Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)
- Focus by Grade Level for the grade being evaluated (www.achievethecore.org/focus)
- From the materials being evaluated: teacher guides, student texts and workbooks

Rating this Criterion

Alignment Criterion 2 is rated as Meets or Does Not Meet.

To rate Alignment Criterion 2, first rate metrics 2A, 2B, and 2C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). For each metric, guiding questions are provided to aid in gathering evidence.

Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 2 if the materials earn 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as mathematical practices, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.

Metric AC2A:
Materials address the practice Standards in such a way as to enrich the Major Work of the grade; practices strengthen the focus on Major Work instead of detracting from it, in both teacher and student materials.

How to Find the Evidence:

Familiarize yourself with the Major Work of the grade being evaluated (see the Focus by Grade Level documents.)

Evaluate teacher and student materials for evidence that the mathematical practices support and connect to the focus of the grade.

NOTE: Examples of evaluating this Criterion might include looking at whether, in grades K–5, students using the materials are supported to look for and express regularity in repeated reasoning about the addition table, the multiplication table, the properties of operations, the relationship between addition and subtraction or multiplication and division, and the place value system; or whether, in grades 6–8, students using the materials are supported to look for and express regularity in repeated reasoning about proportional relationships and linear functions.

For context, read Criterion #8 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013).

Evidence-

Mathmatical practices are embedded throughout the curriculum and identified in T.E., They are used to enhance major work

(Reviewer only.)

✓ **Meets (2)**

___ **Partially Meets (1)**

___ **Does Not Meet (0)**

Metric AC2B: **Materials att to the full meaning of each practice Standard.** **How to Find the Evidence:** For context, read Criterion #7 and Criterion #9 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).		**Use the questions for Metric 2B to evaluate Metric 2B. Record evidence for each ques and rate Metric 2B.** **(Reviewer only.)** **X Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Over the course of any given year of instruction, is each mathematical practice Standard meaningfully present in the form of assignments, activities, or problems that stimulate students to develop the habits of mind described in the practice Standard? Evaluate lessons, chapter/ unit assessments, and homework assignments for evidence of each mathematical practice being meaningfully present in instruction.	**Evidence-** Math practices are all covered over the course of the year. See CCSS Standards Check list	
Do the materials treat the practice Standards as developing across grades or grade bands? Are the practice Standards in early grades appropriately simple? Do they display an arc of growing sophistication across the grades?	**Evidence-** They increase in complexity just like the major work	
Are there teacher-directed materials that explain the role of the practice Standards in the classroom and in students' mathematical development? Are alignments to practice Standards accurate?	**Evidence-** Teacher Overviews Provide insight & use relevant to modules	
Metric AC2C: **Materials support the Standards' emphasis on mathematical reasoning.** **How to Find the Evidence:** For context, read Criterion #10 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).		**Use the questions for Metric 2C to evaluate Metric 2C. Record evidence for each question and rate Metric 2C.** **(Reviewer only.)** **X Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Do the materials support students in constructing viable arguments and critiquing the arguments of others concerning grade-level mathematics that is detailed in the content Standards? Read Standard for Mathematical Practice 3. Evaluate teacher and student materials to ensure that students are given opportunities to reason with grade-level mathematics.	**Evidence-** lots of discussion, class & partner work where students question & justify their work — Socratic method lessons	
Do the materials support students in producing not only answers and solutions, but also, in a grade-appropriate way, arguments, explanations, diagrams, mathematical models, etc., especially in the Major Work of the grade? Familiarize yourself with the Major Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate teacher and student materials, to understand the types of work students are expected to produce.	**Evidence-** Yes, Excellent discussion sections in every lesson. Students are required to use a variety of diagrams, mathematical models etc	

Do materials explicitly attend to the specialized language of mathematics? Is the language of argument, problem solving, and mathematical explanations taught rather than assumed? Evaluate teacher and student materials, paying attention to how mathematical language is taught. NOTE: Examples of evaluating this Criterion might include looking at whether students are supported in: basing arguments on definitions; using the method of providing a counterexample; or recognizing that examples alone do not establish a general statement.	**Evidence-** Vocabulary is present in lessons, introduced & explored & used.	

Alignment Criterion 2: Standards for Mathematical Practice

Materials must demonstrate authentic connections between content Standards and practice Standards.

AC2 Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 out of 6 points, the Criterion has not been met. Check the final rating.
Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion.
(Reviewer only.)

Before moving to Alignment Criterion 3, record the final Meets or Does Not Meet rating in the Evaluation Summary.

(Reviewer only.)

X **Meets**

____ **Does Not Meet**

Strengths/Weaknesses:

Alignment Criterion 3: Access to the Standards for All Students

Materials must provide supports for English Language Learners and other special populations.

Because Standards are for all students, alignment requires thoughtful support to ensure all students are able to meet the Standards. Thus, aligned materials must provide supports for English Language Learners and other special populations.

Required Materials:

- Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf)
- Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)
- From the materials being evaluated: teacher guides, student texts and workbooks

Rating this Criterion:

Alignment Criterion 3 is rated as Meets or Does Not Meet.

To rate Alignment Criterion 3, first rate metrics 3A, 3B, and 3C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points).

Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 3 if the materials earn 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as support for special population, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.

Metric AC3A: **Support for English Language Learners and other special populations is thoughtful and helps those students meet the same Standards as all other students. The language in which problems are posed is carefully considered.** **How to Find the Evidence:** Evaluate teacher and student materials, paying attention to supports offered for special populations.	**Evidence-** Differentiation is built into the scaffolding of the lesson, there are marginal notes (minimal) that suggesting elaboration on differentiation	Reviewer only.) ____Meets (2) X Partially Meets (1) ____Does Not Meet (0)
Metric AC3B: **Materials provide appropriate level and type of scaffolding, differentiation, intervention, and support for a broad range of learners with gradual removal of supports, when needed, to allow students to demonstrate their mathematical understanding independently.** **How to Find the Evidence:** Evaluate teacher and student materials, paying attention to whether materials provide differentiation that will lead all learners to engage with on-grade-level content.	**Evidence-** Great Scaffolding within lessons however there are no additional supports for struggling learners	Reviewer only.) X Meets (2) Partially Meets (1) ____Does Not Meet (0)
Metric AC3C: **Design of lessons recommends and facilitates a mix of instructional approaches for a variety of learners such as using multiple representations (e.g., including models, using a range of questions, checking for understanding, flexible grouping, pair-share).** **How to Find the Evidence:** Evaluate teacher materials, noting instructional approaches suggested for whole class and differentiated lessons and activities.	**Evidence-** 3 types of lessons works well to address metric AC3C & variety of approaches to solving problems	Reviewer only.) X Meets (2) ____Partially Meets (1) ____Does Not Meet (0)

Alignment Criterion 3: **Access to the Standards for All Students** **Materials must provide supports for English Language Learners and other special populations.** **AC3** Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 points, the Criterion has not been met. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion.**(Reviewer only.)** **Move to the Evaluation Summary and record the final Meets or Does Not Meet rating .**	**(Reviewer only.)** X **Meets** ____ **Does Not Meet** **Strengths/Weaknesses:**

Once an evaluation for alignment to the Shifts and major features of the CCSS has been conducted using Sections 1-3, it's important to evaluate for overall quality and best practices. A starting list of Indicators of Quality are suggested below. States, districts and others evaluating instructional materials are encouraged to add to this list to ensure materials reflect local contexts. For background information on some of the Indicators of Quality in this section, refer to pp.18–21 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).

Indicators of Quality	**Evidence- Give specific examples.**	**Rating: (Reviewers only.)**
1. Lessons are thoughtfully structured and support the teacher in leading the class through the learning paths at hand, with active participation by all students in their own learning and in the learning of their classmates.	**Evidence-** 45 minute lesson structure, that can be adjusted to classroom needs. Students working in partners & small groups in Exploratory	**(Reviewer only.)** X **Yes** ____ **No**
2. The underlying design of the materials includes both problems and exercises. (In solving problems, students learn new mathematics, whereas in working exercises, students apply what they have already learned to build mastery.) Each problem or exercise has a purpose. **NOTE: This Criterion does not require that the problems and exercises be labeled as such.**	**Evidence-** lessons follow a sequence (simple to complex)	**(Reviewer only.)** X **Yes** ____ **No**

3. Design of assignments is not haphazard: exercises are given in intentional sequences in order to strengthen students' mathematical understanding.	**Evidence-** See Rationale for Module Sequence in Curriculum Overview document.	(Reviewer only.) X Yes ____ No
4. There are separate teacher materials that support and reward teacher study including, but not limited to: discussion of the mathematics of the units and the mathematical point of each lesson as it relates to the organizing concepts of the unit, discussion on student ways of thinking and anticipating a variety of students responses, guidance on lesson flow, guidance on questions that prompt students thinking, and discussion of desired mathematical behaviors being elicited among students.	**Evidence-** Teacher manuals give good background information & ideas on preparing lessons. • Teacher support page, Eureka Navigator & Video Series online (must subscribe)	(Reviewer only.) X Yes ____ No
5. Manipulatives suggested in the materials are faithful representations of the mathematical objects they represent and are connected to written methods.	**Evidence-** Yes, they are faithful representations	(Reviewer only.) X Yes ____ No
6. Materials include a variety of curriculum-embedded assessments. Examples include pre-, formative, summative, and self-assessment resources.	**Evidence-** Exit tickets Mid module assessment End of module assessment class discussions for more formative	(Reviewer only.) X Yes ____ No
7. Assessments contain aligned rubrics, answer keys, and scoring guidelines that provide sufficient guidance for interpreting student performance.	**Evidence-** Answer keys & rubrics w/ Assessments	(Reviewer only.) X Yes ____ No
8. Materials assess student proficiency using methods that are accessible and unbiased, including the use of course-level language in student prompts.	**Evidence-** Some regional vocabulary that needs to be learned ie – tape diagram vs bar models	(Reviewer only.) X Yes ____ No

9. Materials are carefully evaluated by qualified individuals, whose names are listed, in an effort to ensure freedom from mathematical errors and course-level appropriateness.	**Evidence-** yes Consortium of teachers	**(Reviewer only.)** ✓ Yes _____ No
10. The visual design supports students in engaging thoughtfully with the subject. Navigation through the text is clear.	**Evidence-** very straightforward	**(Reviewer only.)** ✓ Yes _____ No
11. The materials engage parents in appropriate ways. For example, homework assignments in elementary grades, consist of routine problems, practice with getting answers, and fluency-building exercises that parents can easily support.	**Evidence-** Parent support page (need more development here)	**(Reviewer only.)** ✓ Yes _____ No

Reviewer IMET Evaluation Summary **Title/Level:** Eureka Math - A Story of Units

Publisher: Great Minds **Copyright:** 2015 **ISBN:** 978-63255-707-0

Reviewer ID # TS AP **Date Review Completed:** 3-8-16

Non-Negotiable Criteria- Each Non-Negotiable must be met in order for the Non-Negotiable Alignment Criteria to be met overall.

Non-Negotiable 1: Freedom from Obstacles to Focus	Non- Negotiable 2: Focus and Coherence
X Meets	X Meets
_____ Does Not Meet	_____ Does Not Meet

Non-Negotiable Overall:

X **Meets** _____ **Does Not Meet**

Alignment Criteria- Each Alignment Criterion must be met with a sufficient number of points in order for Alignment Criteria to be labeled as "Meets" overall. The more points the materials receive on the Alignment Criteria, the better they are aligned.

Alignment Criterion 1: Rigor and Balance	Alignment Criterion 2: Standards of Mathematical Practice	Alignment Criterion 3: Access to Standards for All Learners
Points: 6 of 6 possible. (Materials must receive at least 5 of 6 points to align.)	Points: 6 of 6 possible. (Materials must receive at least 5 of 6 points to align.)	Points: 5 of 6 possible. (Materials must receive at least 5 of 6 points to align.)
X Meets	X Meets	X Meets
_____ Does Not Meet	_____ Does Not Meet	_____ Does Not Meet

Alignment Criteria Overall:

X **Meets** _____ **Does Not Meet**

If the materials meet both Non-Negotiables and relevant Alignment Criterion, they are aligned to the Shifts and major features of the Core Standards. **Do the materials meet every Non-Negotiable and Alignment Criterion? _____ Yes _____ No**

What are the specific areas of strength and weakness based on this evaluation? Publishers or others modifying or developing assessments can use this information to make improvements and/or to remedy gaps in the alignment of assessment materials.

EVIDENCE SUMMARY:

FOCUS- The materials in this curriculum address all Grade 7 Standards and assess appropriate topics.

COHERENCE- 65% of this curriculum focuses coherently on the major work standards for Grade 7. Major work is further enhanced by supporting work, learning objectives, vocabulary, problems, and activities.

RIGOR- Materials reflect the balances in the standards and help students meet the rigorous expectations. Students will gain a deep understanding of concepts.

CONCEPTUAL UNDERSTANDING- Conceptual understanding is attended to thoroughly throughout the curriculum. Fluency and procedural skills are interwoven throughout. Real-life application creates engaging application for students.

MATHEMATICAL PRACTICES- MPs enrich the major work of Grade 7 throughout the curriculum. MPs develop in each lesson to help students gain a better understanding of content. Vocabulary is provided and appropriate.

ACCESSIBILITY OF STANDARDS TO ALL STUDENTS- Scaffolding is provided throughout the curriculum providing added information, tips, and differentiation ideas for diverse learners. ELL's are rarely specifically mentioned.

OTHER:

Strengths: The curriculum flows and is easy to follow. Discussion opportunities are engaging to students and promote participation. Standards are thoroughly addressed. There are great conceptual activities. Students will gain deep understanding.

Weaknesses: There are minimal ELL supports. Text is not visually appealing. Sometimes skills practice is too intense.

2015-16 Interim Mathematics Review

Mathematics Evaluation Tool Grades K-8

Publisher: Great Minds

Title of Material: Eureka Math- A Story of Units - Grade 7

Author: Great Minds

ISBN #: 978-1-63255-710-0 **Copyright** 2015

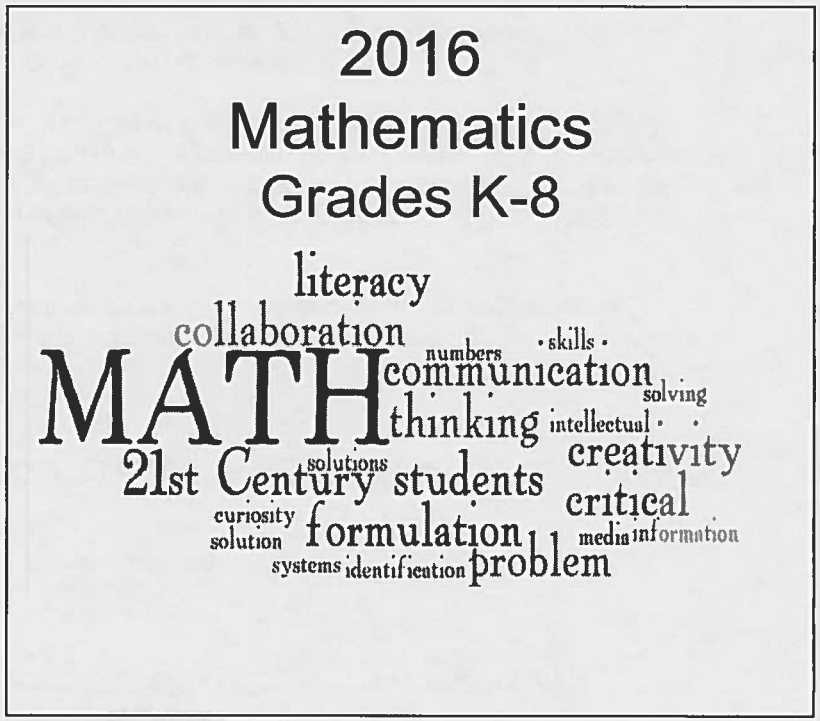
Reviewer ID: HCMN

Core Mathematics Program- a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Core.

Other Mathematics Program- a program that substantially, but partially, meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Other.

Component Mathematics Program- a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs.
Substantial evidence clearly supports the designation of this program as Component.

Intervention Program- a program designed and intended to target and support students' specific needs.
Substantial evidence clearly supports the designation of this program as Intervention.



- Evaluation Form adapted from Instructional Materials Evaluation Toolkit (IMET).

The IMET was developed by Student Achievement Partners. Educators may use or adapt. http://creativecommons.org/licenses/by/3.0/ Download this tool at http://achievethecore.org/IMET

Instructional Materials Evaluation Tool

Mathematics, Grades K-8

What Are the Purposes of the IMET?

This Math IMET is designed to help educators determine whether instructional materials are aligned to the Shifts and major features of the Common Core State Standards (CCSS). The substantial instructional Shifts (http://www.corestandards.org/other-resources/key-shifts-inmathematics/) at the heart of the Common Core State Standards are:

- **Focus** strongly where the Standards focus
- **Coherence**: Think across grades and link to major topics within the grade
- **Rigor**: In major topics, pursue conceptual understanding, procedural skill and fluency, and application with equal intensity.

The IMET draws directly from the following documents:

- Common Core State Standards for Mathematics (www.corestandards.org/Math)
- Publishers' Criteria for the Common Core State Standards in Mathematics grade K-8 (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)

When to use the IMET

1. Purchasing materials: Many factors go into local purchasing decisions. Alignment to the Standards is a critical factor to consider. This tool is designed to evaluate alignment of instructional materials to the Shifts and the major features of the CCSS. It also provides suggestions of additional indicators to consider in the materials evaluation and purchasing process.

2. Evaluating materials currently in use: The IMET can be used to analyze the degree of alignment of existing materials and help to highlight specific, concrete flaws in alignment. Even where materials and tools currently in use fail to meet one or more of these criteria, the pattern of failure is likely to be informative. States and districts can use the evaluation to create a thoughtful plan to modify or combine existing resources in such a way that students' actual learning experiences approach the focus, coherence, and rigor of the Standards.

3. Developing programs: Those developing new programs can use this tool as guidance for creating aligned curricula.
Please note this tool was designed for evaluating comprehensive curricula (including any supplemental or ancillary materials), but it was not designed for the evaluation of standalone supplemental materials.

Who Uses the IMET?

Evaluating instructional materials requires both subject-matter and pedagogical expertise. Evaluators should be well versed in the Standards (www.corestandards.org/Math) for all grades in which materials are being evaluated. This includes understanding the Major Work of the grade (www.achievethecore/focus), the Supporting and Additional work, how the content fits into the progressions in the Standards (www.achievethecore.org/progressions), and the expectations of the Standards with respect to conceptual understanding, procedural skill and fluency, and application. Evaluators also should be familiar with the substantial instructional Shifts (http:// www.corestandards.org/other-resources/key-shifts-in-mathematics/) of Focus, Coherence and Rigor that are listed above.

Getting Started
Prior to Evaluation

Assemble all of the materials necessary for the evaluation. It is essential for evaluators to have materials for all grades covered by the program, as some criteria cannot be rated without having access to each grade. In addition, each evaluator should have a reference copy of the Common Core State Standards for Mathematics (CCSSM) and the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013).

Instructional Materials Evaluation Tool
Mathematics, Grades K-8

What Are the Purposes of the IMET?
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The IMET draws directly from the following documents:
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- Publishers' Criteria for the Common Core State Standards in Mathematics grade K-8 (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)

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Getting Started
Prior to Evaluation
Assemble all of the materials necessary for the evaluation. It is essential for evaluators to have materials for all grades covered by the program, as some criteria cannot be rated without having access to each grade. In addition, each evaluator should have a reference copy of the Common Core State Standards for Mathematics (CCSSM) and the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013).

Before conducting the evaluation itself, it is important to develop a protocol for the evaluation process. The protocol should include having evaluators study the Publishers' Criteria and the IMET. It will also be helpful for evaluators to get a sense of each program overall before beginning the process. At a minimum, this would include reading the front matter of the text, looking at the table of contents and paging through multiple chapters.

Sections 1-3 below should be completed to produce a comprehensive picture of the strengths and weaknesses of the materials under evaluation. Information about areas in need of improvement or supplementation should be shared with internal and external stakeholders.

Navigating the Tool

Begin with Section 1: Non-Negotiable Alignment Criteria

- The Non-Negotiable Alignment Criteria must each be met in full for materials to be considered aligned to the Shifts and the major features of the Common Core State Standards. Each Non-Negotiable Alignment Criterion has one or more metrics associated with it; every one of these metrics must be met in order for the criterion as a whole to be met.

- Examine the relevant materials and use evidence to rate the materials against each criterion and its associated metric(s).

- Record and explain the evidence upon which the rating is based.

Continue to Section 2: Alignment Criteria

- The Alignment Criteria must each be met for materials to be considered aligned to the Shifts and the major features of the Common Core State Standards. Each Alignment Criterion has one or more metric associated with it; a specific number of these metrics must be met or partially met in order for the criterion as a whole to be met.

- Examine the materials in relation to these criteria, assigning each metric a point value. Rate the criterion as "Meets" or "Does Note Meet" based on the number of points assigned. The more points the materials receive on the alignment Criteria, the better they are aligned.

Record and explain the evidence upon which the rating is based.

Proceed to Section 4: Indicators of Quality

- Indicators of Quality are important considerations that will help evaluators better understand the overall quality of instructional materials. These considerations are not criteria for alignment to the CCSS, but they provide valuable information about additional program characteristics. Evaluators may want to add their own indicators to the examples provided.

Directions for Non-Negotiable 1

Freedom from Obstacles to Focus

Criterion	Evidence- Give specific examples.	Rating: (Reviewer only.)
Non-Negotiable 1: **Freedom from Obstacles to Focus** **Materials must reflect the content architecture of the Standards by not assessing the topics named before the grade level where they first appear in the Standards.** The Standards foster students' progress to algebra by focusing strongly on arithmetic. Consistent with this focus, certain topics from outside of arithmetic appear only in later grades. Thus, to be aligned, materials must reflect the content architecture of the Standards by not assessing the topics named before the grade level where they first appear in the Standards. In this criterion, "topics named" means the topics that are explicitly named in Metric 1A. No other topics should be added to the list in Metric 1A. (Note that other topics in the standards are addressed in criterion NN2.)	**Required Materials** • Common Core State Standards for Mathematics (www.corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf) • From the materials being evaluated: teacher guides and all assessment components	**Rating this Criterion:** Non-Negotiable 1 is rated as Meets or Does Not Meet. To rate Non-Negotiable 1, begin by rating Metric 1A. Since Metric 1A is the only metric for Non-Negotiable 1, the rating for Non-Negotiable 1 is the same as the rating for Metric 1A. If Metric 1A is rated as Does Not Meet, include evidence of when the named topic(s) is/are assessed. If the metric is rated as Meets, list the grade(s) examined in the evaluation.

Metric NN1A: **Materials reflect the basic architecture of the Standards by not assessing the listed topics before the grade level indicated.** • Probability, including chance, likely outcomes, probability models. (Introduced in the CCSSM in grade 7) • Statistical distributions, including center, variation, clumping, outliers, mean, median, mode, range, quartiles; and statistical association or trends, including two-way tables, bivariate measurement data, scatter plots, trend line, line of best fit, correlation. (Introduced in the CCSSM in grade 6) • Similarity, congruence, or geometric transformations. (Introduced in the CCSSM in grade 8) • Symmetry of shapes, including line/ reflection symmetry, rotational symmetry. (Introduced in the CCSSM in grade 4) **How to Find the Evidence:** Evaluate the table of contents, all chapter tests, all unit tests, and other such assessment components (including rubrics). For context, read Criterion #2 from the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013). NOTE: Grade alignments of other topics are addressed in Non-Negotiable 2, Focus and Coherence.) In this criterion, "topics named" means the topics that are explicitly named in Metric 1A. No other topics should be added to the list in Metric 1A. (Note that other topics in the standards are addressed in criterion NN2.)	**Evidence-** The curriculum does not assess anything above grade 7 standards. Example: Module 2 assessments cover 7.NS.A.1, 2, 3 7.EE.B.4a There are seldom extensions that introduce content above grade level. Ex. Module 6 Pg. 35 There extensions are not assessed.	**(Reviewer only.)** **__x__Meets** **____Does Not Meet**
Non-Negotiable 1: Materials must reflect the content architecture of the Standards by not assessing the topics named* before the grade level where they first appear in the Standards. **NN 1** If Metric 1A was rated as Meets, then rate Non-Negotiable 1 as Meets. If Metric 1A was rated as Does Not Meet, then rate Non- Negotiable 1 as Does Not Meet. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion.**(Reviewer only.)** **Before moving to Non-Negotiable 2, record the final Meets or Does Not Meet rating in the Evaluation Summary.**		**(Reviewer only.)** **__x__Meets** **____Does Not Meet** **Strengths/Weaknesses:**

Directions for Non-Negotiable 2

Focus and Coherence

Non-Negotiable 2: **Focus and Coherence** **Materials must focus coherently on the Major Work of the grade in a way that is consistent with the progressions in the Standards.** Focus and coherence are the two major evidence-based design principles of the Common Core State Standards for Mathematics (CCSSM, p. 3). Focus is necessary in order to fulfill the ambitious promise the states have made to their students by adopting the Standards: greater achievement at the college and career ready level; greater depth of understanding of mathematics; and a rich classroom environment in which reasoning, sense-making, applications, and a range of mathematical practices flourish. In simpler terms, a mile-wide, inch-deep curriculum translates to less time per topic. Less time means less depth and moving on without many students. Thus, materials must focus coherently on the Major Work of the grade in a way that is consistent with the progressions in the Standards.	**Required Materials** • Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf) • Focus by Grade Level for the grade being evaluated (www.achievethecore.org/focus) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion:** Non-Negotiable 2 is rated as Meets or Does Not Meet. To rate Non-Negotiable 2, first rate metrics 2A–2H. Each of these eight metrics must be rated as Meets in order for Non-Negotiable 2 to be rated as Meets. Rate each metric 2A-2H as Meets or Does Not Meet/Insufficient Evidence. If the evidence examined shows that the Criterion is met, then mark the Criterion Meets. If the evidence examined shows that the Criterion is not met—or if there is insufficient evidence to make a determination—then mark the Criterion as Does Not Meet/Insufficient Evidence. Support all ratings with evidence.
Metric NN2A: **In each grade K–8, students and teachers using the materials as designed devote the large majority of time to the Major Work of the grade.** **How to Find the Evidence:** Familiarize yourself with the Major Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, lessons, homework assignments, and assessments. (Evaluate both student and teacher materials.) Consider time spent on the Major Work of the grade and judge qualitatively whether students and teachers using the materials as designed will devote the large majority of time to the Major Work of the grade. For context, read Criterion #1 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013)	**Evidence-** Approximately 65% of this curriculum focuses on Major Work standards for Grade 7. All of the CCSS for Grade 7 are taught in this curriculum.	**(Reviewer only.)** **__x__Meets** **____Does Not Meet/** **Insufficient Evidence**

Metric NN2B: **Supporting work, where present, enhances focus and coherence simultaneously by also engaging students in the Major Work of the grade.** **How to Find the Evidence:** Familiarize yourself with the Major Work and Supporting Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate chapters and lessons that focus on Supporting Work. NOTE: Example of evaluating this Criterion might include looking at whether materials for K–5 generally treat data displays as an occasion for solving grade-level word problems using the four operations (e.g., see 3.MD.B.3); or whether materials for grade 7 take advantage of opportunities to use probability to support ratios, proportions, and percentages. For context, read Criterion #3 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** The supporting work enhances the focus and coherence of the Major Work throughout the curriculum. Ex. Module 3, Lesson 10 When solving for angle problems, students must set up equations and solve.	**(Reviewer only.)** **__x__Meets** **____Does Not Meet/** **Insufficient Evidence**
Metric NN2C: **Materials base content progressions on the grade-by-grade progressions in the Standards. Content from previous or future grades does not unduly interfere with or displace on-grade-level content.** **How to Find the Evidence:** Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, and lessons in both student and teacher materials. NOTE: In some cases it may be possible that aligned materials might address some aspects of a topic in a strategic way before or after the grade level in which the topic is central in the Standards' progressions; for example, a curriculum author might purposefully choose to explore adding fractions with unlike denominators in a way appropriate to grade four, recognizing that this work is not really required until the next grade. However, any such purposeful discrepancies in content progressions should enhance the required learning in each grade; not unduly interfere with or displace grade-level content; and be clearly aimed at helping students meet the Standards as written rather than effectively rewriting the progressions in the Standards. And in all cases, note that Non-Negotiable 1 must be met for materials to be aligned. For context, read Criterion #5a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** The scope and sequence of this curriculum matches the progression of the Grade 7 standards. This curriculum is grade appropriate throughout. This curriculum is very vigorous and would probably work best if it is used as a grades K-8 curriculum.	**(Reviewer only.)** **__x__Meets** **____Does Not Meet/** **Insufficient Evidence**

Metric NN2D: **Materials gi[illegible]l students extensive work with on-grade-level problems.** **How to Find the Evidence:** Evaluate both student and teacher materials. If the materials provide resources for differentiated learning, consider whether lower-performing students have opportunities to engage with grade-level problems. Also consider whether higher-performing students are given opportunities to learn current grade-level content in greater depth. For context, read Criterion #5b in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** There is differentiation provided for both low-performing students and high-performing students. Module 4: Each lesson includes an opening exercise, discussion, practice problems/activity, closing, and an exit ticket and worksheet/problem sets. During lessons, scaffolding throughout for lower-performing. Pg. 131, 141, 178, 180, etc. Module 4, Lesson 1 scaffolds for higher-performing students during an activity of finding percents. Pg. 18.	**(Reviewer only.)** **__x__Meets** **____Does Not Meet/** **Insufficient Evidence**
Metric NN2E: **Materials relate on-grade-level concepts explicitly to prior knowledge from earlier grades.** **How to Find the Evidence:** Evaluate both student and teacher materials. NOTE: Examples of evaluating this Criterion might include looking at the way the materials extend basic ideas of place value across the decimal point; or the role that properties of operations play when the materials extend arithmetic beyond whole numbers to fractions, variables, and expressions. More generally, cluster headings in the Standards sometimes signal key moments where reorganizing and extending previous knowledge is important in order to accommodate new knowledge (e.g., see cluster headings that use the phrase "Apply and extend previous understanding"). For context, read Criterion #5c in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Throughout. Concepts are linked to and extend previous understanding of content. Each module makes connections and builds. Module 3 teaches expressions and equations, then teaches inequalities, and then has students graph inequalities. The TG explains how modules are connected to previous learning. Ex. Ratios/Proportions build on what students learned in Grade 6.	**(Reviewer only.)** **__x__Meets** **____Does Not Meet/** **Insufficient Evidence**
Metric NN2F: **Review of material from previous grades is clearly identified as such to the teacher, and teacher and students can see what their specific responsibility is for the current year.** **How to Find the Evidence:** Evaluate the table of contents, but do not stop there; also evaluate units, chapters, lessons, homework assignments and assessments. (Evaluate both student and teacher materials.) Identify any content from previous grades and check whether it is identified as such. For context, read Criterion #5a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** In general, I was unable to find any specific mention of review of material from previous grades; however, I did find mention of it in the module overviews. Curriculum map, module sequence rationale, and alignment chart shows teacher what is taught in each grade.	**(Reviewer only.)** **__x__Meets** **____Does Not Meet/** **Insufficient Evidence**

Metric NN2G: **Materials include learning objectives that are visibly shaped by CCSSM cluster headings.** **How to Find the Evidence:** Select several clusters from the Major Work in the grade being evaluated. Evaluate teacher and student materials in relation to these clusters. For context, read Criterion #6a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Each module starts with an overview of standards being covered (MP/Vocab) Module 4 Pg. 3-9 Each topic identifies focus standards. Module 4 Pg. 13-14, 104-406, 176-177, 234-235. Each lesson shows student outcomes/learning objectives. Module 4 Pg. 15, 28, 42,, 62, 76, 87, 107, etc.	**(Reviewer only.)** **__x__Meets** **____Does Not Meet/** **Insufficient Evidence**
Metric NN2H: **Materials include problems and activities that serve to connect two or more clusters in a domain, or two or more domains in a grade, in cases where these connections are natural and important.** **How to Find the Evidence:** In the grade being evaluated, choose two or more clusters or two or more domains for which connections are natural and important. Evaluate the units, chapters, and lessons that deal with the chosen topics, looking for problems and activities that serve to connect the chosen clusters or domains. NOTE: An example of evaluating this Criterion might include looking at whether problems in grade 4 sometimes or often involve students applying their developing computation skills (detailed in domain NBT) in the context of solving word problems (detailed in domain OA). For context, read Criterion #6b in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** In general, the curriculum includes problems and activities that serve to connect two or more clusters in a domain throughout. Ex. Equations are used to solve for missing angles in geometry.	**(Reviewer only.)** **__x__Meets** **____Does Not Meet/** **Insufficient Evidence**
Non-Negotiable 2: **Focus and Coherence** **Materials must focus coherently on the Major Work of the grade in a way that is consistent with the progressions in the Standards.** **NN 2** If all Metrics 2A – 2H were rated as Meets, then rate Non-Negotiable 2 as Meets. If one or more Metric was rated Does Not Meet/Insufficient Evidence, then rate Non-Negotiable 2 as Does Not Meet. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)** **Before moving to Alignment Criterion 1, record the final Meets or Does Not Meet rating in the Evaluation Summary.**		**(Reviewer only.)** **__x__Meets** **____Does Not Meet** **Strengths/Weaknesses:**

Now continue by evaluating the Alignment Criterion 1 for Rigor and Balance.

Directions for Alignment Criterion 1

Rigor and Balance

Alignment Criterion 1:
Rigor and Balance

Materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.

The Standards set expectations for attention to all three aspects of rigor: conceptual understanding, procedural skill and fluency, and applications. Thus, materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.

Required Materials

- Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf)
- Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)
- Focus by Grade Level for the grade being evaluated (achievethecore.org/focus)
- Situation Types for the Operations in Word Problems (achievethecore.org/situation-types)
- From the materials being evaluated: teacher guides, student texts and workbooks

Rating this Criterion:

Alignment Criterion 1 is rated as Meets or Does Not Meet.

To rate Alignment Criterion 1, first rate metrics 1A, 1B, and 1C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). For each metric, guiding questions are provided to aid in gathering evidence.
Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 1 if the materials rate 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as rigor and balance, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.

Metric AC1A:
The materials support the development of students' conceptual understanding of key mathematical concepts, especially where called for in specific content Standards or cluster headings.

How to Find the Evidence:

Select one or more cluster(s) or Standard(s) from the Major Work for the grade being evaluated that relate specifically conceptual understanding to use throughout the questions associated with this metric. NOTE: Some examples of clusters or Standards that call for conceptual understanding include: K.OA.A.1, (1.NBT.B, 1.NBT.C), (2.NBT.A, 2.NBT.B), (3.OA.A.1, 3.OA.A.2), 4.NF.A, (4.NBT.A, 4.NBT.B), 5.NF.B, (5.NBT.A, 5.NBT.B), 6.RP.A, 6.EE.A.3, 7.NS.A, 7.EE.A, 8.EE.B, 8.F.A, 8.G.A

Clusters or Standards grouped by parentheses are closely connected and could be analyzed together.

For context, read Criterion #4a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).

-Choose a cluster/Standard from the Major Work that is aligned to each aspect of rigor and use it to evaluate these metrics. It is most helpful if the same clusters/Standards are chosen for all of the programs being evaluated. (Guidance in choosing clusters/Standards is included in "How to Find the Evidence".)

Use the questions for AC Metric 1A to evaluate Metric 1A. Record evidence for each question and rate Metric 1A.

__x__Meets (2)

____Partially Meets (1)

____Does Not Meet (0)

Is conceptual understanding attended to thoroughly where the Standards set e expectations for understanding or interpreting? Evaluate lessons, chapter/unit assessments and homework assignments, paying attention to work aligned to Standards that explicitly call for understanding or interpreting. NOTE: Examples of evaluating this Criterion might include looking at how well the multi-digit addition and subtraction algorithms are developed and explained on the basis of place value and properties of operations; or how well the multi-digit multiplication and division algorithms are developed and explained on the basis of place value and properties of operations; or how well solving equations is presented and explained as a process of reasoning.	**Evidence-** Conceptual understanding it attended to thoroughly throughout the curriculum. Module 1: Pg. 17 "How do you know..." Pg. 25 "How many other ways can the answer be determined" Pg. 40 "What can you infer about..." Pg. 76 "What does that mean..."	
Do the materials feature high-quality conceptual problems and conceptual discussion questions? Evaluate lessons, chapter/unit assessments, and homework assignments. NOTE: Example of conceptual problems might include such questions as "Find a number greater than 1/5 and less than 1/4," or "If the divisor does not change and the dividend increases, what happens to the quotient?"	**Evidence-** Throughout. Module 6: Pg. 58 "Why do we take time to set u a correspondence?" Pg. 93 Discussion about drawing triangles, "If...Then..."	
Do the materials feature opportunities to identify correspondences across mathematical representations? Evaluate lessons, chapter/unit assessments and homework assignments. NOTE: Examples of evaluating this Criterion might include looking at whether students are supported in identifying correspondences among: the verbal description of a situation, the diagrams that distill its mathematical features, and the equations that model it; or equivalent forms of numbers (e.g., 3 and 6/2) and the number line; or rational number operations and representations of them via models such as the vector model; or the expression that defines a function and the graph that shows the relationship.	**Evidence-** Throughout. This curriculum uses a variety of correspondences to represent math including verbal descriptions, diagrams, graphing, and equations. Module 4: Pg. 30 uses a tape diagram and double number line to find the percent equations. Module 2: Pg. 214-235 going from words to equations to expressions.	
Metric AC1B: **The materials are designed so that students attain the fluencies and procedural skills required by the Standards.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Major Work for the grade being evaluated that relate specifically to fluency and procedural skill to use throughout the questions associated with this metric. NOTE: Some examples of Standards that call for procedural skill and fluency include: K.OA.A.5, 1.OA.C.6, 2.OA.B.2, 2.NBT.B.5, 3.OA.C.7, 3.NBT.A.2, 4.NBT.B.4, 5.NBT.B.5, 6.NS.B.2, and 6.NS.B.3, 6.EE.A, 7.NS.A, 7.EE.A.1,7.EE.B.4a, 8.EE.C.7, 8.EE.C.8b For context, read Criterion #4b in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Is progress toward fluency and procedural skill interwoven with students' developing conceptual understanding of the operations in question? Are purely procedural problems and exercises present that include cases in which opportunistic strategies are valuable and generic cases that require efficient algorithms present? Do the materials in grades K-6 provide repeated practice toward attainment of fluency Standards?	**Use the questions for Metric 1B to evaluate Metric 1 B. Record evidence for each question and rate Metric 1B.** **(Reviewer only.)** **__x__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**

Is progress toward fluency and procedural skill interwoven with students' develo conceptual understanding of the operations in question? Evaluate lessons, chapter/unit assessments, daily routines, and homework assignments for evidence that the development of fluency and procedural skill is supported by conceptual understanding.	**Evidence-** Fluency and procedural skills are interwoven with conceptual understanding throughout.	
Are purely procedural problems and exercises present that include cases in which opportunistic strategies are valuable and generic cases that require efficient algorithms present? Evaluate lessons, chapter/unit assessments, daily routines, and homework assignments. NOTE: Examples of problems in which opportunistic strategies are valuable might include the sum 698 + 240 or the system x + y = 1, 2x + 2y = 3. Examples of generic cases that require efficient algorithms might include the sum 8767+2286 or the system 6y + x = x + 3, – x = 1 + 2y.	**Evidence-** Procedural problems and exercises are present in lessons and problem sets. Module 6 Pg. 282 algorithms for volume. Module 4 Pg. 122 algorithm for percent error.	
Do the materials in grades K–6 provide repeated practice toward attainment of fluency Standards? Evaluate lessons, daily routines, and homework assignments for evidence of repeated practice toward attainment of the following K–6 Standards that set an explicit expectation of fluent (accurate and reasonably fast) computation: K.OA.A.5, 1.OA.C.6, 2.OA.B.2, 2.NBT.B.5, 3.OA.C.7, 3.NBT.A.2, 4.NBT.B.4, 5.NBT.B.5, 6.NS.B.2, 6.NS.B.3.	**Evidence-** N/A	
Metric AC1C: **The materials are designed so that teachers and students spend sufficient time working with engaging applications, without losing focus on the Major Work of each grade.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Major Work for the grade being evaluated that relate specifically application to use throughout the questions associated with this metric. NOTE: Some examples of clusters or Standards that call for application include: K.OA.A.2, 1.OA.A, 2.OA.A, 3.OA.A.3, 3.OA.D.8, 4.OA.A.3, 4.NF.B.3d, 4.NF.B.4c, 5.NF.B.6, 5.NF.B.7c, 6.RP.A.3, 6.NS.A.1, 6.EE.B.7, 6.EE.C.9, 7.RP.A, 7.NS.A.3, 7.EE.B.3, 8.EE.C.8c, 8.F.B For context, read Criterion #4c in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Real Life Application creates engaging application for students throughout each module. Module 4 Pg. 161 Tax, commissions, fees Module 6 Pg. 298 real world volume problems Module 1 Pg. 81 problem set for proportional relationships with equations. Module 2 Pg. 236 modeling college investments. Module 5 Pg. 178 random sampling with words in books Module 3 Pg. 101 real world distance problems.	**Use the questions for Metric 1C to evaluate Metric 1C. Record evidence for each question and rate Metric 1C.** **(Reviewer only.)** **__x__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Are there are single- and multi-step contextual problems, including non-routine problems, that develop the mathematics of the grade, afford opportunities for practice, and engage students in problem solving? Do the problems attend thoroughly to those places in the content Standards where expectations for multi-step and real-world problems are explicit? Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** Throughout Geometry – finding perimeter, area. Students must write equations, solve, and make sense of real world problems.	

Do application problems particularly stress applying the Major Work of the grade? Eva[illegible]essons, chapter/unit assessments, and homework assignments. NOTE: Examples of evaluating this Criterion might include looking at: how well, by the end of grade 2, students using the materials as designed can represent and solve a full range of one-step addition and subtraction word problems; or how well, by the end of grade 3, students using the materials as designed can represent and solve a full range of one-step multiplication and division word problems; or how well these basic situation types for each operation are carried coherently across the grades, (e.g., with fractions and algebraic expressions); or, in all grades, whether the problems connect concepts, Standards, and domains in ways that are natural and important. For a list of situation types for one-step addition, subtraction, multiplication, and division problems, see Situation Types for the Operations in Word Problems	**Evidence-** Throughout Example: In module 2: students are introduced to 2-step equations. Later they have to write their own equations to solve angle problems (Module 3). They again apply this major work standard in Module 6 when solving for surface area, area, and volume.	
Does modeling build slowly across K–8, with applications that are relatively simple in earlier grades and when students are encountering new content? In grades 6–8, do the problems begin to provide opportunities for students to make their own assumptions or simplifications in order to model a situation mathematically? Read Standard for Mathematical Practice 4, Model with Mathematics. Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** Throughout Module 3 – students model using rectangular arrays. Module 4 – double line graphs	

Alignment Criterion 1:

Rigor and Balance

Materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.

AC1 Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 out of 6 points, the Criterion has not been met. Check the final rating.
Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)**

Before moving to Alignment Criterion 2, record the final Meets or Does Not Meet rating in the Evaluation Summary.

(Reviewer only.)

__x__Meets

____Does Not Meet

Strengths/Weaknesses:

Directions for Alignment Criterion 2

Standards for Mathematical Practice

Alignment Criterion 2: Standards for Mathematical Practice

Materials must demonstrate authentic connections between content Standards and practice Standards.

The Standards require that designers of instructional materials connect the mathematical practices to mathematical content in instruction. Thus, materials must demonstrate authentic connections between content Standards and practice Standards.

Required Materials:

- Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf)
- Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)
- Focus by Grade Level for the grade being evaluated (www.achievethecore.org/focus)
- From the materials being evaluated: teacher guides, student texts and workbooks

Rating this Criterion

Alignment Criterion 2 is rated as Meets or Does Not Meet.

To rate Alignment Criterion 2, first rate metrics 2A, 2B, and 2C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). For each metric, guiding questions are provided to aid in gathering evidence.

Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 2 if the materials earn 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as mathematical practices, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.

Metric AC2A: **Materials address the practice Standards in such a way as to enrich the Major Work of the grade; practices strengthen the focus on Major Work instead of detracting from it, in both teacher and student materials.** **How to Find the Evidence:** Familiarize yourself with the Major Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate teacher and student materials for evidence that the mathematical practices support and connect to the focus of the grade. NOTE: Examples of evaluating this Criterion might include looking at whether, in grades K–5, students using the materials are supported to look for and express regularity in repeated reasoning about the addition table, the multiplication table, the properties of operations, the relationship between addition and subtraction or multiplication and division, and the place value system; or whether, in grades 6–8, students using the materials are supported to look for and express regularity in repeated reasoning about proportional relationships and linear functions. For context, read Criterion #8 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013).	**Evidence-** Enrich Major Work of grade 7 throughout. 1. Making sense of problems and persevere in solving. Module 1 Lesson 13 Pg. 117 Completing tables by finding equivalent ratios. 2. Reason abstractly and quantitatively. Module 3 Pg. 241 Ratio for pi. Module 3 Pg. 250 algorithm for area of circle. 3. Construct viable arguments/critique reasoning of others. Module 5 Pg. 71 probabilities of compound events. 4. Model with mathematics. Module 5 Pg. 62 tree diagrams to model sample space 5. Use appropriate tools strategically. Module 6 Pg. 46 protractor for angles Module 6 Pg. 69 compass to draw shapes 6. Attend to precision. Module 2 Pg. 169 applying operations to solve equations 7. Look for and make use of structure. Module 4 Pg. 209 uses scale drawing to find scale factor 8. Look for and express regularity in repeated reasoning. Module 1 Lesson 16 Pg. 142 relating scale drawings to ratios and rates.	(Reviewer only.) __x__**Meets (2)** ____**Partially Meets (1)** ____**Does Not Meet (0)**
Metric AC2B: **Materials attend to the full meaning of each practice Standard.** **How to Find the Evidence:** For context, read Criterion #7 and Criterion #9 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).		**Use the questions for Metric 2B to evaluate Metric 2B. Record evidence for each question and rate Metric 2B.** **(Reviewer only.)** __x__**Meets (2)**
Over the course of any given year of instruction, is each mathematical practice Standard meaningfully present in the form of assignments, activities, or problems that stimulate students to develop the habits of mind described in the practice Standard? Evaluate lessons, chapter/ unit assessments, and homework assignments for evidence of each mathematical practice being meaningfully present in instruction.	**Evidence-** Mathematical practices are shown throughout the curriculum. Every MP is used and MPs are labeled in the guided instruction in the Teacher's Edition.	____**Partially Meets (1)** ____**Does Not Meet (0)**

Do the materials treat the practice Standards as developing across grades or grade bands? Are the practice Standards in early grades appropriately simple? Do they display an arc of growing sophistication across the grades?	**Evidence-** Mathematical practices develop in each lesson to help students gain a better understanding of the curriculum.	
Are there teacher-directed materials that explain the role of the practice Standards in the classroom and in students' mathematical development? Are alignments to practice Standards accurate?	**Evidence-** The Module Overview explains each mathematical practice and how it is implemented in the lessons. Module 1: Pg. 6 Module 2: Pg. 7-8 Module 3: Pg. 8-9 Module 4: Pg. 7-9 Module 5: Pg. 6 Module 6: Pg. 5-6	
Metric AC2C: **Materials support the Standards' emphasis on mathematical reasoning.** **How to Find the Evidence:** For context, read Criterion #10 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).		**Use the questions for Metric 2C to evaluate Metric 2C. Record evidence for each question and rate Metric 2C.** **(Reviewer only.)** **__x__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Do the materials support students in constructing viable arguments and critiquing the arguments of others concerning grade-level mathematics that is detailed in the content Standards? Read Standard for Mathematical Practice 3. Evaluate teacher and student materials to ensure that students are given opportunities to reason with grade-level mathematics.	**Evidence-** Every lesson includes class discussion that promotes participation and reasoning. Module 3: Pg. 73, 100, 131, 149, etc.	
Do the materials support students in producing not only answers and solutions, but also, in a grade-appropriate way, arguments, explanations, diagrams, mathematical models, etc., especially in the Major Work of the grade? Familiarize yourself with the Major Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate teacher and student materials, to understand the types of work students are expected to produce.	**Evidence-** Throughout. Module 4 Pg. 78 using double number line to set up algorithms. Module 4 Pg. 122 students have to explain their reasoning about percent, absolute value, etc. Exit Tickets - throughout	
Do materials explicitly attend to the specialized language of mathematics? Is the language of argument, problem solving, and mathematical explanations taught rather than assumed? Evaluate teacher and student materials, paying attention to how mathematical language is taught. NOTE: Examples of evaluating this Criterion might include looking at whether students are supported in: basing arguments on definitions; using the method of providing a counterexample; or recognizing that examples alone do not establish a general statement.	**Evidence-** Vocabulary is provided in the module overview in every module book and terminology is used throughout. Terminology in module overview Pg. 6-7. Vocab in each lesson Pg. 17, 37, 65, etc. Lesson 8 Pg. 4 has students provide arguments/explanations when finding the difference between theoretical and estimated probabilities.	

Alignment Criterion 2:
Standards for Mathematical Practice

Materials must demonstrate authentic connections between content Standards and practice Standards.

AC2 Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 out of 6 points, the Criterion has not been met. Check the final rating.
Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion.
(Reviewer only.)

Before moving to Alignment Criterion 3, record the final Meets or Does Not Meet rating in the Evaluation Summary.

(Reviewer only.)

__x__Meets

____Does Not Meet

Strengths/Weaknesses:

Alignment Criterion 3:
Access to the Standards for All Students

Materials must provide supports for English Language Learners and other special populations.

Because Standards are for all students, alignment requires thoughtful support to ensure all students are able to meet the Standards. Thus, aligned materials must provide supports for English Language Learners and other special populations.

Required Materials:

- Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf)
- Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)
- From the materials being evaluated: teacher guides, student texts and workbooks

Rating this Criterion:
Alignment Criterion 3 is rated as Meets or Does Not Meet.

To rate Alignment Criterion 3, first rate metrics 3A, 3B, and 3C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points).

Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 3 if the materials earn 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as support for special population, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.

Metric AC3A:
Support for English Language Learners and other special populations is thoughtful and helps those students meet the same Standards as all other students. The language in which problems are posed is carefully considered.

How to Find the Evidence:
Evaluate teacher and student materials, paying attention to supports offered for special populations.

Evidence-

Module 4, Lesson 8, Pg. 122

Out of Modules 4, 5, and 6, this was the only time ELLs were specifically noted.

Reviewer only.)

____Meets (2)

__x__Partially Meets (1)

____Does Not Meet (0)

Metric AC3B: **Materials pr[illegible]e appropriate level and type of scaffolding, differentiation, intervention, and support for a broad range of learners with gradual removal of supports, when needed, to allow students to demonstrate their mathematical understanding independently.** **How to Find the Evidence:** Evaluate teacher and student materials, paying attention to whether materials provide differentiation that will lead all learners to engage with on-grade-level content.	**Evidence-** Scaffolding is provided throughout each lesson and provides teachers with added information, tips, scaffolding ideas, etc.	**Reviewer only.)** **__x__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Metric AC3C: **Design of lessons recommends and facilitates a mix of instructional approaches for a variety of learners such as using multiple representations (e.g., including models, using a range of questions, checking for understanding, flexible grouping, pair-share).** **How to Find the Evidence:** Evaluate teacher materials, noting instructional approaches suggested for whole class and differentiated lessons and activities.	**Evidence-** There are a wide range of instructional approaches used throughout. Module 1 Lesson 6 has students work in small groups to complete an exploratory challenge where they write a problem, draw a table, draw a graph, and provide an explanation.	**Reviewer only.)** **__x__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Alignment Criterion 3: **Access to the Standards for All Students** **Materials must provide supports for English Language Learners and other special populations.** AC3 Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 points, the Criterion has not been met. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion.**(Reviewer only.)** **Move to the Evaluation Summary and record the final Meets or Does Not Meet rating .**		**(Reviewer only.)** **__x__Meets** **____Does Not Meet** **Strengths/Weaknesses:**

Once an evaluation for alignment to the Shifts and major features of the CCSS has been conducted using Sections 1-3, it's important to evaluate for overall quality and best practices. A starting list of Indicators of Quality are suggested below. States, districts and others evaluating instructional materials are encouraged to add to this list to ensure materials reflect local contexts. For background information on some of the Indicators of Quality in this section, refer to pp.18–21 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).

Indicators of Quality	Evidence- Give specific examples.	Rating: (Reviewers only.)
1. Lessons are thoughtfully structured and support the teacher in leading the class through the learning paths at hand, with active participation by all students in their own learning and in the learning of their classmates.	**Evidence-** Throughout. Curriculum is well structured with supports. Module 4 Lessons contain differentiation, activities/discovery, discussion prompts, links to prior knowledge, vocabulary, guided teacher instruction (every lesson), student reflection, guided questions (every lesson), fluency practice, and exploratory challenges (Module 4 Pg. 250, 316, 326). Module 4 Pg. 61, 66 contains a common misconception.	(Reviewer only.) ___x___ **Yes** _____ **No**
2. The underlying design of the materials includes both problems and exercises. (In solving problems, students learn new mathematics, whereas in working exercises, students apply what they have already learned to build mastery.) Each problem or exercise has a purpose. **NOTE: This Criterion does not require that the problems and exercises be labeled as such.**	**Evidence-** Throughout. There are problem sets, activities/projects, and exit tickets in every lesson. Each lesson starts with a warm up "Class Work", has practice/application, including real world and skills practice, and ends with a summary "Closing" and exit ticket.	(Reviewer only.) ___x___ **Yes** _____ **No**
3. Design of assignments is not haphazard: exercises are given in intentional sequences in order to strengthen students' mathematical understanding.	**Evidence-** Curriculum has an intentional sequence that strengthens students understanding of content. Content is introduced, questions scaffold and builds to a better understanding.	(Reviewer only.) ___x___ **Yes** _____ **No**
4. There are separate teacher materials that support and reward teacher study including, but not limited to: discussion of the mathematics of the units and the mathematical point of each lesson as it relates to the organizing concepts of the unit, discussion on student ways of thinking and anticipating a variety of students responses, guidance on lesson flow, guidance on questions that prompt students thinking, and discussion of desired mathematical behaviors being elicited among students.	**Evidence-** CD – Teacher Resources DVD – Exam-View Tests Teachers Edition for every module Online: video supports, homework helpers, pacing and preparation guides	(Reviewer only.) ___x___ **Yes** _____ **No**

5. Manipulatives suggested in the materials are faithful representations of the mathematical objects they represent and are connected to written methods.	**Evidence-** When manipulatives are suggested in the materials, they are well connected to the content. Online – list of manipulatives helpful for lessons. Manipulatives for Eureka are available by purchase.	**(Reviewer only.)** **___x___ Yes** **_____ No**
6. Materials include a variety of curriculum-embedded assessments. Examples include pre-, formative, summative, and self-assessment resources.	**Evidence-** Throughout Summative: Mid module assessment, end of module assessment Formative: exit ticket, activities, projects	**(Reviewer only.)** **___x___ Yes** **_____ No**
7. Assessments contain aligned rubrics, answer keys, and scoring guidelines that provide sufficient guidance for interpreting student performance.	**Evidence-** Every module contains rubrics and student examples for the summative tests. Module 3 Rubric Pg. 224-229, 365-370. Student Examples (each mid/end module assessment) Pg. 230-235, 371-376. Answer keys provided for every problem set.	**(Reviewer only.)** **___x___ Yes** **_____ No**
8. Materials assess student proficiency using methods that are accessible and unbiased, including the use of course-level language in student prompts.	**Evidence-** The language is the same in the curriculum and the assessments. Sentence structure is clear throughout.	**(Reviewer only.)** **___x___ Yes** **_____ No**
9. Materials are carefully evaluated by qualified individuals, whose names are listed, in an effort to ensure freedom from mathematical errors and course-level appropriateness.	**Evidence-** I was unable to find a list of peer reviewers for this curriculum. EdReports	**(Reviewer only.)** **_____ Yes** **___x___ No**
10. The visual design supports students in engaging thoughtfully with the subject. Navigation through the text is clear.	**Evidence-** The curriculum is not flashy or colorful, but the visual design/pictures/diagrams supports students throughout.	**(Reviewer only.)** **___x___ Yes** **_____ No**

11. The materials engage parents in appropriate ways. For example, homework assignments in elementary grades, consist of routine problems, practice with getting answers, and fluency-building exercises that parents can easily support.	**Evidence-** Available online: Module Tip Sheets Homework Helpers Videos Grade Roadmaps FAQs	(Reviewer only.) **___x___ Yes** **_____ No**

Reviewer IMET Evaluation Summary **Title/Level: _Eureka Math – A Story of Ratios – Grade 7**

Publisher: _Great Minds_____ Copyright: __2015___ ISBN:__978-1-63255-710-0_____

Reviewer ID # ____HCMN_____ Date Review Completed: ____March 8, 2016_____

Non-Negotiable Criteria- Each Non-Negotiable must be met in order for the Non-Negotiable Alignment Criteria to be met overall.

Non-Negotiable 1: Freedom from Obstacles to Focus	Non- Negotiable 2: Focus and Coherence
____x___ Meets _____ Does Not Meet	__x___ Meets _____ Does Not Meet

Non-Negotiable Overall:

__x___ Meets _____ Does Not Meet

Alignment Criteria- Each Alignment Criterion must be met with a sufficient number of points in order for Alignment Criteria to be labeled as "Meets" overall. The more points the materials receive on the Alignment Criteria, the better they are aligned.

Alignment Criterion 1: Rigor and Balance	Alignment Criterion 2: Standards of Mathematical Practice	Alignment Criterion 3: Access to Standards for All Learners
Points: ___6__ of 6 possible. (Materials must receive at least 5 of 6 points to align.) ____x___ Meets _____ Does Not Meet	Points: ___6__ of 6 possible. (Materials must receive at least 5 of 6 points to align.) ____x___ Meets _____ Does Not Meet	Points: ___5__ of 6 possible. (Materials must receive at least 5 of 6 points to align.) ____x___ Meets _____ Does Not Meet

Alignment Criteria Overall:

___x__ Meets _____ Does Not Meet

If the materials meet both Non-Negotiables and relevant Alignment Criterion, they are aligned to the Shifts and major features of the Core Standards. **the materials meet every Non-Negotiable and Alignment Criterion? ___x__ Yes _____ No**

What are the specific areas of strength and weakness based on this evaluation? Publishers or others modifying or developing assessments can use this information to make improvements and/or to remedy gaps in the alignment of assessment materials.

Strengths:
Curriculum flows and is easy to follow.
Discussion opportunities are engaging to students and promote student participation.
Standards are thoroughly addressed throughout the curriculum.
Student exercises reinforce conceptual understanding.
Great conceptual knowledge activities.
Deep knowledge and understanding.
Students will get a deep understanding of mathematics.

Weaknesses:
There is minimal ELL supports.
The text is not visually engaging.
Sometimes the skills practice is too intense.

EVIDENCE SUMMARY:

FOCUS- The materials reflect the basic architecture of the Standards by covering all Grade 8 Standards and assessing appropriate topics. Although topics above grade level are introduced, they are not assessed.

COHERENCE- Materials focus coherently on the Major Work standards for Grade 8. Approximately 78% of this curriculum focus on Major Work Standards. Supporting work enhances the focus and coherence of the Major Work throughout the curriculum. MP utilized throughout.

RIGOR- Materials reflect the balances in the Standards with rigorous expectations for the students.

CONCEPTUAL UNDERSTANDING- Conceptual and procedural understanding is attended to throughout the curriculum with discussions, questioning, and concept development activities. Fluency and procedural skills are interwoven with conceptual understanding throughout.

MATHEMATICAL PRACTICES- The MPs are used to enrich the Major Work of Grade 8 standards. MP develop in each lesson to help students gain a deeper understanding of content.

ACCESSIBILITY OF STANDARDS TO ALL STUDENTS- Scaffolding is provided throughout the curriculum and provides added information, tips, and scaffolding techniques / ideas. Scaffolding is helpful for diverse learners; however, specific scaffolds / differentiation for ELL students are rarely listed.

OTHER:

Strengths:

This curriculum flows and is easy to follow. Discussion opportunities are engaging to students and promote participation. Standards are thoroughly addressed and exercises reinforce conceptual understanding.

Weaknesses:

There are minimal ELL supports. The text is not visually engaging. Assessments can be wordy and confusing.

2015-16 Interim Mathematics Review

Mathematics Evaluation Tool Grades K-8

Publisher: Great Minds

Title of Material: Eureka Math- A Story of Ratios - Grade 8

Author: Great Minds

ISBN #: 978-1-63255-713-1 **Copyright** 2015

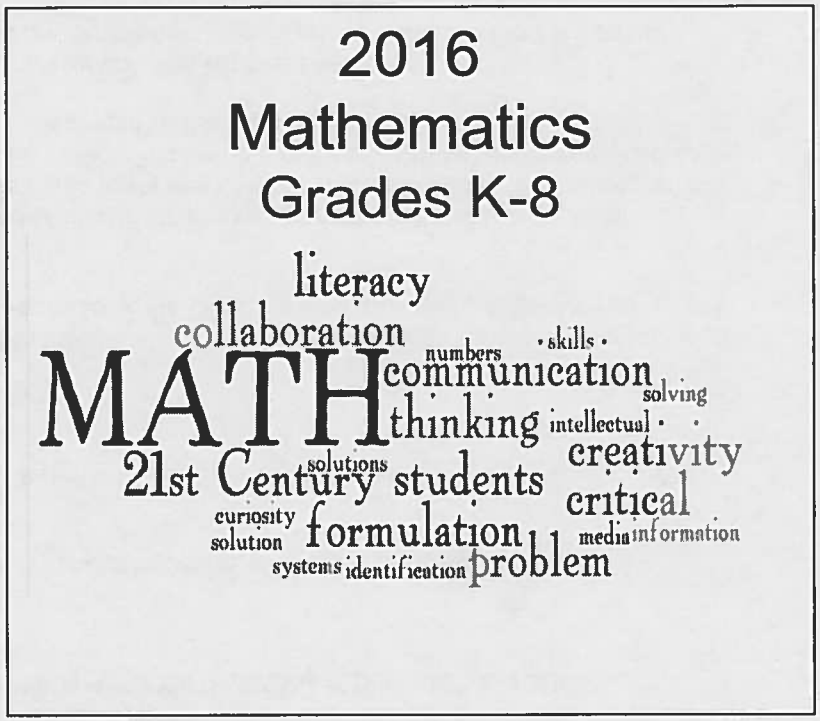
Reviewer ID: HCDN

Core Mathematics Program- a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Core.

Other Mathematics Program- a program that substantially, but partially, meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Other.

Component Mathematics Program- a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs.
Substantial evidence clearly supports the designation of this program as Component.

Intervention Program- a program designed and intended to target and support students' specific needs.
Substantial evidence clearly supports the designation of this program as Intervention.



- Evaluation Form adapted from Instructional Materials Evaluation Toolkit (IMET).

The IMET was developed by Student Achievement Partners. Educators may use or adapt. http://creativecommons.org/licenses/by/3.0/ Download this tool at http://achievethecore.org/IMET

Instructional Materials Evaluation Tool

Mathematics, Grades K-8

What Are the Purposes of the IMET?

This Math IMET is designed to help educators determine whether instructional materials are aligned to the Shifts and major features of the Common Core State Standards (CCSS). The substantial instructional Shifts (http://www.corestandards.org/other-resources/key-shifts-inmathematics/) at the heart of the Common Core State Standards are:

- **Focus** strongly where the Standards focus
- **Coherence**: Think across grades and link to major topics within the grade
- **Rigor**: In major topics, pursue conceptual understanding, procedural skill and fluency, and application with equal intensity.

The IMET draws directly from the following documents:

- Common Core State Standards for Mathematics (www.corestandards.org/Math)
- Publishers' Criteria for the Common Core State Standards in Mathematics grade K-8 (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)

When to use the IMET

1. Purchasing materials: Many factors go into local purchasing decisions. Alignment to the Standards is a critical factor to consider. This tool is designed to evaluate alignment of instructional materials to the Shifts and the major features of the CCSS. It also provides suggestions of additional indicators to consider in the materials evaluation and purchasing process.

2. Evaluating materials currently in use: The IMET can be used to analyze the degree of alignment of existing materials and help to highlight specific, concrete flaws in alignment. Even where materials and tools currently in use fail to meet one or more of these criteria, the pattern of failure is likely to be informative. States and districts can use the evaluation to create a thoughtful plan to modify or combine existing resources in such a way that students' actual learning experiences approach the focus, coherence, and rigor of the Standards.

3. Developing programs: Those developing new programs can use this tool as guidance for creating aligned curricula.
Please note this tool was designed for evaluating comprehensive curricula (including any supplemental or ancillary materials), but it was not designed for the evaluation of standalone supplemental materials.

Who Uses the IMET?

Evaluating instructional materials requires both subject-matter and pedagogical expertise. Evaluators should be well versed in the Standards (www.corestandards.org/Math) for all grades in which materials are being evaluated. This includes understanding the Major Work of the grade (www.achievethecore/focus), the Supporting and Additional work, how the content fits into the progressions in the Standards (www.achievethecore.org/progressions), and the expectations of the Standards with respect to conceptual understanding, procedural skill and fluency, and application. Evaluators also should be familiar with the substantial instructional Shifts (http:// www.corestandards.org/other-resources/key-shifts-in-mathematics/) of Focus, Coherence and Rigor that are listed above.

Getting Started

Prior to Evaluation

Assemble all of the materials necessary for the evaluation. It is essential for evaluators to have materials for all grades covered by the program, as some criteria cannot be rated without having access to each grade. In addition, each evaluator should have a reference copy of the Common Core State Standards for Mathematics (CCSSM) and the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013).

2015-16 Interim Mathematics Review

Mathematics Evaluation Tool Grades K-8

Publisher: Great Minds

Title of Material: Eureka Math – A Story of Units-Grade 8

Author: Great Minds

ISBN #: 978-1-63255-713-1 **Copyright** 2015

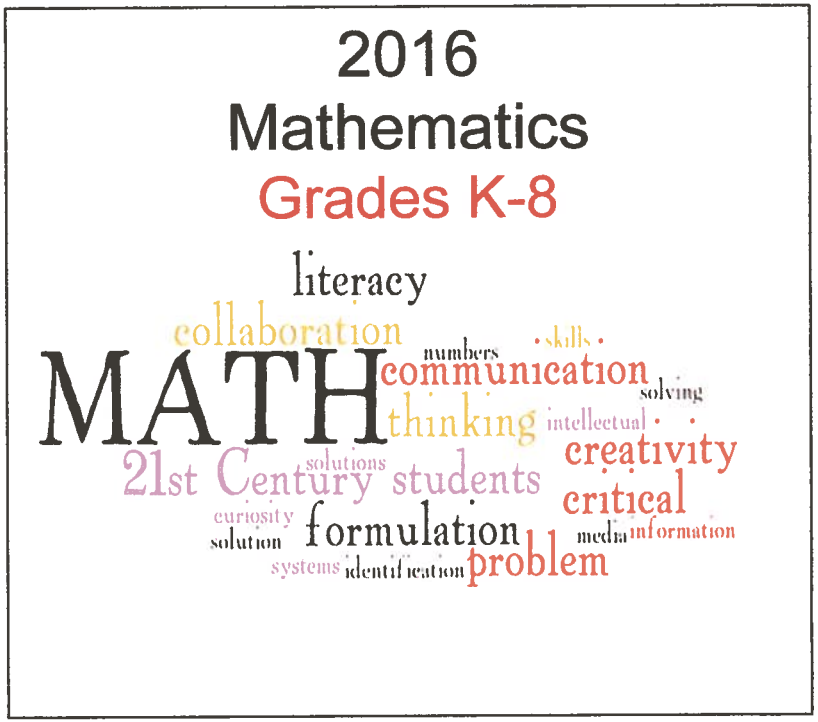
Reviewer ID: HCDN

Core Mathematics Program- a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Core.

Other Mathematics Program- a program that substantially, but partially, meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Other.

Component Mathematics Program- a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs.
Substantial evidence clearly supports the designation of this program as Component.

Intervention Program- a program designed and intended to target and support students' specific needs.
Substantial evidence clearly supports the designation of this program as Intervention.



- Evaluation Form adapted from Instructional Materials Evaluation Toolkit (IMET).

The IMET was developed by Student Achievement Partners. Educators may use or adapt. http://creativecommons.org/licenses/by/3.0/ Download this tool at http://achievethecore.org/IMET

Instructional Materials Evaluation Tool
Mathematics, Grades K-8

What Are the Purposes of the IMET?
This Math IMET is designed to help educators determine whether instructional materials are aligned to the Shifts and major features of the Common Core State Standards (CCSS). The substantial instructional Shifts (http://www.corestandards.org/other-resources/key-shifts-inmathematics/) at the heart of the Common Core State Standards are:
- **Focus** strongly where the Standards focus
- **Coherence**: Think across grades and link to major topics within the grade
- **Rigor**: In major topics, pursue conceptual understanding, procedural skill and fluency, and application with equal intensity.

The IMET draws directly from the following documents:
- Common Core State Standards for Mathematics (www.corestandards.org/Math)
- Publishers' Criteria for the Common Core State Standards in Mathematics grade K-8 (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)

When to use the IMET
1. Purchasing materials: Many factors go into local purchasing decisions. Alignment to the Standards is a critical factor to consider. This tool is designed to evaluate alignment of instructional materials to the Shifts and the major features of the CCSS. It also provides suggestions of additional indicators to consider in the materials evaluation and purchasing process.

2. Evaluating materials currently in use: The IMET can be used to analyze the degree of alignment of existing materials and help to highlight specific, concrete flaws in alignment. Even where materials and tools currently in use fail to meet one or more of these criteria, the pattern of failure is likely to be informative. States and districts can use the evaluation to create a thoughtful plan to modify or combine existing resources in such a way that students' actual learning experiences approach the focus, coherence, and rigor of the Standards.

3. Developing programs: Those developing new programs can use this tool as guidance for creating aligned curricula.
Please note this tool was designed for evaluating comprehensive curricula (including any supplemental or ancillary materials), but it was not designed for the evaluation of standalone supplemental materials.

Who Uses the IMET?
Evaluating instructional materials requires both subject-matter and pedagogical expertise. Evaluators should be well versed in the Standards (www.corestandards.org/Math) for all grades in which materials are being evaluated. This includes understanding the Major Work of the grade (www.achievethecore/focus), the Supporting and Additional work, how the content fits into the progressions in the Standards (www.achievethecore.org/progressions), and the expectations of the Standards with respect to conceptual understanding, procedural skill and fluency, and application. Evaluators also should be familiar with the substantial instructional Shifts (http:// www.corestandards.org/other-resources/key-shifts-in-mathematics/) of Focus, Coherence and Rigor that are listed above.

Getting Started
Prior to Evaluation
Assemble all of the materials necessary for the evaluation. It is essential for evaluators to have materials for all grades covered by the program, as some criteria cannot be rated without having access to each grade. In addition, each evaluator should have a reference copy of the Common Core State Standards for Mathematics (CCSSM) and the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013).

Before conducting the evaluation itself, it is important to develop a protocol for the evaluation process. The protocol should include having evaluators study the Publishers' Criteria and the IMET. It will also be helpful for evaluators to get a sense of each program overall before beginning the process. At a minimum, this would include reading the front matter of the text, looking at the table of contents and paging through multiple chapters.

Sections 1-3 below should be completed to produce a comprehensive picture of the strengths and weaknesses of the materials under evaluation. Information about areas in need of improvement or supplementation should be shared with internal and external stakeholders.

Navigating the Tool

Begin with Section 1: Non-Negotiable Alignment Criteria

- The Non-Negotiable Alignment Criteria must each be met in full for materials to be considered aligned to the Shifts and the major features of the Common Core State Standards. Each Non-Negotiable Alignment Criterion has one or more metrics associated with it; every one of these metrics must be met in order for the criterion as a whole to be met.

- Examine the relevant materials and use evidence to rate the materials against each criterion and its associated metric(s).

- Record and explain the evidence upon which the rating is based.

Continue to Section 2: Alignment Criteria

- The Alignment Criteria must each be met for materials to be considered aligned to the Shifts and the major features of the Common Core State Standards. Each Alignment Criterion has one or more metric associated with it; a specific number of these metrics must be met or partially met in order for the criterion as a whole to be met.

- Examine the materials in relation to these criteria, assigning each metric a point value. Rate the criterion as "Meets" or "Does Note Meet" based on the number of points assigned. The more points the materials receive on the alignment Criteria, the better they are aligned.

- Record and explain the evidence upon which the rating is based.

Proceed to Section 4: Indicators of Quality

- Indicators of Quality are important considerations that will help evaluators better understand the overall quality of instructional materials. These considerations are not criteria for alignment to the CCSS, but they provide valuable information about additional program characteristics. Evaluators may want to add their own indicators to the examples provided.

Directions for Non-Negotiable 1

Freedom from Obstacles to Focus

Criterion	Evidence- Give specific examples.	Rating: (Reviewer only.)
Non-Negotiable 1: **Freedom from Obstacles to Focus** **Materials must reflect the content architecture of the Standards by not assessing the topics named before the grade level where they first appear in the Standards.** The Standards foster students' progress to algebra by focusing strongly on arithmetic. Consistent with this focus, certain topics from outside of arithmetic appear only in later grades. Thus, to be aligned, materials must reflect the content architecture of the Standards by not assessing the topics named before the grade level where they first appear in the Standards. In this criterion, "topics named" means the topics that are explicitly named in Metric 1A. No other topics should be added to the list in Metric 1A. (Note that other topics in the standards are addressed in criterion NN2.)	**Required Materials** • Common Core State Standards for Mathematics (www.corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf) • From the materials being evaluated: teacher guides and all assessment components	**Rating this Criterion:** Non-Negotiable 1 is rated as Meets or Does Not Meet. To rate Non-Negotiable 1, begin by rating Metric 1A. Since Metric 1A is the only metric for Non-Negotiable 1, the rating for Non-Negotiable 1 is the same as the rating for Metric 1A. If Metric 1A is rated as Does Not Meet, include evidence of when the named topic(s) is/are assessed. If the metric is rated as Meets, list the grade(s) examined in the evaluation.

Metric NN1A: **Materials reflect the basic architecture of the Standards by not assessing the listed topics before the grade level indicated.** • Probability, including chance, likely outcomes, probability models. (Introduced in the CCSSM in grade 7) • Statistical distributions, including center, variation, clumping, outliers, mean, median, mode, range, quartiles; and statistical association or trends, including two-way tables, bivariate measurement data, scatter plots, trend line, line of best fit, correlation. (Introduced in the CCSSM in grade 6) • Similarity, congruence, or geometric transformations. (Introduced in the CCSSM in grade 8) • Symmetry of shapes, including line/ reflection symmetry, rotational symmetry. (Introduced in the CCSSM in grade 4) **How to Find the Evidence:** Evaluate the table of contents, all chapter tests, all unit tests, and other such assessment components (including rubrics). For context, read Criterion #2 from the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013). NOTE: Grade alignments of other topics are addressed in Non-Negotiable 2, Focus and Coherence.) In this criterion, "topics named" means the topics that are explicitly named in Metric 1A. No other topics should be added to the list in Metric 1A. (Note that other topics in the standards are addressed in criterion NN2.)	**Evidence-** This curriculum introduces topics that are above grade level; however, it does not test on them. Everything that is in the assessments is grade 8 standards. While the structure and questions can be advanced, the content being assessed is at grade level.	**(Reviewer only.)** **__x__Meets** **____Does Not Meet**
Non-Negotiable 1: Materials must reflect the content architecture of the Standards by not assessing the topics named* before the grade level where they first appear in the Standards. **NN 1** If Metric 1A was rated as Meets, then rate Non-Negotiable 1 as Meets. If Metric 1A was rated as Does Not Meet, then rate Non- Negotiable 1 as Does Not Meet. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion.**(Reviewer only.)** **Before moving to Non-Negotiable 2, record the final Meets or Does Not Meet rating in the Evaluation Summary.**		**(Reviewer only.)** **__x__Meets** **____Does Not Meet** **Strengths/Weaknesses:**

Directions for Non-Negotiable 2

Focus and Coherence

Non-Negotiable 2: **Focus and Coherence** **Materials must focus coherently on the Major Work of the grade in a way that is consistent with the progressions in the Standards.** Focus and coherence are the two major evidence-based design principles of the Common Core State Standards for Mathematics (CCSSM, p. 3). Focus is necessary in order to fulfill the ambitious promise the states have made to their students by adopting the Standards: greater achievement at the college and career ready level; greater depth of understanding of mathematics; and a rich classroom environment in which reasoning, sense-making, applications, and a range of mathematical practices flourish. In simpler terms, a mile-wide, inch-deep curriculum translates to less time per topic. Less time means less depth and moving on without many students. Thus, materials must focus coherently on the Major Work of the grade in a way that is consistent with the progressions in the Standards.	**Required Materials** • Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf) • Focus by Grade Level for the grade being evaluated (www.achievethecore.org/focus) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion:** Non-Negotiable 2 is rated as Meets or Does Not Meet. To rate Non-Negotiable 2, first rate metrics 2A–2H. Each of these eight metrics must be rated as Meets in order for Non-Negotiable 2 to be rated as Meets. Rate each metric 2A-2H as Meets or Does Not Meet/Insufficient Evidence. If the evidence examined shows that the Criterion is met, then mark the Criterion Meets. If the evidence examined shows that the Criterion is not met—or if there is insufficient evidence to make a determination—then mark the Criterion as Does Not Meet/Insufficient Evidence. Support all ratings with evidence.
Metric NN2A: **In each grade K–8, students and teachers using the materials as designed devote the large majority of time to the Major Work of the grade.** **How to Find the Evidence:** Familiarize yourself with the Major Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, lessons, homework assignments, and assessments. (Evaluate both student and teacher materials.) Consider time spent on the Major Work of the grade and judge qualitatively whether students and teachers using the materials as designed will devote the large majority of time to the Major Work of the grade. For context, read Criterion #1 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013)	**Evidence-** Approximately 78% of this curriculum focuses on Major Work standards for Grade 8. All of Module's 1, 2, 3, and 4 are Major Clusters. About 75% of Module 5 is a Major Cluster. About 25% of Module 6 is a Major Cluster. About 50% of Module 7 is a Major Cluster. The Pythagorean theorem is present in several modules.	**(Reviewer only.)** **__x__Meets** **____Does Not Meet/** **Insufficient Evidence**

Metric NN2B: **Supporting work, where present, enhances focus and coherence simultaneously by also engaging students in the Major Work of the grade.** **How to Find the Evidence:** Familiarize yourself with the Major Work and Supporting Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate chapters and lessons that focus on Supporting Work. NOTE: Example of evaluating this Criterion might include looking at whether materials for K–5 generally treat data displays as an occasion for solving grade-level word problems using the four operations (e.g., see 3.MD.B.3); or whether materials for grade 7 take advantage of opportunities to use probability to support ratios, proportions, and percentages. For context, read Criterion #3 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** The supporting work enhances the focus and coherence of the Major Work throughout the curriculum. About 25% of Module 5 is a Supporting Cluster. About 75% of Module 6 is a Supporting Cluster. About 50% of Module 7 is a Supporting Cluster. • 8.F (using functions to solve) is enhanced by 8.G.C 9 (perimeter and area of common and complex shapes) • 8.EE (setting up equations) is enhanced by 8.SP (patterns and fitting lines in scatter plots) • 8.EE and 8.F (solving equations and graphs of functions) is enhanced by 8.SP (linear vs. nonlinear modeling of data) Ex. Lines of best fit is a pattern in bivariate data while using a function to model a relationship between quantities.	(Reviewer only.) **__x__Meets** **____Does Not Meet/** **Insufficient Evidence**
Metric NN2C: **Materials base content progressions on the grade-by-grade progressions in the Standards. Content from previous or future grades does not unduly interfere with or displace on-grade-level content.** **How to Find the Evidence:** Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, and lessons in both student and teacher materials. NOTE: In some cases it may be possible that aligned materials might address some aspects of a topic in a strategic way before or after the grade level in which the topic is central in the Standards' progressions; for example, a curriculum author might purposefully choose to explore adding fractions with unlike denominators in a way appropriate to grade four, recognizing that this work is not really required until the next grade. However, any such purposeful discrepancies in content progressions should enhance the required learning in each grade; not unduly interfere with or displace grade-level content; and be clearly aimed at helping students meet the Standards as written rather than effectively rewriting the progressions in the Standards. And in all cases, note that Non-Negotiable 1 must be met for materials to be aligned. For context, read Criterion #5a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** The scope and sequence of this curriculum matches the progression of the Grade 8 standards. This curriculum is grade appropriate throughout and does a great job preparing students for Algebra 1. This curriculum is very vigorous and would probably work best if it is used as a grades K-8 curriculum.	(Reviewer only.) **__x__Meets** **____Does Not Meet/** **Insufficient Evidence**

Metric NN2D: **Materials gi[illegible]l students extensive work with on-grade-level problems.** **How to Find the Evidence:** Evaluate both student and teacher materials. If the materials provide resources for differentiated learning, consider whether lower-performing students have opportunities to engage with grade-level problems. Also consider whether higher-performing students are given opportunities to learn current grade-level content in greater depth. For context, read Criterion #5b in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** There is differentiation provided for both low-performing students and high-performing students. Low-performing: Module 7 Pg. 12 provides vocabulary terms and definitions. Module 7 Pg. 13 provides tips to the teacher and suggests using cutouts for the Pythagorean theorem. High-performing: Module 7 Lesson 4 is an optional lesson for simplifying square roots that can be used to help students prepare for Algebra 1. Students work through many exercises during class and on homework that are meant to solidify understanding for grade level content.	**(Reviewer only.)** **__x__Meets** **____Does Not Meet/** **Insufficient Evidence**
Metric NN2E: **Materials relate on-grade-level concepts explicitly to prior knowledge from earlier grades.** **How to Find the Evidence:** Evaluate both student and teacher materials. NOTE: Examples of evaluating this Criterion might include looking at the way the materials extend basic ideas of place value across the decimal point; or the role that properties of operations play when the materials extend arithmetic beyond whole numbers to fractions, variables, and expressions. More generally, cluster headings in the Standards sometimes signal key moments where reorganizing and extending previous knowledge is important in order to accommodate new knowledge (e.g., see cluster headings that use the phrase "Apply and extend previous understanding"). For context, read Criterion #5c in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Throughout. Concepts are linked to and extend previous understanding of content. Each module makes connections and builds. Module 3 starts with Similarity Proofs, then builds to Similar Triangles, Modeling Similarity, Similar Shapes, and then builds to Dilations, Similarity, and then Proofs and Properties of Dilations. It rarely specifically references previous grade-level content, but students do use previous skills everyday. This is most evident when students have Eureka implemented over several years, not as much as a stand along 8th grade curriculum.	**(Reviewer only.)** **__x__Meets** **____Does Not Meet/** **Insufficient Evidence**

Metric NN2F: **Review of material from previous grades is clearly identified as such to the teacher, and teacher and students can see what their specific responsibility is for the current year.** **How to Find the Evidence:** Evaluate the table of contents, but do not stop there; also evaluate units, chapters, lessons, homework assignments and assessments. (Evaluate both student and teacher materials.) Identify any content from previous grades and check whether it is identified as such. For context, read Criterion #5a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** In general, I was unable to find any specific mention of review of material from previous grades; however, I did find mention of it in the module overviews. Module 7 module overview explains expectations for module as a whole and indicates that students will need to have an understanding of standards 6.NS.C.6, 6.NS.B.2, and 7.NS.A.2, 2d to complete the activities and assignments in the module. Teacher can see year-long expectations in the online curriculum map.	**(Reviewer only.)** **__x__Meets** **____Does Not Meet/** **Insufficient Evidence**
Metric NN2G: **Materials include learning objectives that are visibly shaped by CCSSM cluster headings.** **How to Find the Evidence:** Select several clusters from the Major Work in the grade being evaluated. Evaluate teacher and student materials in relation to these clusters. For context, read Criterion #6a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** The language ties back to the standards/objectives throughout. Every module contains learning objectives throughout. Below is evidence from Module 1. Overview with standards, MP, Vocabulary Pg. 2-4. Each Topic: Focus Standards Pg. 8, 78. Each Lesson: Student Outcomes Pg. 10, 18, 29, 37, 47, 57, 80, 86, 98, 107, 114, 122, 131.	**(Reviewer only.)** **__x__Meets** **____Does Not Meet/** **Insufficient Evidence**
Metric NN2H: **Materials include problems and activities that serve to connect two or more clusters in a domain, or two or more domains in a grade, in cases where these connections are natural and important.** **How to Find the Evidence:** In the grade being evaluated, choose two or more clusters or two or more domains for which connections are natural and important. Evaluate the units, chapters, and lessons that deal with the chosen topics, looking for problems and activities that serve to connect the chosen clusters or domains. NOTE: An example of evaluating this Criterion might include looking at whether problems in grade 4 sometimes or often involve students applying their developing computation skills (detailed in domain NBT) in the context of solving word problems (detailed in domain OA). For context, read Criterion #6b in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** In general, the curriculum includes problems and activities that serve to connect two or more clusters in a domain throughout. Module 6 Pg. 112 has students learning about scatter plots, then learning how to plot the line of best fit, and then finding the equations for the line. Module 6 Pg. 136 has students writing equations/algorithms, interpreting slope, interpreting y-intercept, and then asking conceptual problems about how and why their interpretations make sense.	**(Reviewer only.)** **__x__Meets** **____Does Not Meet/** **Insufficient Evidence**

Non-Negotiable 2:
Focus and Coherence

Materials must focus coherently on the Major Work of the grade in a way that is consistent with the progressions in the Standards.

NN 2 If all Metrics 2A – 2H were rated as Meets, then rate Non-Negotiable 2 as Meets. If one or more Metric was rated Does Not Meet/Insufficient Evidence, then rate Non-Negotiable 2 as Does Not Meet. Check the final rating.
Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)**

Before moving to Alignment Criterion 1, record the final Meets or Does Not Meet rating in the Evaluation Summary.

(Reviewer only.)

__x__Meets

____Does Not Meet

Strengths/Weaknesses:

Now continue by evaluating the Alignment Criterion 1 for Rigor and Balance.

Directions for Alignment Criterion 1

Rigor and Balance

Alignment Criterion 1:
Rigor and Balance

Materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.

The Standards set expectations for attention to all three aspects of rigor: conceptual understanding, procedural skill and fluency, and applications. Thus, materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.

Required Materials

- Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf)
- Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)
- Focus by Grade Level for the grade being evaluated (achievethecore.org/focus)
- Situation Types for the Operations in Word Problems (achievethecore.org/situation-types)
- From the materials being evaluated: teacher guides, student texts and workbooks

Rating this Criterion:

Alignment Criterion 1 is rated as Meets or Does Not Meet.

To rate Alignment Criterion 1, first rate metrics 1A, 1B, and 1C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). For each metric, guiding questions are provided to aid in gathering evidence.
Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 1 if the materials rate 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as rigor and balance, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.

Metric AC1A: **The materia[illegible]pport the development of students' conceptual understanding of key mathematical concepts, especially where called for in specific content Standards or cluster headings.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Major Work for the grade being evaluated that relate specifically conceptual understanding to use throughout the questions associated with this metric. NOTE: Some examples of clusters or Standards that call for conceptual understanding include: K.OA.A.1, (1.NBT.B, 1.NBT.C), (2.NBT.A, 2.NBT.B), (3.OA.A.1, 3.OA.A.2), 4.NF.A, (4.NBT.A, 4.NBT.B), 5.NF.B, (5.NBT.A, 5.NBT.B), 6.RP.A, 6.EE.A.3, 7.NS.A, 7.EE.A, 8.EE.B, 8.F.A, 8.G.A Clusters or Standards grouped by parentheses are closely connected and could be analyzed together. For context, read Criterion #4a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	-Choose a cluster/Standard from the Major Work that is aligned to each aspect of rigor and use it to [illegible]ate these metrics. It is most helpful if the same clusters/Standards are chosen for all of the programs being evaluated. (Guidance in choosing clusters/Standards is included in "How to Find the Evidence".)	**Use the questions for AC Metric 1A to evaluate Metric 1A. Record evidence for [illegible] question and rate Metric 1A.** **__x__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Is conceptual understanding attended to thoroughly where the Standards set explicit expectations for understanding or interpreting? Evaluate lessons, chapter/unit assessments and homework assignments, paying attention to work aligned to Standards that explicitly call for understanding or interpreting. NOTE: Examples of evaluating this Criterion might include looking at how well the multi-digit addition and subtraction algorithms are developed and explained on the basis of place value and properties of operations; or how well the multi-digit multiplication and division algorithms are developed and explained on the basis of place value and properties of operations; or how well solving equations is presented and explained as a process of reasoning.	**Evidence-** Conceptual understanding it attended to thoroughly throughout the curriculum. Module 1 Pg. 14 asks students, "Why should we bother with exponential notation?" Module 1 Pg. 31 asks, "How is this operation related to the four arithmetic operations?" The discussions during class activities attend to a strong conceptual understanding.	

Do the materials feature high-quality conceptual problems and conceptual discussion questions? Evaluate lessons, chapter/unit assessments, and homework assignments. NOTE: Example of conceptual problems might include such questions as "Find a number greater than 1/5 and less than 1/4," or "If the divisor does not change and the dividend increases, what happens to the quotient?"	**Evidence-** Throughout. Module 1 SWB contains procedural problem sets and sprints such as on Pg. 43-46 (write in scientific notation) and 94-97 (Simplify exponential function.) All module contain Exit Tickets that check for understanding of conceptual problems such as Module 4 Pg. 283 where it shows equations and graphs and students must find the error, explain the error, and correctly graph the equation. Module 4 Pg. 164 has students find at least 10 solutions to a linear equation. They determine if equations have unique, infinitely many, or no solution. Throughout. (Discussion, questioning, concept development) Module 4 Pg. 124 has students connecting constant speed to constant rate problems. Module 4 Pg. 97 has students applying linear equations by asking what is noticed and how to write the equations.	
Do the materials feature opportunities to identify correspondences across mathematical representations? Evaluate lessons, chapter/unit assessments and homework assignments. NOTE: Examples of evaluating this Criterion might include looking at whether students are supported in identifying correspondences among: the verbal description of a situation, the diagrams that distill its mathematical features, and the equations that model it; or equivalent forms of numbers (e.g., 3 and 6/2) and the number line; or rational number operations and representations of them via models such as the vector model; or the expression that defines a function and the graph that shows the relationship.	**Evidence-** Throughout. This curriculum uses a variety of correspondences to represent math including verbal descriptions, diagrams, graphing, and equations. Module 6: Verbal description: Pg. 46-49, 180. Diagrams: Pg. 53-54, 132. Equations: Pg. 113, 132, 138. Graphing: Pg. 151, 153. Tables and graphs are often used to help learn/see/show connections.	

Metric AC1B: **The materials are designed so that students attain the fluencies and procedural skills required by the Standards.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Major Work for the grade being evaluated that relate specifically to fluency and procedural skill to use throughout the questions associated with this metric. NOTE: Some examples of Standards that call for procedural skill and fluency include: K.OA.A.5, 1.OA.C.6, 2.OA.B.2, 2.NBT.B.5, 3.OA.C.7, 3.NBT.A.2, 4.NBT.B.4, 5.NBT.B.5, 6.NS.B.2, and 6.NS.B.3, 6.EE.A, 7.NS.A, 7.EE.A.1,7.EE.B.4a, 8.EE.C.7, 8.EE.C.8b For context, read Criterion #4b in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Is progress toward fluency and procedural skill interwoven with students' developing conceptual understanding of the operations in question? Are purely procedural problems and exercises present that include cases in which opportunistic strategies are valuable and generic cases that require efficient algorithms present? Do the materials in grades K-6 provide repeated practice toward attainment of fluency Standards?	**Use the questions for Metric 1B to evaluate Metric 1 B. Record evidence for each question and rate Metric 1B.** **(Reviewer only.)** **__x__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Is progress toward fluency and procedural skill interwoven with students' developing conceptual understanding of the operations in question? Evaluate lessons, chapter/unit assessments, daily routines, and homework assignments for evidence that the development of fluency and procedural skill is supported by conceptual understanding.	**Evidence-** Fluency and procedural skills are interwoven with conceptual understanding throughout. Module 1 Pg. 5-6 Explains how to use 'Rapid White Board Exchanges" and "Fluency Sprints." Pg. 40, 43-46 Sprints with exponents to achieve better procedural skills while students are gaining conceptual understanding by performing operations with exponents. Pg. 136 Rapid white board exchanges to gain procedure understanding of scientific notation while gaining conceptual understanding of operations with scientific notation. Module 7 Pg. 155 Fluency activity for Area and Volume. Pg. 163 Using radicals/roots to solve Area and Volume problems and write equations.	

Are purely procedural problems and exercises present that include cases in which opportunistic strategies are valuable and generic cases that require efficient algorithms present? Evaluate lessons, chapter/unit assessments, daily routines, and homework assignments. NOTE: Examples of problems in which opportunistic strategies are valuable might include the sum 698 + 240 or the system x + y = 1, 2x + 2y = 3. Examples of generic cases that require efficient algorithms might include the sum 8767+2286 or the system 6y + x = x + 3, – x = 1 + 2y.	**Evidence-** Throughout. Module 7 Pg. 59 When solving for the unknown side of a triangle using Pythagorean Theorem, have radicals to solve giving practice at operations with radical numbers. Pg. 105 Long division used to determine decimal expansion. Done using another method as well. Module 4 has algorithms used throughout. Pg. 364: ax+by=c Pg. 292, 213, 248: y=mx+b Pg. 248: $y=-\frac{a}{b}x+\frac{c}{b}$ Pg. 254: $\frac{p2-r2}{p1-r1}$	
Do the materials in grades K–6 provide repeated practice toward attainment of fluency Standards? Evaluate lessons, daily routines, and homework assignments for evidence of repeated practice toward attainment of the following K–6 Standards that set an explicit expectation of fluent (accurate and reasonably fast) computation: K.OA.A.5, 1.OA.C.6, 2.OA.B.2, 2.NBT.B.5, 3.OA.C.7, 3.NBT.A.2, 4.NBT.B.4, 5.NBT.B.5, 6.NS.B.2, 6.NS.B.3.	**Evidence-** N/A	
Metric AC1C: **The materials are designed so that teachers and students spend sufficient time working with engaging applications, without losing focus on the Major Work of each grade.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Major Work for the grade being evaluated that relate specifically application to use throughout the questions associated with this metric. NOTE: Some examples of clusters or Standards that call for application include: K.OA.A.2, 1.OA.A, 2.OA.A, 3.OA.A.3, 3.OA.D.8, 4.OA.A.3, 4.NF.B.3d, 4.NF.B.4c, 5.NF.B.6, 5.NF.B.7c, 6.RP.A.3, 6.NS.A.1, 6.EE.B.7, 6.EE.C.9, 7.RP.A, 7.NS.A.3, 7.EE.B.3, 8.EE.C.8c, 8.F.B For context, read Criterion #4c in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Real Life Application creates engaging application for students throughout the curriculum. Module 1 Pg. 83 Standard to scientific notation. Pg. 86-87 Population to scientific notation. Pg. 88-93, 100-103, 106-110, 112-113. As the major works are a large part of each module, focus is not lost. Engaging applications are used to develop major works. Converting from Celsius to Fahrenheit 8.EE.C.8c.	**Use the questions for Metric 1C to evaluate Metric 1C. Record evidence for each question and rate Metric 1C.** **(Reviewer only.)** **__x__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Are there are single- and multi-step contextual problems, including non-routine problems, that develop the mathematics of the grade, afford opportunities for practice, and engage students in problem solving? Do the problems attend thoroughly to those places in the content Standards where expectations for multi-step and real-world problems are explicit? Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** Throughout Module 6 Pg. 20 Aging autos (rate of change, interpret initial value, percent increase/decrease). Pg. 68 Relationship for price and quality of athletic shoes. Pg. 146 Relationship between year and population in US.	

Do application problems particularly stress applying the Major Work of the grade? Evaluate lessons, chapter/unit assessments, and homework assignments. NOTE: Examples of evaluating this Criterion might include looking at: how well, by the end of grade 2, students using the materials as designed can represent and solve a full range of one-step addition and subtraction word problems; or how well, by the end of grade 3, students using the materials as designed can represent and solve a full range of one-step multiplication and division word problems; or how well these basic situation types for each operation are carried coherently across the grades, (e.g., with fractions and algebraic expressions); or, in all grades, whether the problems connect concepts, Standards, and domains in ways that are natural and important. For a list of situation types for one-step addition, subtraction, multiplication, and division problems, see Situation Types for the Operations in Word Problems	**Evidence-** Applications problems stress applying the Major Work of Grade 8 throughout the curriculum. The Major Work is being focused on about 78% of the time overall in this curriculum.	
Does modeling build slowly across K–8, with applications that are relatively simple in earlier grades and when students are encountering new content? In grades 6–8, do the problems begin to provide opportunities for students to make their own assumptions or simplifications in order to model a situation mathematically? Read Standard for Mathematical Practice 4, Model with Mathematics. Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** Throughout Module 5 Pg. 114 Students write rules to express functions related to geometry. Pg. 119 Compare liquid in a solid to volume of a prism.	

Alignment Criterion 1:

Rigor and Balance

Materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.

AC1 Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 out of 6 points, the Criterion has not been met. Check the final rating.
Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)**

Before moving to Alignment Criterion 2, record the final Meets or Does Not Meet rating in the Evaluation Summary.

(Reviewer only.)

__x__Meets

____Does Not Meet

Strengths/Weaknesses:

Directions for Alignment Criterion 2

Standards for Mathematical Practice

Alignment Criterion 2: Standards for Mathematical Practice

Materials must demonstrate authentic connections between content Standards and practice Standards.

The Standards require that designers of instructional materials connect the mathematical practices to mathematical content in instruction. Thus, materials must demonstrate authentic connections between content Standards and practice Standards.

Required Materials:

- Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf)
- Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)
- Focus by Grade Level for the grade being evaluated (www.achievethecore.org/focus)
- From the materials being evaluated: teacher guides, student texts and workbooks

Rating this Criterion

Alignment Criterion 2 is rated as Meets or Does Not Meet.

To rate Alignment Criterion 2, first rate metrics 2A, 2B, and 2C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). For each metric, guiding questions are provided to aid in gathering evidence.

Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 2 if the materials earn 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as mathematical practices, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.

Metric AC2A:
Materials address the practice Standards in such a way as to enrich the Major Work of the grade; practices strengthen the focus on Major Work instead of detracting from it, in both teacher and student materials.

How to Find the Evidence:

Familiarize yourself with the Major Work of the grade being evaluated (see the Focus by Grade Level documents.)

Evaluate teacher and student materials for evidence that the mathematical practices support and connect to the focus of the grade.

NOTE: Examples of evaluating this Criterion might include looking at whether, in grades K–5, students using the materials are supported to look for and express regularity in repeated reasoning about the addition table, the multiplication table, the properties of operations, the relationship between addition and subtraction or multiplication and division, and the place value system; or whether, in grades 6–8, students using the materials are supported to look for and express regularity in repeated reasoning about proportional relationships and linear functions.

For context, read Criterion #8 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013).

Evidence-

Enrich Major Work of grade 8 throughout.

1. Making sense of problems and persevere in solving.
   Module 4 Pg. 248-266 Solve linear equations and graph.
   Module 4 Pg. 418 Solving systems of linear equations.
2. Reason abstractly and quantitatively.
   Module 2 Pg. 13 "How" "Do you think" "In other words…"
3. Construct viable arguments/critique reasoning of others.
   Module 3 Pg. 171 Explain properties of similar triangles.
   Module 3 Pg. 91 Informal proofs of dilations.
4. Model with mathematics.
   Module 3 Pg. 164 Similar triangles model real-world.
5. Use appropriate tools strategically.
   Module 2 Pg. 87-91 Transparency for transformations and properties of rigid motion.
6. Attend to precision.
   Module 2 Pg. 39-50 Define properties, label reflections.
7. Look for and make use of structure.
   Module 1 Pg. 18 $x^m \bullet x^n = x^{m+n}$
   Module 1 Pg. 22 $x^m \div x^n = x^{m-n}$
8. Look for and express regularity in repeated reasoning.
   Module 5 Pg. 10 Use repeated computations to
   Pg. 59 determine equations from Pg. 76 graphs/tables.

(Reviewer only.)

__x__Meets (2)

____Partially Meets (1)

____Does Not Meet (0)

Metric AC2B: **Materials attend to the full meaning of each practice Standard.** **How to Find the Evidence:** For context, read Criterion #7 and Criterion #9 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).		**Use the questions for Metric 2B to evaluate Metric 2B. Record evidence for each question and rate Metric 2B.** **(Reviewer only.)** **__x__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Over the course of any given year of instruction, is each mathematical practice Standard meaningfully present in the form of assignments, activities, or problems that stimulate students to develop the habits of mind described in the practice Standard? Evaluate lessons, chapter/ unit assessments, and homework assignments for evidence of each mathematical practice being meaningfully present in instruction.	**Evidence-** Mathematical practices are shown throughout the curriculum. Every MP is used and MPs are labeled in the guided instruction in the Teacher's Edition.	
Do the materials treat the practice Standards as developing across grades or grade bands? Are the practice Standards in early grades appropriately simple? Do they display an arc of growing sophistication across the grades?	**Evidence-** Mathematical practices develop in each lesson to help students gain a better understanding of the curriculum.	
Are there teacher-directed materials that explain the role of the practice Standards in the classroom and in students' mathematical development? Are alignments to practice Standards accurate?	**Evidence-** The Module Overview explains each mathematical practice and how it is implemented in the lessons. Module 4 Pg. 7 shows module overview containing MP.	
Metric AC2C: **Materials support the Standards' emphasis on mathematical reasoning.** **How to Find the Evidence:** For context, read Criterion #10 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).		**Use the questions for Metric 2C to evaluate Metric 2C. Record evidence for each question and rate Metric 2C.** **(Reviewer only.)** **__x__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Do the materials support students in constructing viable arguments and critiquing the arguments of others concerning grade-level mathematics that is detailed in the content Standards? Read Standard for Mathematical Practice 3. Evaluate teacher and student materials to ensure that students are given opportunities to reason with grade-level mathematics.	**Evidence-** Throughout. Module 6 Pg. 37-39 which graph/which function. Explain reasoning. Pg. 39-41 given verbal description, sketch graph of functional relationship. Pg. 42 write story that models situation represented by graph.	
Do the materials support students in producing not only answers and solutions, but also, in a grade-appropriate way, arguments, explanations, diagrams, mathematical models, etc., especially in the Major Work of the grade? Familiarize yourself with the Major Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate teacher and student materials, to understand the types of work students are expected to produce.	**Evidence-** Throughout. Module 6 Producing: Pg. 138, 166 Graphing: Pg. 15, 51, 53 Scatter Plot: Pg. 68-70 Two-Way Table: Pg. 151, 167 Critique/Explain: Pg. 10, 20	

Do materials explicitly attend to the specialized language of mathematics? Is the language of argument, problem solving, and mathematical explanations taught rather than assumed? Evaluate teacher and student materials, paying attention to how mathematical language is taught. NOTE: Examples of evaluating this Criterion might include looking at whether students are supported in: basing arguments on definitions; using the method of providing a counterexample; or recognizing that examples alone do not establish a general statement.	**Evidence-** Vocabulary is provided in the module overview in every module book and terminology is used throughout. Evidence from Module 5: Vocabulary: Pg. 6, 21, 23 Explain the strategy for finding the area of the white border.	

Alignment Criterion 2:
Standards for Mathematical Practice

Materials must demonstrate authentic connections between content Standards and practice Standards.

AC2 Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 out of 6 points, the Criterion has not been met. Check the final rating.
Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion.
(Reviewer only.)

Before moving to Alignment Criterion 3, record the final Meets or Does Not Meet rating in the Evaluation Summary.

(Reviewer only.)

__x__Meets

____Does Not Meet

Strengths/Weaknesses:

Alignment Criterion 3:
Access to the Standards for All Students

Materials must provide supports for English Language Learners and other special populations.

Because Standards are for all students, alignment requires thoughtful support to ensure all students are able to meet the Standards. Thus, aligned materials must provide supports for English Language Learners and other special populations.

Required Materials:

- Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf)
- Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)
- From the materials being evaluated: teacher guides, student texts and workbooks

Rating this Criterion:
Alignment Criterion 3 is rated as Meets or Does Not Meet.

To rate Alignment Criterion 3, first rate metrics 3A, 3B, and 3C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points).

Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 3 if the materials earn 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as support for special population, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.

Metric AC3A: **Support for English Language Learners and other special populations is thoughtful and helps those students meet the same Standards as all other students. The language in which problems are posed is carefully considered.** **How to Find the Evidence:** Evaluate teacher and student materials, paying attention to supports offered for special populations.	**Evidence-** Although the module contain scaffolding, there is a minimal amount connected to ELL students. Module 5 Pg. 131 "Provide a menu of phrases for ELLs to use to support statements. Module 6 Pg. 66, 69, 77, 83, 84, 93, 95, 97, 107, 128, 147, 149, 168, 176, 179. Module 7 Pg. 12, 140.	**Reviewer only.)** **____Meets (2)** **__x__Partially Meets (1)** **____Does Not Meet (0)**
Metric AC3B: **Materials provide appropriate level and type of scaffolding, differentiation, intervention, and support for a broad range of learners with gradual removal of supports, when needed, to allow students to demonstrate their mathematical understanding independently.** **How to Find the Evidence:** Evaluate teacher and student materials, paying attention to whether materials provide differentiation that will lead all learners to engage with on-grade-level content.	**Evidence-** Scaffolding is provided throughout each lesson and provides teachers with added information, tips, scaffolding ideas, etc. Module 4 Pg. 65-67 (...helpful for diverse learners.) Pg. 29, 53 (work bank). Pg. 349.	**Reviewer only.)** **__x__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Metric AC3C: **Design of lessons recommends and facilitates a mix of instructional approaches for a variety of learners such as using multiple representations (e.g., including models, using a range of questions, checking for understanding, flexible grouping, pair-share).** **How to Find the Evidence:** Evaluate teacher materials, noting instructional approaches suggested for whole class and differentiated lessons and activities.	**Evidence-** Module 5 Grouping: Pg. 25 (individual), Pg. 59 (pairs), Pg. 59, 76 (group), Pg. 88 (small group). Strategies: Pg. 23 (input-output machine), Pg. 119 (concrete and hands on experiences), Pg. 142 (modeling and demonstration), Pg. 88 (small group exploratory challenge), Pg. 30 (tables), Pg. 60 (coordinate plane), Pg. 80, 92 (fluency exercises).	**Reviewer only.)** **__x__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**

Alignment Criterion 3: **Access to the Standards for All Students** **Materials must provide supports for English Language Learners and other special populations.** AC3 Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 points, the Criterion has not been met. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion.**(Reviewer only.)** **Move to the Evaluation Summary and record the final Meets or Does Not Meet rating .**	**(Reviewer only.)** **__x__Meets** **____Does Not Meet** **Strengths/Weaknesses:**

Once an evaluation for alignment to the Shifts and major features of the CCSS has been conducted using Sections 1-3, it's important to evaluate for overall quality and best practices. A starting list of Indicators of Quality are suggested below. States, districts and others evaluating instructional materials are encouraged to add to this list to ensure materials reflect local contexts. For background information on some of the Indicators of Quality in this section, refer to pp.18–21 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).

Indicators of Quality	**Evidence- Give specific examples.**	**Rating: (Reviewers only.)**
1. Lessons are thoughtfully structured and support the teacher in leading the class through the learning paths at hand, with active participation by all students in their own learning and in the learning of their classmates.	**Evidence-** Throughout. Curriculum is well structured with supports. Module 7 Lessons contain differentiation (Pg. 13, 102, 117 – every lesson), activities/discovery (Pg. 8 – rapid white board exchanges), discussion prompts (Pg. 19, 30, 37 – every lesson), links to prior knowledge (Pg. 12 - refers to Modules 2 and 3), vocabulary (Pg. 7, 42), guided teacher instruction (every lesson), student reflection (Pg. 19, 32, 44, 120 - closing), guided questions (Pg. 169, 264 – every lesson), fluency practice (Pg. 155, 252), and exploratory challenges (Pg. 103, 165). Module 1 Pg. 62 contains a common misconception.	**(Reviewer only.)** **___x___ Yes** **_____ No**

2. The underlying design of the materials includes both problems and exercises. (In solving problems, students learn new mathematics, whereas in working exercises, students apply what they have already learned to build mastery.) Each problem or exercise has a purpose. **NOTE: This Criterion does not require that the problems and exercises be labeled as such.**	**Evidence-** Throughout. Module 2 Lesson 8: Pg. 86 – discussion, Pg. 87 – exercises, Pg. 88 – discussion, Pg. 89 – video presentation, Pg. 89 – exercises, Pg. 90 – closing, Pg. 91 – summary, Pg. 92 – exit ticket. Lesson 1: Pg. 10 – concept development, vocabulary, exploratory challenge, Pg. 13 – closing, Pg. 14 – summary, Pg. 14 – exit ticket. Lesson 10: Pg. 105 – classwork, Pg. 107 – video presentation, Pg. 107 – exercises, Pg. 111 – closing, Pg. 112 – exit ticket.	**(Reviewer only.)** **___x___ Yes** **_____ No**
3. Design of assignments is not haphazard: exercises are given in intentional sequences in order to strengthen students' mathematical understanding.	**Evidence-** Curriculum has an intentional sequence that strengthens students understanding of content. Content is introduced, questions scaffold and builds to a better understanding. Module 6: Modeling relationships, rate of change, representing a line, increase/decrease functions. Module 6: Scatter plots, patterns in scatter plots, line of best fit, determining equation of line of best fit.	**(Reviewer only.)** **___x___ Yes** **_____ No**
4. There are separate teacher materials that support and reward teacher study including, but not limited to: discussion of the mathematics of the units and the mathematical point of each lesson as it relates to the organizing concepts of the unit, discussion on student ways of thinking and anticipating a variety of students responses, guidance on lesson flow, guidance on questions that prompt students thinking, and discussion of desired mathematical behaviors being elicited among students.	**Evidence-** CD – Teacher Resources DVD – Exam-View Tests Teachers Edition for every module Online: video supports, homework helpers, pacing and preparation guides	**(Reviewer only.)** **___x___ Yes** **_____ No**
5. Manipulatives suggested in the materials are faithful representations of the mathematical objects they represent and are connected to written methods.	**Evidence-** When manipulatives are suggested in the materials, they are well connected to the content. Module 3 Pg. 45 Ruler for figuring similarity. Pg. 18 Compass used for dilations. Pg. 11, 188 Embedded.mov file/video Protractor and calculator used throughout this module. Manipulatives for Eureka are available by purchase.	**(Reviewer only.)** **___x___ Yes** **_____ No**

6. Materials include a variety of curriculum-embedded assessments. Examples include pre-, formative, summative, and self-assessment resources.	**Evidence-** Throughout Module 2 Formative assessments: Exit Ticket Pg. 15, 26, 35, 47, 61, 72, 83, 92, 101, 112, 135, 143, 150, 164, 185, 199. (Each lesson). Activities throughout. Summative assessments (every module): Mid-Assessment Pg. 116-120. End-Assessment Pg. 169-171.	**(Reviewer only.)** **___x___ Yes** **_____ No**
7. Assessments contain aligned rubrics, answer keys, and scoring guidelines that provide sufficient guidance for interpreting student performance.	**Evidence-** Every module contains rubrics and student examples for the summative tests. Module 2 Rubric Pg. 121-122, 172-173. Student Examples Pg. 123-127, 174-176. Exit Tickets Answer keys provided for every problem set.	**(Reviewer only.)** **___x___ Yes** **_____ No**
8. Materials assess student proficiency using methods that are accessible and unbiased, including the use of course-level language in student prompts.	**Evidence-** I feel that the language is the same with clear sentence structure for the lessons and the assessments, EXCEPT for the mid-assessment in Module 1 Pg. 67-70. I felt that the assessment did not match the content or the language of the lessons.	**(Reviewer only.)** **___x___ Yes** **_____ No**
9. Materials are carefully evaluated by qualified individuals, whose names are listed, in an effort to ensure freedom from mathematical errors and course-level appropriateness.	**Evidence-** I was unable to find a list of peer reviewers for this curriculum. EdReports	**(Reviewer only.)** **_____ Yes** **___x___ No**
10. The visual design supports students in engaging thoughtfully with the subject. Navigation through the text is clear.	**Evidence-** The curriculum is not flashy or colorful , but the visual design/pictures/diagrams supports students throughout. Module 3 Graphics/Pictures Pg. 10. Dilation Graphics Pg. 19-43, 79-92. Geometric Figures (Modeling/Similarity) Pg. 9, 111-171.	**(Reviewer only.)** **___x___ Yes** **_____ No**

11. The materials engage parents in appropriate ways. For example, homework assignments in elementary grades, consist of routine problems, practice with getting answers, and fluency-building exercises that parents can easily support.	**Evidence-** Available online: Module Tip Sheets Homework Helpers Videos Grade Roadmaps	**(Reviewer only.)** **___x___ Yes** **_____ No**

Reviewer IMET Evaluation Summary Title/Level: _____

Publisher: _____ Copyright: _____ ISBN:_____

Reviewer ID # _____ Date Review Completed:_____

Non-Negotiable Criteria- Each Non-Negotiable must be met in order for the Non-Negotiable Alignment Criteria to be met overall.

Non-Negotiable 1: Freedom from Obstacles to Focus	**Non- Negotiable 2: Focus and Coherence**
____x___ Meets **_____ Does Not Meet**	**__x___ Meets** **_____ Does Not Meet**

Non-Negotiable Overall:

_____ Meets _____ Does Not Meet

Alignment Criteria- Each Alignment Criterion must be met with a sufficient number of points in order for Alignment Criteria to be labeled as "Meets" overall. The more points the materials receive on the Alignment Criteria, the better they are aligned.

Alignment Criterion 1: Rigor and Balance	**Alignment Criterion 2: Standards of Mathematical Practice**	**Alignment Criterion 3: Access to Standards for All Learners**
Points: ___6__ of 6 possible. **(Materials must receive at least 5 of 6 points to align.)** **____x___ Meets** **_____ Does Not Meet**	**Points: ___6__ of 6 possible.** **(Materials must receive at least 5 of 6 points to align.)** **____x___ Meets** **_____ Does Not Meet**	**Points: ___5__ of 6 possible.** **(Materials must receive at least 5 of 6 points to align.)** **____x___ Meets** **_____ Does Not Meet**

Alignment Criteria Overall:

___x__ Meets **_____ Does Not Meet**

If the materials meet both Non-Negotiables and relevant Alignment Criterion, they are aligned to the Shifts and major features of the Core Standards. **the materials meet every Non-Negotiable and Alignment Criterion? ___x__ Yes _____ No**

What are the specific areas of strength and weakness based on this evaluation? Publishers or others modifying or developing assessments can use this information to make improvements and/or to remedy gaps in the alignment of assessment materials.

Strengths:
Curriculum flows and is easy to follow.
Discussion opportunities are engaging to students and promote student participation.
Standards are thoroughly addressed throughout the curriculum.
Student exercises reinforce conceptual understanding.

Weaknesses:
There is minimal ELL supports.
The text is not visually engaging.
Assessment can be wordy and confusing to students.

2015-16 Mathematics Interim Review Recommendation & Summary

Publisher Name:	Great Minds
Title:	Eureka Math - A Story of Functions - Algebra 1
ISBN #	978-1-63255-324-9
Grade Level(s) or Course:	Algebra 1
Reviewer ID:	K.C. and R.K.

RECOMMENDED AS:

X **Core Mathematics Program-** a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials. Substantial evidence clearly supports the designation of this program as Core.

_____ **Other Mathematics Program-** a program that substantially, but partially, meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for supplemental materials. Substantial evidence clearly supports the designation of this program as Other.

_____ **Component Mathematics Program-** a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs. Substantial evidence clearly supports the designation of this program as Component.

_____ **Intervention Program-** a program designed and intended to target and support students' specific needs. Substantial evidence clearly supports the designation of this program as Intervention.

_____ **Does not meet criteria** for recommendation as a Curricular Material or Online Resource for Mathematics.

EVIDENCE SUMMARY:

FOCUS-
Students spend well over 50% of their time on the Widely Applicable Prerequisites. The language of the titles of the lessons and modules are similar to the language of the standards. In the Module Overview (TE) standards are aligned with each lesson.

COHERENCE-
The modules progress in a logical sequence and also gradually increase in difficulty. Previous knowledge is applied appropriately. Connections are made between categories, domains and clusters when applicable and appropriate.

RIGOR-
Overall this text is rigorous for this grade level, unless vertical alignment is present. However there are many higher-level, challenging exercises, problems and activities.

CONCEPTUAL UNDERSTANDING-
Conceptual understanding is covered throughout the text when a standard requires it. Conceptual problems are integrated into each lesson and placed purposefully.

MATHEMATICAL PRACTICES-
Focus standards for Mathematical Practices can be found at the beginning of each module. Also Mathematical Practices are identified throughout each lesson in the margin. Application problems are designed to cover the required skills from the WAP while also applying the Mathematical Practices.

ACCESSIBILITY OF STANDARDS TO ALL STUDENTS-
Scaffolding boxes located in the margins of the TE address needs to support special populations, however the resources are limited.
Lessons are scaffolded, however resources for remediation and enrichment are lacking.

OTHER:

Strengths
- Covers all standards and mathematical practices
- Module Overview useful
- Good conceptual problems
- Scaffolding boxes in TE are helpful
- Appropriate use of prior knowledge

Weaknesses
- Soft cover have to replace or make copies every year
- Weak text to picture ratio
- Heavy on text difficult for lower level reading students and ELL students
- Missing glossary
- Some lessons lacking in procedural problems

Note:
In order for this curriculum to be adopted and be appropriate for the grade level, Great Minds texts would have to have been adopted in earlier grades before this class.

2015-1 nterim Mathematics Review

Mathematics Evaluation Tool – High School

Publisher: Great Minds

Title of Material: Eureka Math - A Story of Functions - Algebra 1

Author: Great Minds

ISBN #: 978-1-63255-324-9 **Copyright** 2015

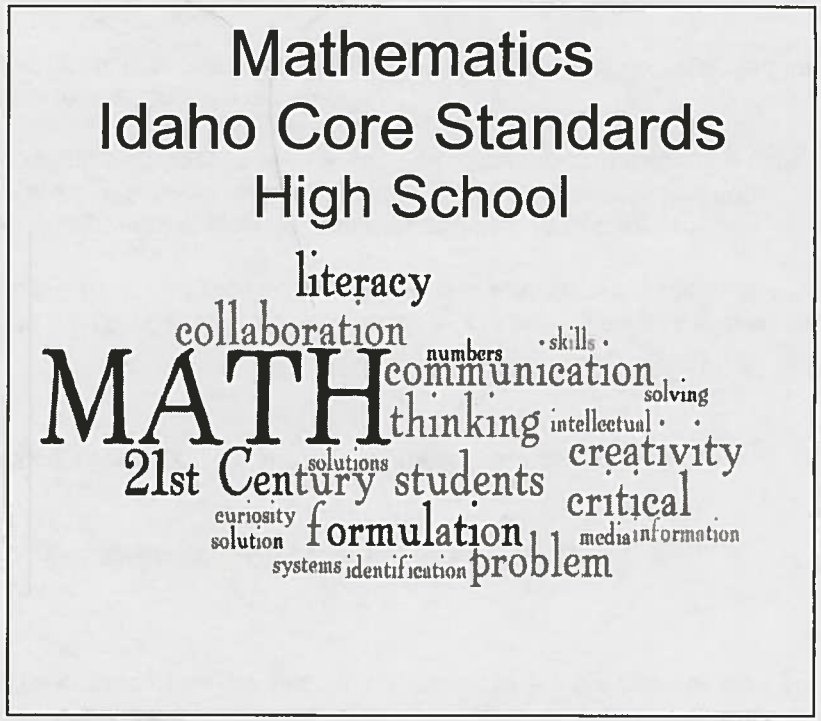
Reviewer ID: K.C. and R.K.

Core Mathematics Program- a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Core.

Other Mathematics Program- a program that substantially, but partially, meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Other.

Component Mathematics Program- a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs.
Substantial evidence clearly supports the designation of this program as Component.

Intervention Program- a program designed and intended to target and support students' specific needs.
Substantial evidence clearly supports the designation of this program as Intervention.



- Evaluation Form adapted from Instructional Materials Evaluation Toolkit (IMET).

The IMET was developed by Student Achievement Partners. Educators may use or adapt. http://creativecommons.org/licenses/by/3.0/ Download this tool at http://achievethecore.org/IMET

Instructional Materials Evaluation Tool

Mathematics, High School

What Are the Purposes of the IMET?

This Math IMET is designed to help educators determine whether instructional materials are aligned to the Shifts and major features of the Common Core State Standards (CCSS). The substantial instructional Shifts (http://www.corestandards.org/other-resources/key-shifts-in-mathematics/) at the heart of the Common Core State Standards are:

- **Focus** strongly where the Standards focus
- **Coherence**: Think across grades and link to major topics within the grade
- **Rigor**: In major topics, pursue conceptual understanding, procedural skill and fluency, and application with equal intensity.

The IMET draws directly from the following documents:

- Common Core State Standards for Mathematics (www.corestandards.org/Math)
- Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013) (http://www. corestandards.org/wp-content/uploads/Math_Publishers_Criteria_ HS_Spring_2013_FINAL1.pdf)

When to use the IMET

1. Purchasing materials: Many factors go into local purchasing decisions. Alignment to the Standards is a critical factor to consider. This tool is designed to evaluate alignment of instructional materials to the Shifts and the major features of the CCSS. It also provides suggestions of additional indicators to consider in the materials evaluation and purchasing process
2. Evaluating materials currently in use: The IMET can be used to analyze the degree of alignment of existing materials and help to highlight specific, concrete flaws in alignment. Even where materials and tools currently in use fail to meet one or more of these criteria, the pattern of failure is likely to be informative. States and districts can use the evaluation to create a thoughtful plan to modify or combine existing resources in such a way that students' actual learning experiences approach the focus, coherence, and rigor of the Standards.
3. Developing programs: Those developing new programs can use this tool as guidance for creating aligned curricula.

Please note this tool was designed for evaluating comprehensive curricula (including any supplemental or ancillary materials), but it was not designed for the evaluation of standalone supplemental materials.

Who Uses the IMET?

Evaluating instructional materials requires both subject-matter and pedagogical expertise. Evaluators should be well versed in the Standards (www.corestandards.org/Math) for all grades in which materials are being evaluated. This includes understanding the Widely Applicable Prerequisites (www.achievethecore.org/prerequisites), how the content fits into the progressions in the Standards (www. achievethecore.org/progressions), and the expectations of the Standards with respect to conceptual understanding, procedural skill and fluency, and application. Evaluators also should be familiar with the substantial instructional Shifts (http://www.corestandards.org/other-resources/key-shifts-in-mathematics/) of Focus, Coherence and Rigor that are listed above.

Getting Started

Prior to Evaluation

Assemble all of the materials necessary for the evaluation. It is essential for evaluators to have materials for all grades covered by the program, as some criteria cannot be rated without having access to each grade. In addition, each evaluator should have a reference copy of the Common Core State Standards for Mathematics (CCSSM) and the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).

Before conducting the evaluation itself, it is important to develop a protocol for the evaluation process. The protocol should include having evaluators study the Publishers' Criteria and the IMET. It will also be helpful for evaluators to get a sense of each program overall before beginning the process. At a minimum, this would include reading the front matter of the text, looking at the table of contents and paging through multiple chapters.

Sections 1-3 below should be completed to produce a comprehensive picture of the strengths and weaknesses of the materials under evaluation. Information about areas in need of improvement or supplementation should be shared with internal and external stakeholders.

Navigating the Tool

Begin with Section 1: Non-Negotiable Alignment Criteria

- The Non-Negotiable Alignment Criteria must each be met in full for materials to be considered aligned to the Shifts and the major features of the Common Core State Standards. Each Non-Negotiable Alignment Criterion has one or more metrics associated with it; every one of these metrics must be met in order for the criterion as a whole to be met.

- Examine the relevant materials and use evidence to rate the materials against each criterion and its associated metric(s).

- Record and explain the evidence upon which the rating is based.

Continue to Section 2: Alignment Criteria

- The Alignment Criteria must each be met for materials to be considered aligned to the Shifts and the major features of the Common Core State Standards. Each Alignment Criterion has one or more metric associated with it; a specific number of these metrics must be met or partially met in order for the criterion as a whole to be met.

- Examine the materials in relation to these criteria, assigning each metric a point value. Rate the criterion as "Meets" or "Does Note Meet" based on the number of points assigned. The more points the materials receive on the alignment Criteria, the better they are aligned.

- Record and explain the evidence upon which the rating is based.

Proceed to Section 4: Indicators of Quality

- Indicators of Quality are important considerations that will help evaluators better understand the overall quality of instructional materials. These considerations are not criteria for alignment to the CCSS, but they provide valuable information about additional program characteristics. Evaluators may want to add their own indicators to the examples provided.

Directions for Non-Negotiable 1 **Focus and Coherence**		
Criterion	**Evidence- Give specific examples.**	**Rating: (Reviewer only.)**
Non-Negotiable 1: Focus and Coherence- Materials must focus coherently on the Widely Applicable Prerequisites in a way that is consistent with the progressions in the Standards. Focus and coherence are the two major evidence-based design principles of the Common Core State Standards for Mathematics (CCSSM, p. 3). Focus is necessary in order to fulfill the ambitious promise the states have made to their students by adopting the Standards: greater achievement at the college and career-ready level; greater depth of understanding of mathematics; and a rich classroom environment in which reasoning, sense-making, applications, and a range of mathematical practices flourish. In high school courses, narrowing and deepening the curriculum creates a structure that ties topics together. Thus, materials must focus coherently on the Widely Applicable Prerequisites in a way that is consistent with the progressions in the Standards.	Focus and coherence are the two major evidence-based design principles of the Common Core State Standards for Mathematics (CCSSM, p. 3). Focus is necessary in order to fulfill the ambitious promise the states have made to their students by adopting the Standards: greater achievement at the college and career-ready level; greater depth of understanding of mathematics; and a rich classroom environment in which reasoning, sense-making, applications, and a range of mathematical practices flourish. In high school courses, narrowing and deepening the curriculum creates a structure that ties topics together. Thus, materials must focus coherently on the Widely Applicable Prerequisites in a way that is consistent with the progressions in the Standards. **Required Materials:** • Common Core State Standards for Mathematics (www.corestandards.org/wpcontent/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_HS_Spring_2013_FINAL1.pdf) • Widely Applicable Prerequisites for College and Careers (http://achievethecore.org/prerequisites) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion:** Non-Negotiable 1 is rated as Meets or Does Not Meet. To rate Non-Negotiable 1, first rate Metrics 1A–1H. Each of these eight metrics must be rated as Meets in order for Non-Negotiable 1 to be rated as Meets. Rate each metric 1A–1H as Meets or Does Not Meet/Insufficient Evidence. If the evidence examined shows that the Criterion is met, then mark the Criterion as Meets. If the evidence examined shows that the Criterion is not met—or if there is insufficient evidence to make a determination—then mark the Criterion as Does Not Meet/Insufficient Evidence. Support all ratings with evidence.

Metric NN1A: **In any single course, students spend at least 50% of their time on Widely Applicable Prerequisites.** **How to Find the Evidence:** Familiarize yourself with the Widely Applicable Prerequisites. Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, lessons, homework assignments, and assessments. (Evaluate both student and teacher materials.) Consider time spent on the Widely Applicable Prerequisites and judge qualitatively whether students and teachers using the materials as designed will devote the majority of time to the Widely Applicable Prerequisites For context, read Criterion #1 in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** Eureka Math materials correspond to the CCSS Standards. Students spend more than 50% of their time on the WAP. In the table of contents Great Minds includes which standards are covered in each lesson and it appears that the standards covered are accurate. Also at the beginning of each module they list the focus standards.	X **Meets** ____**Does Not Meet Insufficient Evidence**
Metric NN1B: **Student work in Geometry involves significant work with applications/modeling and problems that use algebra skills.** **How to Find the Evidence:** Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, lessons, homework assignments, and assessments. (Evaluate both student and teacher materials. NOTE: Since Geometry contains relatively fewer Widely Applicable Prerequisites, this Criterion is important to help foster students' college and career readiness. Problems that use algebra skills might include, for example, algebraic geometry problems in a coordinate setting, or problems of measurement involving unknown quantities.	**Evidence-** Geometry standards are not required in Algebra 1, therefore Eureka meets this metric because they did not need to cover Geometry Standards. However, there are a couple examples that include Geometry concepts. Example #5 pg 104 student edition Module 1 Example: pg 8 of Module 4	X **Meets** ____**Does Not Meet Insufficient Evidence**

Metric NN1C: **There are problems at a level of sophistication appropriate to high school (beyond mere review of middle school topics) that involve the application of knowledge and skills from grades 6-8.** **How to Find the Evidence:** Evaluate lessons, chapter/unit assessments, and homework assignments. NOTE: Problems should include application of the following topics from grades 6-8: • Ratios and proportional relationships. • Percentage and unit conversions, e.g., in the context of complex measurement problems involving quantities with derived or compound units (such as mg/mL, kg/ m3, acre-feet, etc.). • Basic function concepts, e.g., by interpreting the features of a graph in the context of an applied problem. • Concepts and skills of geometric measurement e.g., when analyzing a diagram or schematic. • Concepts and skills of basic statistics and probability (see grades 6–8.SP) • Performing rational number arithmetic fluently. For context, read Table 1 on Page 8 of the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** Overall this text does appear to be rigorous, however if Eureka materials had been used in prior grade levels and gradually implemented it then would be appropriate level of difficulty for Algebra I students. As the modules progress, the level of difficulty challenges all students and gives them the opportunity to grow.	X **Meets** ___ **Does Not Meet Insufficient Evidence**
Metric NN1D: **Materials base courses on the content specified in the Standards.** **How to Find the Evidence:** Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, and lessons in both student and teacher materials. For context, read Criterion #3a in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** It is very apparent that Eureka based their materials on the specified standards, looking through the book the language of the titles of the lesson and modules are similar to the language of the standards. There is a scope and sequence to the book where you can see everything is aligned nicely and in a logical sequence.	X **Meets** ___ **Does Not Meet Insufficient Evidence**
Metric NN1E: **Materials give all students extensive work with course-level problems.** **How to Find the Evidence:** Evaluate both student and teacher materials. If the materials provide resources for differentiated learning, consider whether lower-performing students have opportunities to engage with course-level problems. Also consider whether higher-performing students are given opportunities to learn current course-level content in greater depth. For context, read Criterion #3b in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** Problem sets range from simple procedural attainable problems, to difficult in depth critical thinking problems. In the teachers edition there are suggestions for scaffolding lessons for advanced and lower level students. With the use of online support there are more options for both remediation and enrichment.	X **Meets** ___ **Does Not Meet Insufficient Evidence**

Metric NN1F: **Materials relate course-level concepts explicitly to prior knowledge from earlier grades or courses. The materials are designed so that prior knowledge becomes reorganized and extended to accommodate the new knowledge.** **How to Find the Evidence:** Evaluate student and teacher materials, looking for problems that involve extending the knowledge learned in earlier grades and courses. NOTE: An example of evaluating this Criterion might be to look at whether materials connect the equation of a circle with the distance formula and the Pythagorean theorem. For context, read Criterion #3c in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** Throughout the lessons it is necessary to use prior knowledge from earlier grades and courses. For example, when solving and graphing inequalities it is necessary to use prior knowledge of solving equations. Another example is in Module 4 Lessons 17-22 when students are required to use prior knowledge of graphing quadratics and apply to the new concept of translating quadratic graphs.	X **Meets** ____**Does Not Meet Insufficient Evidence**
Metric NN1G: **Materials include learning objectives that are visibly shaped by CCSSM cluster and domain headings.** **How to Find the Evidence:** Select several clusters from the course being evaluated. Evaluate teacher and student materials in relation to these clusters. For context, read Criterion #4a in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** In the Module Overview in the TE all standards for Algebra I have been intentionally included throughout the text. Also student outcomes are written at the beginning of each lesson and are visibly shaped CCSSM cluster and domain headings. Some standards are included in more than one module to show more emphasis and importance.	X **Meets** ____**Does Not Meet Insufficient Evidence**
Metric NN1H: **Materials include problems and activities that serve to connect two or more clusters in a domain, or two or more domains in a category, or two or more categories, in cases where these connections are natural and important.** **How to Find the Evidence:** In the course being evaluated, choose two or more clusters, two or more domains, or two or more categories for which connections are natural and important. Evaluate the units, chapters, and lessons that deal with the chosen topics, looking for problems and activities that serve to connect the chosen clusters or domains. NOTE: An example of evaluating this Criterion might be to look at whether materials include problems in which students analyze a situation by building a function, graphing it, and using it to create and solve an equation. For context, read Criterion #4b in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** The lessons throughout this text do a good job of connecting and showing the correlation between clusters, domains and categories. The Table of Contents shows how multiple domains and clusters are covered in each lesson. For example, in Lesson 15 Module 1 students are required to write, solve and then graph a linear inequality. That covers both domains A-CED and A-REI and makes a natural and important connection between the two.	X **Meets** ____**Does Not Meet Insufficient Evidence**

Non-Negotiable 1: Focus and Coherence- Materials must focus coherently on the Widely Applicable Prerequisites in a way that is consistent with the progressions in the Standards.

Metric NN 1: If all metrics 1A–1H were rated as Meets, then rate Non-Negotiable 1 as Meets. If one or more metrics were rated as Does Not Meet/Insufficient Evidence, then rate Non-Negotiable 1 as Does Not Meet. Check the final rating.
Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)**

Before moving to Alignment Criterion 1, record the final Meets or Does Not Meet rating in the Evaluation Summary.

X **Meets**

____ **Does Not Meet**

Strengths/Weaknesses

Strengths
- Uses prior knowledge
- Covers all standards
- Module Overview is useful

Weaknesses
- Rigorous

Now continue by evaluating Alignment Criterion 1 for Rigor and Balance.

Directions for Alignment Criterion 1

Rigor and Balance

Alignment Criterion 1:
Rigor and Balance- Materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.

The Standards set expectations for attention to all three aspects of rigor: conceptual understanding, procedural skill and fluency, and applications. Thus, materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.

The Standards set expectations for attention to all three aspects of rigor: conceptual understanding, procedural skill and fluency, and applications. Thus, materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.

- Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf)
- Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_HS_Spring_2013_FINAL1.pdf)
- Widely Applicable Prerequisites for College and Careers (http://achievethecore.org/prerequisites)
- From the materials being evaluated: teacher guides, student texts and workbooks

Rating this Criterion:

Alignment Criterion 1 is rated as Meets or Does Not Meet.

To rate Alignment Criterion 1, first rate metrics 1A, 1B, and 1C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). For each metric, guiding questions are provided to aid in gathering evidence.

Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 1 if the materials rate 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as rigor and balance, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.

AC Metric 1A: **The materials support the development of students' conceptual understanding of key mathematical concepts, especially where called for in specific content Standards or cluster headings.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Widely Applicable Prerequisites that relate specifically to conceptual understanding to use throughout the questions associated with this metric. NOTE: Some examples of clusters or Standards that call for conceptual understanding include: N-RN.A.1, A-APR.B, A-REI.A.1, A-REI.D.10, A.REI.D.11, F.IF.A.1, F-LE.A.1, G.SRT.A.2, G-SRT.C.6, S-ID.C.7 For context, read Criterion #2a in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	• Choose a cluster/Standard from the Widely Applicable Prerequisites that is aligned to each aspect of rigor and use it to evaluate these metrics. It is most helpful if the same clusters and Standards are chosen for all of the programs being evaluated. (Guidance in choosing clusters/Standards is included in "How to Find the Evidence" below.)	**Use the questions for AC Metric 1A to evaluate Metric 1A. Record evidence for each question and rate Metric 1A.** X **Meets (2)** ____ **Partially Meets (1)** ____ **Does Not Meet (0)**
Is conceptual understanding attended to thoroughly where the Standards set explicit expectations for understanding or interpreting? Evaluate lessons, chapter/unit assessments and homework assignments, paying attention to work aligned to Standards that explicitly call for understanding or interpreting.	**Evidence-** Conceptual understanding is covered throughout the text when a standard calls for it. For example, A-REI.D.10 calls for understanding that a graph of an equation is a set of solutions and that conceptual understanding is thoroughly covered in Lessons 20-23 in Module 1	
Do the materials feature high-quality conceptual problems and conceptual discussion questions? Evaluate lessons, chapter/unit assessments, and homework assignments. NOTE: Examples of conceptual problems might include such questions as "What is the maximum value of the function f(t) = 5 – t2 ?" or "Is √2 a polynomial? How about ½(x + √2)+ ½ (-x + √2)?"	**Evidence-** This text provides high quality problems and discussion questions in the TE and require students to respond with their conceptual understanding. Example Module 5 Lesson 4 pg 56-59 High quality problems with conceptual applications	
Do the materials feature opportunities to identify correspondences across mathematical representations? Evaluate lessons, chapter/unit assessments and homework assignments. NOTE: An example of evaluating this metric might include looking at whether materials support students in identifying correspondences among the expression that defines a function, the graph that shows the relationship, and the behavior of the phenomenon being modeled (if any).	**Evidence-** This text requires students throughout the text to solve problems using multiple representations. For example in Module 1 lesson 23 students solve systems of equations both graphically and algebraically.	

AC Metric 1B: **The materials are designed so that students attain the fluencies and procedural skills required by the Standards.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Widely Applicable Prerequisites that relate specifically to fluency and procedural skill to use throughout the questions associated with this metric. NOTE: Some examples of Standards that call for procedural skill and fluency include: A-SSE.A.1b, A-SSE.2, A-APR.A.1, A-APR.C.6, F-BF.B.3, G-GPE.B.4, G-GPE.B.5, G-GPE.B.7, G-CO.A.1, G-SRT.B.5 For context, read Criterion #2b in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).		**Use the questions for AC Metric 1B to evaluate Metric 1B. Record evidence for each question and rate Metric 1B.** X **Meets (2)** ____ **Partially Meets (1)** ____ **Does Not Meet (0)**
Is progress toward fluency and procedural skill interwoven with the student's developing conceptual understanding of the skills in question? Evaluate lessons, chapter/unit assessments, daily routines, and homework assignments for evidence that the development of fluency and procedural skill is supported by conceptual understanding.	**Evidence-** Each lesson contains practice sets once conceptual understanding has been generated to develop procedural skill and fluency to master the concept.	
Are purely procedural problems and exercises present that include cases in which opportunistic strategies are valuable and generic cases that require efficient and general procedures present? Evaluate lessons, chapter/unit assessments, daily routines, and homework assignments. NOTE: Problems in which opportunistic strategies are valuable might include such examples as solving x2 + 5 = 49 + 5 or (3x – 2)2 = 6x – 4. Generic cases that require efficient and general procedures might include such problems as solving c + 8 – c2 = 3(c – 1)2 – 5).	**Evidence-** There are sufficient procedural practice problems throughout the text. For example, when solving systems of equations in Module 1 different strategies are suggested, and students are asked to use the most efficient method for each problem.	
AC Metric 1C: **The materials are designed so that teachers and students spend sufficient time working with engaging applications, without losing focus on the Widely Applicable Prerequisites.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Widely Applicable Prerequisites that relate specifically to application to use throughout the questions associated with this metric. NOTE: Some examples of clusters or Standards that call for application include: N-Q.A, A-SSE.B.3, A-REI.D.11, F-IF.B, F-IF.C.7, F-BF.A.1, G-SRT.C.8, S-ID.A.2, S-IC.A.1 For context, read Criterion #2c in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).		**Use the questions for AC Metric 1C to evaluate Metric 1C. Record evidence for each question and rate Metric 1C.** X **Meets (2)** ____ **Partially Meets (1)** ____ **Does Not Meet (0)**
Are there single- and multi-step contextual problems, including non-routine problems, that develop the mathematics of the course, afford opportunities for practice, and engage students in problem solving? Do the problems attend thoroughly to those places in the content Standards where expectations for multi-step and real-world problems are explicit? Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** Single and multi-step conceptual problems can be found throughout the text. For example, in Module 1 SE pg 90-91 there is a large multi-step problem that helps build the students understanding. Then on page 92 there are single step problems that practice that same content.	

Do application problems particularly stress applying the Widely Applicable Prerequisites? Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** Application Problems apply the widely applicable prerequisites to real world scenerios. Example: Lesson 17 Module 2 Example 1	
Are there ample opportunities for students to engage with modeling problems? Do materials require students to use both individual parts of the modeling cycle as well as the full modeling cycle? Read the pages on High School—Modeling in the Standards for Mathematics (pp. 72 and 73). Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** There are many examples of Problems that use the Modeling cycle. Students are required to formulate equations from contextual problems, and then continue on to compute, interpret and validate the solution.	
Alignment Criterion 1: Materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations. **AC 1:** Materials must earn at least 5 of 6 points to meet this Alignment Criterion. If materials earn less than 5 points, the Criterion has not been met. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)** **Before moving to Alignment Criterion 2, record the final Meets or Does Not Meet rating in the Evaluation Summary.**		X **Meets** ____ **Does Not Meet** **Strengths/Weaknesses:** Strengths - Good conceptual problems to support deeper learning Weaknesses - In some sections the amount of procedural problems is lacking
Alignment Criterion 2: **Standards for Mathematical Practice- Materials must demonstrate authentic connections between content Standards and practice Standards.** The Standards require that designers of instructional materials connect the mathematical practices to mathematical content in instruction. Thus, materials must demonstrate authentic connections between content Standards and practice Standards.	The Standards require that designers of instructional materials connect the mathematical practices to mathematical content in instruction. Thus, materials must demonstrate authentic connections between content Standards and practice Standards. **Required Materials**: • Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_HS_Spring_2013_FINAL1.pdf) • Widely Applicable Prerequisites for College and Careers (http://achievethecore.org/prerequisites) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion:** Alignment Criterion 2 is rated as Meets or Does Not Meet. To rate Alignment Criterion 2, first rate metrics 2A, 2B, and 2C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). For each metric, guiding questions are provided to aid in gathering evidence. Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 2 if the materials rate 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as mathematical practices, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.

AC Metric 2A: **Materials address the practice Standards in such a way as to enrich the Widely Applicable Prerequisites; practices strengthen the focus of the course instead of detracting from it, in both teacher and student materials.** **How to Find the Evidence:** Familiarize yourself with the Widely Applicable Prerequisites. Evaluate teacher and student materials for evidence that the mathematical practices support and connect to the focus of the course. NOTE: An example of evaluating this Criterion might include looking at whether materials use regularity in repeated reasoning to illuminate formal algebra as well as functions, particularly recursive definitions of functions. For context, read Criterion #6 in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** In the Module Overview the Focus standards for Mathematical Practice are listed at the beginning of each module. Also the Mathematical Practices are identified throughout each lesson in the margin. Application problems are designed to cover the required skills from the WAP while also applying the mathematical practices	X **Meets (2)** ____ **Partially Meets (1)** ____ **Does Not Meet (0)**
AC Metric 2B: **Materials attend to the full meaning of each practice Standard.** **How to Find the Evidence:** For context, read Criterion #7 in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).		**Use the questions for AC Metric 2B to evaluate Metric 2B. Record evidence for each question and rate Metric 2B.** X **Meets (2)** ____ **Partially Meets (1)** ____ **Does Not Meet (0)**
Over the course of any given year of instruction, is each mathematical practice Standard meaningfully present in the form of assignments, activities, or problems that stimulate students to develop the habits of mind described in the practice Standard? Evaluate lessons, chapter/ unit assessments, and homework assignments for evidence of each mathematical practice being meaningfully present in instruction.	**Evidence-** The presence of the mathematical practices can be found all throughout the text, and are explicitly marked in the margin of the TE. The standards for mathematical practices are listed in the beginning of each module and includes further explanation on where connections are made.	
Are teacher-directed materials that explain the role of the practice Standards in the classroom and in students' mathematical development included? Are alignments to practice Standards accurate? Evaluate teacher materials, paying attention to explanations of the role of the practice Standards in the classroom and in students' mathematical development. Evaluate documents aligning lessons to practice Standards for accuracy. NOTE: Examples to look for when evaluating this metric might include the following: a highly scaffolded problem should not be aligned to MP.1; or a problem that directs a student to use a calculator should not be aligned to MP.5; or a problem about merely extending a pattern should not be aligned to MP.8.	**Evidence-** This text is very good at showing where the mathematical practices are covered. For example on page 172 in Module 1 (TE) in the margins it indicates the section of the lesson that explicitly addresses MP3.	

AC Metric 2C: **Materials support the Standards' emphasis on mathematical reasoning.** **How to Find the Evidence:** For context, read Criterion #8 in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).		**Use the questions for AC Metric 2C to evaluate Metric 2C. Record evidence for each question and rate Metric 2C.** X **Meets (2)** ____ **Partially Meets (1)** ____ **Does Not Meet (0)**
Do the materials support students in constructing viable arguments and critiquing the arguments of others concerning course-level mathematics that is detailed in the content Standards? Read Standard for Mathematical Practice 3. Evaluate teacher and student materials to ensure that students are given opportunities to reason with grade-level mathematics.	**Evidence-** Materials prompt students to construct viable arguments and critique the arguments and work of others. For example, in Module 1 on page 172 asks students to critique and assess the logic and thought process of other students	
Do the materials support students in producing not only answers and solutions, but also, in a course-appropriate way, arguments, explanations, diagrams, mathematical models, etc., especially in the Widely Applicable Prerequisites? Familiarize yourself with the Widely Applicable Prerequisites. Evaluate teacher and student materials to understand the types of work students are expected to produce.	**Evidence-** There are many places in the text that requires students to justify their answers using arguments and/or diagrams. For example, pg 215 Module 4 Lesson 19 TE. Exit tickets are also a great tool for students to show teachers their explanation of their answers.	
Do materials explicitly attend to the specialized language of mathematics? Is the language of argument, problem solving, and mathematical explanations taught rather than assumed? Evaluate teacher and student materials, paying attention to how mathematical language is taught. NOTE: An example of evaluating this Criterion might include looking at whether students are supported in: basing arguments on definitions; using the method of providing a counter example; or recognizing that examples alone do not establish a general statement.	**Evidence-** Eureka presents questions that require students to understand and use appropriate language of mathematics. The Module Overview includes a list of terms used throughout that module.	

Alignment Criterion 2: Materials must demonstrate authentic connections between content Standards and practice Standards.

AC 2: Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 points, the Criterion has not been met. Check the final rating.
Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewers only.)**

Before moving to Alignment Criterion 3, record the final Meets or Does Not Meet rating in the Evaluation Summary.

X **Meets**

____ **Does Not Meet**

Strengths/Weaknesses:

Strengths
- Covers all mathematical practices and explicitly marks where they are covered

Weaknesses
- No glossary
- Vocabulary not clearly marked throughout lessons

Alignment Criterion 3: **Access to the Standards for All Students- Materials must provide supports for English Language Learners and other special populations.** Because Standards are for all students, alignment requires thoughtful support to ensure all students are able to meet the Standards. Thus, aligned materials must provide supports for English Language Learners and other special populations.	Because Standards are for all students, alignment requires thoughtful support to ensure all students are able to meet the Standards. Thus, aligned materials must provide supports for English Language Learners and other special populations. **Required Materials:** • Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math Publishers_Criteria_HS_Spring_2013_FINAL1.pdf) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion:** Alignment Criterion 3 is rated as Meets or Does Not Meet. To rate Alignment Criterion 3, first rate metrics 3A, 3B, and 3C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 3 if the materials rate 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as support for special population, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.
AC Metric 3A: **Support for English Language Learners and other special populations is thoughtful and helps those students meet the same Standards as all other students. The language in which problems are posed is carefully considered.** **How to Find the Evidence:** Evaluate teacher and student materials, paying attention to supports offered for special populations.	**Evidence-** The scaffolding boxes that are located in the margin of the TE address needs to support special populations. However, the text doesn't provide enough accomodations specifically for ELL students	____**Meets (2)** X **Partially Meets (1)** ____**Does Not Meet (0)**
AC Metric 3B: **Materials provide appropriate level and type of scaffolding, differentiation, intervention, and support for a broad range of learners with gradual removal of supports, when needed, to allow students to demonstrate their mathematical understanding independently.** **How to Find the Evidence:** Evaluate teacher and student materials, paying attention to whether materials provide differentiation that will lead all learners to engage with on-grade-level content.	**Evidence-** There are side notes in the margin in the teachers edition that give suggestions of how to scaffold lessons when necessary. There are also extended resources online for scaffolding purposes.	X **Meets (2)** ____**Partially Meets (1)** ____**Does Not Meet (0)**
AC Metric 3C: **Design of lessons recommends and facilitates a mix of instructional approaches for a variety of learners such as using multiple representations (e.g., including models, using a range of questions, checking for understanding, flexible grouping, pair-share).** **How to Find the Evidence:** Evaluate teacher materials, noting instructional approaches suggested for whole class and differentiated lessons and activities.	**Evidence-** This textbook uses a specific format that helps use the variety of instructional strategies that helps reach all different types of learners. For example on page 181 in Module 4 TE the activity requires students to model the situation using both tables and graphs. They also have to make conclusions about their findings.	X **Meets (2)** ____**Partially Meets (1)** ____**Does Not Meet (0)**

Alignment Criterion 3: Materials must provide supports for English Language Learners and other special populations. **AC 3** Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 points, the Criterion has not been met. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewers only.)** **Move to the Evaluation Summary and record the final Meets or Does Not Meet rating .**	X **Meets** ____ **Does Not Meet** **Strengths/Weaknesses:** Strengths - Scaffolding suggestion in TE Weaknesses - Lacking in ELL and special populations accomodations - No ~~spa~~ spanish-english glossary

Once an evaluation for alignment to the Shifts and major features of the CCSS has been conducted using Sections 1-3, it's important to evaluate for overall quality and best practices. A starting list of Indicators of Quality are suggested below. States, districts and others evaluating instructional materials are encouraged to add to this list to ensure materials reflect local contexts. For background information on some of the Indicators of Quality in this section, refer to pp.16–18 in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).

Indicators of Quality	**Evidence- Give specific examples.**	**Rating: (Reviewer only.)**
1. Lessons are thoughtfully structured and support the teacher in leading the class through the learning paths at hand, with active participation by all students in their own learning and in the learning of their classmates.	**Evidence-** There are many helpful notes in the teachers edition that assist with discussion questions and help guide the lesson	**(Reviewer only.)** X **Yes** ____ **No**
2. The underlying design of the materials includes both problems and exercises. (In solving problems, students learn new mathematics, whereas in working exercises, students apply what they have already learned to build mastery.) Each problem or exercise has a purpose. **NOTE: This Criterion does not require that the problems and exercises be labeled as such.**	**Evidence-** The lessons have problems that guide teachers and students through the lessons. And there are procedural and conceptual excercises at the conclusion of each lesson.	**(Reviewer only.)** X **Yes** ____ **No**

3. Design of assignments is not haphazard: exercises are given in intentional sequences in order to strengthen students' mathematical understanding.	**Evidence-** The information presented follow a good scope and sequence with purpose. The sequence is logical and appropriate for this level of math.	**(Reviewer only.)** X **Yes** ____ **No**
4. There are separate teacher materials that support and reward teacher study including, but not limited to: discussion of the mathematics of the units and the mathematical point of each lesson as it relates to the organizing concepts of the unit, discussion on student ways of thinking and anticipating a variety of students responses, guidance on lesson flow, guidance on questions that prompt students thinking, and discussion of desired mathematical behaviors being elicited among students.	**Evidence-** The teachers edition provides quality suggestions and support for the teacher. There are also many online resources for teachers.	**(Reviewer only.)** X **Yes** ____ **No**
5. Manipulatives suggested in the materials are faithful representations of the mathematical objects they represent and are connected to written methods.	**Evidence-** Manipulatives used are relevent to the process and growth meant for a particular topic.	**(Reviewer only.)** X **Yes** ____ **No**
6. Materials include a variety of curriculum-embedded assessments. Examples include pre-, formative, summative, and self-assessment resources.	**Evidence-** Warm up problems, exit tickets and assessments are included in the materials. There are also more teacher resources online.	**(Reviewer only.)** X **Yes** ____ **No**
7. Assessments contain aligned rubrics, answer keys, and scoring guidelines that provide sufficient guidance for interpreting student performance.	**Evidence-** Assessments contain solutions and End of Module Assessments include "A Progression Toward Mastery" which is a type of rubric.	**(Reviewer only.)** X **Yes** ____ **No**
8. Materials assess student proficiency using methods that are accessible and unbiased, including the use of course-level language in student prompts.	**Evidence-** Exit tickets are a good way to assess students in an informal and unbiased way.	**(Reviewer only.)** X **Yes** ____ **No**

9. Materials are carefully evaluated by qualified individuals whose names are listed, in an effort to ensure freedom from mathematical errors and course-level appropriateness.	**Evidence-** Contributers are listed in front cover of the book	**(Reviewer only.)** X **Yes** ____ **No**
10. The visual design supports students in engaging thoughtfully with the subject. Navigation through the text is clear.	**Evidence-** Poor visual design. Very plain. Bad text to picture ratio	**(Reviewer only.)** ____ **Yes** X **No**

Reviewer IMET Evaluation Summary **Title/Level:** Eureka Math - A Story of Functions - Algebra I

Publisher: Great Minds **Copyright:** 2015 **ISBN:** 978-1-63255-324-9

Reviewer ID # K.C. and R.K. **Date Review Completed:** _____

Non-Negotiable Criteria-The Non-Negotiable must be met in order for the Non-Negotiable Alignment Criteria to be met overall.

Non- Negotiable 1: Focus and Coherence

_____ **Meets**

_____ **Does Not Meet**

Non-Negotiable Overall:

X **Meets** _____ **Does Not Meet**

Alignment Criteria- Each Alignment Criterion must be met with a sufficient number of points in order for Alignment Criteria to be labeled as "Meets" overall. The more points the materials receive on the Alignment Criteria, the better they are aligned.

Alignment Criterion 1: Rigor and Balance	Alignment Criterion 2: Standards of Mathematical Practice	Alignment Criterion 3: Access to Standards for All Learners
Points: 6 **of 6 possible.** **(Materials must receive at least 5 of 6 points to align.)**	**Points:** 6 **of 6 possible.** **(Materials must receive at least 5 of 6 points to align.)**	**Points:** 5 **of 6 possible.** **(Materials must receive at least 5 of 6 points to align.)**
X **Meets**	X **Meets**	X **Meets**
_____ **Does Not Meet**	_____ **Does Not Meet**	_____ **Does Not Meet**

Alignment Criteria Overall:

X **Meets** _____ **Does Not Meet**

If the materials meet the Non-Negotiable Criterion and each Alignment Criterion, they are aligned to the Shifts and major features of the Co[illegible]tandards. **Do the materials meet every Non-Negoti[illegible] and Alignment Criterion?** X **Yes** ____ **N**

What are the specific areas of strength and weakness based on this evaluation? Publishers or others modifying or developing assessments can use this information to make improvements and/or to remedy gaps in the alignment of assessment materials.

Strengths: uses good use of prior knowledge, covers all standards, module overview is very useful, good conceptual problems to support deeper learning, covers all mathematical practices and explicitly marks where they are covered, and scaffolding suggestions in teacher edition are helpful.

Weaknesses: Very rigorous, in some areas/sections the amount of procedural problems are lacking, no glossary, vocabulary not clearly marked throughout lessons, lacking in ELL and special populations accomodations, and no spanish/english glossary.

2015-16 Mathematics Interim Review Recommendation & Summary

Publisher Name:	Great Minds
Title:	Eureka Math - A Story of Functions Geometry
ISBN #	978-1-63255-730-8
Grade Level(s) or Course:	Geometry (H.S.)
Reviewer ID:	AC JH

RECOMMENDED AS:

✓ **Core Mathematics Program-** a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials. Substantial evidence clearly supports the designation of this program as Core.

_____ **Other Mathematics Program-** a program that substantially, but partially, meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for supplemental materials. Substantial evidence clearly supports the designation of this program as Other.

_____ **Component Mathematics Program-** a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs. Substantial evidence clearly supports the designation of this program as Component.

_____ **Intervention Program-** a program designed and intended to target and support students' specific needs. Substantial evidence clearly supports the designation of this program as Intervention.

_____ **Does not meet criteria** for recommendation as a Curricular Material or Online Resource for Mathematics.

EVIDENCE SUMMARY:

FOCUS- Materials reflect the content architecture of the standards by not assessing above grade level. The focus is High School Geometry standards.

COHERENCE-
Materials focus coherently on all ~~major clusters~~ Widely Applicable Geometry standards.

RIGOR- Materials reflect the balances in the standards with rigorous expectations.

CONCEPTUAL UNDERSTANDING-
Conceptual and procedural understanding are attended to throughout the curriculum with deeper thinking problems, socratic discussion, exploratory problems and classwork discussions.

MATHEMATICAL PRACTICES-
MPs are seen throughout this curriculum and make authentic connections between standards. MPs meet the needs of ELLs and diverse learners.

ACCESSIBILITY OF STANDARDS TO ALL STUDENTS-
MPs and content throughout this curriculum meet the needs of ELLs and diverse learners through socratic discussions, scaffolding notes, exploratory challenges, lessons that extend topics (optional).

OTHER:
Strengths of this curriculum are the mathematical practice approach and the conceptual understanding it builds. There are rich application problems and the concrete to abstract learning is seen throughout. The weaknesses are that the text is not as visually

appealing for student engagement, and ~~The~~ navigation is a bit awkward with topics listed small at the bottom instead of ~~color~~ in the colored heading at the top.

Eureka Geometry would be most successful if foundational skills and comprehension are strong to begin with due to Eureka's rigor.

2015-1 nterim Mathematics Review

Mathematics Evaluation Tool – High School

Publisher: Great Minds

Title of Material: Eureka Math - a Story of Functions - Geometry

Author: Great Minds

ISBN #: 978-1-63255-730-8 **Copyright** 2015

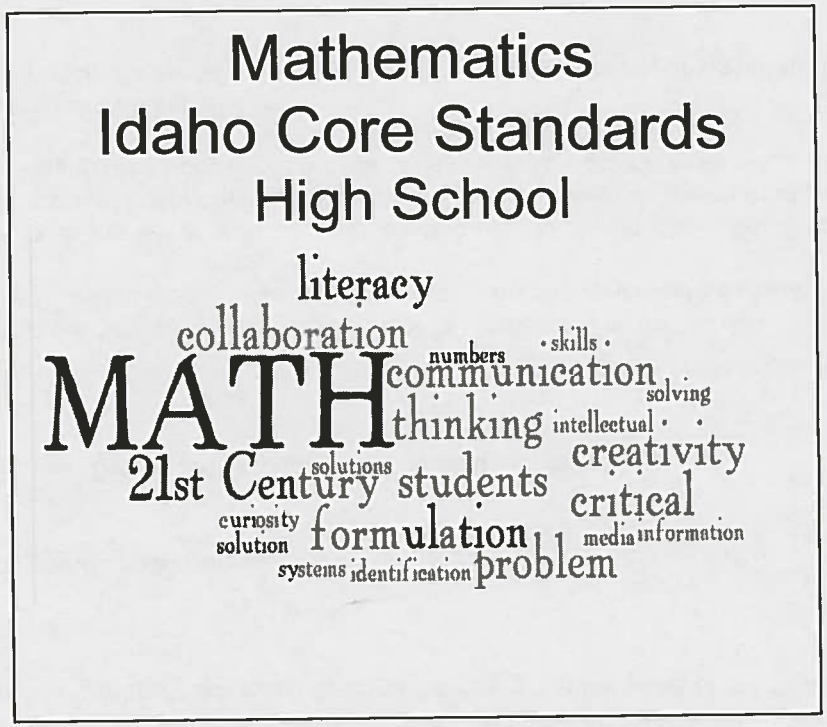
Reviewer ID: AC JH

Core Mathematics Program- a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Core.

Other Mathematics Program- a program that substantially, but partially, meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Other.

Component Mathematics Program- a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs.
Substantial evidence clearly supports the designation of this program as Component.

Intervention Program- a program designed and intended to target and support students' specific needs.
Substantial evidence clearly supports the designation of this program as Intervention.



- Evaluation Form adapted from Instructional Materials Evaluation Toolkit (IMET).

The IMET was developed by Student Achievement Partners. Educators may use or adapt. http://creativecommons.org/licenses/by/3.0/ Download this tool at http://achievethecore.org/IMET

Instructional Materials Evaluation Tool

Mathematics, High School

What Are the Purposes of the IMET?

This Math IMET is designed to help educators determine whether instructional materials are aligned to the Shifts and major features of the Common Core State Standards (CCSS). The substantial instructional Shifts (http://www.corestandards.org/other-resources/key-shifts-in-mathematics/) at the heart of the Common Core State Standards are:

- **Focus** strongly where the Standards focus
- **Coherence**: Think across grades and link to major topics within the grade
- **Rigor**: In major topics, pursue conceptual understanding, procedural skill and fluency, and application with equal intensity.

The IMET draws directly from the following documents:

- Common Core State Standards for Mathematics (www.corestandards.org/Math)
- Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013) (http://www. corestandards.org/wp-content/uploads/Math_Publishers_Criteria_ HS_Spring_2013_FINAL1.pdf)

When to use the IMET

1. Purchasing materials: Many factors go into local purchasing decisions. Alignment to the Standards is a critical factor to consider. This tool is designed to evaluate alignment of instructional materials to the Shifts and the major features of the CCSS. It also provides suggestions of additional indicators to consider in the materials evaluation and purchasing process
2. Evaluating materials currently in use: The IMET can be used to analyze the degree of alignment of existing materials and help to highlight specific, concrete flaws in alignment. Even where materials and tools currently in use fail to meet one or more of these criteria, the pattern of failure is likely to be informative. States and districts can use the evaluation to create a thoughtful plan to modify or combine existing resources in such a way that students' actual learning experiences approach the focus, coherence, and rigor of the Standards.
3. Developing programs: Those developing new programs can use this tool as guidance for creating aligned curricula.

Please note this tool was designed for evaluating comprehensive curricula (including any supplemental or ancillary materials), but it was not designed for the evaluation of standalone supplemental materials.

Who Uses the IMET?

Evaluating instructional materials requires both subject-matter and pedagogical expertise. Evaluators should be well versed in the Standards (www.corestandards.org/Math) for all grades in which materials are being evaluated. This includes understanding the Widely Applicable Prerequisites (www.achievethecore.org/prerequisites), how the content fits into the progressions in the Standards (www. achievethecore.org/progressions), and the expectations of the Standards with respect to conceptual understanding, procedural skill and fluency, and application. Evaluators also should be familiar with the substantial instructional Shifts (http://www.corestandards.org/other-resources/key-shifts-in-mathematics/) of Focus, Coherence and Rigor that are listed above.

Getting Started

Prior to Evaluation

Assemble all of the materials necessary for the evaluation. It is essential for evaluators to have materials for all grades covered by the program, as some criteria cannot be rated without having access to each grade. In addition, each evaluator should have a reference copy of the Common Core State Standards for Mathematics (CCSSM) and the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).

Before conducting the evaluation itself, it is important to develop a protocol for the evaluation process. The protocol should include having evaluators study the Publishers' Criteria and the IMET. It will also be helpful for evaluators to get a sense of each program overall before beginning the process. At a minimum, this would include reading the front matter of the text, looking at the table of contents and paging through multiple chapters.

Sections 1-3 below should be completed to produce a comprehensive picture of the strengths and weaknesses of the materials under evaluation. Information about areas in need of improvement or supplementation should be shared with internal and external stakeholders.

Navigating the Tool

Begin with Section 1: Non-Negotiable Alignment Criteria

- The Non-Negotiable Alignment Criteria must each be met in full for materials to be considered aligned to the Shifts and the major features of the Common Core State Standards. Each Non-Negotiable Alignment Criterion has one or more metrics associated with it; every one of these metrics must be met in order for the criterion as a whole to be met.

- Examine the relevant materials and use evidence to rate the materials against each criterion and its associated metric(s).

- Record and explain the evidence upon which the rating is based.

Continue to Section 2: Alignment Criteria

- The Alignment Criteria must each be met for materials to be considered aligned to the Shifts and the major features of the Common Core State Standards. Each Alignment Criterion has one or more metric associated with it; a specific number of these metrics must be met or partially met in order for the criterion as a whole to be met.

- Examine the materials in relation to these criteria, assigning each metric a point value. Rate the criterion as "Meets" or "Does Note Meet" based on the number of points assigned. The more points the materials receive on the alignment Criteria, the better they are aligned.

- Record and explain the evidence upon which the rating is based.

Proceed to Section 4: Indicators of Quality

- Indicators of Quality are important considerations that will help evaluators better understand the overall quality of instructional materials. These considerations are not criteria for alignment to the CCSS, but they provide valuable information about additional program characteristics. Evaluators may want to add their own indicators to the examples provided.

Directions for Non-Negotiable 1

Focus and Coherence

Criterion	Evidence- Give specific examples.	Rating: (Reviewer only.)
Non-Negotiable 1: Focus and Coherence- Materials must focus coherently on the Widely Applicable Prerequisites in a way that is consistent with the progressions in the Standards. Focus and coherence are the two major evidence-based design principles of the Common Core State Standards for Mathematics (CCSSM, p. 3). Focus is necessary in order to fulfill the ambitious promise the states have made to their students by adopting the Standards: greater achievement at the college and career-ready level; greater depth of understanding of mathematics; and a rich classroom environment in which reasoning, sense-making, applications, and a range of mathematical practices flourish. In high school courses, narrowing and deepening the curriculum creates a structure that ties topics together. Thus, materials must focus coherently on the Widely Applicable Prerequisites in a way that is consistent with the progressions in the Standards.	Focus and coherence are the two major evidence-based design principles of the Common Core State Standards for Mathematics (CCSSM, p. 3). Focus is necessary in order to fulfill the ambitious promise the states have made to their students by adopting the Standards: greater achievement at the college and career-ready level; greater depth of understanding of mathematics; and a rich classroom environment in which reasoning, sense-making, applications, and a range of mathematical practices flourish. In high school courses, narrowing and deepening the curriculum creates a structure that ties topics together. Thus, materials must focus coherently on the Widely Applicable Prerequisites in a way that is consistent with the progressions in the Standards. **Required Materials:** • Common Core State Standards for Mathematics (www.corestandards.org/wpcontent/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_HS_Spring_2013_FINAL1.pdf) • Widely Applicable Prerequisites for College and Careers (http://achievethecore.org/prerequisites) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion:** Non-Negotiable 1 is rated as Meets or Does Not Meet. To rate Non-Negotiable 1, first rate Metrics 1A–1H. Each of these eight metrics must be rated as Meets in order for Non-Negotiable 1 to be rated as Meets. Rate each metric 1A–1H as Meets or Does Not Meet/Insufficient Evidence. If the evidence examined shows that the Criterion is met, then mark the Criterion as Meets. If the evidence examined shows that the Criterion is not met—or if there is insufficient evidence to make a determination—then mark the Criterion as Does Not Meet/Insufficient Evidence. Support all ratings with evidence.

Metric NN1A: **In any s[illegible]e course, students spend at least 50% of their time on Widely Applicable Prerequisites.** **How to Find the Evidence:** Familiarize yourself with the Widely Applicable Prerequisites. Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, lessons, homework assignments, and assessments. (Evaluate both student and teacher materials.) Consider time spent on the Widely Applicable Prerequisites and judge qualitatively whether students and teachers using the materials as designed will devote the majority of time to the Widely Applicable Prerequisites For context, read Criterion #1 in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** 33/66 standards met are Widely Applicable Prerequisites. ≈ 50% Module 1: 297 pages } 831 / 1551 = 54% Module 2: 534 pages }	✓ **Meets** **____Does Not Meet Insufficient Evidence**
Metric NN1B: **Student work in Geometry involves significant work with applications/modeling and problems that use algebra skills.** **How to Find the Evidence:** Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, lessons, homework assignments, and assessments. (Evaluate both student and teacher materials. NOTE: Since Geometry contains relatively fewer Widely Applicable Prerequisites, this Criterion is important to help foster students' college and career readiness. Problems that use algebra skills might include, for example, algebraic geometry problems in a coordinate setting, or problems of measurement involving unknown quantities.	**Evidence-** Geometry work with Modeling + applications are found throughout. Module 1, Topic B: Unknown Angles These lessons use algebra to solve for unknown angles. Module 2, Topic A: Scale Drawings Lesson 1: finds Area + Perimeter pg. 26 Lesson 2: scale drawings using ratio method pg. 28 Problem Set - pg. 39-43	✓ **Meets** **____Does Not Meet Insufficient Evidence**

Metric NN1C: **There are problems at a level of sophistication appropriate to high school (beyond mere review of middle school topics) that involve the application of knowledge and skills from grades 6-8.** **How to Find the Evidence:** Evaluate lessons, chapter/unit assessments, and homework assignments. NOTE: Problems should include application of the following topics from grades 6-8: • Ratios and proportional relationships. • Percentage and unit conversions, e.g., in the context of complex measurement problems involving quantities with derived or compound units (such as mg/mL, kg/ m3, acre-feet, etc.). • Basic function concepts, e.g., by interpreting the features of a graph in the context of an applied problem. • Concepts and skills of geometric measurement e.g., when analyzing a diagram or schematic. • Concepts and skills of basic statistics and probability (see grades 6–8.SP) • Performing rational number arithmetic fluently. For context, read Table 1 on Page 8 of the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** Module 1: Builds off 8th grade construction standards but takes it further to constructing bisectors. Module 2: Connects similarity to ratios: Lesson 2 + 16 Module 3: Extends Area + Volume of 3-D objects to How a 3-D Printer Works. Module 4: Extends 8th grade knowledge of ∥+⊥ lines + distance. Module 5: Properties of Circles to Chords, Arcs, Sectors, Tangent + Secant Lines. Assessments assess at grade level.	✓ **Meets** ____**Does Not Meet Insufficient Evidence** Rationale for Module sequence explained in beginning of Module. Ex. Module 1 pg 3-5
Metric NN1D: **Materials base courses on the content specified in the Standards.** **How to Find the Evidence:** Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, and lessons in both student and teacher materials. For context, read Criterion #3a in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** All Geometry standards were met. All Modules list standards covered in table of contents. Pacing guides are present and helpful.	✓ **Meets** ____**Does Not Meet Insufficient Evidence**
Metric NN1E: **Materials give all students extensive work with course-level problems.** **How to Find the Evidence:** Evaluate both student and teacher materials. If the materials provide resources for differentiated learning, consider whether lower-performing students have opportunities to engage with course-level problems. Also consider whether higher-performing students are given opportunities to learn current course-level content in greater depth. For context, read Criterion #3b in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** Throughout: · Vocabulary · Flexibility of using "part" of Problem Set as differentiated homework (includes notes) · Socratic Discussion · Opening / Exploratory Problems · Practice Problems · Teacher Hints - pg. 9 of Module 1 · Scaffolding - Module 2 pg. 197	✓ **Meets** ____**Does Not Meet Insufficient Evidence**

Metric NN1F: **Materials relate course-level concepts explicitly to prior knowledge from earlier grades or courses. The materials are designed so that prior knowledge becomes reorganized and extended to accommodate the new knowledge.** **How to Find the Evidence:** Evaluate student and teacher materials, looking for problems that involve extending the knowledge learned in earlier grades and courses. NOTE: An example of evaluating this Criterion might be to look at whether materials connect the equation of a circle with the distance formula and the Pythagorean theorem. For context, read Criterion #3c in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** Each module begins w/ an overview explaining unit + identifies "foundational standards" pg. from previous grades / lessons. EX. Module 2 pg. 5	✓ **Meets** **____Does Not Meet Insufficient Evidence**
Metric NN1G: **Materials include learning objectives that are visibly shaped by CCSSM cluster and domain headings.** **How to Find the Evidence:** Select several clusters from the course being evaluated. Evaluate teacher and student materials in relation to these clusters. For context, read Criterion #4a in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** Student outcomes at beginning of each lesson. Each Module outlines CCSS covered. Ex. Module 2 pg. 9 identifies that G-SRT.A.1 will be a focus standard. (dilations w/ scale factors) Lesson 2 pg. 27 : Given a figure + scale drawing, students answer questions about scale factor...	✓ **Meets** **____Does Not Meet Insufficient Evidence**
Metric NN1H: **Materials include problems and activities that serve to connect two or more clusters in a domain, or two or more domains in a category, or two or more categories, in cases where these connections are natural and important.** **How to Find the Evidence:** In the course being evaluated, choose two or more clusters, two or more domains, or two or more categories for which connections are natural and important. Evaluate the units, chapters, and lessons that deal with the chosen topics, looking for problems and activities that serve to connect the chosen clusters or domains. NOTE: An example of evaluating this Criterion might be to look at whether materials include problems in which students analyze a situation by building a function, graphing it, and using it to create and solve an equation. For context, read Criterion #4b in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** Module 2, Topic A : Covers 3-CCSS standards w/ 5 lessons. Also need algebra to solve problems / find scale factors. Connections between domains are strong.	✓ **Meets** **____Does Not Meet Insufficient Evidence**

Non-Negotiable 1: Focus and Coherence- Materials must focus coherently on the Widely Applicable Prerequisites in a way that is consistent with the progressions in the Standards.

Metric NN 1: If all metrics 1A–1H were rated as Meets, then rate Non-Negotiable 1 as Meets. If one or more metrics were rated as Does Not Meet/Insufficient Evidence, then rate Non-Negotiable 1 as Does Not Meet. Check the final rating.
Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)**

Before moving to Alignment Criterion 1, record the final Meets or Does Not Meet rating in the Evaluation Summary.

✓ **Meets**

____Does Not Meet

Strengths/Weaknesses

Now continue by evaluating Alignment Criterion 1 for Rigor and Balance.

Directions for Alignment Criterion 1

Rigor and Balance

Alignment Criterion 1:
Rigor and Balance- Materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.

The Standards set expectations for attention to all three aspects of rigor: conceptual understanding, procedural skill and fluency, and applications. Thus, materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.

The Standards set expectations for attention to all three aspects of rigor: conceptual understanding, procedural skill and fluency, and applications. Thus, materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.

- Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf)
- Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_HS_Spring_2013_FINAL1.pdf)
- Widely Applicable Prerequisites for College and Careers (http://achievethecore.org/prerequisites)
- From the materials being evaluated: teacher guides, student texts and workbooks

Rating this Criterion:

Alignment Criterion 1 is rated as Meets or Does Not Meet.

To rate Alignment Criterion 1, first rate metrics 1A, 1B, and 1C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). For each metric, guiding questions are provided to aid in gathering evidence.

Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 1 if the materials rate 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as rigor and balance, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.

AC Metric 1A: **The materials support the development of students' conceptual understanding of key mathematical concepts, especially where called for in specific content Standards or cluster headings.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Widely Applicable Prerequisites that relate specifically to conceptual understanding to use throughout the questions associated with this metric. NOTE: Some examples of clusters or Standards that call for conceptual understanding include: N-RN.A.1, A-APR.B, A-REI.A.1, A-REI.D.10, A.REI.D.11, F.IF.A.1, F-LE.A.1, G.SRT.A.2, G-SRT.C.6, S-ID.C.7 For context, read Criterion #2a in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	• Choose a cluster/Standard from the Widely Applicable Prerequisites that is linked to each aspect of rigor and use it to evaluate these metrics. It is most helpful if the same clusters and Standards are chosen for all of the programs being evaluated. (Guidance in choosing clusters/Standards is included in "How to Find the Evidence" below.)	**Use the questions for AC Metric 1A to evaluate Metric 1A. Record evidence for each question and rate Metric 1A.** ✓ **Meets (2)** ____ **Partially Meets (1)** ____ **Does Not Meet (0)**
Is conceptual understanding attended to thoroughly where the Standards set explicit expectations for understanding or interpreting? Evaluate lessons, chapter/unit assessments and homework assignments, paying attention to work aligned to Standards that explicitly call for understanding or interpreting.	**Evidence-** Module 2, Topic E, Lesson 25 : pg. 389 • Students discover "incredibly useful ratios" in right triangles that lead to trig ratios.	
Do the materials feature high-quality conceptual problems and conceptual discussion questions? Evaluate lessons, chapter/unit assessments, and homework assignments. NOTE: Examples of conceptual problems might include such questions as "What is the maximum value of the function f(t) = 5 – t2 ?" or "Is √2 a polynomial? How about ½(x + √2)+ ½ (-x + √2)?"	**Evidence-** pg. 414 #5 : Do you agree or disagree? Explain. # 6 How is the new triangle related to the original triangle? Rich in consistent offering Deep problems,	
Do the materials feature opportunities to identify correspondences across mathematical representations? Evaluate lessons, chapter/unit assessments and homework assignments. NOTE: An example of evaluating this metric might include looking at whether materials support students in identifying correspondences among the expression that defines a function, the graph that shows the relationship, and the behavior of the phenomenon being modeled (if any).	**Evidence-** Conceptual understanding is built through Socratic discussion of problems, or discovery, and/or classwork examples. The lessons build on each other. EX. Module 2 – Lesson 26 relates trig functions to ratios pg. 404-405	

AC Metric 1B: **The materials are designed so that students attain the fluencies and procedural skills required by the Standards.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Widely Applicable Prerequisites that relate specifically to fluency and procedural skill to use throughout the questions associated with this metric. NOTE: Some examples of Standards that call for procedural skill and fluency include: A-SSE.A.1b, A-SSE.2, A-APR.A.1, A-APR.C.6, F-BF.B.3, G-GPE.B.4, G-GPE.B.5, G-GPE.B.7, G-CO.A.1, G-SRT.B.5 For context, read Criterion #2b in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).		**Use the questions for AC Metric 1B to evaluate Metric 1B. Record evidence for each question and rate Metric 1B.** ✓ **Meets (2)** ____ **Partially Meets (1)** ____ **Does Not Meet (0)**
Is progress toward fluency and procedural skill interwoven with the student's developing conceptual understanding of the skills in question? Evaluate lessons, chapter/unit assessments, daily routines, and homework assignments for evidence that the development of fluency and procedural skill is supported by conceptual understanding.	**Evidence-** Module 2 - Topic E G-SRT.B.5 Lesson 12: What are Similarity Transformations + why do we need them - conceptual Lesson 17: SAS, SSS Plenty of practice ~~Lesson 18: Angle Bisector Thm~~	} conceptual leads to procedural
Are purely procedural problems and exercises present that include cases in which opportunistic strategies are valuable and generic cases that require efficient and general procedures present? Evaluate lessons, chapter/unit assessments, daily routines, and homework assignments. NOTE: Problems in which opportunistic strategies are valuable might include such examples as solving x2 + 5 = 49 + 5 or (3x – 2)2 = 6x – 4. Generic cases that require efficient and general procedures might include such problems as solving c + 8 – c2 = 3(c – 1)2 – 5).	**Evidence-** Module 2 Lesson 16 pg. 250 - Uses ratios to compute unknown side lengths. Opportunistic strategies and generic cases are present throughout.	
AC Metric 1C: **The materials are designed so that teachers and students spend sufficient time working with engaging applications, without losing focus on the Widely Applicable Prerequisites.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Widely Applicable Prerequisites that relate specifically to application to use throughout the questions associated with this metric. NOTE: Some examples of clusters or Standards that call for application include: N-Q.A, A-SSE.B.3, A-REI.D.11, F-IF.B, F-IF.C.7, F-BF.A.1, G-SRT.C.8, S-ID.A.2, S-IC.A.1 For context, read Criterion #2c in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).		**Use the questions for AC Metric 1C to evaluate Metric 1C. Record evidence for each question and rate Metric 1C.** ✓ **Meets (2)** ____ **Partially Meets (1)** ____ **Does Not Meet (0)**
Are there single- and multi-step contextual problems, including non-routine problems, that develop the mathematics of the course, afford opportunities for practice, and engage students in problem solving? Do the problems attend thoroughly to those places in the content Standards where expectations for multi-step and real-world problems are explicit? Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** Contextual problems throughout Module 2 pg. 250-257 #1-2 determine missing side lengths #2 c - find the value of the ratio that compares the height to base #5 real-world problems	

Do application problems particularly stress applying the Widely Applicable Prerequisites? Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** Module 2 pg. 253 # 4+5 G-SRT.A.2 Applying definition of similarity to solve for info in real-world problems.	
Are there ample opportunities for students to engage with modeling problems? Do materials require students to use both individual parts of the modeling cycle as well as the full modeling cycle? Read the pages on High School—Modeling in the Standards for Mathematics (pp. 72 and 73). Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** Ample opportunities engagement modeling problems. Module 2: constructions w/ compass + ruler Lesson 1 pg. 9 Module 3: images 3-D shapes deck of cards stack of coins	Area of 3-D objects.

Alignment Criterion 1: Materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.

AC 1: Materials must earn at least 5 of 6 points to meet this Alignment Criterion. If materials earn less than 5 points, the Criterion has not been met. Check the final rating.
Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)**

Before moving to Alignment Criterion 2, record the final Meets or Does Not Meet rating in the Evaluation Summary.

✓ **Meets**

Does Not Meet

Strengths/Weaknesses:

Alignment Criterion 2: **Standards for Mathematical Practice- Materials must demonstrate authentic connections between content Standards and practice Standards.** The Standards require that designers of instructional materials connect the mathematical practices to mathematical content in instruction. Thus, materials must demonstrate authentic connections between content Standards and practice Standards.	The Standards require that designers of instructional materials connect the mathematical practices to mathematical content in instruction. Thus, materials must demonstrate authentic connections between content Standards and practice Standards. **Required Materials**: • Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_HS_Spring_2013_FINAL1.pdf) • Widely Applicable Prerequisites for College and Careers (http://achievethecore.org/prerequisites) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion:** Alignment Criterion 2 is rated as Meets or Does Not Meet. To rate Alignment Criterion 2, first rate metrics 2A, 2B, and 2C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). For each metric, guiding questions are provided to aid in gathering evidence. Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 2 if the materials rate 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as mathematical practices, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.

AC Metric 2A: **Materials address the practice Standards in such a way as to enrich the Widely Applicable Prerequisites; practices strengthen the focus of the course instead of detracting from it, in both teacher and student materials.** **How to Find the Evidence:** Familiarize yourself with the Widely Applicable Prerequisites. Evaluate teacher and student materials for evidence that the mathematical practices support and connect to the focus of the course. NOTE: An example of evaluating this Criterion might include looking at whether materials use regularity in repeated reasoning to illuminate formal algebra as well as functions, particularly recursive definitions of functions. For context, read Criterion #6 in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** Mathematical Practice Standards are explicitly identified & explained + connected to lessons at beginning of each Module. Ex. Module 3 pg. 4 → students use MP7 as they derive volume formulas Module 4 pg. 4 → use MP 8 repeated reasoning to ~~dare~~ divide segments into proportional parts.	✓ **Meets (2)** **Partially Meets (1)** **Does Not Meet (0)**
AC Metric 2B: **Materials attend to the full meaning of each practice Standard.** **How to Find the Evidence:** For context, read Criterion #7 in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).		**Use the questions for AC Metric 2B to evaluate Metric 2B. Record evidence for each question and rate Metric 2B.** ✓ **Meets (2)** **Partially Meets (1)** **Does Not Meet (0)**
Over the course of any given year of instruction, is each mathematical practice Standard meaningfully present in the form of assignments, activities, or problems that stimulate students to develop the habits of mind described in the practice Standard? Evaluate lessons, chapter/ unit assessments, and homework assignments for evidence of each mathematical practice being meaningfully present in instruction.	**Evidence-** Mathematical Practices are spread thru entire year. Ex. Module 1 pg. 5-6 MP3, MP4, MP5, MP6 Module 4 pg. 4 MP1, MP2, MP4, MP7, MP8	
Are teacher-directed materials that explain the role of the practice Standards in the classroom and in students' mathematical development included? Are alignments to practice Standards accurate? Evaluate teacher materials, paying attention to explanations of the role of the practice Standards in the classroom and in students' mathematical development. Evaluate documents aligning lessons to practice Standards for accuracy. NOTE: Examples to look for when evaluating this metric might include the following: a highly scaffolded problem should not be aligned to MP.1; or a problem that directs a student to use a calculator should not be aligned to MP.5; or a problem about merely extending a pattern should not be aligned to MP.8.	**Evidence-** Mathematical Practices are clearly identified + explained at the beginning of each module. Ex. Module 1 pg. 5 module 4 pg 4	

AC Metric 2C: **Materia[illegible]upport the Standards' emphasis on mathematical reasoning.** **How to Find the Evidence:** For context, read Criterion #8 in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).		**Use the questions for AC Metric 2C to evaluate Metric 2C. Record e[illegible]nce for each question and rate Metr[illegible].** ✓ **Meets (2)** ____ **Partially Meets (1)** ____ **Does Not Meet (0)**
Do the materials support students in constructing viable arguments and critiquing the arguments of others concerning course-level mathematics that is detailed in the content Standards? Read Standard for Mathematical Practice 3. Evaluate teacher and student materials to ensure that students are given opportunities to reason with grade-level mathematics.	**Evidence-** Most lessons begin w/ an opening exercise that is leads to a socratic discussion. Ex. Mod 5 pg. 10 There are also exploratory challenges they can work w/ partner on Mod 5. pg. 35	
Do the materials support students in producing not only answers and solutions, but also, in a course-appropriate way, arguments, explanations, diagrams, mathematical models, etc., especially in the Widely Applicable Prerequisites? Familiarize yourself with the Widely Applicable Prerequisites. Evaluate teacher and student materials to understand the types of work students are expected to produce.	**Evidence-** Most opening exercises lead to a socrative discussions. Problems sets require explanations, find the error.	
Do materials explicitly attend to the specialized language of mathematics? Is the language of argument, problem solving, and mathematical explanations taught rather than assumed? Evaluate teacher and student materials, paying attention to how mathematical language is taught. NOTE: An example of evaluating this Criterion might include looking at whether students are supported in: basing arguments on definitions; using the method of providing a counter example; or recognizing that examples alone do not establish a general statement.	**Evidence-** Appropriate language + vocabis used. The lessons in each module build on eachother. Ex Mod. 3 Topic A: Lesson 1 What is Area? 2 Properties of Area 4 Finding the Area of a Disk	

Alignment Criterion 2: Materials must demonstrate authentic connections between content Standards and practice Standards.

AC 2: Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 points, the Criterion has not been met. Check the final rating.
Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewers only.)**

Before moving to Alignment Criterion 3, record the final Meets or Does Not Meet rating in the Evaluation Summary.

✓ **Meets**

____ **Does Not Meet**

Strengths/Weaknesses:

Alignment Criterion 3: **Access to the Standards for All Students- Materials must provide supports for English Language Learners and other special populations.** Because Standards are for all students, alignment requires thoughtful support to ensure all students are able to meet the Standards. Thus, aligned materials must provide supports for English Language Learners and other special populations.	Because Standards are for all students, alignment requires thoughtful support to ensure all students are able to meet the Standards. Thus, aligned materials must provide supports for English Language Learners and other special populations. **Required Materials:** • Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math Publishers_Criteria_HS_Spring_2013_FINAL1.pdf) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion:** Alignment Criterion 3 is rated as Meets or Does Not Meet. To rate Alignment Criterion 3, first rate metrics 3A, 3B, and 3C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 3 if the materials rate 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as support for special population, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.
AC Metric 3A: **Support for English Language Learners and other special populations is thoughtful and helps those students meet the same Standards as all other students. The language in which problems are posed is carefully considered.** **How to Find the Evidence:** Evaluate teacher and student materials, paying attention to supports offered for special populations.	**Evidence-** • curriculum available online in other languages • socratic discussion • visuals • scaffolding notes in teacher edition	✓ **Meets (2)** ____ **Partially Meets (1)** ____ **Does Not Meet (0)**
AC Metric 3B: **Materials provide appropriate level and type of scaffolding, differentiation, intervention, and support for a broad range of learners with gradual removal of supports, when needed, to allow students to demonstrate their mathematical understanding independently.** **How to Find the Evidence:** Evaluate teacher and student materials, paying attention to whether materials provide differentiation that will lead all learners to engage with on-grade-level content.	**Evidence-** • socratic discussions • exploratory challenges • scaffolding notes • lessons that extend topics (optional)	✓ **Meets (2)** ____ **Partially Meets (1)** ____ **Does Not Meet (0)**
AC Metric 3C: **Design of lessons recommends and facilitates a mix of instructional approaches for a variety of learners such as using multiple representations (e.g., including models, using a range of questions, checking for understanding, flexible grouping, pair-share).** **How to Find the Evidence:** Evaluate teacher materials, noting instructional approaches suggested for whole class and differentiated lessons and activities.	**Evidence-** tables, graphs, socratic discussions, open-ended questions	✓ **Meets (2)** ____ **Partially Meets (1)** ____ **Does Not Meet (0)**

Alignment Criterion 3: Materials must provide supports for English Language Learners and other special populations.	✓ Meets ____ Does Not Meet
AC 3 Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 points, the Criterion has not been met. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewers only.)** **Move to the Evaluation Summary and record the final Meets or Does Not Meet rating .**	**Strengths/Weaknesses:**

Once an evaluation for alignment to the Shifts and major features of the CCSS has been conducted using Sections 1-3, it's important to evaluate for overall quality and best practices. A starting list of Indicators of Quality are suggested below. States, districts and others evaluating instructional materials are encouraged to add to this list to ensure materials reflect local contexts. For background information on some of the Indicators of Quality in this section, refer to pp.16–18 in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).

Indicators of Quality	Evidence- Give specific examples.	Rating: (Reviewer only.)
1. Lessons are thoughtfully structured and support the teacher in leading the class through the learning paths at hand, with active participation by all students in their own learning and in the learning of their classmates.	**Evidence-** • classwork - Opener, exploratory challenge • discussion - examples • closing • problem sets Mod 3 pg. 8-23 • exit tickets teacher notes	**(Reviewer only.)** ✓ **Yes** ____ **No**
2. The underlying design of the materials includes both problems and exercises. (In solving problems, students learn new mathematics, whereas in working exercises, students apply what they have already learned to build mastery.) Each problem or exercise has a purpose. **NOTE: This Criterion does not require that the problems and exercises be labeled as such.**	**Evidence-** Each lesson has many exercises in classwork, discussion + problem sets to design independent practice from.	**(Reviewer only.)** ✓ **Yes** ____ **No**

3. Design of assignments is not haphazard: exercises are given in intentional sequences in order to strengthen students' mathematical understanding.	**Evidence-** The practice exercises are sequential as well as the problem sets.	**(Reviewer only.)** ✓ Yes ____ No
4. There are separate teacher materials that support and reward teacher study including, but not limited to: discussion of the mathematics of the units and the mathematical point of each lesson as it relates to the organizing concepts of the unit, discussion on student ways of thinking and anticipating a variety of students responses, guidance on lesson flow, guidance on questions that prompt students thinking, and discussion of desired mathematical behaviors being elicited among students.	**Evidence-** There are separate teacher materials w/ notes to support the teacher. The lesson plan is laid out w/ scaffolding notes and sample student responses.	**(Reviewer only.)** ✓ Yes ____ No
5. Manipulatives suggested in the materials are faithful representations of the mathematical objects they represent and are connected to written methods.	**Evidence-** Manipulatives match: Module 1+2: compass + straightedge → constructions / dilations Mod 3: 3D models → cross sections + volume	**(Reviewer only.)** ✓ Yes ____ No
6. Materials include a variety of curriculum-embedded assessments. Examples include pre-, formative, summative, and self-assessment resources.	**Evidence-** • Problem Sets • Exit Tickets • Mid-Module Assessments • End of Module Assessments	**(Reviewer only.)** ✓ Yes ____ No
7. Assessments contain aligned rubrics, answer keys, and scoring guidelines that provide sufficient guidance for interpreting student performance.	**Evidence-** Every example / problem has answer key w/ sample student work Rubrics are provided for assessments.	**(Reviewer only.)** ✓ Yes ____ No
8. Materials assess student proficiency using methods that are accessible and unbiased, including the use of course-level language in student prompts.	**Evidence-** Language + sentence structure is clear & unbiased.	**(Reviewer only.)** ✓ Yes ____ No

9. Materials are carefully evaluated by qualified individuals whose names are listed, in an effort to ensure freedom from mathematical errors and course-level appropriateness.	**Evidence-** Couldn't find in texts - think it is available online	**(Reviewer only.)** ____ Yes ✓ No
10. The visual design supports students in engaging thoughtfully with the subject. Navigation through the text is clear.	**Evidence-** Layout is organized. Font is small Not visually appealing / colorful	**(Reviewer only.)** ____ Yes ✓ No

Reviewer IMET Evaluation Summary **Title/Level:** Great Eureka Math - A Story of Functions Geometry

Publisher: Great Minds **Copyright:** 2015 **ISBN:** 978-1-63255-730-8

Reviewer ID # [redacted] ACJH **Date Review Completed:** 3-8-16

Non-Negotiable Criteria-The Non-Negotiable must be met in order for the Non-Negotiable Alignment Criteria to be met overall.

Non- Negotiable 1: Focus and Coherence

✓ **Meets**

____ **Does Not Meet**

Non-Negotiable Overall:

✓ Meets _____ Does Not Meet

Alignment Criteria- Each Alignment Criterion must be met with a sufficient number of points in order for Alignment Criteria to be labeled as "Meets" overall. The more points the materials receive on the Alignment Criteria, the better they are aligned.

Alignment Criterion 1: Rigor and Balance	Alignment Criterion 2: Standards of Mathematical Practice	Alignment Criterion 3: Access to Standards for All Learners
Points: 6 of 6 possible. (Materials must receive at least 5 of 6 points to align.) ✓ Meets _____ Does Not Meet	Points: 4 of 6 possible. (Materials must receive at least 5 of 6 points to align.) ✓ Meets _____ Does Not Meet	Points: 6 of 6 possible. (Materials must receive at least 5 of 6 points to align.) ✓ Meets _____ Does Not Meet

Alignment Criteria Overall:

✓ Meets _____ Does Not Meet

If the materials meet the Non-Negotiable Criterion and each Alignment Criterion, they are aligned to the Shifts and major features of the Co[illegible]tandards. **Do the materials meet every Non-Negoti[illegible] and Alignment Criterion?** ✓ **Yes** _____ **N[illegible]**

What are the specific areas of strength and weakness based on this evaluation? Publishers or others modifying or developing assessments can use this information to make improvements and/or to remedy gaps in the alignment of assessment materials.

Not very visually appealing, and navigation is a bit awkward with topics on the bottom of the page, instead of the top.
Very detailed -

Covers standards → deep not wide

Approach is conceptual understanding-based with rich application problems at every stage of learning.

2015-16 Mathematics Interim Review Recommendation & Summary

Publisher Name:	Great Minds
Title:	Eureka Math - The Story of Functions - Algebra 2
ISBN #	978-1-63255-734-6
Grade Level(s) or Course:	Algebra 2
Reviewer ID:	K.C. and C.T.

RECOMMENDED AS:

X **Core Mathematics Program-** a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials. Substantial evidence clearly supports the designation of this program as Core.

_____ **Other Mathematics Program-** a program that substantially, but partially, meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for supplemental materials. Substantial evidence clearly supports the designation of this program as Other.

_____ **Component Mathematics Program-** a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs. Substantial evidence clearly supports the designation of this program as Component.

_____ **Intervention Program-** a program designed and intended to target and support students' specific needs. Substantial evidence clearly supports the designation of this program as Intervention.

_____ **Does not meet criteria** for recommendation as a Curricular Material or Online Resource for Mathematics.

EVIDENCE SUMMARY:

FOCUS- Students spend well over 50% of their time on Widely Applicable Prerequisites. For all standards of Algebra 2 that the CCSSM require are fully attended to. Knowledge and skills from grades 6-8 and earlier high school courses are applied at a level of sophistication appropriate for this course.

COHERENCE-
The Eureka modules exhaustively traverse the widely applicable prerequisites, with nearly all prerequisites being designated in the text as focus standards. The progression through these standards is logical.

RIGOR-
This text supplies a sufficient balance of conceptual and procedural problems and exercises. This is done with high expectations for student learning.

CONCEPTUAL UNDERSTANDING-
Conceptual understanding is achieved as students progress through each lesson. Lessons provide opportunities to expand, develop, apply and practice conceptual understanding.

MATHEMATICAL PRACTICES-
Mathematical Practice Standards are embedded and highlighted throughout the teacher text, providing immediate and relevant connections to the Widely Applicable Prerequisites.

ACCESSIBILITY OF STANDARDS TO ALL STUDENTS-
ELL support can be found throughout the text, however there is no multi-lingual glossary and students may struggle with the extensive amount of text.
The text is slightly lacking in differentiation and intervention resources.

OTHER:

Strengths

- High expectations for all learners
- Covers all standards and Mathematical Practices
- Excellent support for teachers

Weaknesses

- Text to picture ratio; lack of graphics to engage students
- Lack of remediation
- Required vertical alignment for textbook adoption

Of Note:

This is an affordable Cirriculum, however you would have to replace the textbooks or make new copies every year.

* In order for this cirriculum to be adopted and be appropriate for the grade level, Great Minds texts would have to have been adopted in earlier grades before this course.

2015-1[illegible]terim Mathematics Review

Mathematics Evaluation Tool – High School

Publisher: GREAT MINDS

Title of Material: EUREKA MATH -- THE STORY OF FUNCTIONS - ALGEBRA 2

Author: GREAT MINDS

ISBN #: 978-1-63255-734-6 **Copyright** 2015

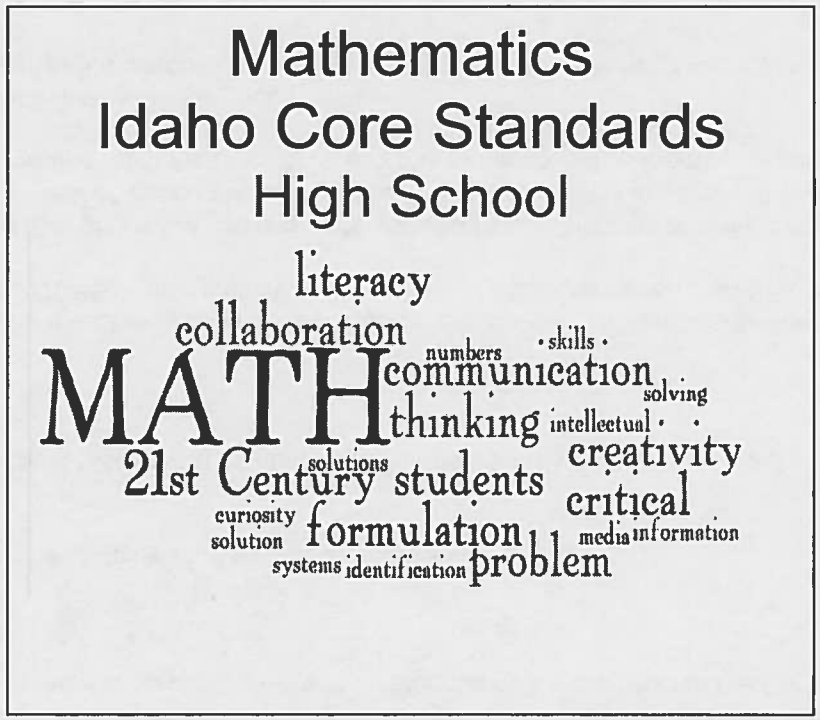
Reviewer ID: KC and CJ

Core Mathematics Program- a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Core.

Other Mathematics Program- a program that substantially, but partially, meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Other.

Component Mathematics Program- a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs.
Substantial evidence clearly supports the designation of this program as Component.

Intervention Program- a program designed and intended to target and support students' specific needs.
Substantial evidence clearly supports the designation of this program as Intervention.



- Evaluation Form adapted from Instructional Materials Evaluation Toolkit (IMET).

The IMET was developed by Student Achievement Partners. Educators may use or adapt. http://creativecommons.org/licenses/by/3.0/ Download this tool at http://achievethecore.org/IMET

Instructional Materials Evaluation Tool

Mathematics, High School

What Are the Purposes of the IMET?

This Math IMET is designed to help educators determine whether instructional materials are aligned to the Shifts and major features of the Common Core State Standards (CCSS). The substantial instructional Shifts (http://www.corestandards.org/other-resources/key-shifts-in-mathematics/) at the heart of the Common Core State Standards are:

- **Focus** strongly where the Standards focus
- **Coherence**: Think across grades and link to major topics within the grade
- **Rigor**: In major topics, pursue conceptual understanding, procedural skill and fluency, and application with equal intensity.

The IMET draws directly from the following documents:

- Common Core State Standards for Mathematics (www.corestandards.org/Math)
- Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013) (http://www. corestandards.org/wp-content/uploads/Math_Publishers_Criteria_ HS_Spring_2013_FINAL1.pdf)

When to use the IMET

1. Purchasing materials: Many factors go into local purchasing decisions. Alignment to the Standards is a critical factor to consider. This tool is designed to evaluate alignment of instructional materials to the Shifts and the major features of the CCSS. It also provides suggestions of additional indicators to consider in the materials evaluation and purchasing process
2. Evaluating materials currently in use: The IMET can be used to analyze the degree of alignment of existing materials and help to highlight specific, concrete flaws in alignment. Even where materials and tools currently in use fail to meet one or more of these criteria, the pattern of failure is likely to be informative. States and districts can use the evaluation to create a thoughtful plan to modify or combine existing resources in such a way that students' actual learning experiences approach the focus, coherence, and rigor of the Standards.
3. Developing programs: Those developing new programs can use this tool as guidance for creating aligned curricula.

Please note this tool was designed for evaluating comprehensive curricula (including any supplemental or ancillary materials), but it was not designed for the evaluation of standalone supplemental materials.

Who Uses the IMET?

Evaluating instructional materials requires both subject-matter and pedagogical expertise. Evaluators should be well versed in the Standards (www.corestandards.org/Math) for all grades in which materials are being evaluated. This includes understanding the Widely Applicable Prerequisites (www.achievethecore.org/prerequisites), how the content fits into the progressions in the Standards (www. achievethecore.org/progressions), and the expectations of the Standards with respect to conceptual understanding, procedural skill and fluency, and application. Evaluators also should be familiar with the substantial instructional Shifts (http://www.corestandards.org/other-resources/key-shifts-in-mathematics/) of Focus, Coherence and Rigor that are listed above.

Getting Started

Prior to Evaluation

Assemble all of the materials necessary for the evaluation. It is essential for evaluators to have materials for all grades covered by the program, as some criteria cannot be rated without having access to each grade. In addition, each evaluator should have a reference copy of the Common Core State Standards for Mathematics (CCSSM) and the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).

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Before conducting the evaluation itself, it is important to develop a protocol for the evaluation process. The protocol should include having evaluators study the Publishers' Criteria and the IMET. It will also be helpful for evaluators to get a sense of each program overall before beginning the process. At a minimum, this would include reading the front matter of the text, looking at the table of contents and paging through multiple chapters.

Sections 1-3 below should be completed to produce a comprehensive picture of the strengths and weaknesses of the materials under evaluation. Information about areas in need of improvement or supplementation should be shared with internal and external stakeholders.

Navigating the Tool

Begin with Section 1: Non-Negotiable Alignment Criteria

- The Non-Negotiable Alignment Criteria must each be met in full for materials to be considered aligned to the Shifts and the major features of the Common Core State Standards. Each Non-Negotiable Alignment Criterion has one or more metrics associated with it; every one of these metrics must be met in order for the criterion as a whole to be met.

- Examine the relevant materials and use evidence to rate the materials against each criterion and its associated metric(s).

- Record and explain the evidence upon which the rating is based.

Continue to Section 2: Alignment Criteria

- The Alignment Criteria must each be met for materials to be considered aligned to the Shifts and the major features of the Common Core State Standards. Each Alignment Criterion has one or more metric associated with it; a specific number of these metrics must be met or partially met in order for the criterion as a whole to be met.

- Examine the materials in relation to these criteria, assigning each metric a point value. Rate the criterion as "Meets" or "Does Note Meet" based on the number of points assigned. The more points the materials receive on the alignment Criteria, the better they are aligned.

- Record and explain the evidence upon which the rating is based.

Proceed to Section 4: Indicators of Quality

- Indicators of Quality are important considerations that will help evaluators better understand the overall quality of instructional materials. These considerations are not criteria for alignment to the CCSS, but they provide valuable information about additional program characteristics. Evaluators may want to add their own indicators to the examples provided.

Directions for Non-Negotiable 1

Focus and Coherence

Criterion	Evidence- Give specific examples.	Rating: (Reviewer only.)
Non-Negotiable 1: Focus and Coherence- Materials must focus coherently on the Widely Applicable Prerequisites in a way that is consistent with the progressions in the Standards. Focus and coherence are the two major evidence-based design principles of the Common Core State Standards for Mathematics (CCSSM, p. 3). Focus is necessary in order to fulfill the ambitious promise the states have made to their students by adopting the Standards: greater achievement at the college and career-ready level; greater depth of understanding of mathematics; and a rich classroom environment in which reasoning, sense-making, applications, and a range of mathematical practices flourish. In high school courses, narrowing and deepening the curriculum creates a structure that ties topics together. Thus, materials must focus coherently on the Widely Applicable Prerequisites in a way that is consistent with the progressions in the Standards.	Focus and coherence are the two major evidence-based design principles of the Common Core State Standards for Mathematics (CCSSM, p. 3). Focus is necessary in order to fulfill the ambitious promise the states have made to their students by adopting the Standards: greater achievement at the college and career-ready level; greater depth of understanding of mathematics; and a rich classroom environment in which reasoning, sense-making, applications, and a range of mathematical practices flourish. In high school courses, narrowing and deepening the curriculum creates a structure that ties topics together. Thus, materials must focus coherently on the Widely Applicable Prerequisites in a way that is consistent with the progressions in the Standards. **Required Materials:** • Common Core State Standards for Mathematics (www.corestandards.org/wpcontent/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_HS_Spring_2013_FINAL1.pdf) • Widely Applicable Prerequisites for College and Careers (http://achievethecore.org/prerequisites) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion**: Non-Negotiable 1 is rated as Meets or Does Not Meet. To rate Non-Negotiable 1, first rate Metrics 1A–1H. Each of these eight metrics must be rated as Meets in order for Non-Negotiable 1 to be rated as Meets. Rate each metric 1A–1H as Meets or Does Not Meet/Insufficient Evidence. If the evidence examined shows that the Criterion is met, then mark the Criterion as Meets. If the evidence examined shows that the Criterion is not met—or if there is insufficient evidence to make a determination—then mark the Criterion as Does Not Meet/Insufficient Evidence. Support all ratings with evidence.

Metric NN1A: **In any s e course, students spend at least 50% of their time on Widely Applicable Prerequisites.** **How to Find the Evidence:** Familiarize yourself with the Widely Applicable Prerequisites. Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, lessons, homework assignments, and assessments. (Evaluate both student and teacher materials.) Consider time spent on the Widely Applicable Prerequisites and judge qualitatively whether students and teachers using the materials as designed will devote the majority of time to the Widely Applicable Prerequisites For context, read Criterion #1 in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence** (Module-Topic) – Hi ted standards are not explicitly discussed as focus standards A-SSE.A.1a, 1b, 2 (I-AB) A-SSE.B.4 (III-E) A-APR.A.1 A-APR.B.2 (I-B), B.3 (I-B), C.4 (IA), C.5, D.6 (I-BC), D.7 A-CED.A.1 (III-BD), 2, 3, 4 A-REI.A.2 (I-CD), D.11 (III-D) F-IF.B.4 (III-C), B.5 (III-C), B.6 (III-AD) F-IF.C.7b, 7c (I-B), 7e (II-AB, III-CE), 8 (III-DE), 9 (III-DE) F-BF.A.1b (III-DE) S-IC.A.1 (IV-C) Module 1: 40 lessons, Module 2: 17 lessons, Module 3: 33 lessons, Module 4: 30 lessons Students spend at least 50% of their time on WAP. The information above notes where the textbook addresses each of the Algebra II WAPs, as indicated by Module number and topic (for instance, III-BC means Module 3, Topics B and C). Each module starts by highlighting focus standards, extension standards, and foundational standards for the unit of study. Standards are fully integrated throughout the text. The time spent on WAPs approaches 80-90% of instruction in the early modules, and remains high on later modules (>50%). Some examples: -Module 1, Lesson 18: Students rewrite rational expressions in different forms, using methods such as long division, and by inspection, as prescribed in A-APR.D.6. This leads to the next lesson which introduces the remainder theorem. -Module 3, Lesson 7: Students create exponential equations and use these equations to solve problems (A-CED.A.1). Question 5 on the mid module assessment task reinforces this standard as students develop a model for bacterial growth.	**X Meets** **____Does Not Meet Insufficient Evidence**
Metric NN1B: **Student work in Geometry involves significant work with applications/modeling and problems that use algebra skills.** **How to Find the Evidence:** Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, lessons, homework assignments, and assessments. (Evaluate both student and teacher materials. NOTE: Since Geometry contains relatively fewer Widely Applicable Prerequisites, this Criterion is important to help foster students' college and career readiness. Problems that use algebra skills might include, for example, algebraic geometry problems in a coordinate setting, or problems of measurement involving unknown quantities.	**Evidence-** Numerous examples: -Module 1, Lesson 10: Students explore difference two squares in the context of Pythagorean Triples. Example 1, provided during instruction, has students complete a proof algebraically, with scaffolding. In the problem set (#10), continue this line of thinking. -Module 1, Lesson 20: students estimate the cross sectional area of a riverbed using trapezoidal approximations. -Module 1, mid module assessment, problem #3: students write an equation to represent the volume of a rectangular prism. This equation is then solved for a known volume. -Module 1, Lesson 32: Graphing systems of equations. Distance formula as related to equations of circles. -Module 1, Lesson 34: Use of distance formula, find equation of parabola. -Module 2, Lesson 6: Why call it tangent? -Module 3, Lesson 24: Students solve equations involving exponential functions with graphical connections—system of equations, intersection (exercise #4). Students are expected to analyze the meaning of the intersection in the context of the problem.	**X Meets** **____Does Not Meet Insufficient Evidence**

Metric NN1C: **There a[illegible]roblems at a level of sophistication appropriate to high school (beyond mere review of middle school topics) that involve the application of knowledge and skills from grades 6-8.** **How to Find the Evidence:** Evaluate lessons, chapter/unit assessments, and homework assignments. NOTE: Problems should include application of the following topics from grades 6-8: • Ratios and proportional relationships. • Percentage and unit conversions, e.g., in the context of complex measurement problems involving quantities with derived or compound units (such as mg/mL, kg/ m3, acre-feet, etc.). • Basic function concepts, e.g., by interpreting the features of a graph in the context of an applied problem. • Concepts and skills of geometric measurement e.g., when analyzing a diagram or schematic. • Concepts and skills of basic statistics and probability (see grades 6–8.SP) • Performing rational number arithmetic fluently. For context, read Table 1 on Page 8 of the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** Examples throughou[illegible]appropriate. Teacher text includes references to earlier lessons wi[illegible]e Eureka curriculum that teachers the MS topics, as well as embedded scaffolding for reteaching and extension. This material is integrated within the curriculum. **Ratios and Proportional Relationships** -Module 1, Lesson 23: Comparison of Ratios (Problem Set #6: population of one city to another) -Module 2, Lesson 7: Proportional relationships for right triangle trigonometry -Module 3: Definition of exponential function includes proportional language ("exponential model changes at a rate proportional to the current value of the function" – Lesson 22) -Module 3, Lesson 25: Common ratio for sequences **Percentage and Unit Conversion** -Module 1, Lesson 21: Modeling Exercise #4-5—students determine the flow of water in cubic feet/min and convert to gallons/min. The exit ticket for this lesson asks students to explain this process. -Module 4, Lesson 22 (and throughout Module 4): Reasoning and application with percentages. For example, students analyze polls and reason about the results, including the comparison of percentages. The entire exercise and lesson focus on applied mathematical literacy that is useful day to day. **Basic Function Concepts** -Module 1, Lesson 1, page 17: "…in this lesson, students continue the theme that began in Grade 6 of evaluating and building expressions." -Throughout: maximum and minimum of a graph, applied. Module 2, Lesson1: students analyze the position of a car on a Ferris wheel, relating student created graphs of movement (height vs time, rotation vs time) to the actual movement of the cars on the Ferris wheel. This lesson is continually referenced throughout the module. -Throughout: analysis of the intercepts, and the meaning of these intercepts within the context of a given problem. For instance, Module 3: Lesson 21, students analyze logarithmic functions and find x- and y-intercepts. Module 1: Lesson 11: zeros of function. -Throughout: Domain and Range of a function. Increasing/Decreasing. **Geometric Measurement** -Module 1, Lesson 16: Students measure a box in preparation to calculate volume, and to model with polynomials for optimization. -Module 1, Lesson 33: As part of study of Newtonian telescope and parabolic mirrors, students measure the distance between the focus of a parabola and points on the parabola, and compare this to measurements between the points on the parabola, and points on the directrix. **Basic Statistics and Probability** -Throughout: modeling data and identifying functions of best fit. This leads to regressions, especially polynomial regression. Module 1. -Throughout Module 4. For instance, Module 4: Lesson 2, construction of two way tables. **Rational Number Arithmetic** -Throughout. In Module 1, Lesson 25, students develop rules for adding and subtracting rational expressions by first exploring the operations for rational numbers. This leads to the development of a specific rule, with number line representations	**X Meets** **____Does Not Meet** **Insufficient Evidence**

Metric NN1D: **Materials use courses on the content specified in the Standards.** **How to Find the Evidence:** Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, and lessons in both student and teacher materials. For context, read Criterion #3a in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** The Eureka modules exhaustively traverse the widely acceptable prerequisites (as noted above in NN1A), with nearly all prerequisites being designated in the text as focus standards. Those that are not (the highlighted standards in NN1A) are still addressed as foundational standards. The overview for each module and topic provides guidance for the teacher in developing a sense about the progression of the unit. Rubrics, such as the Module 1 End of Module Assessment Task Rubric, include reference to each standard and guidance for rating a student's progression towards mastery. In addition, each module highlights the focus, extension, and foundational standards for the upcoming lessons, as well as a focus on mathematical practice standards (for instance, page 5 of module 2). The descriptions for how the practice standard is addressed are quite detailed and specific for each module. Extension standards (+) are presented in tandem with focus and foundational standard, exposing and preparing students for work in later courses. For instance, lesson 16 of Module 2, Topic B has students prove trigonometric identities supporting F-TF.C.9 (+)—preparation for precalculus and calculus. The lessons towards the end of Module do not assess the Fundamental Theorem of Algebra, but they do support the standard (N-CN.C.9 +). The Great Minds website allows for quick navigation of content across grade levels, in the spirit of the criterion. As stated in criteria 3a, "…online materials that allow students and/or teachers to navigate content across course levels promote coherence…." Teachers have access to all module PDFs on the Great Minds website. These are especially easy to find using the Eureka Navigator (http://greatminds.net/maps/math). Additionally, individual lessons make regular reference to course level content outside the scope of the current course.	**X Meets** **____Does Not Meet** **Insufficient Evidence**

Metric NN1E: **Materials give all students extensive work with course-level problems.** **How to Find the Evidence:** Evaluate both student and teacher materials. If the materials provide resources for differentiated learning, consider whether lower-performing students have opportunities to engage with course-level problems. Also consider whether higher-performing students are given opportunities to learn current course-level content in greater depth. For context, read Criterion #3b in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** Publisher's Criterion states that "...materials often manager unfinished learning from earlier grades and courses inside course-level work." This is true for this title. Aside from the occasional opening exercises that activate prior learning (e.g., Module 1, Lesson 10: practical application of the Pythagorean theorem along with coordinate geometry), any unfinished learning is addressed in tandem with lessons. The unfinished learning would fall into the "foundational standards" category and these standards regularly pop-up throughout the text. As noted above, when necessary, teachers are provided directives to review previous learning in the available Eureka curriculum documents available on the website Eureka Math treats the progression of the course (and the attendance to the standards) as part of the "story of functions", and thorough review of the text indicates appropriate coverage of the standards, with ample work on course-level problems. A simple search of the teaching resources suggests 200+ opportunities for scaffolding for both struggling learners and for extension. These scaffolding opportunities are presented in line with the text (just in time), providing directives for supporting students. Often, the techniques suggested (such as a Frayer model in Lesson 27 of Module 4) also provide strategies for differentiating instruction for students. These type of supports do provide lower performing students an opportunity to engage, and also provide extensions for higher-performing students. Notably, the development of scaffolding (and more importantly, differentiation) for each lesson does rely on the teacher's professional judgement. The introductory text suggests that the teacher develop a story for each module and topic, and work through each lesson to understand the flow of the curriculum. Presumably, the teacher will have a real-world understanding of their classroom, allowing for additional differentiation and more meaningful scaffolding. For each lesson's practice set, the problems increase in difficulty from beginning to end. The teacher has the option of differentiating this practice by assigning different problems to different groups of learners.	**X Meets** **____Does Not Meet** **Insufficient Evidence**

Metric NN1F: **Materia late course-level concepts explicitly to prior knowledge from earlier grades or courses. The materials are designed so that prior knowledge becomes reorganized and extended to accommodate the new knowledge.** **How to Find the Evidence:** Evaluate student and teacher materials, looking for problems that involve extending the knowledge learned in earlier grades and courses. NOTE: An example of evaluating this Criterion might be to look at whether materials connect the equation of a circle with the distance formula and the Pythagorean theorem. For context, read Criterion #3c in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** The instructional gui e for teachers regularly refers back to earlier learning, providing r matical background for upcoming learning. Opening exercises are used for some of this reinforcement, as is some scaffolding suggestion. -Module 1, Lesson 12: students explore techniques for factoring polynomial expressions using the quadratic formula and completing the square, techniques first developed in algebra 1 (A-REI.B.4). Suggested instruction includes the reminded students of the GCF. -Module 1, Lesson 31: students extend upon systems of linear equations to also find solutions to systems consisting of a linear equation and a quadratic equation (A-REI.C.7). This continues work that was started in grade 8 (A-REI.C.6) and expanded upon in Algebra 1. -Module 1, Lesson 32: Students begin the lesson by reviewing the connections between the distance formula and the Pythagorean Theorem. This supports the lessons focus on systems of equations for circles, and the distance between centers of circles as related to the number of points of intersection. Additionally, this lesson recalls the graphical and algebraic relationship between perpendicular lines as students find tangents at points along a circle. -Module 2, Lesson 15: Students develop the Pythagorean identity for sin and cos, based upon the Pythagorean theorem. -Module 3, Lesson 22: students analyze data and real-world situations and find functions (linear, quadratic, sinusoidal, and exponential) to use as a model. The lesson provides guidance for selecting a model, including analysis of the rate of the change. This analysis builds on similar analysis that would have occurred in Algebra 1 for linear and quadratic functions (A-CED.A.2,4; F-LE.A.1,3).	**X Meets** **____Does Not Meet** **Insufficient Evidence**

Metric NN1G: **Materials include learning objectives that are visibly shaped by CCSSM cluster and domain headings.** **How to Find the Evidence:** Select several clusters from the course being evaluated. Evaluate teacher and student materials in relation to these clusters. For context, read Criterion #4a in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** Each lesson in the teacher resource begins with student outcomes that are clearly shaped by CCSSM. **Trigonometric Functions: Model Periodic Phenomena with TF: F-TF.B.5** -"Choose trigonometric functions to model periodic phenomena with specified amplitude, frequency and midline." -Module 2, Lesson 13: Student outcomes include similar language, such as "model cyclical phenomena", "periodic behavior". Examples and exercises continue to support the standard as student identify the characteristics of sinusoidal graphs based upon data. At the end of the lesson, students are asked to think about why it is useful to use models for sets of data. **Algebra: Reasoning with Equations and Inequalities: A-REI.A.1** -"Explain each step in solving a simple equation....Construct a viable argument to justify a solution method." -Module 1 Mid-Module Assessment task reinforces language through rubric, especially for #3c. The lessons that lead up to this task helps students construct viable arguments (e.g., final question on exit ticket for lesson 20). -Module 1 End of Module Assessment task #2a. "Prove to her algebraically that your answer is...." **Statistics and Probability: Making Inferences and Justifying Conclusions: S-IC.B.3** -"Recognize the purposes of and differences among sample surveys, experiments, and observational studies; explain how randomization relates to each." -Module 4, Lesson 12: In the lesson, sample surveys, observational studies and experiments are defined. A Venn Diagram is suggested for scaffolding these definitions, and the class participates in a reading and summary exercise that supports these terms. Examples are provided of each, and then students are tasked with classifying studies. Discussion of randomization is included in this discussion. The student edition of the resource does not include student outcomes, but student vocabulary, featured at the end of lessons, and lesson summaries both include language that reflect CCSSM cluster and domain headings. -Module 1, Lesson 35: lesson summary ("...geometric figure of parabola...recognized that it involved the graph of an equation we studied in algebra"; "...used algebra to prove that all parabolas...", and "...proved all parabolas are similar using transformations of functions") reflects G-GPE.A.1, 2. Students are directly exposed to standards as a result of teacher actions, but not through the student edition. The language used in questions supports the language of the CCSSM.	**X Meets** **____Does Not Meet** **Insufficient Evidence**

Metric NN1H: **Materia[illegible]clude problems and activities that serve to connect two or more clusters in a domain, or two or more domains in a category, or two or more categories, in cases where these connections are natural and important.** **How to Find the Evidence:** In the course being evaluated, choose two or more clusters, two or more domains, or two or more categories for which connections are natural and important. Evaluate the units, chapters, and lessons that deal with the chosen topics, looking for problems and activities that serve to connect the chosen clusters or domains. NOTE: An example of evaluating this Criterion might be to look at whether materials include problems in which students analyze a situation by building a function, graphing it, and using it to create and solve an equation. For context, read Criterion #4b in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** The connections (be[illegible]n standards, clusters, domains, categories) are natural and apparen[illegible]ughout. Eureka's approach to treating the course progress as part of the story of functions contributes to this interconnectedness. The introductory section for each module and each topic provides the teacher an overview for how this interconnectedness manifests within the text. The mid module and end of module tasks don't exist to provide an item-by-item summary of the topics within the module; rather, these tasks focus on combining and extending upon the work done in prior lessons. For instance, the mid module assessment task for Module 1 task students with taking a verbal description and writing this as an equation (#2). The initial task for this question has the student (1) analyze the structure of a polynomial equation and rewrite and (2) use this to prove an observation. This represents a connection within a category between both A-SSE.A.2 ("use the structure of an expression to identify ways to rewrite it"), and A-APR.C.4 ("prove polynomial identities and use them to describe numerical relationships"). Other questions on this task make similar connections between standards, clusters, domains, and categories. #1 relates N-Q.A.2, A-APR.B.2 and 3, F-IF.C.7c. The lessons and student work that lead up to this task support this interconnectedness. This is evident throughout the text, especially in modules 1-3.	**X Meets** **____Does Not Meet Insufficient Evidence**
Non-Negotiable 1: Focus and Coherence- Materials must focus coherently on the Widely Applicable Prerequisites in a way that is consistent with the progressions in the Standards. **Metric NN 1:** If all metrics 1A–1H were rated as Meets, then rate Non-Negotiable 1 as Meets. If one or more metrics were rated as Does Not Meet/Insufficient Evidence, then rate Non-Negotiable 1 as Does Not Meet. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)** **Before moving to Alignment Criterion 1, record the final Meets or Does Not Meet rating in the Evaluation Summary.**		**X Meets** **____Does Not Meet** **Strengths/Weaknesses** Strengths: -Covers all standards extensively, and the story in each module is helpful in preparing teachers to teach the module. Weakness: -More practice problems would be beneficial -The student edition does not include worked examples. -Without direct support from the teacher, students can be disconnected from the standards (the standards themselves are not explicit in the student text). -The above can be summarized as: the student edition is not ideal for a self-directed learner.

Now continue by evaluating Alignment Criterion 1 for Rigor and Balance.

Directions for Alignment Criterion 1

Rigor and Balance

Alignment Criterion 1: **Rigor and Balance- Materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.** The Standards set expectations for attention to all three aspects of rigor: conceptual understanding, procedural skill and fluency, and applications. Thus, materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.	The Standards set expectations for attention to all three aspects of rigor: conceptual understanding, procedural skill and fluency, and applications. Thus, materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations. • Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_HS_Spring_2013_FINAL1.pdf) • Widely Applicable Prerequisites for College and Careers (http://achievethecore.org/prerequisites) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion:** Alignment Criterion 1 is rated as Meets or Does Not Meet. To rate Alignment Criterion 1, first rate metrics 1A, 1B, and 1C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). For each metric, guiding questions are provided to aid in gathering evidence. Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 1 if the materials rate 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as rigor and balance, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.
AC Metric 1A: **The materials support the development of students' conceptual understanding of key mathematical concepts, especially where called for in specific content Standards or cluster headings.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Widely Applicable Prerequisites that relate specifically to conceptual understanding to use throughout the questions associated with this metric. NOTE: Some examples of clusters or Standards that call for conceptual understanding include: N-RN.A.1, A-APR.B, A-REI.A.1, A-REI.D.10, A.REI.D.11, F.IF.A.1, F-LE.A.1, G.SRT.A.2, G-SRT.C.6, S-ID.C.7 For context, read Criterion #2a in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	• Choose a cluster/Standard from the Widely Applicable Prerequisites that is aligned to each aspect of rigor and use it to evaluate these metrics. It is most helpful if the same clusters and Standards are chosen for all of the programs being evaluated. (Guidance in choosing clusters/Standards is included in "How to Find the Evidence" below.)	**Use the questions for AC Metric 1A to evaluate Metric 1A. Record evidence for each question and rate Metric 1A.** **X Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**

Is conceptual understanding attended to thoroughly where the Standards set explicit expectations for understanding or interpreting? Evaluate lessons, chapter/unit assessments and homework assignments, paying attention to work aligned to Standards that explicitly call for understanding or interpreting.	**Evidence-** Conceptual understanding as is fully attended to throughout the curriculum. Students understand, develop, apply and practice conceptual understanding. Selection of standards addressing conceptual understanding: **A-APR.B.3: "Identify zeros of polynomials when suitable factorizations are available, and use the zeros to construct a rough graph of the function...."** -Module 1, Lesson 11: This lesson focuses on identifying solutions to polynomial functions. Students start by discussing and reviewing polynomials that can be easily factored into linear factors, and the application of the zero product property. The discussion builds to students making connections between the zeros of polynomial functions and the behavior of the graph. This includes comparisons between functions that have similar (or the same) zeros but not the same behavior and degree. The exit ticket has students find the zeros (with multiplicity) of a given polynomial and explain how one knows the degree of the function. -Module 1, mid module assessment task, #1a: students are provided a crude sketch of a graph, and asked to write a polynomial that could represent the curve. **A-REI.D.11: "Explain why the x-coordinates of the points where graphs of the equations y = f(x) and y = g(x) intersect are the solutions of the equation f(x)=g(x); find solutions approximately...."** -Module 3, Lesson 24: Most of the lesson is spent on practice: manipulating and solving exponential functions. Special emphasis is placed on using multiple algebraic techniques, and graphical techniques to find solutions. **F-IF.B.4: "For a function that models a relationship between two quantities, interpret key features...and sketch graphs showing key features given in a verbal description of the relationship."** -Module 1, Lesson 19, Exercise 6 and 7: students disprove that a function is an inverse by exploring the domain and range of a function, and in the next question, students explore examples of inverses of functions that are not themselves functions (such as f(x) = sin x for (-int, inf). -Module 1, Lesson 20: students find key points (at least 5) and sketch logarithmic functions by hand. This is extended as students transform logarithmic functions, sketch the transformation, and describe the relationship. Instructional support is provided throughout this lesson.	

Do the materials feature high-quality conceptual problems and conceptual discussion questions? Evaluate lessons, chapter/unit assessments, and homework assignments. NOTE: Examples of conceptual problems might include such questions as "What is the maximum value of the function f(t) = 5 – t2 ?" or "Is √2 a polynomial? How about ½(x + √2)+ ½ (-x + √2)?"	**Evidence-** Selection of standards addressing conceptual understanding. Discussion is regularly a feature of these questions: **APR.B.3:** -Module 1, End of Module assessment, #2ab: Students use the graph of a polynomial to prove that an answer is a zero to the given polynomial function. Students then rewrite the given function as a product of linear and quadratic factors. -Module 1, Lesson 15, Exercise 1: Students consider even and odd functions and the relation between these functions and the zeros of the function (specifically, the x-intercepts). This task ends with students drawing a conclusion that relates degree and guaranteed zeros (or lack thereof). **A-REI.D.11:** -Module 3, Lesson 24, Exercises 4: After students justify exponential models generated for sets of data (is this function reasonable?), they are tasked with finding the a solution t where the two models are equal (h(t) = k(t)). After finding a result algebraically, students confirm graphically, making the connection between the intersection and the solution to the system of equations. The discussion that follows asks that student explain the meaning of this intersection. **F-IF.B.4:** -Module 3, Lesson 18: comparison of the growth (and end behavior) of exponential and logarithmic functions. -Module 3, throughout: where do functions intersect? What is the end behavior? What is the domain?	
Do the materials feature opportunities to identify correspondences across mathematical representations? Evaluate lessons, chapter/unit assessments and homework assignments. NOTE: An example of evaluating this metric might include looking at whether materials support students in identifying correspondences among the expression that defines a function, the graph that shows the relationship, and the behavior of the phenomenon being modeled (if any).	**Evidence-** Throughout. Selection of standards addressing conceptual understanding: **A-APR.B.3:** Module 1, Lesson 11: students make connections between the zeros of a polynomial function and the graph of the given function. Additionally, students relate degree to zeros (and multiplicity) as represented on a graph. **A-REI.D.11:** -Module 3, Lesson 24, Exercise 4: As noted above, students make the connection between the solution to a system of equations and the intersection of the graphs of these two equations and then to the verbal description of two similar situations. **F-IF.B.4:** -Module 1, Lesson 17: Students perform a regression to fit a table and then make connections between the table, the plot of the tabular data, and the modeling function. -Module 3, Lesson 18: As part of the opening exercise, students complete a table for an exponential function, graph the function, and then reflect the graphed function across y = x. Features of the original graph and its image are discussed. -Module 3, Lesson 19: Inverse relationship between exponential functions and logarithmic functions is explore via table and graph with connections made between both. Students verbally describe the behavior in each. -Module 3, end of module task, #11: Functions are presented as verbal descriptions, tables, and graphs. Students classify each function, interpret key features, and compare and contrast each function.	

AC Metric 1B: **The materials are designed so that students attain the fluencies and procedural skills required by the Standards.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Widely Applicable Prerequisites that relate specifically to fluency and procedural skill to use throughout the questions associated with this metric. NOTE: Some examples of Standards that call for procedural skill and fluency include: A-SSE.A.1b, A-SSE.2, A-APR.A.1, A-APR.C.6, F-BF.B.3, G-GPE.B.4, G-GPE.B.5, G-GPE.B.7, G-CO.A.1, G-SRT.B.5 For context, read Criterion #2b in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).		**Use the questions for AC Metric 1B to evaluate Metric 1B. Record evidence for each question and rate Metric.** **X Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Is progress toward fluency and procedural skill interwoven with the student's developing conceptual understanding of the skills in question? Evaluate lessons, chapter/unit assessments, daily routines, and homework assignments for evidence that the development of fluency and procedural skill is supported by conceptual understanding.	**Evidence-** Throughout each lesson in every module, examples, exercises and problem sets all provide ample practice in developing fluency and procedural skills while also attending to strong development of conceptual understanding. Additional practice for developing procedural skills and fluency would be useful, and this is one noted weakness of this text (not enough so to drop this category to partially meets). Selection of standards addressing fluency and procedural skill: **A-SSE.A.2: "Use the structure of an expression to identify ways to rewrite it."** -Module 1, Lesson 2: students use different procedures for multiplying polynomial expressions (distributive property, tabular). This builds to a generalization that students develop for (x^n – y^n)(x^n – y^n). This generalization provided context for the concept of prime numbers. Student practice for this lesson features multiple opportunities to develop procedural skill as well as conceptual representations of polynomial expressions. -Module 3, Lesson 13: Entire lesson focuses on the process of changing the base of a logarithmic expression, and using this process to solve equations. This is extended to generalizing properties of logarithms, and discussing the natural logarithm. **A-CED.A.4: "Rearrange formulas to highlight a quantity of interest, using the same reasoning as in solving equations."** -Throughout. For instance, rearranging the annuity formula from Module 3, Lesson 30 to find a monthly payment R (Lesson 31). Given an equation, isolate the variable (Module 3, Lesson 6, Problem Set). **N-RN.A.2: "Rewrite expressions involving radicals and rational exponents using the properties of exponents."** -Module 3, Lesson 2: properties of exponents as applied to numbers written in scientific notation. From example 2 on.... Problem set of Lesson 3 continues this work, providing additional practice while discussing rational exponents (positive/negative) conceptually.	

Are purely procedural problems and exercises present that include cases in which opportunistic strategies are valuable and generic cases that require efficient and general procedures present? Evaluate lessons, chapter/unit assessments, daily routines, and homework assignments. NOTE: Problems in which opportunistic strategies are valuable might include such examples as solving $x2 + 5 = 49 + 5$ or $(3x - 2)2 = 6x - 4$. Generic cases that require efficient and general procedures might include such problems as solving $c + 8 - c2 = 3(c - 1)2 - 5$).	**Evidence-** At no point in the text are tricks or mnemonics emphasized or used. The teacher edition provides a friendly reminder of why FOIL is not helpful (Module 1, pg 32), and that students must think of these problems as repeated applications of FOIL. As concepts are introduced, and procedures demonstrated, the text purposefully applies properties and techniques in a generalized fashion (not as "this is how you solve this very specific problem"). Selection of standards addressing fluency and procedural skill: **A-SSE.A.2** -Module 3, Lesson 13 and throughout discussion of logarithms in module 3: Change of base is a demonstrated strategy for solving problems involving logarithms. Elsewhere, students rewrite logarithms as exponential expressions (or vice versa) as a strategy to solve problems. **A-CED.A.4** -Module 1, Lesson 28: Isolating the radical in an equation to simplify the process of finding a solution, including cases in which isolation of the radical in one step is not feasible. -Module 3, Lesson 13: Solving logarithms by rewriting as an exponential equation. **N-RN.A.2** -Module 3, Lesson 2 and 3: as part of the discussion of simplifying computations applied to numbers written in scientific notation, exponent rules are treated as an opportunistic strategy. The problem set of lesson 3 emphasizes equivalent expressions as a method for making calculations more efficient.	
AC Metric 1C: **The materials are designed so that teachers and students spend sufficient time working with engaging applications, without losing focus on the Widely Applicable Prerequisites.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Widely Applicable Prerequisites that relate specifically to application to use throughout the questions associated with this metric. NOTE: Some examples of clusters or Standards that call for application include: N-Q.A, A-SSE.B.3, A-REI.D.11, F-IF.B, F-IF.C.7, F-BF.A.1, G-SRT.C.8, S-ID.A.2, S-IC.A.1 For context, read Criterion #2c in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).		**Use the questions for AC Metric 1C to evaluate Metric 1C. Record evidence for each question and rate Metric 1C.** **X Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**

Are there single- and multi-step contextual problems, including non-routine problems, that develop the mathematics of the course, afford opportunities for practice, and engage students in problem solving? Do the problems attend thoroughly to those places in the content Standards where expectations for multi-step and real-world problems are explicit? Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** Nearly all mid- and end-of-module assessment tasks contain multi-step contextual problems that support the mathematics of the course and provide an opportunity to problem solve by applying the previously practiced mathematics. These assessment tasks do not exist in a vacuum, but instead are the culminating task in a series of examples, exercises, and problem sets that provide continuing practice. As noted in the examples below, these tasks do reflect the expectations of the standards. Selection of standards addressing applications: **A-CED.A.3: "Represent constraints by equations or inequalities, and by systems of equations and/or inequalities, and interpret solutions as viable or non-viable options in a modeling context."** -Module 1, Lesson 26-29: students work to solve rational equations, checking for extraneous solutions. When appropriate, solutions are verified as viable or non-viable in the context of an application (Lesson 27: exercises 2 and 3, problems 8 and 10). -Module 3, Lesson 26, Example 1: compound interest and growth for money in a bank. Problem set for lesson includes a multistep problem focusing on the comparison of savings accounts at different banks. **F-BF.A.1b: "Combine standard function types using arithmetic operations."** -Module 3, End of Module Assessment Task #10: modeling a car loan, comparison of multiple functions (end behavior, intersection). -Module 3, Lesson 28: Application: Newton's Law of Cooling. Lesson begins with exploration of formula, and then multiple applications included in exercises and problem set.	
Do application problems particularly stress applying the Widely Applicable Prerequisites? Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** Throughout the text, and for the standards noted above and below, the application problems stress the widely applicable prerequisites. In particular, the tasks at the end of each module focus on multiple standards in presenting multi-step applications for students to explore. Selection of standards addressing applications: **F-BF.A.1b** -Module 3, End-of-Module task, #13 focuses on the combination of functions (to model medication in the bloodstream) and deriving a formula based upon a geometric series (Table #13b).	

Are there ample opportunities for students to engage with modeling problems? Materials require students to use both individual parts of the modeling cycle as well as the full modeling cycle? Read the pages on High School—Modeling in the Standards for Mathematics (pp. 72 and 73). Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** The teacher text incl multiple references to the CCSSM modeling cycle, including replic of the flow chart present within the standards. This cycle is not replicated for students, so the expectation is that the flow chart be presented in lesson, or perhaps posted on the wall. Modeling lessons have students work through each step explicitly (formulate, compute, interpret, validate). Teacher attention is drawn to these modeling activities within the table of contents for each module/topic. Often, single lessons focus on a single step of the modeling cycle, capped by a set of problems reinforcing the application of knowledge from the current module. Module 1, Lesson 20-21: Modeling Riverbeds with Polynomial: Formulate: develop a plan to use the remainder thm to fit a polynomial function to riverbed data. Identify constraints. Compute: Find the polynomial function that fits the data. Find the volumetric flow. Interpret: "How might this data help the EPA?" Module 3, Lesson 29: The mathematics behind a structured savings plan.	
Alignment Criterion 1: Materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations. **AC 1:** Materials must earn at least 5 of 6 points to meet this Alignment Criterion. If materials earn less than 5 points, the Criterion has not been met. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)** **Before moving to Alignment Criterion 2, record the final Meets or Does Not Meet rating in the Evaluation Summary.**	**X Meets** **____Does Not Meet** **Strengths/Weaknesses:** Strengths: -Plenty of conceptual and application practice. -Problem sets faithfully attend to standards. Weaknesses: -Could use additional practice sets, especially in developing procedural skills and fluency. -Some problem sets are small. -No worked solutions in student edition.

Alignment Criterion 2: **Standards for Mathematical Practice- Materials must demonstrate authentic connections between content Standards and practice Standards.** The Standards require that designers of instructional materials connect the mathematical practices to mathematical content in instruction. Thus, materials must demonstrate authentic connections between content Standards and practice Standards.	The Standards require that designers of instructional materials connect the mathematical practices to mathematical content in instruction. Thus, materials must demonstrate authentic connections between content Standards and practice Standards. **Required Materials**: • Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_HS_Spring_2013_FINAL1.pdf) • Widely Applicable Prerequisites for College and Careers (http://achievethecore.org/prerequisites) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion:** Alignment Criterion 2 is rated Meets or Does Not Meet. To rate Alignment Criterion 2, first rate metrics 2A, 2B, and 2C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). For each metric, guiding questions are provided to aid in gathering evidence. Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 2 if the materials rate 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as mathematical practices, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.
AC Metric 2A: **Materials address the practice Standards in such a way as to enrich the Widely Applicable Prerequisites; practices strengthen the focus of the course instead of detracting from it, in both teacher and student materials.** **How to Find the Evidence:** Familiarize yourself with the Widely Applicable Prerequisites. Evaluate teacher and student materials for evidence that the mathematical practices support and connect to the focus of the course. NOTE: An example of evaluating this Criterion might include looking at whether materials use regularity in repeated reasoning to illuminate formal algebra as well as functions, particularly recursive definitions of functions. For context, read Criterion #6 in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** Mathematical practice standards are embedded and highlighted throughout the teacher text, providing immediate and relevant connections to the focus standards (which are usually the widely applicable prerequisites). The standards are noted in the margins, and each topic beings with a short description of how specific practice standards are applied. Module 1, Lesson 27: Students work to solve application problems involving rational equations (A-REI.A.2). In exercise 1, students make sense of a problem and come up with a rational equation to represent the situation (MP 4). The design of the tasks attends to students building to a solution, and persevering (MP 1). Later exercises in the lesson continue this emphasis, and also have students reason quantitatively about a rational equation (MP 2). The text rarely emphasizes technology, but it does so it is appropriately (MP 5). Module 2, Lesson 12: After sketching the graphs of the height and co-height of the Ferris wheel, students create a parametric graph on their calculator (MP 5). This continues with quantitative reasoning about the graphs and the representative trigonometric relationships (MP 2). Module 1, Lesson 21: students use Wolfram Alpha to generate an interpolating polynomial, supporting work previously done by hand (MP 5). Module 2, Lesson 14: repeated reasoning as applied to the graph of trigonometric functions (MP 8).	**X Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**

AC Metric 2B: **Material[illegible]tend to the full meaning of each practice Standar[illegible]** **How to Find the Evidence:** For context, read Criterion #7 in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).		**Use the questions for AC Metric 2B to evaluate Metric 2B. Record e[illegible]nce for each question and rate Met[illegible].** **X Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Over the course of any given year of instruction, is each mathematical practice Standard meaningfully present in the form of assignments, activities, or problems that stimulate students to develop the habits of mind described in the practice Standard? Evaluate lessons, chapter/ unit assessments, and homework assignments for evidence of each mathematical practice being meaningfully present in instruction.	**Evidence-** A simple search of the teaching edition suggests decently distributed attention to the mathematical practice standards. MP 1: 36 instances MP 2: 68 MP 3: 110 MP 4: 50 MP 5: 26 MP 6: 8 MP 7: 98 MP 8: 68 Each topic of each module begins with a summary of how practice standards are addressed. For instance, Module 4, Topic A lists MP 2, 3, 4, 5 as being addressed in the module. For MP 2, the text states: "Students use data from a sample to estimate a population mean or proportion and generalize from a sample to the population. They associate a margin of error with estimates based on a sample and interpret them in the context of generalizing from a sample to the population. Students also make conjectures or claims about independence and use arguments based on probabilities to support them." MP 6 (attend to precision) is the least highlighted of the practice standards, but attention to precision, reinforcement of vocabulary, and emphasis on demonstrated work that builds to a solution is present throughout the curriculum.	

Are teacher-directed materials that explain the role of the practice Standards in the classroom and in students' mathematical development included? Are alignments to practice Standards accurate? Evaluate teacher materials, paying attention to explanations of the role of the practice Standards in the classroom and in students' mathematical development. Evaluate documents aligning lessons to practice Standards for accuracy. NOTE: Examples to look for when evaluating this metric might include the following: a highly scaffolded problem should not be aligned to MP.1; or a problem that directs a student to use a calculator should not be aligned to MP.5; or a problem about merely extending a pattern should not be aligned to MP.8.	**Evidence-** MP 4: Modeling is emphasized throughout the text, highlighted in specific lessons. These modeling tasks are in line with the modeling standards (starred) as well as the practice standard. MP 5: Module 1, Lesson 21: students find polynomial functions to fit data using multiple techniques and technology is used as just one possibility for finding a modeling function. Module 4, Lesson 15: students use technology to carry out simulations. This lesson treats technology, in this case a calculator, as an essential tool required to carry out simulations. In lesson 19, students use technology to generate samples of size 20 MP 7: Module 3, Lesson 21: students explore *b* for exponential and logarithmic functions, looking for patterns in the graphs of these functions as *b* changes. Later, in Lesson 23, students look for patterns in data to choose appropriate models and relate the values of *a* and *b* for an exponential function to a model. Module 4, Lesson 17, exercise 11: students make conjectures relating sample size and margin of error based upon patterns in previously studies sets of data.	
AC Metric 2C: **Materials support the Standards' emphasis on mathematical reasoning.** **How to Find the Evidence:** For context, read Criterion #8 in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).		**Use the questions for AC Metric 2C to evaluate Metric 2C. Record evidence for each question and rate Metric 2C.** **X Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Do the materials support students in constructing viable arguments and critiquing the arguments of others concerning course-level mathematics that is detailed in the content Standards? Read Standard for Mathematical Practice 3. Evaluate teacher and student materials to ensure that students are given opportunities to reason with grade-level mathematics.	**Evidence-** MP 3: Construct viable arguments and critique the reasoning of others. Student exercises and problem sets often ask that students critique the viability of arguments from fictitious students (M1, Lesson 34, Exer. 14; M1, Lesson 36, Exer 6; M3, Lesson 15, Exer 14; M3, Lesson 3, Problem 4ab; M2, Lesson 13, Problem 6). The development in the lessons, and guided instruction from the instructor, support the creation of viable arguments and the identification of non-viable arguments. Nearly every lesson requires that students construct these arguments, although often these arguments are informal. The work in trigonometry (Module 2) does occasionally discuss and require more formal argumentation in the form of proofs (M2, Lesson 16, Example 1). Proof problems requiring abstract reasoning (MP 2) are used elsewhere (M3, Lesson 16, Problem 11).	

Do the materials support students in producing not only answers and solutions, but also, in a course-appropriate way, arguments, explanations, diagrams, mathematical models, etc., especially in the Widely Applicable Prerequisites? Familiarize yourself with the Widely Applicable Prerequisites. Evaluate teacher and student materials to understand the types of work students are expected to produce.	**Evidence-** Problem sets, exit tickets and assessment tasks regularly ask students to explain solutions and provide support for conclusions in the form of graphs, diagrams and mathematical arguments. Module 1, Lesson 11, Problem Set, S.64-65: "Make a conjecture based on the results of...." This final question is supportive of the focus standards for the unit regarding the remainder theorem (A-APR.B.2). Module 1, Lesson 35, Exit Ticket: "Are the two parabolas defined below similar or congruent or both." The thinking required for this problem would include the property of parabolas that all parabolas are similar. (F-IF.C.7, G-GPE.A.1, MP 7). Module 2, Lesson 7, Problem #4, S.52: "Show that...for all integers k." (F-TF.C.8, F-TF.C.9+). Module 2, Lesson 13, Exit Ticket: "Would a sinusoidal function...be appropriate? Explain your reasoning." Module 3, Lesson 6, Problem #7, S.38: "Can the value of an irrational number raised to an irrational power every rational?" This builds upon previously completed practice problems, requiring the student to provide reasoning for why this statement could be true or false.	
Do materials explicitly attend to the specialized language of mathematics? Is the language of argument, problem solving, and mathematical explanations taught rather than assumed? Evaluate teacher and student materials, paying attention to how mathematical language is taught. NOTE: An example of evaluating this Criterion might include looking at whether students are supported in: basing arguments on definitions; using the method of providing a counter example; or recognizing that examples alone do not establish a general statement.	**Evidence-** Counter examples are used most frequently in refutation of statements made within discussion, or in the contexts of problems. For tasks that have a rubric, full scoring is reserved for students that use mathematical reasoning and precise language when responding to tasks. Throughout Module 2, trigonometric identities are used as justifications for arguments, but this type of attention does not exist, for the most part, in other modules. What does exist is the use of course-level and age appropriate definitions for the language of mathematics. Idiomatic explanations are not used to explain terms, nor are tricks used to shoehorn understanding. Each module (and topic) begin with vocabulary terms that teachers are expected to emphasize (by highlighting in the lesson, and by presenting within the classroom—e.g., a word wall). The progression of most lessons includes a step by step exploration of focus standards, with emphasis on vocabulary (by definition, by example, by demonstration) throughout. Graphical representations of these terms are used throughout, making the connection between verbal description and graphical representation.	

Alignment Criterion 2: Materials must demonstrate authentic connections between content Standards and practice Standards.

AC 2: Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 points, the Criterion has not been met. Check the final rating.
Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewers only.)**

Before moving to Alignment Criterion 3, record the final Meets or Does Not Meet rating in the Evaluation Summary.

X Meets

____Does Not Meet

Strengths/Weaknesses:

Strengths:
-Mathematical practices are covered and clearly labeled. Teachers are provided overviews for each topics regarding these practices.

Weaknesses:
-No supporting glossary
-Vocabulary terms don't always receive textual emphasis (bold, italic, etc.)
-Mathematic practices aren't always faithfully highlighted in marginalia

Alignment Criterion 3:
Access to the Standards for All Students- Materials must provide supports for English Language Learners and other special populations.

Because Standards are for all students, alignment requires thoughtful support to ensure all students are able to meet the Standards. Thus, aligned materials must provide supports for English Language Learners and other special populations.

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Required Materials:

- Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf)
- Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math Publishers_Criteria_HS_Spring_2013_FINAL1.pdf)
- From the materials being evaluated: teacher guides, student texts and workbooks

Rating this Criterion:

Alignment Criterion 3 is rated as Meets or Does Not Meet.

To rate Alignment Criterion 3, first rate metrics 3A, 3B, and 3C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 3 if the materials rate 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as support for special population, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.

AC Metric 3A: **Support for English Language Learners and other special populations is thoughtful and helps those students meet the same Standards as all other students. The language in which problems are posed is carefully considered.** **How to Find the Evidence:** Evaluate teacher and student materials, paying attention to supports offered for special populations.	**Evidence-** English Language Learner support exists as scaffolding notes provided for many lessons. For instance: challenging words are highlighted ("relative" in Module 1, Lesson 14), sentence stems are provided (Module 1, Lesson 34; Module 3, Lesson 21), Frayer Models are suggested (Module 1, Lesson 38; Module 4, Lesson 8), Choral Recitation (Module 2, Lesson 15), Word Walls (Module 3, Lesson 9), visual images for language support (Module 3, Lesson 30; Module 4, Lesson 2), clarification and rehearsal (Module 4, Lesson 1). Additionally, vocabulary terms with multiple meanings are highlighted. Unfortunately, a Spanish-English glossary is not included within the text. Schools and teachers would need to provide this support externally. Additionally, the high levels of exposition in each chapter could greatly impede an ELL student's ability to progress through the material. Beyond explicit support for ELL students, the language used in the text is generally grade-level appropriate and precise in meaning and intent. There is little fluff, and language support is built in for all learners—the above activities are also suggested for whole group opening activities. No evidence of idiomatic language is present. Scaffolding, present throughout the text, provides support for special populations. Differentiation activities are not expressly suggested or provided. The presentation of information throughout the text does provide support for differing learning styles, in the sense that the rule of four multiple representations are regularly and repeatedly reinforced Outside of ELL students, the text does not prevent other special populations (such as those from economically disadvantaged families, individuals with disabilities, teen mothers, and other categories addressed by the Perkins Act) from accessing the material. The language is such that these populations of students are not marginalized by the language and scenarios presented in application and modeling exercises. In scenarios in which the ideas discussed in the problems may be foreign to some students, adequate explanation is provided (e.g., the Ferris Wheel discussion, used throughout Module 2, is inclusionary. Likewise, when the windmills from Don Quixote are discussed, a diagram is provided for students that may not realize that the windmills of yore are quite different from the wind turbines they may see in their backyard). Worth noting: Eureka Math does a good job of emphasizing external resources that are free, and readily available (such as Desmos graphing calculator, Geogebra, Wolfram Alpha, and LibreOffice). Finally, at no point do any of the suggested language supports, scaffolding, or suggested remediation detract from proper attention being given to the standard.	____**Meets (2)** **X Partially Meets (1)** ____**Does Not Meet (0)**

AC Metric 3B:

Material[illegible]ovide appropriate level and type of scaffold[illegible], differentiation, intervention, and support for a broad range of learners with gradual removal of supports, when needed, to allow students to demonstrate their mathematical understanding independently.

How to Find the Evidence:

Evaluate teacher and student materials, paying attention to whether materials provide differentiation that will lead all learners to engage with on-grade-level content.

Evidence-

As noted in NN1E, s[illegible]lding is readily available in the teaching guide. The notes from abov[illegible] included here for reference:

A simple search of the teaching resources suggests 200+ opportunities for scaffolding for both struggling learners and for extension. These scaffolding opportunities are presented in line with the text (just in time), providing directives for supporting students. Often, the techniques suggested (such as a Frayer model in Lesson 27 of Module 4) also provide strategies for differentiating instruction for students. These type of supports do provide lower performing students an opportunity to engage, and also provide extensions for higher-performing students.

Notably, the development of scaffolding (and more importantly, differentiation) for each lesson does rely on the teacher's professional judgement. The introductory text suggests that the teacher develop a story for each module and topic, and work through each lesson to understand the flow of the curriculum. Presumably, the teacher will have a real-world understanding of their classroom, allowing for additional differentiation and more meaningful scaffolding.

Additionally, the introductory module provides guidance for preparing to teach a lesson (pg. 12) which is a good list of best practices for each lesson. The scaffolding notes, mentioned above, support these best practices. For instance, the text suggests that teachers classify each activity as must do or could do, and then identify anticipated difficulties. These anticipations are supported by the scaffolding within the text.

This lack of differentiation and intervention is concerning. The development of the Eureka Math text suggests that the teacher fill in the gaps and provide differentiated activities for students. For students with especially large gaps, or students that struggle to make it through the provide work, what is the next step? Remediation and review of standards covered in prior grades is included along with the course-level material, but no index is provided to locate this information, nor is there an introductory chapter or appendix providing support. The design of the student material reinforces, greatly, the idea of the teacher as the sole provider of knowledge for struggling kids. **Schools considering this curriculum would need to also consider ancillary support for intervention**.

The suggestion on the Great Minds website is that the digital versions of the resource (including search functionality) are contributory to a tiered support program for remediation. This may well be true, but this could be better developed and supported within the core text. As noted elsewhere: the design of the student resource reinforces the idea that the teacher is the sole provider of knowledge.

X Meets (2)

____ Partially Meets (1)

____Does Not Meet (0)

AC Metric 3C: **Design lessons recommends and facilitates a mix of instructional approaches for a variety of learners such as using multiple representations (e.g., including models, using a range of questions, checking for understanding, flexible grouping, pair-share).** **How to Find the Evidence:** Evaluate teacher materials, noting instructional approaches suggested for whole class and differentiated lessons and activities.	**Evidence-** Throughout. Each le deploys varied instructional strategies and questioning techniq scaffolding is provided within the lessons, and students receive support for big questions in the form of building block questions that help students develop responses. Multiple representations are used throughout the text, always in tandem.	**X Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Alignment Criterion 3: Materials must provide supports for English Language Learners and other special populations. **AC 3** Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 points, the Criterion has not been met. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewers only.)** **Move to the Evaluation Summary and record the final Meets or Does Not Meet rating .**		**X Meets** **____Does Not Meet** **Strengths/Weaknesses:** Strengths: -Scaffolding within lessons and practice -Extensive teacher notes Weaknesses: -Lacking in some accommodations for ELL students (such as a glossary or auditory supports). -Language is written with high expectations in mind

Once an evaluation for alignment to the Shifts and major features of the CCSS has been conducted using Sections 1-3, it's important to evaluate for overall quality and best practices. A starting list of Indicators of Quality are suggested below. States, districts and others evaluating instructional materials are encouraged to add to this list to ensure materials reflect local contexts. For background information on some of the Indicators of Quality in this section, refer to pp.16–18 in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).

Indicators of Quality	**Evidence- Give specific examples.**	**Rating: (Reviewer only.)**
1. Lessons are thoughtfully structured and support the teacher in leading the class through the learning paths at hand, with active participation by all students in their own learning and in the learning of their classmates.	**Evidence-** Lessons throughout the curriculum feature individual explorations, small group and class discussions, individual and small group activities, and individual performance tasks. Scaffolding notes are provided to include all learners, with special attention paid to English Language Learners. Rarely is student time during lessons spent on long individual explorations—the opportunity exists for the teacher to quickly intervene with guiding questions so students don't fall excessively behind.	**(Reviewer only.)** **X Yes** **_____ No**

2. The underlying design of the materials includes both problems and exercises. (In solving problems, students learn new mathematics, whereas in working exercises, students apply what they have already learned to build mastery.) Each problem or exercise has a purpose. **NOTE: This Criterion does not require that the problems and exercises be labeled as such.**	**Evidence-** Not quite labeled as problem/exercise, but the distinction exists within the text: general lesson cycle presented in text starts with an opening exercise, applying previously learned ideas and offering an opening to the lesson, followed by discussion, examples, exercises, an exit ticket, and a problem set. Exercises are used during the lesson cycle (1) to recall and reinforce content learned previously (within the course, or in prior math courses) and (2) to build understanding in the current standards for learning. The problem sets at the end of lessons (take home, or end of class work) focus on students building mastery in the current learning standards. These problem sets are preceded by lesson summaries to help students recall information.	**(Reviewer only.)** **X Yes** **_____ No**
3. Design of assignments is not haphazard: exercises are given in intentional sequences in order to strengthen students' mathematical understanding.	**Evidence-** Throughout. Problem sets are usually about ~10 questions, building in difficulty from the first to the last problem. Often, the early problems focus on specific skills, and the late problems are either applications or more abstract generalization problems. Module 1, Lesson 37, S.229-231: Early problems: Plotting points in the complex plane, arithmetic with complex numbers. Mid: solving for x and y with complex numbers, exponentiation with complex numbers, evaluating polynomials and rational equations with complex numbers. Late: Show by substitution that ___ is a solution, determine equality of radical expressions with complex numbers (construct a viable argument). Module 2, Lesson 12, S.114-115: Early problems: application problems that mirror the modeling done within the lesson. Mid: Given a sinusoidal function, create a graph and explain the meaning of each parameter. Late: Give a sinusoidal function, use the parameters to formulate a real-world situation. Module 4, Lesson 19, S.166: Early problem: Identify smallest standard deviation Mid: discussion of sample means from lesson Late: explain the difference between sample mean and the mean of the sampling distribution.	**(Reviewer only.)** **X Yes** **_____ No**

4. There are separate teacher materials that support and reward teacher study including, but not limited to: discussion of the mathematics of the units and the mathematical point of each lesson as it relates to the organizing concepts of the unit, discussion on student ways of thinking and anticipating a variety of students responses, guidance on lesson flow, guidance on questions that prompt students thinking, and discussion of desired mathematical behaviors being elicited among students.	**Evidence-** The teacher resources are very thorough, designed to reward teacher study of the material. Great Minds expects teachers to fully prepare for each lesson by identify the "must dos" and the "could dos", while maintaining the full attention to the focus standards. Guiding questions are provided in every lesson, as is a structured flow: opening activity, instruction, guided practice, independent practice, and an exit ticket. This support of teacher study is almost a fault: as differentiation and intervention is not explicitly provided within the curriculum, teachers must be fully prepared to provide support in class and beyond. The teacher text does provide good support for the development of this type of support in the sense that it is very specific in the definition of student learning outcomes. Positively, teachers are provided access to the full range of Great Minds materials and the text includes references to standards from earlier grade levels (and the accompanying modules and lessons). This does provide an avenue for extended support and remediation. This digital functionality is highlighted as a method for support and implementation of RTI tiers. (Caveat: if a school is using Great Minds for all grade levels, and the student didn't understand the material the first time it was presented, this may not be useful.)	**(Reviewer only.)** **X Yes** **_____ No**
5. Manipulatives suggested in the materials are faithful representations of the mathematical objects they represent and are connected to written methods.	**Evidence-** As appropriate, the text make use of tools such as calculators to help students understand the multiple representations present in the text.	**(Reviewer only.)** **X Yes** **_____ No**
6. Materials include a variety of curriculum-embedded assessments. Examples include pre-, formative, summative, and self-assessment resources.	**Evidence-** No pre assessments included. Exit tickets and mid-module assessment tasks are formative assessments that allow the teacher to guide learning and provide remediation. Remediation is included in the lesson progression. The formative assessments provide rubrics that help target this remediation and support. Modules end with End-of-Module assessment tasks that function as summative assessments, although they are very similar to the mid-module tasks. There is not an end of course summative included in the curriculum, and students are not provided any way to self-assess because selected answers aren't provided. Teachers would need to provide selected answers for students ahead of time.	**(Reviewer only.)** **_____ Yes** **X No**
7. Assessments contain aligned rubrics, answer keys, and scoring guidelines that provide sufficient guidance for interpreting student performance.	**Evidence-** The rubrics provided for mid module and end of module tasks are very good—each question is provided with four categories of progress, along with standards alignment. For non-rubric graded tasks, example answers are provided. For exercises and examples, scaffolding is often provided for review of student answers and to provide support.	**(Reviewer only.)** **X Yes** **_____ No**
8. Materials assess student proficiency using methods that are accessible and unbiased, including the use of course-level language in student prompts.	**Evidence-** Yes. The rubrics for the mid module and end of module performance tasks are well developed, and based up on assessing student learning. The questioning used in these tasks reflects the language of CCSSM, and the tasks are free from bias.	**(Reviewer only.)** **X Yes** **_____ No**

9. Materials are carefully evaluated by qualified individuals whose names are listed, in an effort to ensure freedom from mathematical errors and course-level appropriateness.	**Evidence-** Not noted in the text, but the Great Minds website does write of the Eureka Math reviewers and accolades. There is not enough information provided within the text itself.	**(Reviewer only.)** _____ **Yes** **X No**
10. The visual design supports students in engaging thoughtfully with the subject. Navigation through the text is clear.	**Evidence-** Consistent typography and judicious use of white space provide for a clean, although nearly sterile, presentation. The intent is to provide engagement directly through the mathematics, without superfluous elements that would otherwise detract from the intent of each lesson. For the most part, this design is successful. At times, students may tire of the repetitiveness of the design and flow of each lesson. Navigation through the teacher text is very clear. This is **not** true for the student text: there is not a table contents, nor an index, so students are reliant on the teacher providing the direction. Unfortunately, the text includes little to no use of pictures that would help the student engage and build interest in the topic.	**(Reviewer only.)** _____ **Yes** **x No**

Reviewer IMET Evaluation Summary **Title/Level: Eureka Math: Algebra II**

Publisher: Great Minds Copyright: 2015 ISBN: 978-1-63255-734-6

Reviewer ID # CJ, KC **Date Review Completed: 03/07/2016**

Non-Negotiable Criteria-The Non-Negotiable must be met in order for the Non-Negotiable Alignment Criteria to be met overall.

Non- Negotiable 1: Focus and Coherence

X Meets

_____ Does Not Meet

Non-Negotiable Overall:

X Meets **_____ Does Not Meet**

Alignment Criteria- Each Alignment Criterion must be met with a sufficient number of points in order for Alignment Criteria to be labeled as "Meets" overall. The more points the materials receive on the Alignment Criteria, the better they are aligned.

Alignment Criterion 1: Rigor and Balance	Alignment Criterion 2: Standards of Mathematical Practice	Alignment Criterion 3: Access to Standards for All Learners
Points: 6 of 6 possible. (Materials must receive at least 5 of 6 points to align.)	**Points: 6 of 6 possible.** (Materials must receive at least 5 of 6 points to align.)	**Points: 5 of 6 possible.** (Materials must receive at least 5 of 6 points to align.)
X Meets	**X Meets**	**X Meets**
_____ Does Not Meet	**_____ Does Not Meet**	**_____ Does Not Meet**

Alignment Criteria Overall:

X Meets **_____ Does Not Meet**

If the materials meet the Non-Negotiable Criterion and each Alignment Criterion, they are aligned to the Shifts and major features of the Common Core Standards. **Do the materials meet every Non-Negotiable and Alignment Criterion? X Yes _____ No**

What are the specific areas of strength and weakness based on this evaluation? Publishers or others modifying or developing assessments can use this information to make improvements and/or to remedy gaps in the alignment of assessment materials.

Eureka Math: Algebra II represents a math curriculum with high expectations for all learners. This is certainly a strength, but the design of the curriculum could leave struggling learners behind without additional support provided outside of the curriculum. Referring teachers (and students) to earlier curriculum to review and reinforce standards can be useful, but it does not provide support for students that struggled in the same curriculum previously (e.g., the algebra II student that also completed work in Eureka Math: Algebra I).

The text does cover all standards and mathematical practices.

Adoption of this specific title makes sense if a school adopts Eureka math for all grades (or at least all grades addressed within a specific story—A Story of Ratios and Functions is grades 6-12) because all stakeholders become familiar with the nuances and processes of the curriculum.

Additionally, this is a "free" curriculum that can be accessed by anyone online. This is great! That said, schools that purchase this curriculum would either need to buy workbooks each year, or print out the student materials.

2015-16 Mathematics Interim Review Recommendation & Summary

Publisher Name:	Great Minds
Title:	Eureka Math - A story of Functions Pre-Calculus
ISBN #	978-1-63255-738-4
Grade Level(s) or Course:	Pre-Calculus
Reviewer ID:	KBJH

RECOMMENDED AS:

✓ **Core Mathematics Program-** a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials. Substantial evidence clearly supports the designation of this program as Core.

_____ **Other Mathematics Program-** a program that substantially, but partially, meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for supplemental materials. Substantial evidence clearly supports the designation of this program as Other.

_____ **Component Mathematics Program-** a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs. Substantial evidence clearly supports the designation of this program as Component.

_____ **Intervention Program-** a program designed and intended to target and support students' specific needs. Substantial evidence clearly supports the designation of this program as Intervention.

_____ **Does not meet criteria** for recommendation as a Curricular Material or Online Resource for Mathematics.

EVIDENCE SUMMARY:

FOCUS- The content throughout evidences the majority of the material grounded in the Widely Applicable Prerequisits.
NVI Geometry skills are repeatedly used to model problems ~~rai~~ to boost comprehension of concepts.

COHERENCE- The overall sequencing and the structure of lessons focus on the Widely Appricable Prerequisits in a way
NVI that is consistent with the progression of the Standards.

RIGOR- Problem sets are designed to reinforce procedural skills, with ample practice, while requiring deeper level thinking.
ACI Conceptual understanding is this texts primary focus thrugh rich real-world application problems.

CONCEPTUAL UNDERSTANDING-
ACI The Student edition is designed to lead the students through the entire conceptual process. The overview and summary in TE.

MATHEMATICAL PRACTICES-
AC2 Text, throughout incorporates Mathematical Practices
* Explore, Extend, write, Analyze, question understanding of Topics.
Teachers are given Socratic-Method Questions and other guided help

ACCESSIBILITY OF STANDARDS TO ALL STUDENTS-
AC3 Assessments use course-level and topic specific vocab and questioning.
There does not seem to be cultural bias in questions on assessments.

OTHER:
The text leads with the "story" of each concept, and leads teacher/students through big ideas toward procedural tasks in a cohesive manner!

Eureka Pre-Calculus would be most successful if prior material ~~is~~ is rigorous in skills and comprehension. It would be a perfect material for STEM courses and motivated learners.

This material would also be a great tool to, possibly, engage "at-risk" students.

Very Rich Material

2015-1 nterim Mathematics Review

Mathematics Evaluation Tool – High School

Publisher: Great Minds

Title of Material: Eureka Math - A Story of Functions Pre-Calculus

Author: Great Minds

ISBN #: 978-1-63255-738-4 **Copyright** 2015

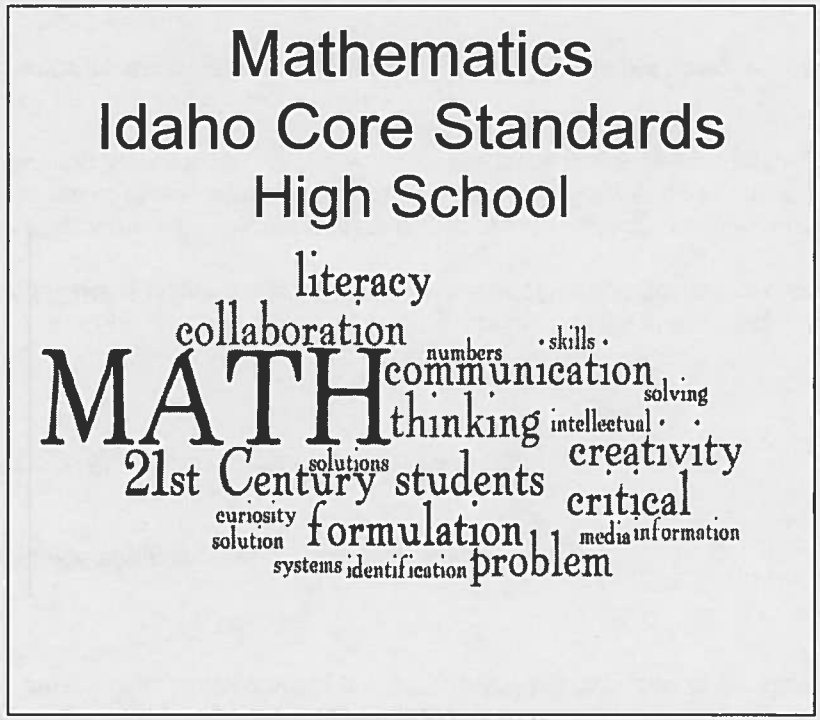
Reviewer ID: KB JH

Core Mathematics Program- a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Core.

Other Mathematics Program- a program that substantially, but partially, meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Other.

Component Mathematics Program- a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs.
Substantial evidence clearly supports the designation of this program as Component.

Intervention Program- a program designed and intended to target and support students' specific needs.
Substantial evidence clearly supports the designation of this program as Intervention.



- Evaluation Form adapted from Instructional Materials Evaluation Toolkit (IMET).

The IMET was developed by Student Achievement Partners. Educators may use or adapt. http://creativecommons.org/licenses/by/3.0/ Download this tool at http://achievethecore.org/IMET

Instructional Materials Evaluation Tool

Mathematics, High School

What Are the Purposes of the IMET?

This Math IMET is designed to help educators determine whether instructional materials are aligned to the Shifts and major features of the Common Core State Standards (CCSS). The substantial instructional Shifts (http://www.corestandards.org/other-resources/key-shifts-in-mathematics/) at the heart of the Common Core State Standards are:

- **Focus** strongly where the Standards focus
- **Coherence**: Think across grades and link to major topics within the grade
- **Rigor**: In major topics, pursue conceptual understanding, procedural skill and fluency, and application with equal intensity.

The IMET draws directly from the following documents:

- Common Core State Standards for Mathematics (www.corestandards.org/Math)
- Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013) (http://www. corestandards.org/wp-content/uploads/Math_Publishers_Criteria_ HS_Spring_2013_FINAL1.pdf)

When to use the IMET

1. Purchasing materials: Many factors go into local purchasing decisions. Alignment to the Standards is a critical factor to consider. This tool is designed to evaluate alignment of instructional materials to the Shifts and the major features of the CCSS. It also provides suggestions of additional indicators to consider in the materials evaluation and purchasing process
2. Evaluating materials currently in use: The IMET can be used to analyze the degree of alignment of existing materials and help to highlight specific, concrete flaws in alignment. Even where materials and tools currently in use fail to meet one or more of these criteria, the pattern of failure is likely to be informative. States and districts can use the evaluation to create a thoughtful plan to modify or combine existing resources in such a way that students' actual learning experiences approach the focus, coherence, and rigor of the Standards.
3. Developing programs: Those developing new programs can use this tool as guidance for creating aligned curricula.

Please note this tool was designed for evaluating comprehensive curricula (including any supplemental or ancillary materials), but it was not designed for the evaluation of standalone supplemental materials.

Who Uses the IMET?

Evaluating instructional materials requires both subject-matter and pedagogical expertise. Evaluators should be well versed in the Standards (www.corestandards.org/Math) for all grades in which materials are being evaluated. This includes understanding the Widely Applicable Prerequisites (www.achievethecore.org/prerequisites), how the content fits into the progressions in the Standards (www. achievethecore.org/progressions), and the expectations of the Standards with respect to conceptual understanding, procedural skill and fluency, and application. Evaluators also should be familiar with the substantial instructional Shifts (http://www.corestandards.org/other-resources/key-shifts-in-mathematics/) of Focus, Coherence and Rigor that are listed above.

Getting Started

Prior to Evaluation

Assemble all of the materials necessary for the evaluation. It is essential for evaluators to have materials for all grades covered by the program, as some criteria cannot be rated without having access to each grade. In addition, each evaluator should have a reference copy of the Common Core State Standards for Mathematics (CCSSM) and the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).

Before conducting the evaluation itself, it is important to develop a protocol for the evaluation process. The protocol should include having evaluators study the Publishers' Criteria and the IMET. It will also be helpful for evaluators to get a sense of each program overall before beginning the process. At a minimum, this would include reading the front matter of the text, looking at the table of contents and paging through multiple chapters.

Sections 1-3 below should be completed to produce a comprehensive picture of the strengths and weaknesses of the materials under evaluation. Information about areas in need of improvement or supplementation should be shared with internal and external stakeholders.

Navigating the Tool

Begin with Section 1: Non-Negotiable Alignment Criteria

- The Non-Negotiable Alignment Criteria must each be met in full for materials to be considered aligned to the Shifts and the major features of the Common Core State Standards. Each Non-Negotiable Alignment Criterion has one or more metrics associated with it; every one of these metrics must be met in order for the criterion as a whole to be met.

- Examine the relevant materials and use evidence to rate the materials against each criterion and its associated metric(s).

- Record and explain the evidence upon which the rating is based.

Continue to Section 2: Alignment Criteria

- The Alignment Criteria must each be met for materials to be considered aligned to the Shifts and the major features of the Common Core State Standards. Each Alignment Criterion has one or more metric associated with it; a specific number of these metrics must be met or partially met in order for the criterion as a whole to be met.

- Examine the materials in relation to these criteria, assigning each metric a point value. Rate the criterion as "Meets" or "Does Note Meet" based on the number of points assigned. The more points the materials receive on the alignment Criteria, the better they are aligned.

- Record and explain the evidence upon which the rating is based.

Proceed to Section 4: Indicators of Quality

- Indicators of Quality are important considerations that will help evaluators better understand the overall quality of instructional materials. These considerations are not criteria for alignment to the CCSS, but they provide valuable information about additional program characteristics. Evaluators may want to add their own indicators to the examples provided.

Directions for Non-Negotiable 1 **Focus and Coherence**		
Criterion	**Evidence- Give specific examples.**	**Rating: (Reviewer only.)**
Non-Negotiable 1: Focus and Coherence- Materials must focus coherently on the Widely Applicable Prerequisites in a way that is consistent with the progressions in the Standards. Focus and coherence are the two major evidence-based design principles of the Common Core State Standards for Mathematics (CCSSM, p. 3). Focus is necessary in order to fulfill the ambitious promise the states have made to their students by adopting the Standards: greater achievement at the college and career-ready level; greater depth of understanding of mathematics; and a rich classroom environment in which reasoning, sense-making, applications, and a range of mathematical practices flourish. In high school courses, narrowing and deepening the curriculum creates a structure that ties topics together. Thus, materials must focus coherently on the Widely Applicable Prerequisites in a way that is consistent with the progressions in the Standards.	Focus and coherence are the two major evidence-based design principles of the Common Core State Standards for Mathematics (CCSSM, p. 3). Focus is necessary in order to fulfill the ambitious promise the states have made to their students by adopting the Standards: greater achievement at the college and career-ready level; greater depth of understanding of mathematics; and a rich classroom environment in which reasoning, sense-making, applications, and a range of mathematical practices flourish. In high school courses, narrowing and deepening the curriculum creates a structure that ties topics together. Thus, materials must focus coherently on the Widely Applicable Prerequisites in a way that is consistent with the progressions in the Standards. **Required Materials:** • Common Core State Standards for Mathematics (www.corestandards.org/wpcontent/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_HS_Spring_2013_FINAL1.pdf) • Widely Applicable Prerequisites for College and Careers (http://achievethecore.org/prerequisites) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion:** Non-Negotiable 1 is rated as Meets or Does Not Meet. To rate Non-Negotiable 1, first rate Metrics 1A–1H. Each of these eight metrics must be rated as Meets in order for Non-Negotiable 1 to be rated as Meets. Rate each metric 1A–1H as Meets or Does Not Meet/Insufficient Evidence. If the evidence examined shows that the Criterion is met, then mark the Criterion as Meets. If the evidence examined shows that the Criterion is not met—or if there is insufficient evidence to make a determination—then mark the Criterion as Does Not Meet/Insufficient Evidence. Support all ratings with evidence.

Metric NN1A: **In any single course, students spend at least 50% of their time on Widely Applicable Prerequisites.** **How to Find the Evidence:** Familiarize yourself with the Widely Applicable Prerequisites. Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, lessons, homework assignments, and assessments. (Evaluate both student and teacher materials.) Consider time spent on the Widely Applicable Prerequisites and judge qualitatively whether students and teachers using the materials as designed will devote the majority of time to the Widely Applicable Prerequisites For context, read Criterion #1 in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** The content of this material largely focuses on the Widely Applicable Prerequisits in Algebra Functions, and Geometry. Evidence is found throughout modules, lessons, and assessments.	✓ **Meets** ___ **Does Not Meet Insufficient Evidence**
Metric NN1B: **Student work in Geometry involves significant work with applications/modeling and problems that use algebra skills.** **How to Find the Evidence:** Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, lessons, homework assignments, and assessments. (Evaluate both student and teacher materials. NOTE: Since Geometry contains relatively fewer Widely Applicable Prerequisites, this Criterion is important to help foster students' college and career readiness. Problems that use algebra skills might include, for example, algebraic geometry problems in a coordinate setting, or problems of measurement involving unknown quantities.	**Evidence-** The content repeatedly uses geometry skills as a way to model problems and analyze concepts. Evidence is found throughout the modules.	✓ **Meets** ___ **Does Not Meet Insufficient Evidence**

Metric NN1C: **There are problems at a level of sophistication appropriate to high school (beyond mere review of middle school topics) that involve the application of knowledge and skills from grades 6-8.** **How to Find the Evidence:** Evaluate lessons, chapter/unit assessments, and homework assignments. NOTE: Problems should include application of the following topics from grades 6-8: • Ratios and proportional relationships. • Percentage and unit conversions, e.g., in the context of complex measurement problems involving quantities with derived or compound units (such as mg/mL, kg/ m3, acre-feet, etc.). • Basic function concepts, e.g., by interpreting the features of a graph in the context of an applied problem. • Concepts and skills of geometric measurement e.g., when analyzing a diagram or schematic. • Concepts and skills of basic statistics and probability (see grades 6–8.SP) • Performing rational number arithmetic fluently. For context, read Table 1 on Page 8 of the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** The content utilizes the knowledge and skills aquired in previous courses, and requires appropriate sophistication throughout. Evidence is found in transformations where they draw from transformations of rigid objects learned in previous courses.	✓ **Meets** ____ **Does Not Meet Insufficient Evidence**
Metric NN1D: **Materials base courses on the content specified in the Standards.** **How to Find the Evidence:** Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, and lessons in both student and teacher materials. For context, read Criterion #3a in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** The content incorporates and embeds the standards well throughout this text. Evidence ~~is~~ of as an example Mod 3 with Rational functions and composition are based on standards	✓ **Meets** ____ **Does Not Meet Insufficient Evidence**
Metric NN1E: **Materials give all students extensive work with course-level problems.** **How to Find the Evidence:** Evaluate both student and teacher materials. If the materials provide resources for differentiated learning, consider whether lower-performing students have opportunities to engage with course-level problems. Also consider whether higher-performing students are given opportunities to learn current course-level content in greater depth. For context, read Criterion #3b in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** The content is rich in course level problems and practice. For example Mod 5 lesson 4. Also found throughout.	____ **Meets** ____ **Does Not Meet Insufficient Evidence**

Metric NN1F: **Materials relate course-level concepts explicitly to prior knowledge from earlier grades or courses. The materials are designed so that prior knowledge becomes reorganized and extended to accommodate the new knowledge.** **How to Find the Evidence:** Evaluate student and teacher materials, looking for problems that involve extending the knowledge learned in earlier grades and courses. NOTE: An example of evaluating this Criterion might be to look at whether materials connect the equation of a circle with the distance formula and the Pythagorean theorem. For context, read Criterion #3c in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** Each module incorporates and scaffold material from earlier courses very well. For evidence, see Mod 4 Quadrants of Coordinate Graphs page 68. Also found throughout.	✓ **Meets** **___Does Not Meet Insufficient Evidence**
Metric NN1G: **Materials include learning objectives that are visibly shaped by CCSSM cluster and domain headings.** **How to Find the Evidence:** Select several clusters from the course being evaluated. Evaluate teacher and student materials in relation to these clusters. For context, read Criterion #4a in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** Table of Contents and beginning of each Big Topic, the CCSSM standards are clearly stated. Module 2 TE p.15 (example)	✓ **Meets** **___Does Not Meet Insufficient Evidence**
Metric NN1H: **Materials include problems and activities that serve to connect two or more clusters in a domain, or two or more domains in a category, or two or more categories, in cases where these connections are natural and important.** **How to Find the Evidence:** In the course being evaluated, choose two or more clusters, two or more domains, or two or more categories for which connections are natural and important. Evaluate the units, chapters, and lessons that deal with the chosen topics, looking for problems and activities that serve to connect the chosen clusters or domains. NOTE: An example of evaluating this Criterion might be to look at whether materials include problems in which students analyze a situation by building a function, graphing it, and using it to create and solve an equation. For context, read Criterion #4b in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** Throughout text materials include problems/tasks across domains. Larger connections are made with visuals and deeper questions Module 1 Lesson 16 Transformations Number Sense Geometry	✓ **Meets** **___Does Not Meet Insufficient Evidence**

Non-Negotiable 1: Focus and Coherence- Materials must focus coherently on the Widely Applicable Prerequisites in a way that is consistent with the progressions in the Standards.

Metric NN 1: If all metrics 1A–1H were rated as Meets, then rate Non-Negotiable 1 as Meets. If one or more metrics were rated as Does Not Meet/Insufficient Evidence, then rate Non-Negotiable 1 as Does Not Meet. Check the final rating.
Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)**

Before moving to Alignment Criterion 1, record the final Meets or Does Not Meet rating in the Evaluation Summary.

✓ **Meets**

____ **Does Not Meet**

Strengths/Weaknesses

This text does an exceptional job at covering WAP as well as focusing on conceptual learning.

Now continue by evaluating Alignment Criterion 1 for Rigor and Balance.

Directions for Alignment Criterion 1

Rigor and Balance

Alignment Criterion 1:
Rigor and Balance- Materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.

The Standards set expectations for attention to all three aspects of rigor: conceptual understanding, procedural skill and fluency, and applications. Thus, materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.

The Standards set expectations for attention to all three aspects of rigor: conceptual understanding, procedural skill and fluency, and applications. Thus, materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.

- Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf)
- Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_HS_Spring_2013_FINAL1.pdf)
- Widely Applicable Prerequisites for College and Careers (http://achievethecore.org/prerequisites)
- From the materials being evaluated: teacher guides, student texts and workbooks

Rating this Criterion:

Alignment Criterion 1 is rated as Meets or Does Not Meet.

To rate Alignment Criterion 1, first rate metrics 1A, 1B, and 1C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). For each metric, guiding questions are provided to aid in gathering evidence.
Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 1 if the materials rate 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as rigor and balance, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.

AC Metric 1A: **The materials support the development of students' conceptual understanding of key mathematical concepts, especially where called for in specific content Standards or cluster headings.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Widely Applicable Prerequisites that relate specifically to conceptual understanding to use throughout the questions associated with this metric. NOTE: Some examples of clusters or Standards that call for conceptual understanding include: N-RN.A.1, A-APR.B, A-REI.A.1, A-REI.D.10, A.REI.D.11, F.IF.A.1, F-LE.A.1, G.SRT.A.2, G-SRT.C.6, S-ID.C.7 For context, read Criterion #2a in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	• Choose a cluster/Standard from the Widely Applicable Prerequisites that is aligned to each aspect of rigor and use it to evaluate these metrics. It is most helpful if the same clusters and Standards are chosen for all of the programs being evaluated. (Guidance in choosing clusters/Standards is included in "How to Find the Evidence" below.)	**Use the questions for AC Metric 1A to evaluate Metric 1A. Record evidence for each question and rate Metric** **1 Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Is conceptual understanding attended to thoroughly where the Standards set explicit expectations for understanding or interpreting? Evaluate lessons, chapter/unit assessments and homework assignments, paying attention to work aligned to Standards that explicitly call for understanding or interpreting.	**Evidence-** IN Student Book the Focus primarily focuses on concentual undering through real-world problems while providing ample practice for skills. SE Mdo 45	
Do the materials feature high-quality conceptual problems and conceptual discussion questions? Evaluate lessons, chapter/unit assessments, and homework assignments. NOTE: Examples of conceptual problems might include such questions as "What is the maximum value of the function f(t) = 5 – t2 ?" or "Is √2 a polynomial? How about ½(x + √2)+ ½ (-x + √2)?"	**Evidence-** Lessons: *Problem Sets *Socratic Method questioning Explove opportunities Model Problems	
Do the materials feature opportunities to identify correspondences across mathematical representations? Evaluate lessons, chapter/unit assessments and homework assignments. NOTE: An example of evaluating this metric might include looking at whether materials support students in identifying correspondences among the expression that defines a function, the graph that shows the relationship, and the behavior of the phenomenon being modeled (if any).	**Evidence-** Digital Manipulatives – Math Model with heavy focus on what is changing on graphs. P.120-121 M5 L10	

AC Metric 1B: **The materials are designed so that students attain the fluencies and procedural skills required by the Standards.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Widely Applicable Prerequisites that relate specifically to fluency and procedural skill to use throughout the questions associated with this metric. NOTE: Some examples of Standards that call for procedural skill and fluency include: A-SSE.A.1b, A-SSE.2, A-APR.A.1, A-APR.C.6, F-BF.B.3, G-GPE.B.4, G-GPE.B.5, G-GPE.B.7, G-CO.A.1, G-SRT.B.5 For context, read Criterion #2b in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).		**Use the questions for AC Metric 1B to evaluate Metric 1B. Record evidence for each question and rate Metric 1B.** ✓ **Meets (2)** ____ **Partially Meets (1)** ____ **Does Not Meet (0)**
Is progress toward fluency and procedural skill interwoven with the student's developing conceptual understanding of the skills in question? Evaluate lessons, chapter/unit assessments, daily routines, and homework assignments for evidence that the development of fluency and procedural skill is supported by conceptual understanding.	**Evidence-** Problem Set (Provide Extentions) Links to digital/visual. * Opening * Building * Extention Problems M4 L11 S.87→	
Are purely procedural problems and exercises present that include cases in which opportunistic strategies are valuable and generic cases that require efficient and general procedures present? Evaluate lessons, chapter/unit assessments, daily routines, and homework assignments. NOTE: Problems in which opportunistic strategies are valuable might include such examples as solving x2 + 5 = 49 + 5 or (3x – 2)2 = 6x – 4. Generic cases that require efficient and general procedures might include such problems as solving c + 8 – c2 = 3(c – 1)2 – 5).	**Evidence-** Problem Sets designed to reinforce procedural skills while asking deeper level thinking. S.59 Exploratory challenges. MS L7 Mod 5 M15	
AC Metric 1C: **The materials are designed so that teachers and students spend sufficient time working with engaging applications, without losing focus on the Widely Applicable Prerequisites.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Widely Applicable Prerequisites that relate specifically to application to use throughout the questions associated with this metric. NOTE: Some examples of clusters or Standards that call for application include: N-Q.A, A-SSE.B.3, A-REI.D.11, F-IF.B, F-IF.C.7, F-BF.A.1, G-SRT.C.8, S-ID.A.2, S-IC.A.1 For context, read Criterion #2c in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).		**Use the questions for AC Metric 1C to evaluate Metric 1C. Record evidence for each question and rate Metric 1C.** ✓ **Meets (2)** ____ **Partially Meets (1)** ____ **Does Not Meet (0)**
Are there single- and multi-step contextual problems, including non-routine problems, that develop the mathematics of the course, afford opportunities for practice, and engage students in problem solving? Do the problems attend thoroughly to those places in the content Standards where expectations for multi-step and real-world problems are explicit? Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** All modules/lessons contain problems relating concepts to real-world situations attending to Standing. SE M8 L1 P.55	

Do application problems particularly stress applying the Widely Applicable Prerequisites? Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** Supporting Clusters in lessons address WAP at least 75%. Mod 2 L 27 p.5 2 of 7	
Are there ample opportunities for students to engage with modeling problems? Do materials require students to use both individual parts of the modeling cycle as well as the full modeling cycle? Read the pages on High School—Modeling in the Standards for Mathematics (pp. 72 and 73). Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** Students have capstone, modeling w/problems and statistics.	

Alignment Criterion 1: Materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.

AC 1: Materials must earn at least 5 of 6 points to meet this Alignment Criterion. If materials earn less than 5 points, the Criterion has not been met. Check the final rating.
Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)**

Before moving to Alignment Criterion 2, record the final Meets or Does Not Meet rating in the Evaluation Summary.

2 Meets

____Does Not Meet

Strengths/Weaknesses:
The applied problems together with the explore, write and analyze problems give students opportunities for advanced thinking.

Alignment Criterion 2: **Standards for Mathematical Practice- Materials must demonstrate authentic connections between content Standards and practice Standards.** The Standards require that designers of instructional materials connect the mathematical practices to mathematical content in instruction. Thus, materials must demonstrate authentic connections between content Standards and practice Standards.	The Standards require that designers of instructional materials connect the mathematical practices to mathematical content in instruction. Thus, materials must demonstrate authentic connections between content Standards and practice Standards. **Required Materials**: • Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_HS_Spring_2013_FINAL1.pdf) • Widely Applicable Prerequisites for College and Careers (http://achievethecore.org/prerequisites) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion:** Alignment Criterion 2 is rated as Meets or Does Not Meet. To rate Alignment Criterion 2, first rate metrics 2A, 2B, and 2C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). For each metric, guiding questions are provided to aid in gathering evidence. Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 2 if the materials rate 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as mathematical practices, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.

AC Metric 2A: **Materials address the practice Standards in such a way as to enrich the Widely Applicable Prerequisites; practices strengthen the focus of the course instead of detracting from it, in both teacher and student materials.** **How to Find the Evidence:** Familiarize yourself with the Widely Applicable Prerequisites. Evaluate teacher and student materials for evidence that the mathematical practices support and connect to the focus of the course. NOTE: An example of evaluating this Criterion might include looking at whether materials use regularity in repeated reasoning to illuminate formal algebra as well as functions, particularly recursive definitions of functions. For context, read Criterion #6 in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** This text incorporates the practice standards very well to support and develops the Widely Applicable Prerequisites. ~~to focus~~ Evidence is found through out the modules.	✓ Meets (2) ___ Partially Meets (1) ___ Does Not Meet (0)
AC Metric 2B: **Materials attend to the full meaning of each practice Standard.** **How to Find the Evidence:** For context, read Criterion #7 in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).		**Use the questions for AC Metric 2B to evaluate Metric 2B. Record evidence for each question and rate Metric 2B.** ✓ Meets (2) ___ Partially Meets (1) ___ Does Not Meet (0)
Over the course of any given year of instruction, is each mathematical practice Standard meaningfully present in the form of assignments, activities, or problems that stimulate students to develop the habits of mind described in the practice Standard? Evaluate lessons, chapter/ unit assessments, and homework assignments for evidence of each mathematical practice being meaningfully present in instruction.	**Evidence-** The course intrinsicly incorporates all the practice standards and continually prompts the development of the habits of mind.	
Are teacher-directed materials that explain the role of the practice Standards in the classroom and in students' mathematical development included? Are alignments to practice Standards accurate? Evaluate teacher materials, paying attention to explanations of the role of the practice Standards in the classroom and in students' mathematical development. Evaluate documents aligning lessons to practice Standards for accuracy. NOTE: Examples to look for when evaluating this metric might include the following: a highly scaffolded problem should not be aligned to MP.1; or a problem that directs a student to use a calculator should not be aligned to MP.5; or a problem about merely extending a pattern should not be aligned to MP.8.	**Evidence-** In every module before the main topics, the practice standards are suggested in the Teacher Edition. See Module Overviews for evidence.	

AC Metric 2C: **Materials support the Standards' emphasis on mathematical reasoning.** **How to Find the Evidence:** For context, read Criterion #8 in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).		**Use the questions for AC Metric 2C to evaluate Metric 2C. Record evidence for each question and rate Metric.** ✓ **Meets (2)** ___ **Partially Meets (1)** ___ **Does Not Meet (0)**
Do the materials support students in constructing viable arguments and critiquing the arguments of others concerning course-level mathematics that is detailed in the content Standards? Read Standard for Mathematical Practice 3. Evaluate teacher and student materials to ensure that students are given opportunities to reason with grade-level mathematics.	**Evidence-** Often in lesson development, students are promted to build arguments and critique others work. Evidence found in Mod 1 lesson 3.	
Do the materials support students in producing not only answers and solutions, but also, in a course-appropriate way, arguments, explanations, diagrams, mathematical models, etc., especially in the Widely Applicable Prerequisites? Familiarize yourself with the Widely Applicable Prerequisites. Evaluate teacher and student materials to understand the types of work students are expected to produce.	**Evidence-** Throughout the course students have frequent opportunities to produce explanations, diagrams, models in the Widely Applicable Prerequites.	
Do materials explicitly attend to the specialized language of mathematics? Is the language of argument, problem solving, and mathematical explanations taught rather than assumed? Evaluate teacher and student materials, paying attention to how mathematical language is taught. NOTE: An example of evaluating this Criterion might include looking at whether students are supported in: basing arguments on definitions; using the method of providing a counter example; or recognizing that examples alone do not establish a general statement.	**Evidence-** ~~That~~ The language of mathematics is precise, correctly used, and developed very well throughout all lessons and all modules!	
Alignment Criterion 2: Materials must demonstrate authentic connections between content Standards and practice Standards. **AC 2:** Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 points, the Criterion has not been met. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewers only.)** **Before moving to Alignment Criterion 3, record the final Meets or Does Not Meet rating in the Evaluation Summary.**		✓ **Meets** ___ **Does Not Meet** **Strengths/Weaknesses:** Biggest Strength is connecting ideas over clusters giving students ample practice opportunities.

Alignment Criterion 3: **Access to the Standards for All Students- Materials must provide supports for English Language Learners and other special populations.** Because Standards are for all students, alignment requires thoughtful support to ensure all students are able to meet the Standards. Thus, aligned materials must provide supports for English Language Learners and other special populations.	Because Standards are for all students, alignment requires thoughtful support to ensure all students are able to meet the Standards. Thus, aligned materials must provide supports for English Language Learners and other special populations. **Required Materials:** • Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math Publishers_Criteria_HS_Spring_2013_FINAL1.pdf) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion:** Alignment Criterion 3 is rated as Meets or Does Not Meet. To rate Alignment Criterion 3, first rate metrics 3A, 3B, and 3C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 3 if the materials rate 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as support for special population, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.
AC Metric 3A: **Support for English Language Learners and other special populations is thoughtful and helps those students meet the same Standards as all other students. The language in which problems are posed is carefully considered.** **How to Find the Evidence:** Evaluate teacher and student materials, paying attention to supports offered for special populations.	**Evidence-** T.E provide ideas to support EL students. Example: "Use a Word Wall". Mod 2 L1 ONLINE/S.E. Spanish Version 2016	✓ **Meets (2)** **Partially Meets (1)** **Does Not Meet (0)**
AC Metric 3B: **Materials provide appropriate level and type of scaffolding, differentiation, intervention, and support for a broad range of learners with gradual removal of supports, when needed, to allow students to demonstrate their mathematical understanding independently.** **How to Find the Evidence:** Evaluate teacher and student materials, paying attention to whether materials provide differentiation that will lead all learners to engage with on-grade-level content.	**Evidence-** Mod 3 Scaffolding notes for differentiation and enrichment LS p.74 The online platform provides additional RTI supports.	✓ **Meets (2)** **Partially Meets (1)** **Does Not Meet (0)**
AC Metric 3C: **Design of lessons recommends and facilitates a mix of instructional approaches for a variety of learners such as using multiple representations (e.g., including models, using a range of questions, checking for understanding, flexible grouping, pair-share).** **How to Find the Evidence:** Evaluate teacher materials, noting instructional approaches suggested for whole class and differentiated lessons and activities.	**Evidence-** M5 L3 p.71 * Discussion opportunities * Visuals Diagrams * opening Excercises p.76 * Writing Prompts - closing Exercise M3LS * Exit Tickets Self-Critique Questions	✓ **Meets (2)** **Partially Meets (1)** **Does Not Meet (0)**

Alignment Criterion 3: Materials must provide supports for English Language Learners and other special populations. AC 3 Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 points, the Criterion has not been met. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewers only.)** **Move to the Evaluation Summary and record the final Meets or Does Not Meet rating .**	✓ **Meets** ____ **Does Not Meet** **Strengths/Weaknesses:**

Once an evaluation for alignment to the Shifts and major features of the CCSS has been conducted using Sections 1-3, it's important to evaluate for overall quality and best practices. A starting list of Indicators of Quality are suggested below. States, districts and others evaluating instructional materials are encouraged to add to this list to ensure materials reflect local contexts. For background information on some of the Indicators of Quality in this section, refer to pp.16–18 in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).

Indicators of Quality	**Evidence- Give specific examples.**	**Rating: (Reviewer only.)**
1. Lessons are thoughtfully structured and support the teacher in leading the class through the learning paths at hand, with active participation by all students in their own learning and in the learning of their classmates.	**Evidence-** Designed for teachers to Focus on conceptual teaching rather than time-consuming lesson planning. * Time limit suggestion * Socratic Questioning * Mastery Building	**(Reviewer only.)** ✓ **Yes** ____ **No**
2. The underlying design of the materials includes both problems and exercises. (In solving problems, students learn new mathematics, whereas in working exercises, students apply what they have already learned to build mastery.) Each problem or exercise has a purpose. **NOTE: This Criterion does not require that the problems and exercises be labeled as such.**	**Evidence-** Throughout text * Modeling problems SE * Exploratory problems * Mastery Building Exercises	**(Reviewer only.)** ✓ **Yes** ____ **No**

3. Design of assignments is not haphazard: exercises are given in intentional sequences in order to strengthen students' mathematical understanding.	**Evidence-** Curriculum Overview Sections * Well sequenced * Purposeful, clear objects Standards met.	**(Reviewer only.)** __i/__ **Yes** _____ **No**
4. There are separate teacher materials that support and reward teacher study including, but not limited to: discussion of the mathematics of the units and the mathematical point of each lesson as it relates to the organizing concepts of the unit, discussion on student ways of thinking and anticipating a variety of students responses, guidance on lesson flow, guidance on questions that prompt students thinking, and discussion of desired mathematical behaviors being elicited among students.	**Evidence-** Pacing / Prep guides Curriculum Overviews Video Gallery Eureka Navigator (PD materials)	**(Reviewer only.)** __✓__ **Yes** _____ **No**
5. Manipulatives suggested in the materials are faithful representations of the mathematical objects they represent and are connected to written methods.	**Evidence-** Modeling questions use effective modeling / graphing serve as manipulates. Digital manipulatives.	**(Reviewer only.)** __✓__ **Yes** _____ **No**
6. Materials include a variety of curriculum-embedded assessments. Examples include pre-, formative, summative, and self-assessment resources.	**Evidence-** Exit Tickets as Formative Assessment Mid Module / End Module Assessment PARCC Sample tasks	**(Reviewer only.)** __✓__ **Yes** _____ **No**
7. Assessments contain aligned rubrics, answer keys, and scoring guidelines that provide sufficient guidance for interpreting student performance.	**Evidence-** Rubrics Offered/Provided 6-12 Ex P. 419	**(Reviewer only.)** __✓__ **Yes** _____ **No**
8. Materials assess student proficiency using methods that are accessible and unbiased, including the use of course-level language in student prompts.	**Evidence-** Assessments use course-level appropriate language w/out bias. M2 End of Mod. Assessment p. 470	**(Reviewer only.)** __✓__ **Yes** _____ **No**

9. Materials are carefully evaluated by qualified individuals whose names are listed, in an effort to ensure freedom from mathematical errors and course-level appropriateness.	**Evidence-** EQuIP (Ed. Evaluating Quality Inst. Products) Louisiana State University Louisiana State Dept Ed.	**(Reviewer only.)** ✓ **Yes** ____ **No**
10. The visual design supports students in engaging thoughtfully with the subject. Navigation through the text is clear.	**Evidence-** Mathematical diagrams used well to engage students in the thinking / problem solving process. Few distractions. (unnecessary)	**(Reviewer only.)** ✓ **Yes** ____ **No**

Reviewer IMET Evaluation Summary **Title/Level:** Great Minds: Eureka Math - A Story of Pre-Calculus

Publisher: Great Minds **Copyright:** 2015 **ISBN:** 978-1-63255-238-4

Reviewer ID # KB JH **Date Review Completed:** 3/8/16

Non-Negotiable Criteria-The Non-Negotiable must be met in order for the Non-Negotiable Alignment Criteria to be met overall.

Non- Negotiable 1: Focus and Coherence

✓ **Meets**

____ **Does Not Meet**

Non-Negotiable Overall:

__✓__ **Meets** _____ **Does Not Meet**

Alignment Criteria- Each Alignment Criterion must be met with a sufficient number of points in order for Alignment Criteria to be labeled as "Meets" overall. The more points the materials receive on the Alignment Criteria, the better they are aligned.

Alignment Criterion 1: Rigor and Balance	Alignment Criterion 2: Standards of Mathematical Practice	Alignment Criterion 3: Access to Standards for All Learners
Points: 6 **of 6 possible.** **(Materials must receive at least 5 of 6 points to align.)**	**Points:** 6 **of 6 possible.** **(Materials must receive at least 5 of 6 points to align.)**	**Points:** 6 **of 6 possible.** **(Materials must receive at least 5 of 6 points to align.)**
✓ **Meets**	✓ **Meets**	✓ **Meets**
_____ **Does Not Meet**	_____ **Does Not Meet**	_____ **Does Not Meet**

Alignment Criteria Overall:

__✓__ **Meets** _____ **Does Not Meet**

If the materials meet the Non-Negotiable Criterion and each Alignment Criterion, they are aligned to the Shifts and major features of the Co[illegible]tandards. **Do the materials meet every Non-Negoti[illegible] and Alignment Criterion?** ✓ **Yes** ____ **No**

What are the specific areas of strength and weakness based on this evaluation? Publishers or others modifying or developing assessments can use this information to make improvements and/or to remedy gaps in the alignment of assessment materials.

Strengths are in the design of the text as a whole, in building on prerequisits, on engaging application problems, in the rigor and approriate level of vocabulary, the lesson designs, the ample procedural practice problems, the authentic assessments, and opportunities to differentiate and extend student learning.

Weaknesses are very few. Navigation was at times slightly awkward with the topic heading at the bottom of the page instead of the top.

2015-16 Mathematics Interim Review Recommendation & Summary

Publisher Name:	Houghton Mifflin Harcourt
Title:	Math Expressions
ISBN #	978-0-547-82486-6
Grade Level(s) or Course:	Kindergarten
Reviewer ID:	~~KJ~~ LC

RECOMMENDED AS:

__X__ **Core Mathematics Program-** a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials. Substantial evidence clearly supports the designation of this program as Core.

_____ **Other Mathematics Program-** a program that substantially, but partially, meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for supplemental materials. Substantial evidence clearly supports the designation of this program as Other.

_____ **Component Mathematics Program-** a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs. Substantial evidence clearly supports the designation of this program as Component.

_____ **Intervention Program-** a program designed and intended to target and support students' specific needs. Substantial evidence clearly supports the designation of this program as Intervention.

_____ **Does not meet criteria** for recommendation as a Curricular Material or Online Resource for Mathematics.

EVIDENCE SUMMARY:

FOCUS-

Materials for Grade K align the majority of lessons and activities to the major work for Kindergarten follow the learning path to Grade 1. Does not assess outside the major work of the grade.

COHERENCE-

RIGOR-

Materials reflect and support the ~~conceptual~~ rigorous ~~understanding~~ expectations and development of key mathematical practices.

CONCEPTUAL UNDERSTANDING-

Materials reflect and support the conceptual understanding of key mathematical practices.

MATHEMATICAL PRACTICES-

Curriculum ~~must~~ demonstrates authentic connections between content Standards and practice Standards.

ACCESSIBILITY OF STANDARDS TO ALL STUDENTS-

Curriculum provides significant support for ELL and other special student populations.

OTHER:

2[illegible]-16 Interim Mathematics Review

Mathematics Evaluation Tool Grades K-8

Publisher: Houghton Mifflin Harcourt

Title of Material: Math Expressions Kindergarten

Author: Dr. Karen C. Fuson

ISBN #: 978-0-547-82486-6 **Copyright** 2013

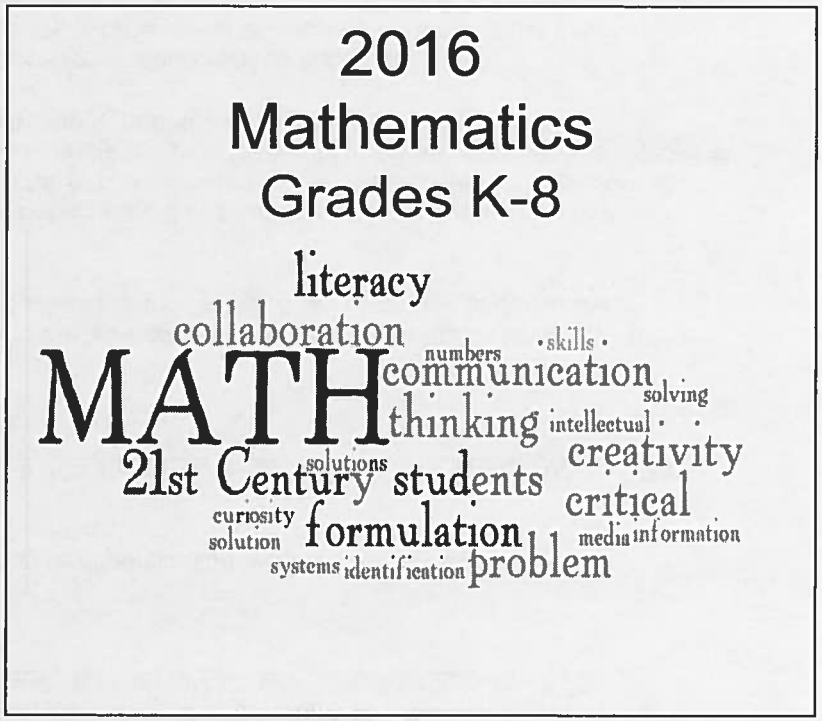
Reviewer ID: LC KS

Core Mathematics Program- a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Core.

Other Mathematics Program- a program that substantially, but partially, meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Other.

Component Mathematics Program- a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs.
Substantial evidence clearly supports the designation of this program as Component.

Intervention Program- a program designed and intended to target and support students' specific needs.
Substantial evidence clearly supports the designation of this program as Intervention.



- Evaluation Form adapted from Instructional Materials Evaluation Toolkit (IMET).

The IMET was developed by Student Achievement Partners. Educators may use or adapt. http://creativecommons.org/licenses/by/3.0/ Download this tool at http://achievethecore.org/IMET

Instructional Materials Evaluation Tool

Mathematics, Grades K-8

What Are the Purposes of the IMET?

This Math IMET is designed to help educators determine whether instructional materials are aligned to the Shifts and major features of the Common Core State Standards (CCSS). The substantial instructional Shifts (http://www.corestandards.org/other-resources/key-shifts-inmathematics/) at the heart of the Common Core State Standards are:

- **Focus** strongly where the Standards focus
- **Coherence**: Think across grades and link to major topics within the grade
- **Rigor**: In major topics, pursue conceptual understanding, procedural skill and fluency, and application with equal intensity.

The IMET draws directly from the following documents:

- Common Core State Standards for Mathematics (www.corestandards.org/Math)
- Publishers' Criteria for the Common Core State Standards in Mathematics grade K-8 (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)

When to use the IMET

1. Purchasing materials: Many factors go into local purchasing decisions. Alignment to the Standards is a critical factor to consider. This tool is designed to evaluate alignment of instructional materials to the Shifts and the major features of the CCSS. It also provides suggestions of additional indicators to consider in the materials evaluation and purchasing process.

2. Evaluating materials currently in use: The IMET can be used to analyze the degree of alignment of existing materials and help to highlight specific, concrete flaws in alignment. Even where materials and tools currently in use fail to meet one or more of these criteria, the pattern of failure is likely to be informative. States and districts can use the evaluation to create a thoughtful plan to modify or combine existing resources in such a way that students' actual learning experiences approach the focus, coherence, and rigor of the Standards.

3. Developing programs: Those developing new programs can use this tool as guidance for creating aligned curricula.
Please note this tool was designed for evaluating comprehensive curricula (including any supplemental or ancillary materials), but it was not designed for the evaluation of standalone supplemental materials.

Who Uses the IMET?

Evaluating instructional materials requires both subject-matter and pedagogical expertise. Evaluators should be well versed in the Standards (www.corestandards.org/Math) for all grades in which materials are being evaluated. This includes understanding the Major Work of the grade (www.achievethecore/focus), the Supporting and Additional work, how the content fits into the progressions in the Standards (www.achievethecore.org/progressions), and the expectations of the Standards with respect to conceptual understanding, procedural skill and fluency, and application. Evaluators also should be familiar with the substantial instructional Shifts (http:// www.corestandards.org/other-resources/key-shifts-in-mathematics/) of Focus, Coherence and Rigor that are listed above.

Getting Started

Prior to Evaluation

Assemble all of the materials necessary for the evaluation. It is essential for evaluators to have materials for all grades covered by the program, as some criteria cannot be rated without having access to each grade. In addition, each evaluator should have a reference copy of the Common Core State Standards for Mathematics (CCSSM) and the Publishers' Criteria for the Common Core St[illegible] Standards for Mathematics, Grades K-8 (Spring 2013).

Instructional Materials Evaluation Tool
Mathematics, Grades K-8

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Getting Started
Prior to Evaluation

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Before conducting the evaluation itself, it is important to develop a protocol for the evaluation process. The protocol should include having evaluators study the Publishers' Criteria and the IMET. It will also be helpful for evaluators to get a sense of each program overall before beginning the process. At a minimum, this would include reading the front matter of the text, looking at the table of contents and paging through multiple chapters.

Sections 1-3 below should be completed to produce a comprehensive picture of the strengths and weaknesses of the materials under evaluation. Information about areas in need of improvement or supplementation should be shared with internal and external stakeholders.

Navigating the Tool

Begin with Section 1: Non-Negotiable Alignment Criteria

- The Non-Negotiable Alignment Criteria must each be met in full for materials to be considered aligned to the Shifts and the major features of the Common Core State Standards. Each Non-Negotiable Alignment Criterion has one or more metrics associated with it; every one of these metrics must be met in order for the criterion as a whole to be met.

- Examine the relevant materials and use evidence to rate the materials against each criterion and its associated metric(s).

- Record and explain the evidence upon which the rating is based.

Continue to Section 2: Alignment Criteria

- The Alignment Criteria must each be met for materials to be considered aligned to the Shifts and the major features of the Common Core State Standards. Each Alignment Criterion has one or more metric associated with it; a specific number of these metrics must be met or partially met in order for the criterion as a whole to be met.

- Examine the materials in relation to these criteria, assigning each metric a point value. Rate the criterion as "Meets" or "Does Note Meet" based on the number of points assigned. The more points the materials receive on the alignment Criteria, the better they are aligned.

Record and explain the evidence upon which the rating is based.

Proceed to Section 4: Indicators of Quality

- Indicators of Quality are important considerations that will help evaluators better understand the overall quality of instructional materials. These considerations are not criteria for alignment to the CCSS, but they provide valuable information about additional program characteristics. Evaluators may want to add their own indicators to the examples provided.

Directions for Non-Negotiable 1

Freedom from Obstacles to Focus

Criterion	Evidence- Give specific examples.	Rating: (Reviewer only.)
Non-Negotiable 1: **Freedom from Obstacles to Focus** **Materials must reflect the content architecture of the Standards by not assessing the topics named before the grade level where they first appear in the Standards.** The Standards foster students' progress to algebra by focusing strongly on arithmetic. Consistent with this focus, certain topics from outside of arithmetic appear only in later grades. Thus, to be aligned, materials must reflect the content architecture of the Standards by not assessing the topics named before the grade level where they first appear in the Standards. In this criterion, "topics named" means the topics that are explicitly named in Metric 1A. No other topics should be added to the list in Metric 1A. (Note that other topics in the standards are addressed in criterion NN2.)	**Required Materials** • Common Core State Standards for Mathematics (www.corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf) • From the materials being evaluated: teacher guides and all assessment components	**Rating this Criterion:** Non-Negotiable 1 is rated as Meets or Does Not Meet. To rate Non-Negotiable 1, begin by rating Metric 1A. Since Metric 1A is the only metric for Non-Negotiable 1, the rating for Non-Negotiable 1 is the same as the rating for Metric 1A. If Metric 1A is rated as Does Not Meet, include evidence of when the named topic(s) is/are assessed. If the metric is rated as Meets, list the grade(s) examined in the evaluation.

Metric NN1A **Materials reflect the basic architecture of the Standards by not assessing the listed topics before the grade level indicated.** • Probability, including chance, likely outcomes, probability models. (Introduced in the CCSSM in grade 7) • Statistical distributions, including center, variation, clumping, outliers, mean, median, mode, range, quartiles; and statistical association or trends, including two-way tables, bivariate measurement data, scatter plots, trend line, line of best fit, correlation. (Introduced in the CCSSM in grade 6) • Similarity, congruence, or geometric transformations. (Introduced in the CCSSM in grade 8) • Symmetry of shapes, including line/ reflection symmetry, rotational symmetry. (Introduced in the CCSSM in grade 4) **How to Find the Evidence:** Evaluate the table of contents, all chapter tests, all unit tests, and other such assessment components (including rubrics). For context, read Criterion #2 from the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013). NOTE: Grade alignments of other topics are addressed in Non-Negotiable 2, Focus and Coherence.) In this criterion, "topics named" means the topics that are explicitly named in Metric 1A. No other topics should be added to the list in Metric 1A. (Note that other topics in the standards are addressed in criterion NN2.)	**Evidence-** Unit 1: Instructional time is spent focused on Major Works of Kindergarten: Know number names and the count sequence, Count to tell the number of objects; Unit Test/Assessment pages 97-100. Unit 2: Instructional time is spent focused on Major Works of Kindergarten: Know number names and the count sequence, Count to tell the number of objects; Unit Test/Assessment pages 197-200. Unit 3: Instructional time is spent focused on Major Works of Kindergarten: Know number names and the count sequence, Count to tell the number of objects; Compare numbers, Understand addition as putting together and adding to, and understand subtractions as taking apart and taking from, Work with numbers 11-19 to gain foundations for place value; Unit Test/Assessment pages 323-326. Unit 4: Instructional time is spent focused on Major Works of Kindergarten: Know number names and the count sequence, Count to tell the number of objects; Compare numbers, Understand addition as putting together and adding to, and understand subtractions as taking apart and taking from, Work with numbers 11-19 to gain foundations for place value; Unit Test/Assessment pages 455-458 Unit 5: Instructional time is spent focused on Major Works of Kindergarten: Know number names and the count sequence, Count to tell the number of objects; Compare numbers, Understand addition as putting together and adding to, and understand subtractions as taking apart and taking from, Work with numbers 11-19 to gain foundations for place value; Unit Test/Assessment pages 571-574.	**(Reviewer only.)** **_X_Meets** **____Does Not Meet**

Non-Negotiable 1: Materials must reflect the content architecture of the Standards by not assessing the topics named* before the grade level where they first appear in the Standards.

NN 1 If Metric 1A was rated as Meets, then rate Non-Negotiable 1 as Meets. If Metric 1A was rated as Does Not Meet, then rate Non- Negotiable 1 as Does Not Meet. Check the final rating.

Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion.**(Reviewer only.)**

Before moving to Non-Negotiable 2, record the final Meets or Does Not Meet rating in the Evaluation Summary.

(Reviewer only.)

_X__Meets

____Does Not Meet

Strengths/Weaknesses:

Directions for Non-Negotiable 2

Focus and Coherence

Non-Negotiable 2:

Focus and Coherence

Materials must focus coherently on the Major Work of the grade in a way that is consistent with the progressions in the Standards.

Focus and coherence are the two major evidence-based design principles of the Common Core State Standards for Mathematics (CCSSM, p. 3). Focus is necessary in order to fulfill the ambitious promise the states have made to their students by adopting the Standards: greater achievement at the college and career ready level; greater depth of understanding of mathematics; and a rich classroom environment in which reasoning, sense-making, applications, and a range of mathematical practices flourish. In simpler terms, a mile-wide, inch-deep curriculum translates to less time per topic. Less time means less depth and moving on without many students. Thus, materials must focus coherently on the Major Work of the grade in a way that is consistent with the progressions in the Standards.

Required Materials

- Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf)
- Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)
- Focus by Grade Level for the grade being evaluated (www.achievethecore.org/focus)
- From the materials being evaluated: teacher guides, student texts and workbooks

Rating this Criterion:

Non-Negotiable 2 is rated as Meets or Does Not Meet.

To rate Non-Negotiable 2, first rate metrics 2A–2H. Each of these eight metrics must be rated as Meets in order for Non-Negotiable 2 to be rated as Meets. Rate each metric 2A-2H as Meets or Does Not Meet/Insufficient Evidence. If the evidence examined shows that the Criterion is met, then mark the Criterion Meets. If the evidence examined shows that the Criterion is not met—or if there is insufficient evidence to make a determination—then mark the Criterion as Does Not Meet/Insufficient Evidence. Support all ratings with evidence.

Metric NN2A:
In each grade K–8, students and teachers using the materials as designed devote the large majority of time to the Major Work of the grade.

How to Find the Evidence:

Familiarize yourself with the Major Work of the grade being evaluated (see the Focus by Grade Level documents.)

Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, lessons, homework assignments, and assessments. (Evaluate both student and teacher materials.)

Consider time spent on the Major Work of the grade and judge qualitatively whether students and teachers using the materials as designed will devote the large majority of time to the Major Work of the grade.

For context, read Criterion #1 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013)

Materials for Grade K align the majority of lessons and activities to the major work for Kindergarten follow the learning path to Grade 1.

Evidence-

Common Core State Standards for Mathematical Content: Lessons are aligned to grade level standards/major work of the grade; pages xlviii-l.

Units 1-5: Instructional time spent on the following Major works of Kindergarten:

- Know number names and the count sequence
- Count to tell the number of objects
- Compare numbers
- Understand addition as putting together and adding to, and understand subtraction as taking apart and taking from

Units3-5: Instructional time is spent on the following Major Work as well as the above:

- Work with numbers 11-19 to gain foundation for place value

(Reviewer only.)

_X__Meets

____Does Not Meet/

Insufficient Evidence

Metric NN2E **Supporting Work, where present, enhances focus and coherence simultaneously by also engaging students in the Major Work of the grade.** **How to Find the Evidence:** Familiarize yourself with the Major Work and Supporting Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate chapters and lessons that focus on Supporting Work. NOTE: Example of evaluating this Criterion might include looking at whether materials for K–5 generally treat data displays as an occasion for solving grade-level word problems using the four operations (e.g., see 3.MD.B.3); or whether materials for grade 7 take advantage of opportunities to use probability to support ratios, proportions, and percentages. For context, read Criterion #3 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Unit 1: Majority of lessons focus on major content standards K.CC.2, K.CC.3, K.CC.4a, K.CC.4b, K.CC.5, K.CC.6, K.OA.1, K.OA.2; with lessons from supporting and additional clusters K.MD.3, K.G.1, K.G.2, K.G.3, K.G.4. Unit 2: Majority of lessons focus on major content standards K.CC.1, K.CC.2, K.CC.3, K.CC.4a, K.CC.4b, K.CC.4c, K.CC.5, K.CC.6, K.CC.7, K.OA.1, K.OA.2, K.OA.3, K.OA.4; with lessons from supporting and additional clusters K.MD.3, K.G.1, K.G.2, K.G.3, K.G.5. Unit 3: Majority of lessons focus on major content standards K.CC.1, K.CC.2, K.CC.3, K.CC.4a, K.CC.4b, K.CC.4c, K.CC.5, K.CC.6, K.CC.7, K.OA.1, K.OA.2, K.OA.3, K.OA.5, K.NBT.1; with lessons from supporting and additional clusters K.MD.3, K.G.1, K.G.2, K.G.4, K.G.6. Unit 4: Majority of lessons focus on major content standards K.CC.1, K.CC.2, K.CC.3, K.CC.4a, K.CC.4b, K.CC.4c, K.CC.5, K.CC.6, K.CC.7, K.OA.1, K.OA.2, K.OA.3, K.OA.4, K.OA.5, K.NBT.1; with lessons from supporting and additional clusters K.MD.3, K.G.1, K.G.2, K.G.3, K.G.4, K.G.6. Unit 5: Majority of lessons focus on major content standards K.CC.1, K.CC.2, K.CC.3, K.CC.4, K.CC.4c, K.CC.5, K.CC.6, K.CC.7, K.OA.1, K.OA.2, K.OA.3, K.OA.5, K.NBT.1; with lessons from supporting and additional clusters K.MD.1, K.MD.2.	**(Reviewer only.)** **_X__Meets** **____Does Not Meet/** **Insufficient Evidence**

Metric NN2C **Materials base content progressions on the grade-by-grade progressions in the Standards. Content from previous or future grades does not unduly interfere with or displace on-grade-level content.** **How to Find the Evidence:** Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, and lessons in both student and teacher materials. NOTE: In some cases it may be possible that aligned materials might address some aspects of a topic in a strategic way before or after the grade level in which the topic is central in the Standards' progressions; for example, a curriculum author might purposefully choose to explore adding fractions with unlike denominators in a way appropriate to grade four, recognizing that this work is not really required until the next grade. However, any such purposeful discrepancies in content progressions should enhance the required learning in each grade; not unduly interfere with or displace grade-level content; and be clearly aimed at helping students meet the Standards as written rather than effectively rewriting the progressions in the Standards. And in all cases, note that Non-Negotiable 1 must be met for materials to be aligned. For context, read Criterion #5a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Content progression is obvious within each unit through lessons and activities. Each Unit Overview provides a learning progressions of the Common Core State Standards and a Content Standards Across the Grades for the following unit lessons and activities. It states current grade level standards, as well as the following grade standards that are incorporated into the unit lessons and activities. The incorporation of future grade level standards does not interfere with current grade level standards and progressions. **Evidence-** Unit 1: K.CC.1-3: Know number names and the count sequence • Standard is extended to the following grade in 1.NBT.1: Extend the counting sequence. Unit 2: K.OA.1-5: Know number names and the count sequence, count to tell the number of objects. • Standard is extended to the following grade in 1.OA.3: Apply properties of operations as strategies to add and subtract. Unit 3: K.NBT.1: Work with numbers 11-19 to gain foundations for place value. • Standard is extended to the following grade in 1.NBT.2-3: Understand place value. Unit 4: K.G.4: Analyze, compare, create, and compose shapes. • Standard is extended to the following grade in 1.G.1-2: Reason with shapes and their attributes. Unit 5: K.OA.1-5: Understand addition as putting together and adding to, and understand subtraction as taking apart and taking from. • Standard is extended to the following grade in 1.OA.1-2: Represent and solve problems involving addition and subtraction.	**(Reviewer only.)** **_X__Meets** **____Does Not Meet/** **Insufficient Evidence**

Metric NN2D **Materials give all students extensive work with on-grade-level problems.** **How to Find the Evidence:** Evaluate both student and teacher materials. If the materials provide resources for differentiated learning, consider whether lower-performing students have opportunities to engage with grade-level problems. Also consider whether higher-performing students are given opportunities to learn current grade-level content in greater depth. For context, read Criterion #5b in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Materials provide all students with extensive work with on-grade-level problems. Materials are designed to accommodate a wide range of student learning styles and academic skills. Each lesson has accommodations and resources to incorporate strategies and opportunities for differentiating instruction. On level, and challenge activities are outlined after every lesson with accommodations for ELL students in every lesson as well. **Evidence-** Unit 1: Lesson 10: Lesson focus: identify and classify rectangles by their attributes, with differentiated instruction provided for ELL students on pages 47 and 52; On level, and challenge activities on page 54. Unit 2: Lesson 18: Lesson focus: write numbers 1-10 and compare two numbers, with differentiated instruction provided for ELL students on page 185; On level, and challenge activities on page 186. Unit 3: Lesson 19: Lesson focus: show as group of ten when making a teen number, with differentiated instruction provided for ELL students on page 309; On level, and challenge activities on page 312. Unit 4: Lesson 2: Lesson focus: identify partners of 6, 7 and 10, with differentiated instruction provided for ELL students on page 337; On level, and challenge activities on page 340. Unit 5: Lesson 5: Lesson focus: show numbers 1-20 as a group of ten ones and more ones, with differentiated instruction provided for ELL students on page 483; On level, and challenge activities on page 484.	**(Reviewer only.)** **_X__Meets** **____Does Not Meet/** **Insufficient Evidence**

Metric NN2E **Materials relate on-grade-level concepts explicitly to prior knowledge from earlier grades.** **How to Find the Evidence:** Evaluate both student and teacher materials. NOTE: Examples of evaluating this Criterion might include looking at the way the materials extend basic ideas of place value across the decimal point; or the role that properties of operations play when the materials extend arithmetic beyond whole numbers to fractions, variables, and expressions. More generally, cluster headings in the Standards sometimes signal key moments where reorganizing and extending previous knowledge is important in order to accommodate new knowledge (e.g., see cluster headings that use the phrase "Apply and extend previous understanding"). For context, read Criterion #5c in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	Kindergarten curriculu aterials provided may be the first experience students have with the materials and standards. Therefore materials cannot include review of prior standards. The materials do provide learning progressions and content standards across the grade where teachers can see the progression of the Kindergarten curriculum in relation to Grade 1. **Evidence-** Unit 1: K.CC.1-3: Know number names and the count sequence. Provides foundational skills for 1.NBT.1 Count to 120. Unit 2: K.OA.1-5: Understand addition as putting together and adding to, and understand subtraction as taking apart and taking from. Provides foundational skills for 1.OA.3: Apply properties of operations as strategies to add and subtract. Unit 3: K.NBT.1: Work with numbers 11-19 to gain foundations for place value. Provides foundational skills for 1.NBT.2-3: Understand place value. Unit 4: K.G.4: Analyze, compare, create, and compose shapes. Provides foundational skills for 1.G.1-2: Reason with shapes and their attributes. Unit 5: K.MD.1-2: Describe and compare measurable attributes. Provides foundational skills for 1.MD.1-2: Measure lengths indirectly and by iterating length units.	**(Reviewer only.)** **_X__Meets** **____Does Not Meet/** **Insufficient Evidence**

Metric NN2F **Review of material from previous grades is clearly identified as such to the teacher, and teacher and students can see what their specific responsibility is for the current year.** **How to Find the Evidence:** Evaluate the table of contents, but do not stop there; also evaluate units, chapters, lessons, homework assignments and assessments. (Evaluate both student and teacher materials.) Identify any content from previous grades and check whether it is identified as such. For context, read Criterion #5a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	Kindergarten curriculu aterials provided may be the first experience students have with the materials and standards. Therefore materials cannot include review of prior standards. The materials do provide learning progressions and content standards across the grade where teachers can see the progression of the Kindergarten curriculum in relation to Grade 1. **Evidence-** Unit 1: K.CC.1-3: Know number names and the count sequence. Provides foundational skills for 1.NBT.1 Count to 120. Unit 2: K.OA.1-5: Understand addition as putting together and adding to, and understand subtraction as taking apart and taking from. Provides foundational skills for 1.OA.3: Apply properties of operations as strategies to add and subtract. Unit 3: K.NBT.1: Work with numbers 11-19 to gain foundations for place value. Provides foundational skills for 1.NBT.2-3: Understand place value. Unit 4: K.G.4: Analyze, compare, create, and compose shapes. Provides foundational skills for 1.G.1-2: Reason with shapes and their attributes. Unit 5: K.MD.1-2: Describe and compare measurable attributes. Provides foundational skills for 1.MD.1-2: Measure lengths indirectly and by iterating length units.	**(Reviewer only.)** **_X__Meets** **____Does Not Meet/** **Insufficient Evidence**

Metric NN2G **Materials include learning objectives that are visibly shaped by CCSSM cluster headings.** **How to Find the Evidence:** Select several clusters from the Major Work in the grade being evaluated. Evaluate teacher and student materials in relation to these clusters. For context, read Criterion #6a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Each unit has an overview of learning progressions and content standards. Each lesson within the unit has a lesson focus for the lesson taught, mathematical practices covered within the lesson, and the Common Core State Standard covered in the lesson as well. Within the lesson, each activity indicates the Common Core State Standards addressed as well as the Mathematical Practices covered explicitly. **Evidence-** Unit 1: Lesson 1: Lesson focus: Count objects in the classroom and in a counting book; Standard identified: K.CC.4a When counting objects, say the number names in the standard order; K.CC.4b Understand that the last number name said tells the number of objects counted. Mathematical Practices covered: MP.4, MP.6, and MP.7. Unit 2: Lesson 18: Lesson focus: Write numbers 1-10, Compare two numbers; Standards identified: K.CC.1-3 Know number names and the count sequence; K.CC.7 Compare two numbers between 1 and 10 presented as written numerals. Mathematical Practices covered: MP.3, and MP.6. Unit 3: Lesson 8: Lesson focus: Make teen numbers using 5-groups; Standards identified K.CC.5 Count to answer "how many?" questions about as many as 20 things arranged in a line, a rectangular array, or a circle, or as many as 10 things in a scattered configuration; given a number from 1-20, count out that many objects; K.NBT.1 work with numbers 11-19 to gain foundations for place value. Mathematical Practices covered: MP.3, MP.5, MP.6, MP.7 and MP.8. Unit 4: Lesson 2: Lesson focus: Identify partners of 6,7, and 10; Standards identified: K.OA.1-4 Understand addition as putting together and adding to, and understand subtraction as taking apart and taking from. Mathematical Practices covered: MP.1, MP.2, MP.4, and MP.7. Unit 5: Lesson 13: Lesson focus: Count by ones and tens to 100, Find partners of 10 and discuss 7-partners; Standards identified: K.CC.1-2 Count to 100 by ones and by tens, Count forward beginning from a given number; K.OA.2-4 Understand addition as putting together and adding to, and understand subtraction as taking apart and taking from. Mathematical Practices covered: MP.4, MP.7, and MP.7.	**(Reviewer only.)** **_X__Meets** **____Does Not Meet/** **Insufficient Evidence**

Metric NN2H

Materials include problems and activities that serve to connect two or more clusters in a domain, or two or more domains in a grade, in cases where these connections are natural and important.

How to Find the Evidence:

In the grade being evaluated, choose two or more clusters or two or more domains for which connections are natural and important. Evaluate the units, chapters, and lessons that deal with the chosen topics, looking for problems and activities that serve to connect the chosen clusters or domains. NOTE: An example of evaluating this Criterion might include looking at whether problems in grade 4 sometimes or often involve students applying their developing computation skills (detailed in domain NBT) in the context of solving word problems (detailed in domain OA).

For context, read Criterion #6b in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).

Evidence-

Each unit of the materials adequately connects two or more clusters in a domain or two or more domains in grade one. In most units, lessons exceed expectation to include up to 7 clusters of a domain. The clusters in a domain are combine in a natural and important way as to connect standards, domains, and clusters fluidly.

Evidence-

Domain Counting and Cardinality (K.CC.1-7)

Unit 1:

- Lessons 1-6: combine clusters K.CC.4a and K.CC.4b
- Lessons 7-10: combine clusters K.CC.2, K.CC.4a, K.CC.4b, and K.CC.6
- Lessons 11-14: combine clusters K.CC.3, K.CC.4a, K.CC.4b, K.CC.5, and K.CC.6
- Lessons 15-18: combine clusters K.CC.1, K.CC.3, K.CC.4a, K.CC.4b, K.CC.5, and K.CC.6

Unit 2:

- Lessons 1-5: combine clusters K.CC.1, K.CC.3, K.CC.4a, K.CC.5, and K.CC.6
- Lessons 5-10: combine clusters K.CC.1, K.CC.2, K.CC.3, K.CC.4a, K.CC.4b, K.CC.5, K.CC.6, and K.CC.7
- Lessons 11-15: combine clusters K.CC.1, K.CC.2, K.CC.3, K.CC.4a, K.CC.4b, K.CC.4c, and K.CC.5
- Lessons 16-20: combine clusters K.CC.1, K.CC.2, K.CC.3, K.CC.4a, K.CC.4b, K.CC.4c, K.CC.5, and K.CC.7

Unit 3:

- Lessons 1-9: combine clusters K.CC.1, K.CC.2, K.CC.3, K.CC.4a, K.CC.4b, and K.CC.5
- Lessons 10-12: combine clusters K.CC.2, K.CC.3, K.CC.4c, K.CC.5, K.CC.6, and K.CC.7
- Lessons 13-17: combine clusters K.CC.3, K.CC.4, K.CC.5, and K.CC.7
- Lessons 18-21: combine clusters K.CC.3, K.CC.4, K.CC.4b, and K.CC.5

Unit 4:

- Lessons 1-4: combine clusters K.CC.3, K.CC.4a, K.CC.4b, and K.CC.4c
- Lessons 5-8: combine clusters K.CC.3, K.CC.4, K.CC.4c, K.CC.5, K.CC.6, and K.CC.7
- Lessons 9-15: combine clusters K.CC.2, K.CC.4a, K.CC.4b, K.CC.4c, K.CC.6, and K.CC.7
- Lessons 16-22: combine clusters K.CC.1, K.CC.2, K.CC.3, K.CC.4a, K.CC.4b, K.CC.5, K.CC.6, and K.CC.7

(Reviewer only.)

_X__Meets

____Does Not Meet/

Insufficient Evidence

	Unit 5: • Lessons 1-4: combine clusters K.CC.1, K.CC.3, K.CC.5, and K.CC.7 • Lessons 5-7: combine clusters K.CC.1, K.CC.3, K.CC.4, K.CC.4c, and K.CC.5 • Lessons 8-14: combine clusters K.CC.1, K.CC.2, K.CC.3, and K.CC.5 • Lessons 15-23: combine clusters K.CC.3, K.CC.4, K.CC.4c, K.CC.5, K.CC.6, and K.CC.7	
Non-Negotiable 2: **Focus and Coherence** **Materials must focus coherently on the Major Work of the grade in a way that is consistent with the progressions in the Standards.** NN 2 If all Metrics 2A – 2H were rated as Meets, then rate Non-Negotiable 2 as Meets. If one or more Metric was rated Does Not Meet/Insufficient Evidence, then rate Non-Negotiable 2 as Does Not Meet. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)** **Before moving to Alignment Criterion 1, record the final Meets or Does Not Meet rating in the Evaluation Summary.**		**(Reviewer only.)** **_X__Meets** **____Does Not Meet** **Strengths/Weaknesses:**

Now continue by evaluating the Alignment Criterion 1 for Rigor and Balance.

Directions for Alignment Criterion 1

Rigor and Balance

Alignment Criterion 1: Rigor and Balance **Materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.** The Standards set expectations for attention to all three aspects of rigor: conceptual understanding, procedural skill and fluency, and applications. Thus, materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.	**Required Materials** • Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf) • Focus by Grade Level for the grade being evaluated (achievethecore.org/focus) • Situation Types for the Operations in Word Problems (achievethecore.org/situation-types) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion:** Alignment Criterion 1 is rated as Meets or Does Not Meet. To rate Alignment Criterion 1, first rate metrics 1A, 1B, and 1C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). For each metric, guiding questions are provided to aid in gathering evidence. Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 1 if the materials rate 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as rigor and balance, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.
Metric AC1A: **The materials support the development of students' conceptual understanding of key mathematical concepts, especially where called for in specific content Standards or cluster headings.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Major Work for the grade being evaluated that relate specifically conceptual understanding to use throughout the questions associated with this metric. NOTE: Some examples of clusters or Standards that call for conceptual understanding include: K.OA.A.1, (1.NBT.B, 1.NBT.C), (2.NBT.A, 2.NBT.B), (3.OA.A.1, 3.OA.A.2), 4.NF.A, (4.NBT.A, 4.NBT.B), 5.NF.B, (5.NBT.A, 5.NBT.B), 6.RP.A, 6.EE.A.3, 7.NS.A, 7.EE.A, 8.EE.B, 8.F.A, 8.G.A Clusters or Standards grouped by parentheses are closely connected and could be analyzed together. For context, read Criterion #4a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	-Choose a cluster/Standard from the Major Work that is aligned to each aspect of rigor and use it to evaluate these metrics. It is most helpful if the same clusters/Standards are chosen for all of the programs being evaluated. (Guidance in choosing clusters/Standards is included in "How to Find the Evidence".)	**Use the questions for AC Metric 1A to evaluate Metric 1A. Record evidence for each question and rate Metric 1A.** **_X__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**

Is conceptual understanding attended to thoroughly where the Standards set explicit expectations for understanding or interpreting? Evaluate lessons, chapter/unit assessments and homework assignments, paying attention to work aligned to Standards that explicitly call for understanding or interpreting. NOTE: Examples of evaluating this Criterion might include looking at how well the multi-digit addition and subtraction algorithms are developed and explained on the basis of place value and properties of operations; or how well the multi-digit multiplication and division algorithms are developed and explained on the basis of place value and properties of operations; or how well solving equations is presented and explained as a process of reasoning.	**Evidence-** Math Talk is a large and widely used feature of the curriculum. It is used in various forms throughout the curriculum – solve and discuss board work, small group discussions. These strategies provide support to students by allowing students to share and talk about the different ways they have solved a problem, which in turn can help other students. The formative assessment at the end of each lesson allows students to explain their reasoning and understanding of a concept instead of just a practice assessment. Curriculum also has Learning Community-Best Practice strategies that incorporate Building Concepts. These prompts focus of building conceptual understanding of standards. Examples: • Unit 1: TE 2, 4, 34, 40 • Unit 2: TE 107, 110 • Unit 3: TE 214, 220, 292 • Unit 4: TE 349, 373, 392, 394, • Unit 5: TE 478, 538, 545	
Do the materials feature high-quality conceptual problems and conceptual discussion questions? Evaluate lessons, chapter/unit assessments, and homework assignments. NOTE: Example of conceptual problems might include such questions as "Find a number greater than 1/5 and less than 1/4," or "If the divisor does not change and the dividend increases, what happens to the quotient?"	**Evidence-** Examples: • Unit 1, Lesson 13: Subitizing and working with counting mats with numbers 1-10. Unit 1 Test: Exercises 3-4 • Unit 2, Lesson 7: Using the counting mat to build number concepts through 10. Unit 2 Test: Extended Response Exercise 10. • Unit 3, Lesson 7: tell, retell, and solve story problems. Unit 3 Test: Extended Response Exercise 20. • Unit 4, Lesson 2: Show and record partners of 10. Unit 4 Test: Extended Response Exercise 25. • Unit 5, Lesson 17: Visualize a group of a ten in a teen number. Unit 5 Test: Exercises 5-6.	

Do the materials ~~are~~ re opportunities to identify correspondences across mathematical representations? Evaluate lessons, chapter/unit assessments and homework assignments. NOTE: Examples of evaluating this Criterion might include looking at whether students are supported in identifying correspondences among: the verbal description of a situation, the diagrams that distill its mathematical features, and the equations that model it; or equivalent forms of numbers (e.g., 3 and 6/2) and the number line; or rational number operations and representations of them via models such as the vector model; or the expression that defines a function and the graph that shows the relationship.	**Evidence-** Examples: • Unit 1, Lesson 13: Subitizing and working with counting mats with numbers 1-10 • Unit 2, Lesson 7: Using the counting mat to build number concepts through 10. • Unit 3, Lesson 7: tell, retell, and solve story problems. • Unit 4, Lesson 2: Show and record partners of 10. • Unit 5, Lesson 17: Visualize a group of a ten in a teen number.	
Metric AC1B: **The materials are designed so that students attain the fluencies and procedural skills required by the Standards.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Major Work for the grade being evaluated that relate specifically to fluency and procedural skill to use throughout the questions associated with this metric. NOTE: Some examples of Standards that call for procedural skill and fluency include: K.OA.A.5, 1.OA.C.6, 2.OA.B.2, 2.NBT.B.5, 3.OA.C.7, 3.NBT.A.2, 4.NBT.B.4, 5.NBT.B.5, 6.NS.B.2, and 6.NS.B.3, 6.EE.A, 7.NS.A, 7.EE.A.1,7.EE.B.4a, 8.EE.C.7, 8.EE.C.8b For context, read Criterion #4b in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).		**Use the questions for Metric 1B to evaluate Metric 1 B. Record evidence for each question and rate Metric 1B.** **(Reviewer only.)** **_X__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Is progress toward fluency and procedural skill interwoven with students' developing conceptual understanding of the operations in question? Evaluate lessons, chapter/unit assessments, daily routines, and homework assignments for evidence that the development of fluency and procedural skill is supported by conceptual understanding.	**Evidence-** A Path to Fluency: Kindergarten through Grade 5 is a fluency plan that shows how the curriculum achieves fluency with the Common Core Standards suggested for each grade through targeted practice. This can be found in the Teachers Edition on page xxvi.	

Are purely procedural problems and exercises present that include cases in which opportunistic strategies are valuable and generic cases that require efficient algorithms present? Evaluate lessons, chapter/unit assessments, daily routines, and homework assignments. NOTE: Examples of problems in which opportunistic strategies are valuable might include the sum 698 + 240 or the system x + y = 1, 2x + 2y = 3. Examples of generic cases that require efficient algorithms might include the sum 8767+2286 or the system 6y + x = x + 3, – x = 1 + 2y.	**Evidence-** Common Core Standard K.OA.5: Fluently add and subtract within 5 Examples: • Unit 1: Understanding numbers 1-10; development of subitizing skills by relating numbers and objects. • Unit 2: Transition to recognizing 5-groups in numbers 6-10. • Unit 3: Transition to addition and subtraction equations within 5. • Unit 4: Recognizing partners and using drawings to become fluent in addition and subtraction. • Unit 5: Continued support and practice of addition and subtraction.	
Do the materials in grades K–6 provide repeated practice toward attainment of fluency Standards? Evaluate lessons, daily routines, and homework assignments for evidence of repeated practice toward attainment of the following K–6 Standards that set an explicit expectation of fluent (accurate and reasonably fast) computation: K.OA.A.5, 1.OA.C.6, 2.OA.B.2, 2.NBT.B.5, 3.OA.C.7, 3.NBT.A.2, 4.NBT.B.4, 5.NBT.B.5, 6.NS.B.2, 6.NS.B.3.	**Evidence-** Curriculum provides repeated practice to attainment of fluency for the standards. • A Path to Fluency: TE page xxvi • Quick Practice: TE opening page to every lesson • Fluency Checks: Assessment Guide pages 78-85 • Daily Routines: TE Volume 1 pages xxxi-xxxii and TE Volume 2 pages xxxi-xxxii.	
Metric AC1C: **The materials are designed so that teachers and students spend sufficient time working with engaging applications, without losing focus on the Major Work of each grade.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Major Work for the grade being evaluated that relate specifically application to use throughout the questions associated with this metric. NOTE: Some examples of clusters or Standards that call for application include: K.OA.A.2, 1.OA.A, 2.OA.A, 3.OA.A.3, 3.OA.D.8, 4.OA.A.3, 4.NF.B.3d, 4.NF.B.4c, 5.NF.B.6, 5.NF.B.7c, 6.RP.A.3, 6.NS.A.1, 6.EE.B.7, 6.EE.C.9, 7.RP.A, 7.NS.A.3, 7.EE.B.3, 8.EE.C.8c, 8.F.B For context, read Criterion #4c in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Curriculum uses a wide range of word problems to expose students to problem solving: understanding the situation, representing the situation, solving the problem with representation, and reflecting on the answer to ensure it makes sense. There are a wide variety of activities to help students understand problems: using math talk, acting out, retelling, etc.	**Use the questions for Metric 1C to evaluate Metric 1C. Record evidence for each question and rate Metric 1C.** **(Reviewer only.)** **_X__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Are there are single- and multi-step contextual problems, including non-routine problems, that develop the mathematics of the grade, afford opportunities for practice, and engage students in problem solving? Do the problems attend thoroughly to those places in the content Standards where expectations for multi-step and real-world problems are explicit? Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** Curriculum encourages student to use math drawings, visual models, and manipulatives as tools to represent problems/situations. Different problem types can be found in the introduction to the curriculum on page xxviii. This table shows how problem types are incorporated across the grades.	

Do application problems particularly stress applying the Major Work of the grade? Evaluate lessons, chapter/unit assessments, and homework assignments. NOTE: Examples of evaluating this Criterion might include looking at: how well, by the end of grade 2, students using the materials as designed can represent and solve a full range of one-step addition and subtraction word problems; or how well, by the end of grade 3, students using the materials as designed can represent and solve a full range of one-step multiplication and division word problems; or how well these basic situation types for each operation are carried coherently across the grades, (e.g., with fractions and algebraic expressions); or, in all grades, whether the problems connect concepts, Standards, and domains in ways that are natural and important. For a list of situation types for one-step addition, subtraction, multiplication, and division problems, see Situation Types for the Operations in Word Problems	**Evidence-** Examples: • Unit 1, Lessons 1, 3, 4, 6, 8, 10, 14, 17, 18, unit test • Unit 2, Lessons 1, 3, 5, 6, 10, 11, 13, 15, 17, 20, unit test • Unit 3, Lessons 4, 7, 9, 11, 12, 16, 18, 19, 20, unit test • Unit 4, Lessons 1, 2, 4, 6, 9, 10, 11, 14, 21, unit test • Unit 5, Lessons 1, 4, 6, 12, 15, 16, unit test	
Does modeling build slowly across K–8, with applications that are relatively simple in earlier grades and when students are encountering new content? In grades 6–8, do the problems begin to provide opportunities for students to make their own assumptions or simplifications in order to model a situation mathematically? Read Standard for Mathematical Practice 4, Model with Mathematics. Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** Examples: • Unit 1, Lesson 5: Identify, order and count 1-5; Lesson 12: Identify, order and count 1-10 • Unit 2, Lesson 1: Find groups of 1-10 and identify 5-groups; Lesson 9: Count and make groups of 6-10 with 5-groups • Unit 3, Lesson 1: Find groups of 1-10 and identify partners; Lesson 8: Make teen numbers using 5-groups • Unit 4, Lesson 3: Show teen numbers in a group of ten ones and extra ones; Lesson7: Show teen numbers in a group of ten ones and extra ones and as 10 + a 1-digit number • Unit 5, Lesson 7: Show numbers 1-20; show the teen numbers as a group of ten ones and further ones; Lesson 11: Visualize teen numbers as ten ones and extra ones, and find 10-partners.	

Alignment Criterion 1: Rigor and Balance

Materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.

AC1 Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 out of 6 points, the Criterion has not been met. Check the final rating.
Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)**

Before moving to Alignment Criterion 2, record the final Meets or Does Not Meet rating in the Evaluation Summary.

(Reviewer only.)

_X__Meets

____Does Not Meet

Strengths/Weaknesses:

Directions for Alignment Criterion 2

Standards for Mathematical Practice

Alignment Criterion 2: Standards for Mathematical Practice

Materials must demonstrate authentic connections between content Standards and practice Standards.

The Standards require that designers of instructional materials connect the mathematical practices to mathematical content in instruction. Thus, materials must demonstrate authentic connections between content Standards and practice Standards.

Required Materials:

- Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf)
- Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)
- Focus by Grade Level for the grade being evaluated (www.achievethecore.org/focus)
- From the materials being evaluated: teacher guides, student texts and workbooks

Rating this Criterion

Alignment Criterion 2 is rated as Meets or Does Not Meet.

To rate Alignment Criterion 2, first rate metrics 2A, 2B, and 2C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). For each metric, guiding questions are provided to aid in gathering evidence.

Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 2 if the materials earn 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as mathematical practices, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.

Metric AC2A **Materials address the practice Standards in such a way as to enrich the Major Work of the grade; practices strengthen the focus on Major Work instead of detracting from it, in both teacher and student materials.** **How to Find the Evidence:** Familiarize yourself with the Major Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate teacher and student materials for evidence that the mathematical practices support and connect to the focus of the grade. NOTE: Examples of evaluating this Criterion might include looking at whether, in grades K–5, students using the materials are supported to look for and express regularity in repeated reasoning about the addition table, the multiplication table, the properties of operations, the relationship between addition and subtraction or multiplication and division, and the place value system; or whether, in grades 6–8, students using the materials are supported to look for and express regularity in repeated reasoning about proportional relationships and linear functions. For context, read Criterion #8 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013).	**Evidence-** In the overview for the curriculum, each unit includes a Getting Ready to Teach the Unit using the Common Core Standards for Mathematical Practices. This part of the overview for each unit indicates what concepts, skills, and problem solving the students will learn in that unit and how the students will demonstrate their understanding. Mathematical Standards are also identified in each lesson of every unit. Examples: • Unit 1: TE 1V-1XCC • Unit 2: TE 103U-103BB • Unit 3: TE 203X-203EE • Unit 4: TE 329X-329EE • Unit 5: TE 461X-461XEE	**(Reviewer only.)** **_X__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Metric AC2B: **Materials attend to the full meaning of each practice Standard.** **How to Find the Evidence:** For context, read Criterion #7 and Criterion #9 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).		**Use the questions for Metric 2B to evaluate Metric 2B. Record evidence for each question and rate Metric 2B.** **(Reviewer only.)** **_X__Meets (2)**

Over the course of a given year of instruction, is each mathematical practice Standard meaningfully present in the form of assignments, activities, or problems that stimulate students to develop the habits of mind described in the practice Standard? Evaluate lessons, chapter/ unit assessments, and homework assignments for evidence of each mathematical practice being meaningfully present in instruction.	**Evidence-** At the start of every unit, the curriculum provides an over view of Common Core State Standards for Mathematics that aligns every lesson in the unit with the Mathematical Practices and the standards that will be taught in the unit. Examples: • Unit 1: TE 1I-1N • Unit 2: TE 103D-103E • Unit 3: TE 203N-203Q • Unit 4: TE 329N-329PE • Unit 5: TE 461P-461Q Each unit also includes a Getting Ready to Teach the Unit using the Common Core Standards for Mathematical Practices. This part of the overview for each unit indicates what concepts, skills, and problem solving the students will learn in that unit and how the students will demonstrate their understanding. Mathematical Standards are also identified in each lesson of every unit. Examples: • Unit 1: TE 1V-1XCC • Unit 2: TE 103U-103BB • Unit 3: TE 203X-203EE • Unit 4: TE 329X-329EE • Unit 5: TE 461X-461XEE	____**Partially Meets (1)** ____**Does Not Meet (0)**
Do the materials treat the practice Standards as developing across grades or grade bands? Are the practice Standards in early grades appropriately simple? Do they display an arc of growing sophistication across the grades?	**Evidence-** The following examples provided evidence of the practice standards developing across the grade level in the Getting to Teach the Unit Using the Common Core Standards for Mathematical Practice. Each Mathematical Practice is listed with examples from within the unit as to how they are developing across the grade. Examples: • Unit 1: TE 1V-1XCC • Unit 2: TE 103U-103BB • Unit 3: TE 203X-203EE • Unit 4: TE 329X-329EE • Unit 5: TE 461X-461XEE	

Are there teacher selected materials that explain the role of the practice Standards in the classroom and in students' mathematical development? Are alignments to practice Standards accurate?	**Evidence-** Within each lesson of the curriculum the Mathematical Practices incorporated have been identified with each activity and has suggestions for the teacher to help implement and support the practices. The last lesson in every unit focuses explicitly on the Mathematical Practice and their practical application for student to solve real world problem. Examples: • Unit 1, Lesson 18 (pages 91-96) • Unit 2, Lesson 20 (pages 191-196) • Unit 3: Lesson 21 (pages 317-322) • Unit 4: Lesson 22 (pages 449-454) • Unit 5: Lesson 23 (pages 565-570)	
Metric AC2C: **Materials support the Standards' emphasis on mathematical reasoning.** **How to Find the Evidence:** For context, read Criterion #10 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).		**Use the questions for Metric 2C to evaluate Metric 2C. Record evidence for each question and rate Metric 2C.** **(Reviewer only.)** **_X__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Do the materials support students in constructing viable arguments and critiquing the arguments of others concerning grade-level mathematics that is detailed in the content Standards? Read Standard for Mathematical Practice 3. Evaluate teacher and student materials to ensure that students are given opportunities to reason with grade-level mathematics.	**Evidence-** Curriculum includes evidence of the progression of Mathematical Practices in the research and background section of the TE. See Teacher Edition pages: 1X. 103W, 203Z, 329Z, 461Z Mathematical Practice 3 – Construct viable arguments and critique the reasoning of others is part of the progression across the grade level curriculum. Mathematical Practices are embedded in every lesson of the curriculum. Evidence of Mathematical Practice 3 is included in the following lessons: • Unit 1 Lessons: 4,6,10,15,18 • Unit 2 Lessons: 1,4,9,16,17,18,19,20 • Unit 3 Lessons: 1,2,3,4,6,9,10,11,12,13,18,19,21 • Unit 4 Lessons: 1,8,9,11,13,17,19,21,22 • Unit 5 Lessons: 1,2,6,12,14,16,17,21,22,23	

Do the materials support students in producing not only answers and solutions, but also, in a grade-appropriate way, arguments, explanations, diagrams, mathematical models, etc., especially in the Major Work of the grade? Familiarize yourself with the Major Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate teacher and student materials, to understand the types of work students are expected to produce.	**Evidence-** Curriculum has a Puzzled Penguin throughout the materials that enables students to construct grade-appropriate viable arguments to explain why Puzzled Penguin is wrong and explain how to solve the problem correctly. Examples of Puzzled Penguin found on these pages in the TE: • Unit 2: 105, 121, 142 • Unit 3: 229 • Unit 4: 377, 395 • Unit 5: 489 Examples of Puzzled Penguin in Student Workbook can be found on these pages: • 8, 29, 44, 62, 80, 81, 92, 122, 130, 141, 152, 188, 194, 210, 250, 252 Although it is important to determine why Puzzled Penguin is wrong and construct a grade-appropriate response; it would be helpful if Puzzled Penguin was not always wrong. It would be beneficial for students to construct grade-appropriate arguments to explain why he is right as well.	

Do materials explicitly attend to the specialized language of mathematics? Is the language of argument, problem solving, and mathematical explanations taught rather than assumed? Evaluate teacher and student materials, paying attention to how mathematical language is taught. NOTE: Examples of evaluating this Criterion might include looking at whether students are supported in: basing arguments on definitions; using the method of providing a counterexample; or recognizing that examples alone do not establish a general statement.	**Evidence-** Curriculum materials provide a word list of math vocabulary words used within each lesson. The vocabulary words can be found on the lesson overview for every lesson where new vocabulary is introduced. Vocabulary words are used repeatedly throughout the materials even though they are no longer considered "new". Examples of vocabulary words: • Unit 1, Lesson 3: group, scene • Unit 2, Lesson 15: tens, ones • Unit 3, Lesson 1: add, subtract, unknown • Unit 4, Lesson 13: 5-frame, Tiny Tumbler, Math Mountain • Unit 5, Lesson 1: partners, addition subtraction, teen number Math Talk is also explicitly used throughout the entire curriculum. It can be found in every lesson within each unit. It is indicated with a red conversation bubble with the words Math Talk. Math Talk allows students to exchange strategies and reasoning with peers to further explain their thinking using precise mathematical vocabulary and Math Talk. Mathematical Practice Standards have been incorporated into all lessons throughout the curriculum. Students are encouraged to use a variety of math drawings, symbols/equations, and models to represent problems and situations. Page xxvii provides an outline of the problem solving processes this curriculum integrates into units and lessons.	

Alignment Criterion 2:
Standards for Mathematical Practice

Materials must demonstrate authentic connections between content Standards and practice Standards.

AC2 Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 out of 6 points, the Criterion has not been met. Check the final rating.
Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion.
(Reviewer only.)

Before moving to Alignment Criterion 3, record the final Meets or Does Not Meet rating in the Evaluation Summary.

(Reviewer only.)

_X_Meets

____Does Not Meet

Strengths/Weaknesses:

Alignment Criterion 3:
Access to the Standards for All Students

Materials must provide supports for English Language Learners and other special populations.

Because Standards are for all students, alignment requires thoughtful support to ensure all students are able to meet the Standards. Thus, aligned materials must provide supports for English Language Learners and other special populations.

Required Materials:

- Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf)
- Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)
- From the materials being evaluated: teacher guides, student texts and workbooks

Rating this Criterion:
Alignment Criterion 3 is rated as Meets or Does Not Meet.

To rate Alignment Criterion 3, first rate metrics 3A, 3B, and 3C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points).

Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 3 if the materials earn 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as support for special population, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.

Metric AC3A **Support for English Language Learners and other special populations is thoughtful and helps those students meet the same Standards as all other students. The language in which problems are posed is carefully considered.** **How to Find the Evidence:** Evaluate teacher and student materials, paying attention to supports offered for special populations.	**Evidence-** Materials have lessons designed to accommodate a variety of students and academic skills. Each unit has a differentiated instruction overview in the unit planning section where instruction for ELL students is outlined with an overall objective for the unit. Every lesson within the units also has support for ELL students; including leveled support for beginning, intermediate, and advanced ELL students. Examples: • Unit 1: Planning TE 1P-1Q; Lesson 10 page 47 and 52. • Unit 2: Planning TE 103N-103O; Lesson 6 page 129 • Unit 3: Planning TE 203R-203S; Lesson 3 page 221 • Unit 4: Planning TE 329R-329S; Lesson 14 page 441 • Unit 5: Planning TE 461R-461S; Lesson 2 page 473 Support is also provided for other special populations with leveled writing prompts and differentiated instruction cards. Examples: • Unit 1: Lesson 14 page 76 • Unit 2: Lesson 1 page 108 • Unit 3: Lesson 16 page 298 • Unit 4: Lesson 7 page 370 • Unit 5: Lesson 9 page 506	**Reviewer only.)** **_X__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Metric AC3B: **Materials provide appropriate level and type of scaffolding, differentiation, intervention, and support for a broad range of learners with gradual removal of supports, when needed, to allow students to demonstrate their mathematical understanding independently.** **How to Find the Evidence:** Evaluate teacher and student materials, paying attention to whether materials provide differentiation that will lead all learners to engage with on-grade-level content.	**Evidence-** Curriculum has a response to intervention overview page that provides focused instruction on the standards for every unit. There were also two separate books provided with the core curriculum for Tier 1 intervention lessons and Tier 2 and 3 intervention skills, examples and lessons. Each response to intervention book provides opportunities for students to have differentiated instruction based on their specific needs. Examples of response to intervention overview: • Unit 1: Planning TE 1R • Unit 2: Planning TE 103P • Unit 3: Planning TE 203T • Unit 4: Planning TE 329T • Unit 5: Planning TE 461T	**Reviewer only.)** **_X__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**

Metric AC3C **Design of lessons recommends and facilitates a mix of instructional approaches for a variety of learners such as using multiple representations (e.g., including models, using a range of questions, checking for understanding, flexible grouping, pair-share).** **How to Find the Evidence:** Evaluate teacher materials, noting instructional approaches suggested for whole class and differentiated lessons and activities.	**Evidence-** Curriculum provides a variety of methods to enable all students advance. Units are organized into Big Ideas grouping a number of lessons together under one topic. Examples: • Unit 1, Lessons 1-6: Big Idea – Understanding Numbers 1-10, Lesson focus: counting and cardinality 1-5. Each lesson begins with quick practice following daily routines utilizing student leaders. Math background is provided as a resource that can provide conceptual understanding for teachers. • Lesson 1 Activity 1 incorporates whole group discussion with Math Talk discussion points. The lesson uses manipulatives and whole group strategies to engage students. • Lesson 1 Activity 2 Quick Practice Routines: Oral counting, modeling with fingers, creative movement and sounds number practice. • At the end of the lesson is a formative assessment to check for student understanding.	**Reviewer only.)** **_X__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Alignment Criterion 3: **Access to the Standards for All Students** **Materials must provide supports for English Language Learners and other special populations.** **AC3** Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 points, the Criterion has not been met. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion.**(Reviewer only.)** **Move to the Evaluation Summary and record the final Meets or Does Not Meet rating.**		**(Reviewer only.)** **_X_Meets** **____Does Not Meet** **Strengths/Weaknesses:**

Once an evaluation for alignment to the Shifts and major features of the CCSS has been conducted using Sections 1-3, it's important to evaluate for overall quality and best practices. A starting list of Indicators of Quality are suggested below. States, districts and others evaluating instructional materials are encouraged to add to this list to ensure materials reflect local contexts. For background information on some of the Indicators of Quality in this section, refer to pp.18–21 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).

Indicators of Quality	Evidence- Give specific examples.	Rating: (Reviewers only.)
1. Lessons are thoughtfully structured and support the teacher in leading the class through the learning paths at hand, with active participation by all students in their own learning and in the learning of their classmates.	**Evidence-** Materials provide a clear, thoughtful lesson plan for each lesson. Including math background information, activity focus, differentiated instruction, mathematical practices, Common Core State Standards, quick practice and daily routines. Each lesson provides the teacher with an estimated activity time and focus. Activities have whole class or individual work identified next to the focus strategy so the teacher knows when to allow students to work independently or to continue with a whole group approach. Math talk is encouraged and indicated on the lessons. Group/partner talk is used frequently to encourage interaction with peers enabling them learn from each other not just the teacher. Examples of Math Talk: • Unit 6 Lesson 2 (page 496) Make comparisons using math talk. • Unit 7 Lesson 6 (pages 587-589) Math talk when reasoning with shapes and their attributes. Best practices and class management tools are given to the teacher to use as needed. Differentiation for ELL, intervention, on-level and challenge extension lessons are provided at the end of each lesson so the teacher can easily adapt as needed while teaching. Examples: Unit 3 Lesson 10 (page 250): Activity one lesson duration: 40 minutes. Focus: review the relationship between known and unknown quantities in addition story problems. Differentiation for ELL students (page 251); differentiation for intervention, on-level, and challenge students (page 253) is clearly outlined and examples of activities are provided within the lesson.	**(Reviewer only.)** **_X___ Yes** **_____ No**

2. The underlying design of the materials includes both problems and exercises. (In solving problems, students learn new mathematics, whereas in working exercises, students apply what they have already learned to build mastery.) Each problem or exercise has a purpose. **NOTE: This Criterion does not require that the problems and exercises be labeled as such.**	**Evidence-** Materials are balanced in the number of problems and exercises. The majority of lessons begin with an activity that involves problems that utilize whole class activities and math talk; then the lesson progresses to individual work with exercises to apply knowledge procured in the current and prior lessons. Problems are well thought out; encouraging students to use background knowledge and their own strategies to begin to work through a new concept. Example: • Unit 2 Lesson 3 (page 114-115 of TE) students are working whole group acting out family experiences of addition and subtraction; they will then share them with the class (math talk). • Unit 2 Lesson 5 (page 123-124 of TE) students use knowledge gained in prior lesson 3 act out more family experiences with addition and subtraction adding more detail and answering more complex questions.	**(Reviewer only.)** **__X__ Yes** **_____ No**
3. Design of assignments is not haphazard: exercises are given in intentional sequences in order to strengthen students' mathematical understanding.	**Evidence-** The materials have an intentional sequence and pacing. Page xxvi provides a Path to Fluency outline for the curriculum from kindergarten to grade 5. Outlining the progressions each grade level will take to provide students with the necessary skills to be fluent. Math Vocabulary builds on words and skills taught. There is no assumption that students know terminology, it is taught. It is often revisited to a deeper level in a later unit/lesson. Example: • Unit 1, Lesson 7: the vocabulary taught is: partners • Unit 2, Lesson 1: vocabulary partners is extended to 5-groups	**(Reviewer only.)** **__X__ Yes** **_____ No**

4. There are separate teacher materials that support and reward teacher study including, but not limited to: discussion of the mathematics of the units and the mathematical point of each lesson as it relates to the organizing concepts of the unit, discussion on student ways of thinking and anticipating a variety of students responses, guidance on lesson flow, guidance on questions that prompt students thinking, and discussion of desired mathematical behaviors being elicited among students.	**Evidence-** Prior to teaching a lesson, an extensive introduction is provided in the overview of the curriculum (pages xvii-xxix). In the curriculum introduction teacher learning/study is provided on math talk (pages xx-xxi and xviii and xx-xxi), teaching model: an inquiry learning path (page xix), classroom management (page xxii), mathematical practices (pages xxii-xxiv), and algebraic problems that appear in all domains (pages xxiv-xxv). A path to fluency is provided for grades Kindergarten through grade 5 (page xxvi) and a pacing guide for all units and lessons in the Grade 1 curriculum (page xxx). Information is provided on the problem solving process and problem types that will occur within the curriculum (pages xxvii-xxix). Detailed daily routines are outlined for teachers to study and incorporate into their classrooms based on the unit/book volume (pages xxxi-xxxii) Each unit is provided with a detailed overview including learning progressions across grades and content standards across the grades for the prevalent Common Core Standards addressed within it. Response to intervention and cross curricular connections are provided prior to the unit lessons. A putting the research into practice and math background is also provided prior to teaching each unit. Each unit is provided with a "Getting Ready to Teach Unit.." section that provides teachers with examples of common errors students may make and strategies to help teachers further explain a concept/strategy. Examples of teacher support/ study: • Unit 1: Putting Research into Practice (page 1T of TE); teacher study of equity with current research. • Unit 2: Getting Ready to Teach Unit 6; Common Errors (page 103CC of TE); Puzzled Penguin provides examples of possible student misconceptions. • Unit 3: Math Background (pages 203GG-203MM of TE); strategies to anticipate and enhance student learning are provided for each lesson of the unit.	**(Reviewer only.)** **__X__ Yes** **_____ No**

5. Manipulat suggested in the materials are faithful representations of the mathematical objects they represent and are connected to written methods.	**Evidence-** Curriculum materials are a great additional resource but are not a requirement to teach the curriculum.	**(Reviewer only.)** __X__ **Yes** _____ **No**
6. Materials include a variety of curriculum-embedded assessments. Examples include pre-, formative, summative, and self-assessment resources.	**Evidence-** Materials provide a Beginning of the Year Inventory Test that tests student prior knowledge. Each lesson has a quick Formative Assessment: Check for Understanding that can be done at the end of every lesson to assess student understanding of lesson concepts. There is a Unit Review and Test at the end of every unit with two alternate tests in the Assessment Guide Book. An End of the Year Test is also provided in the Assessment Guide Book to determine student growth and understanding. Examples: • Formative Assessments: Check for Understanding Unit 3, Lesson 10 page 267 • Unit Review and Test: Unit 4 Review and Test pages 455-458; Alternate Tests: A and B, Assessment Guide Book pages 51-60 • Beginning of the Year Inventory: Assessment Guide Book pages 4-14 • End of the Year Test: Assessment Guide Book: 90-99	**(Reviewer only.)** __X__ **Yes** _____ **No**
7. Assessments contain aligned rubrics, answer keys, and scoring guidelines that provide sufficient guidance for interpreting student performance.	**Evidence-** Curriculum review and test for each unit has an answer key, and each question is aligned the Common Core Standards covered during the course of the unit. The TE provides Common Errors student might face and reteach activities that can be done prior to testing or as a form of remediation post assessment. Two alternate tests are provided for each unit test in the Assessment Guide Book in the event that students need an alternate assessment. Examples: • Unit 2 Review and Test: TE 197-200, Alternate Tests: Assessment Guide Book pages 27-34	**(Reviewer only.)** __X__ **Yes** _____ **No**
8. Materials assess student proficiency using methods that are accessible and unbiased, including the use of course-level language in student prompts.	**Evidence-**	**(Reviewer only.)** __X__ **Yes** _____ **No**

9. Materials are carefully evaluated by qualified individuals, whose names are listed, in an effort to ensure freedom from mathematical errors and course-level appropriateness.	**Evidence-** The author is clearly indicated on the title page of the teacher's edition. Curriculum was developed from the Children's Math Worlds Research Project conducted by Dr. Karen Fuson (author). The material is based upon work supported by the National Science Foundation and is funded in part by the National Science Foundation.	**(Reviewer only.)** **__X__ Yes** **_____ No**
10. The visual design supports students in engaging thoughtfully with the subject. Navigation through the text is clear.	**Evidence-** Materials are bright and colorful. Student workbook pages are not cluttered with too much text, pictures, or drawings. There is a building repetition to the activities that allows students to understand new concepts/lessons based on prior concepts/lessons. Example: • Unit 1 lessons work with number writing and recognition through 10. These strategies are then built on in Units 3, and 4 with teen numbers.	**(Reviewer only.)** **__X___ Yes** **_____ No**

11. The materials engage parents in appropriate ways. For example, homework assignments in elementary grades, consist of routine problems, practice with getting answers, and fluency-building exercises that parents can easily support.	**Evidence-** At the beginning of every unit, in the student handbook, there is a Family Letter that describes the concepts of the upcoming unit. It includes math vocabulary that parents may or may not be familiar with so they can understand the terminology used in the classroom, on workbook pages, and homework. Throughout the rest of the unit there are occasional Family Letters that explain any new math vocabulary or conceptual understandings that have become relevant in the current unit. Examples of Family Letters can be found in the student work book at the start of every new unit: • Unit 1, Student Workbook pages 1, 5, and 19 • Unit 2, Student Workbook page 41 • Unit 3, Student Workbook page 89, 97, 101, 107, and 137 • Unit 4, Student Workbook pages 149, 165, and 175 • Unit 5, Student Workbook pages 205, 211, and 259 Homework can be found in the Homework and Remembering Blackline Masters and each page is aligned with the unit and lesson that is being taught. Homework format, vocabulary, and terminology is consistent with lessons and student workbook pages. Homework is a review of prior lessons/units and does not cover a new concept that has not be explicitly taught in the materials. For example: Unit 2 Lesson 18 Lesson Focus: Write Numbers 1 through 10; Homework for Unit 2 Lesson 18 reviews number writing 1-10 (Unit 2 Lesson 6) (Unit 1, Lessons 8-9)	**(Reviewer only.)** **_X___ Yes** **_____ No**

Reviewer IMET Evaluation Summary **Title/Level:** Math Expressions Common Core Kindergarten

Publisher: Houghton Mifflin Harcourt Publishing Company **Copyright: 2013** **ISBN:** 978-0-547-82486-6

Reviewer ID # _____ **Date Review Completed:** March 7, 2016

Non-Negotiable Criteria- Each Non-Negotiable must be met in order for the Non-Negotiable Alignment Criteria to be met overall.

Non-Negotiable 1: Freedom from Obstacles to Focus	Non- Negotiable 2: Focus and Coherence
X Meets _____ Does Not Meet	X Meets _____ Does Not Meet

Non-Negotiable Overall:

X **Meets** _____ **Does Not Meet**

Alignment Criteria- Each Alignment Criterion must be met with a sufficient number of points in order for Alignment Criteria to be labeled as "Meets" overall. The more points the materials receive on the Alignment Criteria, the better they are aligned.

Alignment Criterion 1: Rigor and Balance	Alignment Criterion 2: Standards of Mathematical Practice	Alignment Criterion 3: Access to Standards for All Learners
Points: 6 of 6 possible. (Materials must receive at least 5 of 6 points to align.) X Meets _____ Does Not Meet	Points: 6 of 6 possible. (Materials must receive at least 5 of 6 points to align.) X Meets _____ Does Not Meet	Points: 6 of 6 possible. (Materials must receive at least 5 of 6 points to align.) X Meets _____ Does Not Meet

Alignment Criteria Overall:

__X__ **Meets** _____ **Does Not Meet**

If the mater meet both Non-Negotiables and relevant Alignment Cr ion, they are aligned to the Shifts and major features o e Core Standards. **Do the materials meet every Non-Negotiable and Alignment Criterion?** _X_ **Yes** _____ **No**

What are the specific areas of strength and weakness based on this evaluation? Publishers or others modifying or developing assessments can use this information to make improvements and/or to remedy gaps in the alignment of assessment materials.

Strengths

- Teacher materials allow the teacher to understand the layout of the unit(s) with ease.
- Vocabulary and world problems were engaging and age appropriate.
- Sub, New teachers could easily pick up and teach a lesson w/o too much stress.

Weakness

- It would be nice if Puzzled Penguin is right sometimes to make students think about the complexity of the concept.

2015-16 Mathematics Interim Review Recommendation & Summary

Publisher Name:	Houghton Mifflin Harcourt
Title:	Math Expressions
ISBN #	978-0-547-82479-6
Grade Level(s) or Course:	1st
Reviewer ID:	KJ (LC)

RECOMMENDED AS:

__X__ **Core Mathematics Program-** a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials. Substantial evidence clearly supports the designation of this program as Core.

_____ **Other Mathematics Program-** a program that substantially, but partially, meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for supplemental materials. Substantial evidence clearly supports the designation of this program as Other.

_____ **Component Mathematics Program-** a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs. Substantial evidence clearly supports the designation of this program as Component.

_____ **Intervention Program-** a program designed and intended to target and support students' specific needs. Substantial evidence clearly supports the designation of this program as Intervention.

_____ **Does not meet criteria** for recommendation as a Curricular Material or Online Resource for Mathematics.

EVIDENCE SUMMARY:

FOCUS- Materials for Grade 1 align the majority of lessons and activities to the major work for 1st grade follow the learning path to
COHERENCE- Grade 2. Does not assess outside the major work of the grade.

RIGOR-
Materials reflect and support the rigorous expectation and development of key mathematical practices

CONCEPTUAL UNDERSTANDING-
Materials reflect and support the ... of key mathematical

MATHEMATICAL PRACTICES- practices.
Curriculum demonstrates authentic connections between content standards and practice standards

ACCESSIBILITY OF STANDARDS TO ALL STUDENTS-
Curriculum provides significant support for ELL and other special student populations

OTHER:

2[illegible]-16 Interim Mathematics Review

Mathematics Evaluation Tool Grades K-8

Publisher: Houghton Mifflin Harcourt

Title of Material: Math Expressions 1st grade

Author: Dr. Karen C. Fuson

ISBN #: 978-0-547-82479-6 **Copyright** 2013

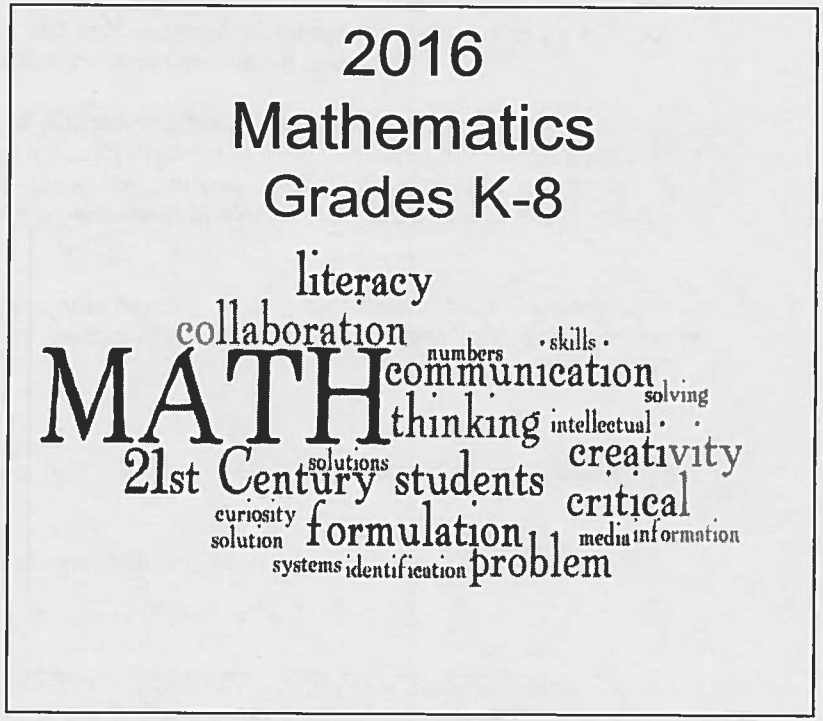
Reviewer ID: LC KS

Core Mathematics Program- a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Core.

Other Mathematics Program- a program that substantially, but partially, meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Other.

Component Mathematics Program- a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs.
Substantial evidence clearly supports the designation of this program as Component.

Intervention Program- a program designed and intended to target and support students' specific needs.
Substantial evidence clearly supports the designation of this program as Intervention.



- Evaluation Form adapted from Instructional Materials Evaluation Toolkit (IMET).

The IMET was developed by Student Achievement Partners. Educators may use or adapt. http://creativecommons.org/licenses/by/3.0/ Download this tool at http://achievethecore.org/IMET

Record and explain the evidence upon which the rating is based.

Proceed to Section 4: Indicators of Quality

- Indicators of Quality are important considerations that will help evaluators better understand the overall quality of instructional materials. These considerations are not criteria for alignment to the CCSS, but they provide valuable information about additional program characteristics. Evaluators may want to add their own indicators to the examples provided.

Directions for Non-Negotiable 1

Freedom from Obstacles to Focus

Criterion	Evidence- Give specific examples.	Rating: (Reviewer only.)
Non-Negotiable 1: **Freedom from Obstacles to Focus** **Materials must reflect the content architecture of the Standards by not assessing the topics named before the grade level where they first appear in the Standards.** The Standards foster students' progress to algebra by focusing strongly on arithmetic. Consistent with this focus, certain topics from outside of arithmetic appear only in later grades. Thus, to be aligned, materials must reflect the content architecture of the Standards by not assessing the topics named before the grade level where they first appear in the Standards. In this criterion, "topics named" means the topics that are explicitly named in Metric 1A. No other topics should be added to the list in Metric 1A. (Note that other topics in the standards are addressed in criterion NN2.)	**Required Materials** • Common Core State Standards for Mathematics (www.corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf) • From the materials being evaluated: teacher guides and all assessment components	**Rating this Criterion:** Non-Negotiable 1 is rated as Meets or Does Not Meet. To rate Non-Negotiable 1, begin by rating Metric 1A. Since Metric 1A is the only metric for Non-Negotiable 1, the rating for Non-Negotiable 1 is the same as the rating for Metric 1A. If Metric 1A is rated as Does Not Meet, include evidence of when the named topic(s) is/are assessed. If the metric is rated as Meets, list the grade(s) examined in the evaluation.

Metric NN1A **Materials reflect the basic architecture of the Standards by not assessing the listed topics before the grade level indicated.** • Probability, including chance, likely outcomes, probability models. (Introduced in the CCSSM in grade 7) • Statistical distributions, including center, variation, clumping, outliers, mean, median, mode, range, quartiles; and statistical association or trends, including two-way tables, bivariate measurement data, scatter plots, trend line, line of best fit, correlation. (Introduced in the CCSSM in grade 6) • Similarity, congruence, or geometric transformations. (Introduced in the CCSSM in grade 8) • Symmetry of shapes, including line/ reflection symmetry, rotational symmetry. (Introduced in the CCSSM in grade 4) **How to Find the Evidence:** Evaluate the table of contents, all chapter tests, all unit tests, and other such assessment components (including rubrics). For context, read Criterion #2 from the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013). NOTE: Grade alignments of other topics are addressed in Non-Negotiable 2, Focus and Coherence.) In this criterion, "topics named" means the topics that are explicitly named in Metric 1A. No other topics should be added to the list in Metric 1A. (Note that other topics in the standards are addressed in criterion NN2.)	**Evidence-** Unit 1: Instructional time spent on critical focus area 1 of Grade 1. Partner and number patterns through 10. Focus on 1 more and 1 less patterns with addition and subtraction problems. Unit Test/Assessment pages 76-77 Unit 2: Instructional time spent on critical focus area 1 of Grade 1. Addition and subtraction strategies within 10. Recognition of problem types and writing an equation to represent the situation/problem. Practice of true and false equations. Unit Test/Assessment pages 180-182 Unit 3: Instructional time spent on critical focus areas 1 and 2 of Grade 1. Unknown numbers in addition and subtraction within 10. Using various strategies to solve unknown total and unknown partner addition and subtraction situations/problems. Unit Test/Assessment pages 268-270 Unit 4: Instructional time spent on critical focus areas 1 and 2 of Grade 1. Place value concepts; building 2-digit numbers; adding with 1 and 2 digit numbers. Focus of understanding and providing experience of building 2-digit numbers with visuals. Expand to add a 1-digit number to a 2-digit number. Unit Test/Assessment pages 392-394 Unit 5: Instructional time spent on critical focus areas 1 and 2 of Grade 1. Place value situations extending the use of unknown partners in addition and subtraction with larger numbers. Expanding on prior knowledge from working addition and subtraction situations/problems. Unit Test/Assessment pages 484-486 Unit 6: Instructional time spent on critical focus area 3 of Grade 1. Uses comparisons and data organization, representation and interpretation. Supports building on prior knowledge of comparing numbers to build comparison statements for data and solve comparison story problems. Unit Test/Assessment pages 550-552 Unit 7: Instructional time spent on critical focus areas 3 and 4 of Grade 1. Supports geometry, measurement and equal shares; distinguish between defining and non-defining attributes of shapes, shape composition. Basic concepts of	**(Reviewer only.)** **_X_Meets** **____Does Not Meet**

	length measurement a ime measurement is also covered. Unit Test/Assessment pages 654-656 Unit 8: Instructional time spent on critical focus area 2 of Grade 1. Supports two digit addition using skills, place value, and addition concepts to add with 2-digit numbers with and without regrouping. Unit Test/Assessment pages 702-703	
Non-Negotiable 1: Materials must reflect the content architecture of the Standards by not assessing the topics named* before the grade level where they first appear in the Standards. **NN 1** If Metric 1A was rated as Meets, then rate Non-Negotiable 1 as Meets. If Metric 1A was rated as Does Not Meet, then rate Non- Negotiable 1 as Does Not Meet. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion.**(Reviewer only.)** **Before moving to Non-Negotiable 2, record the final Meets or Does Not Meet rating in the Evaluation Summary.**	**(Reviewer only.)** **_X_Meets** **____Does Not Meet** **Strengths/Weaknesses:** **Each unit assesses topics under one or more of the four critical areas of instruction time for first grade. The curriculum does not assess topics above the first grade level. Unit test/assessments have standards for each test question listed and defined in the review and test lesson.**	

Directions for Non-Negotiable 2

Focus and Coherence

Non-Negotiable 2:

Focus and Coherence

Materials must focus coherently on the Major Work of the grade in a way that is consistent with the progressions in the Standards.

Focus and coherence are the two major evidence-based design principles of the Common Core State Standards for Mathematics (CCSSM, p. 3). Focus is necessary in order to fulfill the ambitious promise the states have made to their students by adopting the Standards: greater achievement at the college and career ready level; greater depth of understanding of mathematics; and a rich classroom environment in which reasoning, sense-making, applications, and a range of mathematical practices flourish. In simpler terms, a mile-wide, inch-deep curriculum translates to less time per topic. Less time means less depth and moving on without many students. Thus, materials must focus coherently on the Major Work of the grade in a way that is consistent with the progressions in the Standards.

Required Materials

- Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf)
- Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)
- Focus by Grade Level for the grade being evaluated (www.achievethecore.org/focus)
- From the materials being evaluated: teacher guides, student texts and workbooks

Rating this Criterion:

Non-Negotiable 2 is rated as Meets or Does Not Meet.

To rate Non-Negotiable 2, first rate metrics 2A–2H. Each of these eight metrics must be rated as Meets in order for Non-Negotiable 2 to be rated as Meets. Rate each metric 2A-2H as Meets or Does Not Meet/Insufficient Evidence. If the evidence examined shows that the Criterion is met, then mark the Criterion Meets. If the evidence examined shows that the Criterion is not met—or if there is insufficient evidence to make a determination—then mark the Criterion as Does Not Meet/Insufficient Evidence. Support all ratings with evidence.

Metric NN2A **In each grade K–8, students and teachers using the materials as designed devote the large majority of time to the Major Work of the grade.** **How to Find the Evidence:** Familiarize yourself with the Major Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, lessons, homework assignments, and assessments. (Evaluate both student and teacher materials.) Consider time spent on the Major Work of the grade and judge qualitatively whether students and teachers using the materials as designed will devote the large majority of time to the Major Work of the grade. For context, read Criterion #1 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013)	Materials for Grade 1 [illegible] the majority of lessons and activities to the major work for First Grade so lessons review Kindergarten standards and extend to Grade 2 standards but are not assessed. **Evidence-** *Common Core State Standards for Mathematical Content: Lessons are aligned to grade level standards/major work of the grade; pages xlviii-li Unit 1 & 2: Instructional time spent on critical focus area 1 of Grade 1: developing understanding of addition, subtraction and strategies for addition and subtraction within 20. Unit 3, 4, & 5: Instructional time spent on critical focus areas 1 and 2 of Grade 1: developing understanding of addition, subtraction and strategies for addition and subtraction within 20; developing understanding of whole number relationships and place value, including grouping in tens and ones. Unit 6: Instructional time spent on critical focus area 3 of Grade 1: developing understanding of linear measurement and measuring lengths as iterating length units. Unit 7: Instructional time spent on critical focus areas 3 and 4 of Grade 1: developing understanding of linear measurement and measuring lengths as iterating length units; reasoning about attributes of, and composing and decomposing geometric shapes. Unit 8: Instructional time spent on critical focus areas 1 and 2 of Grade 1: developing understanding of addition, subtraction and strategies for addition and subtraction within 20; developing understanding of whole number relationships and place value, including grouping in tens and ones.	**(Reviewer only.)** **_X__Meets** **____Does Not Meet/** **Insufficient Evidence**

Metric NN2E **Supporting Work, where present, enhances focus and coherence simultaneously by also engaging students in the Major Work of the grade.** **How to Find the Evidence:** Familiarize yourself with the Major Work and Supporting Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate chapters and lessons that focus on Supporting Work. NOTE: Example of evaluating this Criterion might include looking at whether materials for K–5 generally treat data displays as an occasion for solving grade-level word problems using the four operations (e.g., see 3.MD.B.3); or whether materials for grade 7 take advantage of opportunities to use probability to support ratios, proportions, and percentages. For context, read Criterion #3 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Unit 1: All lessons focus on major content standards 1.OA.1, 1.OA.3, 1.OA.5, 1.OA.6, and 1.OA.8. Unit 2: Majority of lessons focus on major content standards 1.OA.1, 1.OA.5, 1.OA.6, 1.OA.7 and 1.OA.8 with one lesson supporting major content standard 1.OA.3. Unit 3: Majority of lessons focus on major content standards 1.OA.1, 1.OA.4, 1.OA.5, 1.OA.6 and 1.OA.8 with one lesson supporting major content standard 1.OA.7. Unit 4: Majority of lessons focus on major content standards 1.OA.5, 1.OA.6, 1.OA.8, 1.NBT.1, 1.NBT.2, 1.NBT.2c, and 1.NBT.4 with one lesson supporting major content standards 1.OA.2, 1.OA.3, and one lesson supporting major content standard 1.NBT.5. Unit 5: Majority of lessons focus on major content standards 1.OA.1, 1.OA.4, 1.OA.5, 1.OA.6, 1.OA.8, 1.NBT.1, 1.NBT.2, 1.NBT.2a, 1.NBT.2b, 1.NBT.2c, 1.NBT.3, 1.NBT.4 and 1.NBT.5 with one to two lessons supporting major content standards 1.OA.2, 1.OA.3, 1.NBT.2c, and 1.NBT5. Unit 6: All lessons focus on major content standards 1.OA.1 and 1.OA.2 with lessons connecting supporting content standard 1.MD.4 Unit 7: Only three lessons that focus on major content standards 1.MD.1 and 1.MD.2. Majority of lessons support additional content standards 1.MD.3, 1.G.1, 1.G.2, and 1.G.3 Unit 8: All lessons focus on major content standard 1.NBT.4 with one lesson supporting major content standards 1.NBT.3 and 1.NBT.6.	**(Reviewer only.)** **_X__Meets** **____Does Not Meet/** **Insufficient Evidence**

Metric NN2C **Materials base content progressions on the grade-by-grade progressions in the Standards. Content from previous or future grades does not unduly interfere with or displace on-grade-level content.** **How to Find the Evidence:** Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, and lessons in both student and teacher materials. NOTE: In some cases it may be possible that aligned materials might address some aspects of a topic in a strategic way before or after the grade level in which the topic is central in the Standards' progressions; for example, a curriculum author might purposefully choose to explore adding fractions with unlike denominators in a way appropriate to grade four, recognizing that this work is not really required until the next grade. However, any such purposeful discrepancies in content progressions should enhance the required learning in each grade; not unduly interfere with or displace grade-level content; and be clearly aimed at helping students meet the Standards as written rather than effectively rewriting the progressions in the Standards. And in all cases, note that Non-Negotiable 1 must be met for materials to be aligned. For context, read Criterion #5a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	Content progression is obvious within each unit through lessons and activities. Each Unit Overview provides a learning progressions of the Common Core State Standards and a Content Standards Across the Grades for the following unit lessons and activities. It states previous grade level standards, as well as the following grade standards that are incorporated into the unit lessons and activities. The incorporation of prior and future grade level standards does not interfere with current grade level standards and progressions. **Evidence-** Unit 1: 1.OA.1: Represent and solve problems involving addition and subtraction. • Standard is introduced in previous grade in standard K.OA.1: Understand addition as putting together and adding to, and understand subtraction as taking apart and taking from. • Standard is extended to the following grade in 2.OA.1: Represent and solve problems involving addition and subtraction. Unit 2: 1.OA.6: Add and subtract within 20 demonstrating fluency for addition and subtraction within 10 using strategies. • Standard is introduced in previous grade in standard K.OA.4: Fluently add and subtract within 5. • Standard is extended to the following grade in 2.OA.2: Add and subtract within 20 using mental strategies. • Unit 3: 1.OA.1: Represent and solve problems involving addition and subtraction. Use addition and subtraction within 20 to solve word problems. • Standard is introduced in previous grade in standard K.OA.2: Solve addition and subtraction word problems within 10. • Standard is extended to the following grade in 2.OA.1: Use addition and subtraction within100 to solve one-and two-step word problems. Unit 4: 1.NBT.3: Compare two two-digit numbers based on meanings of the tens and ones digits, recording the results of comparisons with the symbols >, =, and <. • Standard is introduced in previous grade in standard K.NBT.1: Compost and decompose	**(Reviewer only.)** **_X__Meets** **____Does Not Meet/** **Insufficient Evidence**

numbers from 11 to 19 into tens ones and some further ones.
- Standard is extended to the following grade in 2.NBT.4: Compare two three-digit numbers based on meanings of the hundreds, tens, and ones digits, using >, =, and < symbols to record the results.

Unit 5: 1.OA.1: Represent and solve problems involving addition and subtraction.
- Standard is introduced in previous grade in standard K.OA.1: Understand addition as putting together and adding to, and understand subtraction as taking apart and taking from.
- Standard is extended to the following grade in 2.OA.1: Represent and solve problems involving addition and subtraction.

Unit 6: 1.MD.4: Represent and interpret data
- Standard is introduced in previous grade in standard K.MD.3: Classify objects and count the number of object in each category.
- Standard is extended to the following grade in 2.MD.9 and 2.MD.10: Represent and interpret data.

Unit 7: 1.MD.1: Measure lengths indirectly and by iterating length units.
- Standard is introduced in previous grade in standard K.MD.1: Describe and compare measurable attributes.
- Standard is extended to the following grade in 2.MD.1: Measure and estimate lengths in standard units.

Unit 8: 1.NBT.4: Understand and apply properties of operations and the relationship between addition and subtraction.
- Standard is introduced in the previous grade in standard K.NBT.1: Work with numbers 11-19 to gain foundations for place value.
- Standard is extended to the following grade in standard 2.NBT.5: Use place value understanding and properties of operations to add and subtract.

Metric NN2D **Materials give all students extensive work with on-grade-level problems.** **How to Find the Evidence:** Evaluate both student and teacher materials. If the materials provide resources for differentiated learning, consider whether lower-performing students have opportunities to engage with grade-level problems. Also consider whether higher-performing students are given opportunities to learn current grade-level content in greater depth. For context, read Criterion #5b in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	Materials provide all students with extensive work with on-grade-level problems. Materials are designed to accommodate a wide range of student learning styles and academic skills. Each lesson has accommodations and resources to incorporate strategies and opportunities for differentiating instruction. Intervention, on level, and challenge activities are outlined after every lesson with accommodations for ELL students in every lesson as well. **Evidence-** Unit 1: Lesson 8: Lesson focus is adding and subtracting within 10 (1.OA.3), with differentiated instruction provided for ELL students on page 61 and intervention, on level, and challenge activities on page 67. Unit 2: Lesson 4: Lesson focus to represent and solve addition story problems and determine if addition equations are true (1.OA.7), with differentiated instruction provided for ELL students on page 99 and intervention, on level, and challenge activities on page 101. Unit 3: Lesson 10: Lesson focus to solve story problems with unknown partners and totals (1.OA.4), with differentiated instruction provided for ELL students on page 251 and intervention, on level, and challenge activities on page 253. Unit 4: Lesson 1: Lesson focus is working with on-grade-level problems to recognize 10 as a group of ten ones and count decade numbers as groups of ten (1.NBT.2a), with differentiated instruction provided for ELL students on page 275 and intervention, on level, and challenge activities on page 279. Unit 5: Lesson 7: Lesson focus to count large quantities of objects by tens and ones (1.NBT.2), with differentiated instruction provided for ELL students on page 447 and intervention, on level, and challenge activities on page 449. Unit 6: Lesson 5: Lesson focus is to collect, organize, represent, and interpret data with three categories (1.MD.4), with differentiated instruction provided for ELL students on page 517 and intervention, on level, and challenge activities on page 519. Unit 7: Lesson 12: Lesson focus to compare and order objects by length (1.MD.1), with differentiated instruction provided for ELL students on page 637 and intervention, on level, and challenge activities on page 639.	**(Reviewer only.)** **_X__Meets** **____Does Not Meet/** **Insufficient Evidence**

	Unit 8: Lesson 2: Lesson focus to add 2-digit numbers (1.NBT.4), with differentiated instruction provided for ELL students on page 669 and intervention, on level, and challenge activities on page 673.	

Metric NN2E **Materials relate on-grade-level concepts explicitly to prior knowledge from earlier grades.** **How to Find the Evidence:** Evaluate both student and teacher materials. NOTE: Examples of evaluating this Criterion might include looking at the way the materials extend basic ideas of place value across the decimal point; or the role that properties of operations play when the materials extend arithmetic beyond whole numbers to fractions, variables, and expressions. More generally, cluster headings in the Standards sometimes signal key moments where reorganizing and extending previous knowledge is important in order to accommodate new knowledge (e.g., see cluster headings that use the phrase "Apply and extend previous understanding"). For context, read Criterion #5c in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	The Overview of each explicitly states the on-grade-level concepts taught in the unit with their relation to prior knowledge from the previous grade. **Evidence-** Unit 1: On-grade-level standard 1.OA.1: Use addition and subtraction within 10 to tell and solve story problems. Building on prior grade level standard K.OA.2: Solve addition and subtraction story problems within 10. Unit 2: On-grade-level standard 1.OA.3: Apply properties of operations as strategies to add and subtract. Building on prior grade level standard K.OA.3: Decompose numbers less than or equal to 10 into pairs in more than one way. Unit 3: On-grade-level standard 1.OA.6: Demonstrate fluency for addition and subtraction within 10. Building on prior grade level standard K.OA.4: Fluently add and subtract within 5. Unit 4: On-grade-level standard 1.NBT.2: Understand that the two digits of a two-digit number represent amounts of tens and ones. Building on prior grade level standard K.NBT.1: Compose and decompose numbers from 11 to 19 into ten ones and some further ones. Unit 5: On-grade-level standard 1.OA.1: Use addition and subtraction within 20 solve story problems. Building on prior grade level standard K.OA.2: Solve addition and subtraction story problems within 10. Unit 6: On-grade-level standard 1.MD.4: organize, represent, and interpret dad with up to three categories. Building on prior grade level standard K.MD.3: Classify objects into given categories; count the numbers of objects in each category and sort the categories by count. Unit 7: On-grade-level standard 1.MD.1: Order objects by length and compare the lengths of two objects indirectly. Building on prior grade level standard K.MD.1: Describe measurable attributes of objects, such as length or weight. Unit 8: On-grade-level standard 1.NBT.4: Add within 100, including adding a 2-digit number and a 1-digit number, and adding a 2-digit number and a multiple of 10. Building on prior grade level standard K.NBT.1: Compose and decompose numbers from 11 to 19 into ten ones and some further ones.	**(Reviewer only.)** **_X__Meets** **____Does Not Meet/** **Insufficient Evidence**

Metric NN2F **Review of material from previous grades is clearly identified as such to the teacher, and teacher and students can see what their specific responsibility is for the current year.** **How to Find the Evidence:** Evaluate the table of contents, but do not stop there; also evaluate units, chapters, lessons, homework assignments and assessments. (Evaluate both student and teacher materials.) Identify any content from previous grades and check whether it is identified as such. For context, read Criterion #5a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Unit 1: 1.OA.1: Use addition and subtraction within 10 to tell and solve story problems. Building on prior grade level standard K.OA.2: Solve addition and subtraction story problems within 10. Unit 2: 1.OA.6: Demonstrate fluency for addition and subtraction within 10. Building on prior grade level standard K.OA.4: Fluently add and subtract within 5. Unit 3: 1.OA.1: Use addition and subtraction within 10 to solve story problems. Building on prior grade level standard K.OA1 & K.OA.2: Represent addition and subtraction and solve addition and subtraction story problems within 10. Unit 4: 1.NBT.1-2: Read, write, and represent 2-digit numbers as tens and ones. Building on prior grade level standard K.NBT.1: Compose and decompose numbers from 11-19 into ten ones and some further ones. Unit 5: 1.OA.1-2: Use addition within 20 to solve story problems and problems with three addends. Building on prior grade level standard K.OA.1-2: Represent addition and subtraction and solve addition and subtraction story problems within 10. Unit 6: 1.OA.2: Solve story problems that call for addition of three whole numbers whose total is less than or equal to 20. Building on prior grade level standard K.OA.2: Solve addition and subtraction story problems and add and subtract within 10. Unit 7: 1.MD.1: Order three objects by length and compare the lengths of two objects indirectly. Building on prior grade level standard K.MD.2: Compare two objects with a measurable attribute in common. Unit 8: 1.NBT.4: Add within 100, including adding a 2-digit number and a 1-digit number, and adding a 2-digit number and a multiple of 10. Building on prior grade level standard K.NBT.1: Compose and decompose numbers from 11 to 19 into ten ones and some further ones.	**(Reviewer only.)** **_X__Meets** **____Does Not Meet/** **Insufficient Evidence**

Metric NN2G **Materials include learning objectives that are visibly shaped by CCSSM cluster headings.** **How to Find the Evidence:** Select several clusters from the Major Work in the grade being evaluated. Evaluate teacher and student materials in relation to these clusters. For context, read Criterion #6a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	Each unit has an overview of learning progressions and content standards. Each lesson within the unit has a lesson focus for the lesson taught, mathematical practices covered within the lesson, and the Common Core State Standard covered in the lesson as well. Within the lesson, each activity indicates the Common Core State Standards addressed as well as the Mathematical Practices covered explicitly. **Evidence-** Unit 1: Lesson 1: Lesson focus: Represent numbers 1-10; Standard identified: 1.OA.1 Use addition and subtraction within 20 to solve word problems. Mathematical Practices covered: MP. 3, MP.5, MP.6, MP.7, and MP.8. Unit 2: Lesson 6: Lesson focus: Find the total in addition equations; Standards identified: 1.OA.5 Relate counting to addition and subtraction; 1.OA.6 Add and subtract within 20; 1.OA.7 Understand the meaning of the equal sign and determine if equations involving addition and subtraction are true or false. Mathematical Practices covered: MP. 1, MP.2, MP.3, MP.5, MP.6 and MP.8. Unit 3: Lesson 9: Lesson focus: Model and relate addition and subtraction situations; Standards identified 1.OA.5 Relate counting to addition and subtraction; 1.OA.4 Understand subtraction as an unknown-addend problem; 1.OA.8 Determine the unknown whole number in an addition or subtraction equation relating three whole numbers. Mathematical Practices covered: MP. 1, MP.3, MP.4, MP.6, MP.7 and MP.8. Unit 4: Lesson 10: Lesson focus: Use tens and ones to add; Standards identified: 1.OA.6 Add and subtract within 20; 1.OA.8 Determine the unknown whole number in an addition or subtraction equation relating three whole numbers; 1.NBT.1 Extend the counting sequence; 1.NBT.2, 1.NBT.2a, 1.NBT.2b Understand place value; 1.NBT.4 Add within 100 including adding a two-digit number and a multiple of 10. Mathematical Practices covered: MP. 1, MP.2, MP.3, MP.4, MP.5, MP.6, MP. 7 and MP.8. Unit 5: Lesson 7: Lesson focus: Count large quantities of objects by tens and ones; Standards identified: 1.NBT.1 Extend the counting sequence; 1.NBT.2 Understand that the two digits of a two-digit number represent amounts of tens and ones. Mathematical Practices covered: MP.3, MP.5, MP.6, MP.7 and MP.8.	**(Reviewer only.)** **_X__Meets** **____Does Not Meet/** **Insufficient Evidence**

	Unit 6: Lesson 4: Lesson focus: Organize, represent, and interpret data with three categories; Standards identified: 1.OA.1, 1.OA.2 Represent and solve problems involving addition and subtraction; 1.MD.4 Represent and interpret data. Mathematical Practices covered: MP.1, MP.3, MP.4, MP.5 and MP.6. Unit 7: Lesson 6: Lesson focus: Distinguish between defining and non-defining attributes of squares and other rectangles; Standards identified: 1.G.1 Order three objects by length; compare the lengths of two objects indirectly by using a third object. Mathematical Practices covered: MP.3, MP.5, MP.6, MP.7 and MP.8. Unit 8: Lesson 1: Lesson focus: Add 2-digit numbers; Standards identified: 1.NBT.4 Add within 100 including adding a two-digit number and a one-digit number, and adding a two digit number and a multiple of 10. Mathematical Practices covered: MP.1, MP.2, MP.3, MP.4, MP.6 and MP.8.	

Metric NN2H **Materials include problems and activities that serve to connect two or more clusters in a domain, or two or more domains in a grade, in cases where these connections are natural and important.** **How to Find the Evidence:** In the grade being evaluated, choose two or more clusters or two or more domains for which connections are natural and important. Evaluate the units, chapters, and lessons that deal with the chosen topics, looking for problems and activities that serve to connect the chosen clusters or domains. NOTE: An example of evaluating this Criterion might include looking at whether problems in grade 4 sometimes or often involve students applying their developing computation skills (detailed in domain NBT) in the context of solving word problems (detailed in domain OA). For context, read Criterion #6b in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	Each unit of the mater adequately connects two or more clusters in a domain or two or more domains in grade one. In most units, lessons exceed expectation to include up to 7-8 clusters of a domain. The clusters in a domain are combine in a natural and important way as to connect standards, domains, and clusters fluidly. **Evidence-** Domain Operations and Algebraic Thinking (1.OA.1-4) Unit 1: • Lessons 1-2: combine clusters 1.OA.1 and 1.OA.5 • Lessons 3-9: combine clusters 1.OA.1, 1.OA.3, 1.OA.5, 1.OA.6 and 1.OA.8 Unit 2: • Lessons 1-4: combine clusters 1.OA.1, 1.OA. 6 and 1.OA.7 • Lessons 5-9: combine clusters 1.OA.3, 1.OA.5, 1.OA.6, and 1.OA.8 • Lessons 10-16: combine clusters 1.OA.1, 1.OA. 6, 1.OA.7, and 1.OA.8 Unit 3: • Lessons 1-5: combine clusters 1.OA.1, 1.OA 5, 1.OA.6 and 1.OA.8 • Lessons 6-8: combine clusters 1.OA.1, 1.OA.4, 1.OA.5, 1.OA.6, and 1.OA.8 • Lessons 9-12: combine clusters 1.OA.1, 1.OA. 4, 1.OA.5, 1.OA.6, 1.OA.7, and 1.OA.8 Unit 4: • Lessons 1-6: combine clusters 1.OA.1, 1.OA.3, 1.OA.5, 1.OA.6, 1.OA.8, 1.NBT.1, 1.NBT.2, 1.NBT.2a, 1.NBT.2b, 1.NBT.2c, 1.NBT.3, and 1.NBT.5 • Lessons 7-12: combine clusters 1.OA.5, 1.OA.6, 1.OA.8 • Lessons 13-18: combine clusters 1.OA.5, Unit 5: • Lessons 1-6: combine clusters 1.OA.1, 1.OA.2, 1.OA.3, 1.OA.4, 1.OA.5, 1.OA.6 and 1.OA.8 • Lessons 7-11: combine clusters 1.OA.1, 1.OA.2, 1.OA.6, Unit 6: • Lessons 1-5: combine clusters 1.OA.1, 1.OA.2 • Lessons 6-9: combine clusters 1.OA.1, 1.OA.2	**(Reviewer only.)** **_X__Meets** **____Does Not Meet/** **Insufficient Evidence**

Non-Negotiable 2:

Focus and Coherence

Materials must focus coherently on the Major Work of the grade in a way that is consistent with the progressions in the Standards.

NN 2 If all Metrics 2A – 2H were rated as Meets, then rate Non-Negotiable 2 as Meets. If one or more Metric was rated Does Not Meet/Insufficient Evidence, then rate Non-Negotiable 2 as Does Not Meet. Check the final rating.
Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)**

Before moving to Alignment Criterion 1, record the final Meets or Does Not Meet rating in the Evaluation Summary.

(Reviewer only.)

_X__Meets

____Does Not Meet

Strengths/Weaknesses:

Now continue by evaluating the Alignment Criterion 1 for Rigor and Balance.

Directions for Alignment Criterion 1

Rigor and Balance

Alignment Criterion 1: Rigor and Balance

Materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.

The Standards set expectations for attention to all three aspects of rigor: conceptual understanding, procedural skill and fluency, and applications. Thus, materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.

Required Materials

- Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf)
- Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)
- Focus by Grade Level for the grade being evaluated (achievethecore.org/focus)
- Situation Types for the Operations in Word Problems (achievethecore.org/situation-types)
- From the materials being evaluated: teacher guides, student texts and workbooks

Rating this Criterion:

Alignment Criterion 1 is rated as Meets or Does Not Meet.

To rate Alignment Criterion 1, first rate metrics 1A, 1B, and 1C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). For each metric, guiding questions are provided to aid in gathering evidence.
Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 1 if the materials rate 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as rigor and balance, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.

Metric AC1A **The materials support the development of students' conceptual understanding of key mathematical concepts, especially where called for in specific content Standards or cluster headings.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Major Work for the grade being evaluated that relate specifically conceptual understanding to use throughout the questions associated with this metric. NOTE: Some examples of clusters or Standards that call for conceptual understanding include: K.OA.A.1, (1.NBT.B, 1.NBT.C), (2.NBT.A, 2.NBT.B), (3.OA.A.1, 3.OA.A.2), 4.NF.A, (4.NBT.A, 4.NBT.B), 5.NF.B, (5.NBT.A, 5.NBT.B), 6.RP.A, 6.EE.A.3, 7.NS.A, 7.EE.A, 8.EE.B, 8.F.A, 8.G.A Clusters or Standards grouped by parentheses are closely connected and could be analyzed together. For context, read Criterion #4a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	-Choose a cluster/Standa om the Major Work that is aligned to each aspect of rigor and use it to evaluate these metrics. It is most helpful if the same clusters/Standards are chosen for all of the programs being evaluated. (Guidance in choosing clusters/Standards is included in "How to Find the Evidence".)	**Use the questions for AC Metric 1 evaluate Metric 1A. Record evidence for each question and rate Metric 1A.** **_X__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**

Is conceptual understanding attended to thoroughly where the Standards set explicit expectations for understanding or interpreting? Evaluate lessons, chapter/unit assessments and homework assignments, paying attention to work aligned to Standards that explicitly call for understanding or interpreting. NOTE: Examples of evaluating this Criterion might include looking at how well the multi-digit addition and subtraction algorithms are developed and explained on the basis of place value and properties of operations; or how well the multi-digit multiplication and division algorithms are developed and explained on the basis of place value and properties of operations; or how well solving equations is presented and explained as a process of reasoning.	**Evidence-** Math Talk is a large and widely used feature of the curriculum. It is used in various forms throughout the curriculum – solve and discuss board work, small group discussions. These strategies provide support to students by allowing students to share and talk about the different ways they have solved a problem, which in turn can help other students. The formative assessment at the end of each lesson allows students to explain their reasoning and understanding of a concept instead of just a practice assessment. Curriculum also has Learning Community-Best Practice strategies that incorporate Building Concepts. These prompts focus of building conceptual understanding of standards. Examples: • Unit 1: TE 17, 22, 27, 36, 39, 40, 44, 55, 60 • Unit 2: TE 88, 106, 112, 124, 149, 162, 163, 165, 175 • Unit 3: TE 189, 202, 209, 214, 216, 220, 224, 230 • Unit 4: TE 274, 277, 284, 294, 304, 310, 314, 318, 320, 330, 356, 368, 374 • Unit 5: TE 400, 401, 406, 408, 409, 422, 426, 431, 440 442, 452, 453, 454, 462 • Unit 6: TE 490, 496, 505, 530 • Unit 7: TE 587, 590, 642, 648 • Unit 8: TE 660, 663, 669, 677	

Do the materials feature high-quality conceptual problems and conceptual discussion questions? Evaluate lessons, chapter/unit assessments, and homework assignments. NOTE: Example of conceptual problems might include such questions as "Find a number greater than 1/5 and less than 1/4," or "If the divisor does not change and the dividend increases, what happens to the quotient?"	**Evidence-** Examples: • Unit 1, Lesson 9: model and recite 1-more and 1-less sequences to 10. Unit 1 Test: Extended Response • Unit 2, Lesson 7: show ways to count on. Unit 2 Test: Extended Response proof drawing. • Unit 3, Lesson 8: Relate methods of solving problems. Unit 3 Test: Extended Response relate addition and subtraction. • Unit 4, Lesson 10: Relating digits in a two-digit number. Unit 4 Test: Extended Response number comparison. • Unit 5, Lesson 5: Reason and understand Puzzled Penguin. • Unit 6, Lesson 7: Solve and discuss with comparison bars. • Unit 7, Lesson 8: Working with equal shares. • Unit 8, Lesson 2: Methods of 2-digit addition	
Do the materials feature opportunities to identify correspondences across mathematical representations? Evaluate lessons, chapter/unit assessments and homework assignments. NOTE: Examples of evaluating this Criterion might include looking at whether students are supported in identifying correspondences among: the verbal description of a situation, the diagrams that distill its mathematical features, and the equations that model it; or equivalent forms of numbers (e.g., 3 and 6/2) and the number line; or rational number operations and representations of them via models such as the vector model; or the expression that defines a function and the graph that shows the relationship.	**Evidence-** Examples: • Unit 1, Lesson 9: model and recite 1-more and 1-less sequences to 10. • Unit 2, Lesson 7: show ways to count on. • Unit 3, Lesson 8: Relate methods of solving problems. • Unit 4, Lesson 10: Relating digits in a two-digit number. • Unit 5, Lesson 5: Reason and understand Puzzled Penguin. • Unit 6, Lesson 7: Solve and discuss with comparison bars. • Unit 7, Lesson 8: Working with equal shares. • Unit 8, Lesson 2: Methods of 2-digit addition	

Metric AC1E **The materials are designed so that students attain the fluencies and procedural skills required by the Standards.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Major Work for the grade being evaluated that relate specifically to fluency and procedural skill to use throughout the questions associated with this metric. NOTE: Some examples of Standards that call for procedural skill and fluency include: K.OA.A.5, 1.OA.C.6, 2.OA.B.2, 2.NBT.B.5, 3.OA.C.7, 3.NBT.A.2, 4.NBT.B.4, 5.NBT.B.5, 6.NS.B.2, and 6.NS.B.3, 6.EE.A, 7.NS.A, 7.EE.A.1,7.EE.B.4a, 8.EE.C.7, 8.EE.C.8b For context, read Criterion #4b in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).		**Use the questions for Metric 1B to evaluate Metric 1 B. Record evidence for each question and rate Metric 1B.** **(Reviewer only.)** **_X__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Is progress toward fluency and procedural skill interwoven with students' developing conceptual understanding of the operations in question? Evaluate lessons, chapter/unit assessments, daily routines, and homework assignments for evidence that the development of fluency and procedural skill is supported by conceptual understanding.	**Evidence-** A Path to Fluency: Kindergarten through Grade 5 is a fluency plan that shows how the curriculum achieves fluency with the Common Core Standards suggested for each grade through targeted practice. This can be found in the Teachers Edition on page xxvi.	
Are purely procedural problems and exercises present that include cases in which opportunistic strategies are valuable and generic cases that require efficient algorithms present? Evaluate lessons, chapter/unit assessments, daily routines, and homework assignments. NOTE: Examples of problems in which opportunistic strategies are valuable might include the sum 698 + 240 or the system x + y = 1, 2x + 2y = 3. Examples of generic cases that require efficient algorithms might include the sum 8767+2286 or the system 6y + x = x + 3, – x = 1 + 2y.	**Evidence-** Common Core Standard 1.OA.6: Add and subtract within 20, demonstrating fluency for addition and subtraction within 10. Use strategies such as counting on, making ten, decomposing a number leading to a ten, using the relationship between addition and subtraction, and creating equivalent but easier or known sums. Examples: • Unit 1: Patterns with partners through 10. • Unit 2: Transition to equations with unknown addends. • Unit 3: Focus on unknown partners represented as addition and subtraction. • Unit 4: Exploring tens and ones in 2-digit numbers. • Unit 8: Two digit addition	
Do the materials in grades K–6 provide repeated practice toward attainment of fluency Standards? Evaluate lessons, daily routines, and homework assignments for evidence of repeated practice toward attainment of the following K–6 Standards that set an explicit expectation of fluent (accurate and reasonably fast) computation: K.OA.A.5, 1.OA.C.6, 2.OA.B.2, 2.NBT.B.5, 3.OA.C.7, 3.NBT.A.2, 4.NBT.B.4, 5.NBT.B.5, 6.NS.B.2, 6.NS.B.3.	**Evidence-** Curriculum provides repeated practice to attainment of fluency for the standards. • A Path to Fluency: TE page xxvi • Quick Practice: TE opening page to every lesson • Fluency Checks: Assessment Guide pages 136-153 • Daily Routines: TE Volume 1 pages xxxi-xxxiv and TE Volume 2 pages xxxi-xxxiv	

Metric AC1C **The materials are designed so that teachers and students spend sufficient time working with engaging applications, without losing focus on the Major Work of each grade.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Major Work for the grade being evaluated that relate specifically application to use throughout the questions associated with this metric. NOTE: Some examples of clusters or Standards that call for application include: K.OA.A.2, 1.OA.A, 2.OA.A, 3.OA.A.3, 3.OA.D.8, 4.OA.A.3, 4.NF.B.3d, 4.NF.B.4c, 5.NF.B.6, 5.NF.B.7c, 6.RP.A.3, 6.NS.A.1, 6.EE.B.7, 6.EE.C.9, 7.RP.A, 7.NS.A.3, 7.EE.B.3, 8.EE.C.8c, 8.F.B For context, read Criterion #4c in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Curriculum uses a wide range of word problems to expose students to problem solving: understanding the situation, representing the situation, solving the problem with representation, and reflecting on the answer to ensure it makes sense. There are a wide variety of activities to help students understand problems: using math talk, acting out, retelling, etc.	**Use the questions for Metric 1C to evaluate Metric 1C. Record evidence for each question and rate Metric 1C.** **(Reviewer only.)** **_X__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Are there are single- and multi-step contextual problems, including non-routine problems, that develop the mathematics of the grade, afford opportunities for practice, and engage students in problem solving? Do the problems attend thoroughly to those places in the content Standards where expectations for multi-step and real-world problems are explicit? Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** Curriculum encourages student to use math drawings, visual models, and manipulatives as tools to represent problems/situations. Different problem types can be found in the introduction to the curriculum on page xxviii. This table shows how problem types are incorporated across the grades.	
Do application problems particularly stress applying the Major Work of the grade? Evaluate lessons, chapter/unit assessments, and homework assignments. NOTE: Examples of evaluating this Criterion might include looking at: how well, by the end of grade 2, students using the materials as designed can represent and solve a full range of one-step addition and subtraction word problems; or how well, by the end of grade 3, students using the materials as designed can represent and solve a full range of one-step multiplication and division word problems; or how well these basic situation types for each operation are carried coherently across the grades, (e.g., with fractions and algebraic expressions); or, in all grades, whether the problems connect concepts, Standards, and domains in ways that are natural and important. For a list of situation types for one-step addition, subtraction, multiplication, and division problems, see Situation Types for the Operations in Word Problems	**Evidence-** Examples: • Unit 3, Lessons 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, unit test • Unit 4, Lessons 4, 10, 14, 15, unit test • Unit 5, Lessons 1, 3, 4, 5, 10, unit test	

Does modeling [illegible] slowly across K–8, with applications that are relatively simple in earlier grades and when students are encountering new content? In grades 6–8, do the problems begin to provide opportunities for students to make their own assumptions or simplifications in order to model a situation mathematically? Read Standard for Mathematical Practice 4, Model with Mathematics. Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** Examples: • Unit 1, Lesson 5: Partners of 7; Lesson 8: Partners of 10 • Unit 2, Lesson 1: Represent Addition; Lesson 12: Practice with Subtraction • Unit 3, Lesson 1: Explore Unknowns; Lesson 9: Relate Addition and Subtraction Situations • Unit 4, Lesson 3: Represent and Compare Teen Numbers; Lesson 16: Practice with 2-Digit Numbers • Unit 5, Lesson 1: Unknown Partners with Teen Totals; Lesson 10: Add and Subtract Multiples of 10	
Alignment Criterion 1: **Rigor and Balance** **Materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.** **AC1** Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 out of 6 points, the Criterion has not been met. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)** **Before moving to Alignment Criterion 2, record the final Meets or Does Not Meet rating in the Evaluation Summary.**		**(Reviewer only.)** **_X__Meets** **____Does Not Meet** **Strengths/Weaknesses:**

Directions for Alignment Criterion 2

Standards for Mathematical Practice

Alignment Criterion 2: Standards for Mathematical Practice

Materials must demonstrate authentic connections between content Standards and practice Standards.

The Standards require that designers of instructional materials connect the mathematical practices to mathematical content in instruction. Thus, materials must demonstrate authentic connections between content Standards and practice Standards.

Required Materials:

- Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf)
- Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)
- Focus by Grade Level for the grade being evaluated (www.achievethecore.org/focus)
- From the materials being evaluated: teacher guides, student texts and workbooks

Rating this Criterion

Alignment Criterion 2 is rated as Meets or Does Not Meet.

To rate Alignment Criterion 2, first rate metrics 2A, 2B, and 2C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). For each metric, guiding questions are provided to aid in gathering evidence.

Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 2 if the materials earn 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as mathematical practices, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.

Metric AC2A:
Materials address the practice Standards in such a way as to enrich the Major Work of the grade; practices strengthen the focus on Major Work instead of detracting from it, in both teacher and student materials.

How to Find the Evidence:

Familiarize yourself with the Major Work of the grade being evaluated (see the Focus by Grade Level documents.)

Evaluate teacher and student materials for evidence that the mathematical practices support and connect to the focus of the grade.

NOTE: Examples of evaluating this Criterion might include looking at whether, in grades K–5, students using the materials are supported to look for and express regularity in repeated reasoning about the addition table, the multiplication table, the properties of operations, the relationship between addition and subtraction or multiplication and division, and the place value system; or whether, in grades 6–8, students using the materials are supported to look for and express regularity in repeated reasoning about proportional relationships and linear functions.

For context, read Criterion #8 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013).

Evidence-

In the overview for the curriculum, each unit includes a Getting Ready to Teach the Unit using the Common Core Standards for Mathematical Practices. This part of the overview for each unit indicates what concepts, skills, and problem solving the students will learn in that unit and how the students will demonstrate their understanding. Mathematical Standards are also identified in each lesson of every unit.

Examples:

- Unit 1: TE 1Q-1X
- Unit 2: TE 79S-79Z
- Unit 3: TE 185Y-185EE
- Unit 4: TE 273T-273AA
- Unit 5: TE 397Q-397X
- Unit 6: TE 489P-489W
- Unit 7: TE 555R-555Y
- Unit 8: TE 659M-659T

(Reviewer only.)

_X__Meets (2)

____Partially Meets (1)

____Does Not Meet (0)

Metric AC2B **Materials attend to the full meaning of each practice Standard.** **How to Find the Evidence:** For context, read Criterion #7 and Criterion #9 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).		**Use the questions for Metric 2B to evaluate Metric 2B. Record evidence for each question and rate Metric 2B.** **(Reviewer only.)** **_X__Meets (2)**
Over the course of any given year of instruction, is each mathematical practice Standard meaningfully present in the form of assignments, activities, or problems that stimulate students to develop the habits of mind described in the practice Standard? Evaluate lessons, chapter/ unit assessments, and homework assignments for evidence of each mathematical practice being meaningfully present in instruction.	**Evidence-** At the start of every unit, the curriculum provides an over view of Common Core State Standards for Mathematics that aligns every lesson in the unit with the Mathematical Practices and the standards that will be taught in the unit. Examples: • Unit 1: TE 1H-1I • Unit 2: TE 79J-79K • Unit 3: TE 185H-185I • Unit 4: TE 273D-273E • Unit 5: TE 397H-397I • Unit 6: TE 489H-489I • Unit 7: TE 555J-555K • Unit 8: TE 659C Each unit also includes a Getting Ready to Teach the Unit using the Common Core Standards for Mathematical Practices. This part of the overview for each unit indicates what concepts, skills, and problem solving the students will learn in that unit and how the students will demonstrate their understanding. Mathematical Standards are also identified in each lesson of every unit. Examples: • Unit 1: TE 1Q-1X • Unit 2: TE 79S-79Z • Unit 3: TE 185Y-185EE • Unit 4: TE 273T-273AA • Unit 5: TE 397Q-397X • Unit 6: TE 489P-489W • Unit 7: TE 555R-555Y • Unit 8: TE 659M-659T	**____Partially Meets (1)** **____Does Not Meet (0)**

Do the materials the practice Standards as developing across grades or grade bands? Are the practice Standards in early grades appropriately simple? Do they display an arc of growing sophistication across the grades?	**Evidence-** The following examples provided evidence of the practice standards developing across the grade level in the Getting to Teach the Unit Using the Common Core Standards for Mathematical Practice. Each Mathematical Practice is listed with examples from within the unit as to how they are developing across the grade. Examples: • Unit 1: TE 1Q-1X • Unit 2: TE 79S-79Z • Unit 3: TE 185Y-185EE • Unit 4: TE 273T-273AA • Unit 5: TE 397Q-397X • Unit 6: TE 489P-489W • Unit 7: TE 555R-555Y • Unit 8: TE 659M-659T	
Are there teacher-directed materials that explain the role of the practice Standards in the classroom and in students' mathematical development? Are alignments to practice Standards accurate?	**Evidence-** Within each lesson of the curriculum the Mathematical Practices incorporated have been identified with each activity and has suggestions for the teacher to help implement and support the practices. The last lesson in every unit focuses explicitly on the Mathematical Practice and their practical application for student to solve real world problem. Examples: • Unit 1, Lesson 9 • Unit 2, Lesson 16 • Unit 3: Lesson 11 • Unit 4: Lesson 18 • Unit 5: Lesson 11 • Unit 6: Lesson 9 • Unit 7: Lesson 14 • Unit 8: Lesson 6	
Metric AC2C: **Materials support the Standards' emphasis on mathematical reasoning.** **How to Find the Evidence:** For context, read Criterion #10 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).		**Use the questions for Metric 2C to evaluate Metric 2C. Record evidence for each question and rate Metric 2C.** **(Reviewer only.)** **_X__Meets (2)**

Do the materials support students in constructing viable arguments and critiquing the arguments of others concerning grade-level mathematics that is detailed in the content Standards? Read Standard for Mathematical Practice 3. Evaluate teacher and student materials to ensure that students are given opportunities to reason with grade-level mathematics.	**Evidence-** Curriculum includes evidence of the progression of Mathematical Practices in the research and background section of the TE. See Teacher Edition pages: 1S. 79U, 185S, 273V, 397S, 489R, 555T, and 659O Mathematical Practice 3 – Construct viable arguments and critique the reasoning of others is part of the progression across the grade level curriculum. Mathematical Practices are embedded in every lesson of the curriculum. Evidence of Mathematical Practice 3 is included in the following lessons: • Unit 1 Lessons: 1,2,3,4,5,6,7,8,9 • Unit 2 Lessons: 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16 • Unit 3 Lessons: 1,2,3,4,6,7,8,9,10,11,12 • Unit 4 Lessons: 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18 • Unit 5 Lessons: 1,2,3,4,5,6,7,8,9,10,11 • Unit 6 Lessons: 1,2,3,4,5,6,7,8,9 • Unit 7 Lessons: 1,2,3,4,5,6,7,8,9,10,11,12,13,14 • Unit 8 Lessons: 1,2,3,4,5,6	____**Partially Meets (1)** ____**Does Not Meet (0)**
Do the materials support students in producing not only answers and solutions, but also, in a grade-appropriate way, arguments, explanations, diagrams, mathematical models, etc., especially in the Major Work of the grade? Familiarize yourself with the Major Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate teacher and student materials, to understand the types of work students are expected to produce.	**Evidence-** Curriculum has a Puzzled Penguin throughout the materials that enables students to construct grade-appropriate viable arguments to explain why Puzzled Penguin is wrong and explain how to solve the problem correctly. Examples of Puzzled Penguin found on these pages in the TE: • Unit 1: 4, 22 • Unit 2: 100, 110, 166 • Unit 3: 236, 251 • Unit 7: 588, 643 • Unit 8: 672 Examples of Puzzled Penguin in Student Workbook can be found on these pages: • 50, 70, 103, 120, 122, 152, 164 ,179, 202, 208, 250 Although it is important to determine why Puzzled Penguin is wrong and construct a grade-appropriate response; it would be helpful if Puzzled Penguin was not always wrong. It would be beneficial for students to construct grade-appropriate arguments to explain why he is right as well.	

Do materials exp attend to the specialized language of mathematics? Is the language of argument, problem solving, and mathematical explanations taught rather than assumed? Evaluate teacher and student materials, paying attention to how mathematical language is taught. NOTE: Examples of evaluating this Criterion might include looking at whether students are supported in: basing arguments on definitions; using the method of providing a counterexample; or recognizing that examples alone do not establish a general statement.	**Evidence-** Curriculum materials provide a word list of math vocabulary words used within each lesson. The vocabulary words can be found on the lesson overview for every lesson where new vocabulary is introduced. Vocabulary words are used repeatedly throughout the materials even though they are no longer considered "new". Examples of vocabulary words: • Unit 1, Lesson 1: more, less, 5-group • Unit 2, Lesson 1: add, partners, plus sign, total • Unit 3, Lesson 1: unknown partner • Unit 4, Lesson 1: decade number, tens, ones, digit • Unit 5, Lesson 1: unknown partner • Unit 6, Lesson 1: sort, data, compare, more, most, fewer, fewest • Unit 7, Lesson 1: clock, hour, minute, hour hand, minute hand • Unit 8, Lesson 1: group Math Talk is also explicitly used throughout the entire curriculum. It can be found in every lesson within each unit. It is indicated with a red conversation bubble with the words Math Talk. Math Talk allows students to exchange strategies and reasoning with peers to further explain their thinking using precise mathematical vocabulary and Math Talk. Mathematical Practice Standards have been incorporated into all lessons throughout the curriculum. Students are encouraged to use a variety of math drawings, symbols/equations, and models to represent problems and situations. Page xxvii provides an outline of the problem solving processes this curriculum integrates into units and lessons.	

Alignment Criterion 2:
Standards for Mathematical Practice

Materials must demonstrate authentic connections between content Standards and practice Standards.

AC2 Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 out of 6 points, the Criterion has not been met. Check the final rating.
Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion.
(Reviewer only.)

Before moving to Alignment Criterion 3, record the final Meets or Does Not Meet rating in the Evaluation Summary.

(Reviewer only.)

_X__Meets

____Does Not Meet

Strengths/Weaknesses:

Alignment Criterion 3:
Access to the Standards for All Students

Materials must provide supports for English Language Learners and other special populations.

Because Standards are for all students, alignment requires thoughtful support to ensure all students are able to meet the Standards. Thus, aligned materials must provide supports for English Language Learners and other special populations.

Required Materials:

- Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf)
- Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)
- From the materials being evaluated: teacher guides, student texts and workbooks

Rating this Criterion:
Alignment Criterion 3 is rated as Meets or Does Not Meet.

To rate Alignment Criterion 3, first rate metrics 3A, 3B, and 3C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points).

Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 3 if the materials earn 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as support for special population, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.

Metric AC3A **Support for English Language Learners and other special populations is thoughtful and helps those students meet the same Standards as all other students. The language in which problems are posed is carefully considered.** **How to Find the Evidence:** Evaluate teacher and student materials, paying attention to supports offered for special populations.	**Evidence-** Materials have lessons designed to accommodate a variety of students and academic skills. Each unit has a differentiated instruction overview in the unit planning section where instruction for ELL students is outlined with an overall objective for the unit. Every lesson within the units also has support for ELL students; including leveled support for beginning, intermediate, and advanced ELL students. Examples: • Unit 1: Planning TE 1J-1K; Lesson 3 page 17. • Unit 2: Planning TE 79L-79M; Lesson 9 page 130 • Unit 3: Planning TE 185J-185K; Lesson 6 page 221 • Unit 4: Planning TE 273P-273Q; Lesson 14 page 361 • Unit 5: Planning TE 397J-397K; Lesson 10 page 469 • Unit 6: Planning TE 489J-489K; Lesson 6 page 531 • Unit 7: Planning TE 555L-555M; Lesson 2 page 563 • Unit 8: Planning TE 659F-659G; Lesson 12 page 637 Support is also provided for other special populations with leveled writing prompts and differentiated instruction cards. Examples: • Unit 1: Lesson 6 page 49 • Unit 2: Lesson 1 page 83 • Unit 3: Lesson 4 page 211 • Unit 4: Lesson 11 page 345 • Unit 5: Lesson 5 page 435 • Unit 6: Lesson 9 page 547 • Unit 7: Lesson 7 page 599 • Unit 8: Lesson 2 page 673	**Reviewer only.)** **_X__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**

Metric AC3B **Materials provide appropriate level and type of scaffolding, differentiation, intervention, and support for a broad range of learners with gradual removal of supports, when needed, to allow students to demonstrate their mathematical understanding independently.** **How to Find the Evidence:** Evaluate teacher and student materials, paying attention to whether materials provide differentiation that will lead all learners to engage with on-grade-level content.	**Evidence-** Curriculum has a response to intervention overview page that provides focused instruction on the standards for every unit. There were also two separate books provided with the core curriculum for Tier 1 intervention lessons and Tier 2 and 3 intervention skills, examples and lessons. Each response to intervention book provides opportunities for students to have differentiated instruction based on their specific needs. Examples of response to intervention overview: • Unit 1: Planning TE 1L • Unit 2: Planning TE 79N • Unit 3: Planning TE 185L • Unit 4: Planning TE 273R • Unit 5: Planning TE 397L • Unit 6: Planning TE 489L • Unit 7: Planning TE 555N • Unit 8: Planning TE 659H	**Reviewer only.)** **_X__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Metric AC3C: **Design of lessons recommends and facilitates a mix of instructional approaches for a variety of learners such as using multiple representations (e.g., including models, using a range of questions, checking for understanding, flexible grouping, pair-share).** **How to Find the Evidence:** Evaluate teacher materials, noting instructional approaches suggested for whole class and differentiated lessons and activities.	**Evidence-** Curriculum provides a variety of methods to enable all students advance. Units are organized into Big Ideas grouping a number of lessons together under one topic with a quick quiz assessment before moving on to the next topic within the unit. Examples: • Unit 1, Lessons 1-2: Big Idea – Numbers through 10, Lesson focus: visualize and represent numbers 1-10. Each lesson begins with quick practice following daily routines utilizing student leaders. Math background is provided as a resource that can provide conceptual understanding for teachers. • Lesson 1 Activity 1 incorporates whole group discussion with the Ask for Ideas discussion points. The lesson uses manipulatives and whole group strategies to engage students. • Lesson 1 Activity 2 incorporates more manipulatives and kinesthetic movement with student hands in a whole group discussion to elicit varied responses. Puzzled Penguin is also included to construct viable arguments and evaluate student reasoning. • At the end of the lesson is a formative assessment to check for student understanding.	**Reviewer only.)** **_X__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**

Alignment Criterion 3: Access to the Standards for All Students **Materials must provide supports for English Language Learners and other special populations.** AC3 Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 points, the Criterion has not been met. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion.**(Reviewer only.)** **Move to the Evaluation Summary and record the final Meets or Does Not Meet rating .**	**(Reviewer only.)** **__X_Meets** **____Does Not Meet** **Strengths/Weaknesses:**

Once an evaluation for alignment to the Shifts and major features of the CCSS has been conducted using Sections 1-3, it's important to evaluate for overall quality and best practices. A starting list of Indicators of Quality are suggested below. States, districts and others evaluating instructional materials are encouraged to add to this list to ensure materials reflect local contexts. For background information on some of the Indicators of Quality in this section, refer to pp.18–21 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).

Indicators of Quality	Evidence- Give specific examples.	Rating: (Reviewers only.)

1. Lessons are thoughtfully structured and support the teacher in leading the class through the learning paths at hand, with active participation by all students in their own learning and in the learning of their classmates.	**Evidence-** Materials provide a clear, thoughtful lesson plan for each lesson. Including math background information, activity focus, differentiated instruction, mathematical practices, Common Core State Standards, quick practice and daily routines. Each lesson provides the teacher with an estimated activity time and focus. Activities have whole class or individual work identified next to the focus strategy so the teacher knows when to allow students to work independently or to continue with a whole group approach. Math talk is encouraged and indicated on the lessons. Group/partner talk is used frequently to encourage interaction with peers enabling them to learn from each other not just the teacher. Examples of Math Talk: • Unit 6 Lesson 2 (page 496) Make comparisons using math talk. • Unit 7 Lesson 6 (pages 587-589) Math talk when reasoning with shapes and their attributes. Best practices and class management tools are given to the teacher to use as needed. Differentiation for ELL, intervention, on-level and challenge extension lessons are provided at the end of each lesson so the teacher can easily adapt as needed while teaching. Examples: • Unit 3 Lesson 10 (page 250): Activity one lesson duration: 40 minutes. Focus: review the relationship between known and unknown quantities in addition story problems. Differentiation for ELL students (page 251); differentiation for intervention, on-level, and challenge students (page 253) is clearly outlined and examples of activities are provided within the lesson.	**(Reviewer only.)** **__X___ Yes** **_____ No**

2. The underlying design of the materials includes both problems and exercises. (In solving problems, students learn new mathematics, whereas in working exercises, students apply what they have already learned to build mastery.) Each problem or exercise has a purpose. **NOTE: This Criterion does not require that the problems and exercises be labeled as such.**	**Evidence-** Materials are balanced in the number of problems and exercises. The majority of lessons begin with an activity that involves problems that utilize whole class activities and math talk; then the lesson progresses to individual work with exercises to apply knowledge procured in the current and prior lessons. Problems are well thought out; encouraging students to use background knowledge and their own strategies to begin to work through a new concept. Example: • Unit 2 Lesson 5 (page 104) students are working whole group to find an unknown total, students are encouraged to be detectives and use any method they choose to find the total; they will then share them with the class (math talk). • Unit 2 Lesson 6 (page 118) students use knowledge gained in prior lesson to complete exercises in the student workbook to find an unknown total.	**(Reviewer only.)** **__X___ Yes** **_____ No**
3. Design of assignments is not haphazard: exercises are given in intentional sequences in order to strengthen students' mathematical understanding.	**Evidence-** The materials have an intentional sequence and pacing. Page xxvi provides a Path to Fluency outline for the curriculum from kindergarten to grade 5. Outlining the progressions each grade level will take to provide students with the necessary skills to be fluent. Math Vocabulary builds on words and skills taught. There is no assumption that students know terminology, it is taught. It is often revisited to a deeper level in a later unit/lesson. Example: • Unit 3, Lesson 1: the vocabulary taught is: unknown partner • Unit 5, Lesson 1: unknown vocabulary is retaught	**(Reviewer only.)** **__X___ Yes** **_____ No**

4. There are separate teacher materials that support and reward teacher study including, but not limited to: discussion of the mathematics of the units and the mathematical point of each lesson as it relates to the organizing concepts of the unit, discussion on student ways of thinking and anticipating a variety of students responses, guidance on lesson flow, guidance on questions that prompt students thinking, and discussion of desired mathematical behaviors being elicited among students.	**Evidence-** Prior to teaching a lesson, an extensive introduction is provided in the overview of the curriculum (pages xvii-xxx). In the curriculum introduction teacher learning/study is provided on math talk (pages xx-xxi xviii and xx-xxi), teaching model: an inquiry learning path (page xix), classroom management (page xxii), mathematical practices (pages xxii-xxiv), and algebraic problems that appear in all domains (pages xxiv-xxv). A path to fluency is provided for grades Kindergarten through grade 5 (page xxvi) and a pacing guide for all units and lessons in the Grade 1 curriculum (page xxx). Information is provided on the problem solving process and problem types that will occur within the curriculum (pages xxvii-xxix). Detailed daily routines are outlined for teachers to study and incorporate into their classrooms based on the unit/book volume (pages xxxi-xxxiv) Each unit is provided with a detailed overview including learning progressions across grades and content standards across the grades for the prevalent Common Core Standards addressed within it. Response to intervention and cross curricular connections are provided prior to the unit lessons. A putting the research into practice and math background is also provided prior to teaching each unit. Each unit is provided with a "Getting Ready to Teach Unit .." section that provides teachers with examples of common errors students may make and strategies to help teachers further explain a concept/strategy. Examples of teacher support/ study: • Unit 5: Putting Research into Practice (page 397O of TE); teacher study of equity with current research. • Unit 6: Getting Ready to Teach Unit 6; Common Errors (page 489X of TE); Puzzled Penguin provides examples of possible student misconceptions. • Unit 7: Math Background (pages 555AA-555LL of TE); strategies to anticipate and enhance student learning are provided for each lesson of the unit.	**(Reviewer only.)** __X__ **Yes** _____ **No**
5. Manipulatives suggested in the materials are faithful representations of the mathematical objects they represent and are connected to written methods.	**Evidence-** Curriculum manipulatives are a great additional resource but are not a requirement to teach the curriculum.	**(Reviewer only.)** __X__ **Yes** _____ **No**

6. Materials i de a variety of curriculum-embedded assessments. Examples include pre-, formative, summative, and self-assessment resources.	**Evidence-** Materials provide a Beginning of the Year Inventory Test that tests student prior knowledge. Each lesson has a quick Formative Assessment: Check for Understanding that can be done at the end of every lesson to assess student understanding of lesson concepts. Quick Quizzes are provided for every unit; they fall at the end of a group of lessons that have focused on a Big Idea. There are 1-3 quizzes in each unit. There is a Unit Review and Test at the end of every unit with two alternate tests in the Assessment Guide Book. An End of the Year Test is also provided in the Assessment Guide Book to determine student growth and understanding. Examples: • Formative Assessments: Check for Understanding Unit 6, Lesson 5 page 518 • Quick Quizzes: Unit 7 (3 Quizzes) Assessment Guide Book pages 110-112 • Unit Review and Test: Unit 8 pages 701-703; Alternate Tests: A and B, Assessment Guide Book pages 127-130 • Beginning of the Year Inventory: Assessment Guide Book pages 4-14 • End of the Year Test: Assessment Guide Book: 158-165	**(Reviewer only.)** **__X___ Yes** **_____ No**
7. Assessments contain aligned rubrics, answer keys, and scoring guidelines that provide sufficient guidance for interpreting student performance.	**Evidence-** Curriculum review and test for each unit has an answer key, and each question is aligned the Common Core Standards covered during the course of the unit. The TE provides Common Errors student might face and reteach activities that can be done prior to testing or as a form of remediation post assessment. Two alternate tests are provided for each unit test in the Assessment Guide Book in the event that students need an alternate assessment. Examples: • Unit 5 Review and Test: TE 483-487, Alternate Tests: Assessment Guide Book pages 82-91	**(Reviewer only.)** **__X__ Yes** **_____ No**
8. Materials assess student proficiency using methods that are accessible and unbiased, including the use of course-level language in student prompts.	**Evidence-**	**(Reviewer only.)** **__X__ Yes** **_____ No**

9. Materials a[illegible]arefully evaluated by qualified individuals, whose names are listed, in an effort to ensure freedom from mathematical errors and course-level appropriateness.	**Evidence-** The author is clearly indicated on the title page of the teacher's edition. Curriculum was developed from the Children's Math Worlds Research Project conducted by Dr. Karen Fuson (author). The material is based upon work supported by the National Science Foundation and is funded in part by the National Science Foundation.	**(Reviewer only.)** **__X___ Yes** **_____ No**
10. The visual design supports students in engaging thoughtfully with the subject. Navigation through the text is clear.	**Evidence-** Materials are bright and colorful. Student workbook pages are not cluttered with too much text, pictures, or drawings. There is a building repetition to the activities that allows students to understand new concepts/lessons based on prior concepts/lessons. Example: • Unit 3 lessons work with unknown addends within 10 using equations and story problems. These strategies are then built on in Units 4, 5, and 6 with numbers within 20.	**(Reviewer only.)** **__X___ Yes** **_____ No**

11. The mate[illegible] engage parents in appropriate ways. For example, homework assignments in elementary grades, consist of routine problems, practice with getting answers, and fluency-building exercises that parents can easily support.	**Evidence-** At the beginning of every unit, in the student handbook, there is a Family Letter that describes the concepts of the upcoming unit. It includes math vocabulary that parents may or may not be familiar with so they can understand the terminology used in the classroom, on workbook pages, and homework. Throughout the rest of the unit there are occasional Family Letters that explain any new math vocabulary or conceptual understandings that have become relevant in the current unit. Examples of Family Letters can be found in the student work book at the start of every new unit: • Unit 1, Student Workbook pages 1 and 9 • Unit 2, Student Workbook pages 29 and 37 • Unit 3, Student Workbook page 63 • Unit 4, Student Workbook pages 97 and 101 • Unit 5, Student Workbook pages 133 and 157 • Unit 6, Student Workbook pages 171 • Unit 7, Student Workbook pages 195 • Unit 8, Student Workbook pages 241 Homework can be found in the Homework and Remembering Blackline Masters and each page is aligned with the unit and lesson that is being taught. Homework format, vocabulary, and terminology is consistent with lessons and student workbook pages. Homework is a review of prior lessons/units and does not cover a new concept that has not be explicitly taught in the materials. For example: Unit 2 Lesson 6 Lesson Focus: Addition Strategies- Counting On; Homework for Unit 2 Lesson 6 reviews counting on to find the total (Unit 2 Lesson 6) and partners of ten (Unit 1, Lessons 8-9)	**(Reviewer only.)** **__X___ Yes** **_____ No**

Reviewer IMET Evaluation Summary **Title/Level:** Math Expressions Common Core 1st Grade

Publisher: Houghton Mifflin Harcourt Publishing Company **Copyright: 2013** **ISBN:** 978-0-547-82479-6

Reviewer ID # _____ **Date Review Completed:** March 7, 2016

Non-Negotiable Criteria- Each Non-Negotiable must be met in order for the Non-Negotiable Alignment Criteria to be met overall.	
Non-Negotiable 1: Freedom from Obstacles to Focus **__X__ Meets** **_____ Does Not Meet**	**Non- Negotiable 2: Focus and Coherence** **__X__ Meets** **_____ Does Not Meet**
Non-Negotiable Overall: **__X__ Meets** **_____ Does Not Meet**	
Alignment Criteria- Each Alignment Criterion must be met with a sufficient number of points in order for Alignment Criteria to be labeled as "Meets" overall. The more points the materials receive on the Alignment Criteria, the better they are aligned.	

Alignment Criterion 1: Rigor and Balance	Alignment Criterion 2: Standards of Mathematical Practice	Alignment Criterion 3: Access Standards for All Learners
Points: __6__ of 6 possible. (Materials must receive at least 5 of 6 points to align.) __X___ Meets _____ Does Not Meet	Points: _6___ of 6 possible. (Materials must receive at least 5 of 6 points to align.) ___X__ Meets _____ Does Not Meet	Points: __6__ of 6 possible. (Materials must receive at least 5 of 6 points to align.) __X___ Meets _____ Does Not Meet

Alignment Criteria Overall:

_X__ Meets **_____ Does Not Meet**

If the mater meet both Non-Negotiables and relevant Alignment Cr on, they are aligned to the Shifts and major features o e Core Standards. **Do the materials meet every Non-Negotiable and Alignment Criterion? _X__ Yes _____ No**

What are the specific areas of strength and weakness based on this evaluation? Publishers or others modifying or developing assessments can use this information to make improvements and/or to remedy gaps in the alignment of assessment materials.

Strengths

- Teacher materials allow the teacher to understand the layout of the unit(s) with ease.
- Vocabulary and World Problems were engaging and age appropriate.
- Sub. New teachers could easily pick up and teach a lesson w/o too much stress.

Weakness

- It would be nice if Puzzled Penguin is right sometimes to make students think about the complexity of the concept.

2015-16 Mathematics Interim Review Recommendation & Summary

Publisher Name:	Houghton Mifflin Harcourt
Title:	Math Expressions Common Core
ISBN #	978-0-547-82480-2
Grade Level(s) or Course:	2nd Grade
Reviewer ID:	KS

RECOMMENDED AS:

__X__ **Core Mathematics Program-** a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials. Substantial evidence clearly supports the designation of this program as Core.

_____ **Other Mathematics Program-** a program that substantially, but partially, meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for supplemental materials. Substantial evidence clearly supports the designation of this program as Other.

_____ **Component Mathematics Program-** a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs. Substantial evidence clearly supports the designation of this program as Component.

_____ **Intervention Program-** a program designed and intended to target and support students' specific needs. Substantial evidence clearly supports the designation of this program as Intervention.

_____ **Does not meet criteria** for recommendation as a Curricular Material or Online Resource for Mathematics.

EVIDENCE SUMMARY:

FOCUS-

All assessments within the curriculum do not assess standards/topics before the grade level where the standard.

COHERENCE-

Curriculum focus is on the major works of Grade 2 with support from supporting clusters.

RIGOR-

Curriculum expects students to work with high-level, high-quality conceptual problems.

CONCEPTUAL UNDERSTANDING-

Materials provide many opportunities to work across mathematical representations and conceptual discussion questions.

MATHEMATICAL PRACTICES-

Curriculum provides connections across all lessons between Content Standards and the mathematical practice Standards.

ACCESSIBILITY OF STANDARDS TO ALL STUDENTS-

Differentiation of all students, ELL, and other Special Populations is provided on ALL lessons in EVERY unit.

OTHER:

2015-16 Interim Mathematics Review

Mathematics Evaluation Tool Grades K-8

Publisher: Houghton Mifflin Harcourt

Title of Material: Math Expressions Common Core 2nd Grade

Author: Dr. Karen C. Fuson

ISBN #: 978-0-547-82480-2 **Copyright** 2013

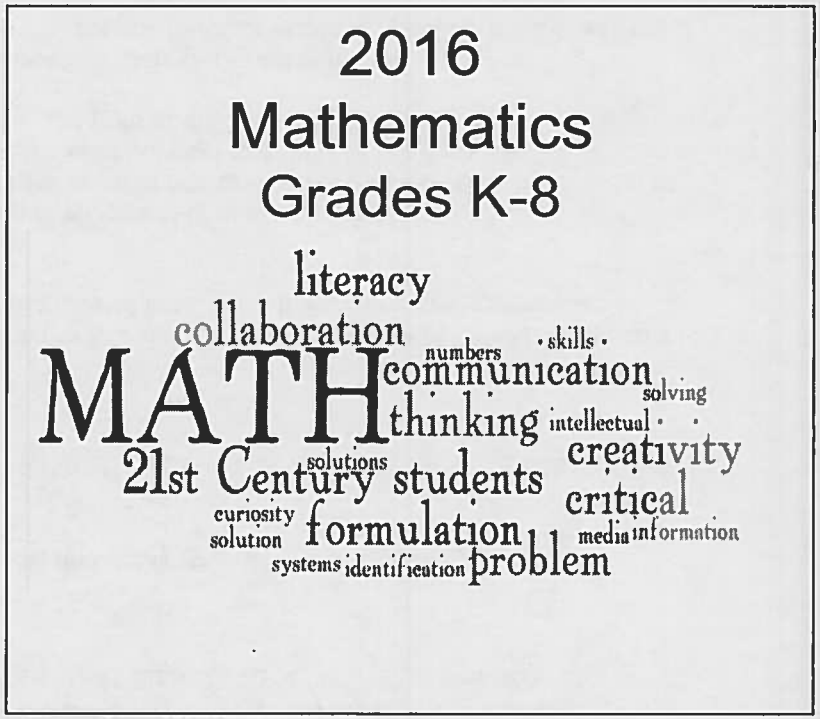
Reviewer ID: KJ

Core Mathematics Program- a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Core.

Other Mathematics Program- a program that substantially, but partially, meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Other.

Component Mathematics Program- a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs.
Substantial evidence clearly supports the designation of this program as Component.

Intervention Program- a program designed and intended to target and support students' specific needs.
Substantial evidence clearly supports the designation of this program as Intervention.



- Evaluation Form adapted from Instructional Materials Evaluation Toolkit (IMET).

The IMET was developed by Student Achievement Partners. Educators may use or adapt. http://creativecommons.org/licenses/by/3.0/ Download this tool at http://achievethecore.org/IMET

Instructional Materials Evaluation Tool

Mathematics, Grades K-8

What Are the Purposes of the IMET?

This Math IMET is designed to help educators determine whether instructional materials are aligned to the Shifts and major features of the Common Core State Standards (CCSS). The substantial instructional Shifts (http://www.corestandards.org/other-resources/key-shifts-inmathematics/) at the heart of the Common Core State Standards are:

- **Focus** strongly where the Standards focus
- **Coherence**: Think across grades and link to major topics within the grade
- **Rigor**: In major topics, pursue conceptual understanding, procedural skill and fluency, and application with equal intensity.

The IMET draws directly from the following documents:

- Common Core State Standards for Mathematics (www.corestandards.org/Math)
- Publishers' Criteria for the Common Core State Standards in Mathematics grade K-8 (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)

When to use the IMET

1. Purchasing materials: Many factors go into local purchasing decisions. Alignment to the Standards is a critical factor to consider. This tool is designed to evaluate alignment of instructional materials to the Shifts and the major features of the CCSS. It also provides suggestions of additional indicators to consider in the materials evaluation and purchasing process.

2. Evaluating materials currently in use: The IMET can be used to analyze the degree of alignment of existing materials and help to highlight specific, concrete flaws in alignment. Even where materials and tools currently in use fail to meet one or more of these criteria, the pattern of failure is likely to be informative. States and districts can use the evaluation to create a thoughtful plan to modify or combine existing resources in such a way that students' actual learning experiences approach the focus, coherence, and rigor of the Standards.

3. Developing programs: Those developing new programs can use this tool as guidance for creating aligned curricula.
Please note this tool was designed for evaluating comprehensive curricula (including any supplemental or ancillary materials), but it was not designed for the evaluation of standalone supplemental materials.

Who Uses the IMET?

Evaluating instructional materials requires both subject-matter and pedagogical expertise. Evaluators should be well versed in the Standards (www.corestandards.org/Math) for all grades in which materials are being evaluated. This includes understanding the Major Work of the grade (www.achievethecore/focus), the Supporting and Additional work, how the content fits into the progressions in the Standards (www.achievethecore.org/progressions), and the expectations of the Standards with respect to conceptual understanding, procedural skill and fluency, and application. Evaluators also should be familiar with the substantial instructional Shifts (http:// www.corestandards.org/other-resources/key-shifts-in-mathematics/) of Focus, Coherence and Rigor that are listed above.

Getting Started

Prior to Evaluation

Assemble all of the materials necessary for the evaluation. It is essential for evaluators to have materials for all grades covered by the program, as some criteria cannot be rated without having access to each grade. In addition, each evaluator should have a reference copy of the Common Core State Standards for Mathematics (CCSSM) and the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013).

Instructional Materials Evaluation Tool
Mathematics, Grades K-8

What Are the Purposes of the IMET?
This Math IMET is designed to help educators determine whether instructional materials are aligned to the Shifts and major features of the Common Core State Standards (CCSS). The substantial instructional Shifts (http://www.corestandards.org/other-resources/key-shifts-inmathematics/) at the heart of the Common Core State Standards are:
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- **Rigor**: In major topics, pursue conceptual understanding, procedural skill and fluency, and application with equal intensity.

The IMET draws directly from the following documents:
- Common Core State Standards for Mathematics (www.corestandards.org/Math)
- Publishers' Criteria for the Common Core State Standards in Mathematics grade K-8 (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)

When to use the IMET
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Evaluating instructional materials requires both subject-matter and pedagogical expertise. Evaluators should be well versed in the Standards (www.corestandards.org/Math) for all grades in which materials are being evaluated. This includes understanding the Major Work of the grade (www.achievethecore/focus), the Supporting and Additional work, how the content fits into the progressions in the Standards (www.achievethecore.org/progressions), and the expectations of the Standards with respect to conceptual understanding, procedural skill and fluency, and application. Evaluators also should be familiar with the substantial instructional Shifts (http:// www.corestandards.org/other-resources/key-shifts-in-mathematics/) of Focus, Coherence and Rigor that are listed above.

Getting Started
Prior to Evaluation

Assemble all of the materials necessary for the evaluation. It is essential for evaluators to have materials for all grades covered by the program, as some criteria cannot be rated without having access to each grade. In addition, each evaluator should have a reference copy of the Common Core State Standards for Mathematics (CCSSM) and the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013).

Before conducting the evaluation itself, it is important to develop a protocol for the evaluation process. The protocol should include having evaluators study the Publishers' Criteria and the IMET. It will also be helpful for evaluators to get a sense of each program overall before beginning the process. At a minimum, this would include reading the front matter of the text, looking at the table of contents and paging through multiple chapters.

Sections 1-3 below should be completed to produce a comprehensive picture of the strengths and weaknesses of the materials under evaluation. Information about areas in need of improvement or supplementation should be shared with internal and external stakeholders.

Navigating the Tool

Begin with Section 1: Non-Negotiable Alignment Criteria

- The Non-Negotiable Alignment Criteria must each be met in full for materials to be considered aligned to the Shifts and the major features of the Common Core State Standards. Each Non-Negotiable Alignment Criterion has one or more metrics associated with it; every one of these metrics must be met in order for the criterion as a whole to be met.

- Examine the relevant materials and use evidence to rate the materials against each criterion and its associated metric(s).

- Record and explain the evidence upon which the rating is based.

Continue to Section 2: Alignment Criteria

- The Alignment Criteria must each be met for materials to be considered aligned to the Shifts and the major features of the Common Core State Standards. Each Alignment Criterion has one or more metric associated with it; a specific number of these metrics must be met or partially met in order for the criterion as a whole to be met.

- Examine the materials in relation to these criteria, assigning each metric a point value. Rate the criterion as "Meets" or "Does Note Meet" based on the number of points assigned. The more points the materials receive on the alignment Criteria, the better they are aligned.

- Record and explain the evidence upon which the rating is based.

Proceed to Section 4: Indicators of Quality

- Indicators of Quality are important considerations that will help evaluators better understand the overall quality of instructional materials. These considerations are not criteria for alignment to the CCSS, but they provide valuable information about additional program characteristics. Evaluators may want to add their own indicators to the examples provided.

Directions for Non-Negotiable 1

Freedom from Obstacles to Focus

Criterion	Evidence- Give specific examples.	Rating: (Reviewer only.)
Non-Negotiable 1: **Freedom from Obstacles to Focus** **Materials must reflect the content architecture of the Standards by not assessing the topics named before the grade level where they first appear in the Standards.** The Standards foster students' progress to algebra by focusing strongly on arithmetic. Consistent with this focus, certain topics from outside of arithmetic appear only in later grades. Thus, to be aligned, materials must reflect the content architecture of the Standards by not assessing the topics named before the grade level where they first appear in the Standards. In this criterion, "topics named" means the topics that are explicitly named in Metric 1A. No other topics should be added to the list in Metric 1A. (Note that other topics in the standards are addressed in criterion NN2.)	**Required Materials** • Common Core State Standards for Mathematics (www.corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf) • From the materials being evaluated: teacher guides and all assessment components	**Rating this Criterion**: Non-Negotiable 1 is rated as Meets or Does Not Meet. To rate Non-Negotiable 1, begin by rating Metric 1A. Since Metric 1A is the only metric for Non-Negotiable 1, the rating for Non-Negotiable 1 is the same as the rating for Metric 1A. If Metric 1A is rated as Does Not Meet, include evidence of when the named topic(s) is/are assessed. If the metric is rated as Meets, list the grade(s) examined in the evaluation.

Metric NN1A: **Materials re[illegible] the basic architecture of the Standards by not assessing the listed topics before the grade level indicated.** • Probability, including chance, likely outcomes, probability models. (Introduced in the CCSSM in grade 7) • Statistical distributions, including center, variation, clumping, outliers, mean, median, mode, range, quartiles; and statistical association or trends, including two-way tables, bivariate measurement data, scatter plots, trend line, line of best fit, correlation. (Introduced in the CCSSM in grade 6) • Similarity, congruence, or geometric transformations. (Introduced in the CCSSM in grade 8) • Symmetry of shapes, including line/ reflection symmetry, rotational symmetry. (Introduced in the CCSSM in grade 4) **How to Find the Evidence:** Evaluate the table of contents, all chapter tests, all unit tests, and other such assessment components (including rubrics). For context, read Criterion #2 from the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013). NOTE: Grade alignments of other topics are addressed in Non-Negotiable 2, Focus and Coherence.) In this criterion, "topics named" means the topics that are explicitly named in Metric 1A. No other topics should be added to the list in Metric 1A. (Note that other topics in the standards are addressed in criterion NN2.)	**Evidence-** Unit 1: Instructional ti[illegible]pent on critical focus area 1 of Grade 2. Building fluency with addition and subtraction. Focus on Strategies for Addition and Subtraction, Addition and Subtraction Situations, Complex Situations. Unit Test/Assessment pages 153-158. Unit 2: Instructional time spent on critical focus areas 1 and 2 of Grade 2. Building fluency with addition and subtraction & Extending Understanding of Base-Ten Notation. Focus on Place Value; Add 2-Digit Numbers, Money and Fluency for Addition within 100. Unit Test/Assessment pages 273-276. Unit 3: Instructional time spent on critical focus area 3 of Grade 2. Using standard units of measure. Focus on length and shapes; estimate, measure and make line plots. Unit Test/Assessment pages 345-348 Unit 4: Instructional time spent on critical focus area 1 of Grade 2. Building fluency with addition and subtraction. Focus on totals of mixed coins and bills, multi-digit subtraction strategies, word problems: addition and subtraction within 100. Unit Test/Assessment pages 501-504 Unit 5: Instructional time spent on critical focus area 3 of Grade 2. Using standard units of measure. Focus on time, graphs, and word problems. Unit Test/Assessment pages 577-580 Unit 6: Instructional time spent on critical focus areas 1 and 2 of Grade 2. Building fluency with addition and subtraction & Extending Understanding of Base-Ten Notation. Focus on understanding numbers to 1,000; adding to 1,000, 3-digit subtraction, 3-digit addition and subtraction. Unit Test/Assessment pages 695-698 Unit 7: Instructional time spent on critical focus areas 3 and 4 of Grade 2. Using standard units of measure, and describing and analyzing shapes. Focus on arrays and equal shares and relate addition and subtraction to length. Unit Test/Assessment pages 759-762	**(Reviewer only.)** **_X_Meets** **____Does Not Meet**

Non-Negotiable 1: Materials must reflect the content architecture of the Standards by not assessing the topics named* before the grade level where they first appear in the Standards.

NN 1 If Metric 1A was rated as Meets, then rate Non-Negotiable 1 as Meets. If Metric 1A was rated as Does Not Meet, then rate Non- Negotiable 1 as Does Not Meet. Check the final rating.

Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion.**(Reviewer only.)**

Before moving to Non-Negotiable 2, record the final Meets or Does Not Meet rating in the Evaluation Summary.

(Reviewer only.)

_X_Meets

____Does Not Meet

Strengths/Weaknesses:

Each unit assesses topics under one or more of the four critical areas of instruction time for first grade. The curriculum does not assess topics above the first grade level. Unit test/assessments have standards for each test question listed and defined in the review and test lesson.

Directions for Non-Negotiable 2

Focus and Coherence

Non-Negotiable 2: **Focus and Coherence** **Materials must focus coherently on the Major Work of the grade in a way that is consistent with the progressions in the Standards.** Focus and coherence are the two major evidence-based design principles of the Common Core State Standards for Mathematics (CCSSM, p. 3). Focus is necessary in order to fulfill the ambitious promise the states have made to their students by adopting the Standards: greater achievement at the college and career ready level; greater depth of understanding of mathematics; and a rich classroom environment in which reasoning, sense-making, applications, and a range of mathematical practices flourish. In simpler terms, a mile-wide, inch-deep curriculum translates to less time per topic. Less time means less depth and moving on without many students. Thus, materials must focus coherently on the Major Work of the grade in a way that is consistent with the progressions in the Standards.	**Required Materials** • Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf) • Focus by Grade Level for the grade being evaluated (www.achievethecore.org/focus) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion:** Non-Negotiable 2 is rated as Meets or Does Not Meet. To rate Non-Negotiable 2, first rate metrics 2A–2H. Each of these eight metrics must be rated as Meets in order for Non-Negotiable 2 to be rated as Meets. Rate each metric 2A-2H as Meets or Does Not Meet/Insufficient Evidence. If the evidence examined shows that the Criterion is met, then mark the Criterion Meets. If the evidence examined shows that the Criterion is not met—or if there is insufficient evidence to make a determination—then mark the Criterion as Does Not Meet/Insufficient Evidence. Support all ratings with evidence.
Metric NN2A: **In each grade K–8, students and teachers using the materials as designed devote the large majority of time to the Major Work of the grade.** **How to Find the Evidence:** Familiarize yourself with the Major Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, lessons, homework assignments, and assessments. (Evaluate both student and teacher materials.) Consider time spent on the Major Work of the grade and judge qualitatively whether students and teachers using the materials as designed will devote the large majority of time to the Major Work of the grade. For context, read Criterion #1 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013)	Materials for Grade 2 align the majority of lessons and activities to the major work for Second Grade so lessons review First Grade standards and extend to Grade 3 standards but are not assessed. **Evidence-** *Common Core State Standards for Mathematical Content: Lessons are aligned to grade level standards/major work of the grade; pages xlviii-li Units 1, 2, 4 & 6: Instructional time spent on critical focus areas 1 and 2 of Grade 2: extending understanding of base-ten notation; building fluency with addition and subtraction. Unit 3, 5 & 7: Instructional time spent on critical focus areas 3 and 4 of Grade 2: using standard units of measure; and describing and analyzing shapes.	**(Reviewer only.)** **_X__Meets** **____Does Not Meet/** **Insufficient Evidence**

Metric NN2B: **Supporting work, where present, enhances focus and coherence simultaneously by also engaging students in the Major Work of the grade.** **How to Find the Evidence:** Familiarize yourself with the Major Work and Supporting Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate chapters and lessons that focus on Supporting Work. NOTE: Example of evaluating this Criterion might include looking at whether materials for K–5 generally treat data displays as an occasion for solving grade-level word problems using the four operations (e.g., see 3.MD.B.3); or whether materials for grade 7 take advantage of opportunities to use probability to support ratios, proportions, and percentages. For context, read Criterion #3 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Unit 1: All lessons focus on major content standards 2.OA.1, 2.OA.2, 2.OA.3, 2.NBT.5, 2.NBT.6, and 2.NBT.9 Unit 2: Majority of lessons focus on major content standards 2.OA.1, 2.OA.2, 2.NBT.1, 2.NBT.1a, 2.NBT.2, 2.NBT.3, 2.NBT.4, 2.NBT.5, 2.NBT.6, 2.NBT.7, 2.NBT.8, 2.NBT.9, 2.MD.1, 2.MD.2, 2.MD.3, 2.MD.4; with supporting content standards 2.MD.9 and 2.G.1. Unit 3: Majority of lessons focus on major content standards 2.OA.2, 2.NBT.4, 2.NBT.5, 2.NBT.6, 2.MD.1, 2.MD.2, 2.MD.3, and 2.MD.4; with supporting content standards 2.MD.9 and 2.G.1. Unit 4: Majority of lessons focus on major content standards 2.OA.1, 2.OA.2, 2.NBT.1, 2.NBT.1a, 2.NBT.1b, 2.NBT.2, 2.NBT.5, 2.NBT.6, 2.NBT.7, 2.NBT.9, 2.MD.1, 2.MD.3, 2.MD.3, 2.MD.4; with supporting content standards 2.MD.5, 2.MD.8. Unit 5: Majority of lessons focus on major content standards 2.OA.1, 2.OA.2, 2.NBT.2, 2.NBT.4, 2.NBT.5, 2.NBT.6; with supporting content standards 2.MD.7, 2.MD.10, and 2.G.3 Unit 6: All lessons focus on major content standards 2.OA.1, 2.NBT.1, 2.NBT.1a, 2.NBT.1b, 2.NBT.2, 2.NBT.3, 2.NBT.4, 2.NBT.5, 2.NBT.7, and 2.NBT.9, 2; with supporting content standard 2.MD.8 Unit 7: All lessons focus on major content standards 2.OA.1, 2.OA.3, 2.OA.4, 2.OA.5, 2.OA.6, 2.NBT.5, 2.NBT.6, 2.MD.1; with supporting standards 2.G.1, 2.G.2, 2.G.3, 2.MD.5, and 2.MD.6	**(Reviewer only.)** **_X__Meets** **____Does Not Meet/** **Insufficient Evidence**

Metric NN2C: **Materials base content progressions on the grade-by-grade progressions in the Standards. Content from previous or future grades does not unduly interfere with or displace on-grade-level content.** **How to Find the Evidence:** Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, and lessons in both student and teacher materials. NOTE: In some cases it may be possible that aligned materials might address some aspects of a topic in a strategic way before or after the grade level in which the topic is central in the Standards' progressions; for example, a curriculum author might purposefully choose to explore adding fractions with unlike denominators in a way appropriate to grade four, recognizing that this work is not really required until the next grade. However, any such purposeful discrepancies in content progressions should enhance the required learning in each grade; not unduly interfere with or displace grade-level content; and be clearly aimed at helping students meet the Standards as written rather than effectively rewriting the progressions in the Standards. And in all cases, note that Non-Negotiable 1 must be met for materials to be aligned. For context, read Criterion #5a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	Content progression is obvious within each unit through lessons and activities. Each Unit Overview provides a learning progressions of the Common Core State Standards and a Content Standards Across the Grades for the following unit lessons and activities. It states previous grade level standards, as well as the following grade standards that are incorporated into the unit lessons and activities. The incorporation of prior and future grade level standards does not interfere with current grade level standards and progressions. **Evidence-** Unit 1: 2.OA.2: Fluently add and subtract within 20. • Previous grade standard 1.OA.6: Add and subtract within 20 demonstrating fluency within 10. • Standard is extended to the following grade in 3.OA.9: Identify arithmetic patterns and explain them using properties of operations.	**(Reviewer only.)** **_X__Meets** **____Does Not Meet/** **Insufficient Evidence**
Metric NN2D: **Materials give all students extensive work with on-grade-level problems.** **How to Find the Evidence:** Evaluate both student and teacher materials. If the materials provide resources for differentiated learning, consider whether lower-performing students have opportunities to engage with grade-level problems. Also consider whether higher-performing students are given opportunities to learn current grade-level content in greater depth. For context, read Criterion #5b in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	Materials provide all students with extensive work with on-grade-level problems. Materials are designed to accommodate a wide range of student learning styles and academic skills. Each lesson has accommodations and resources to incorporate strategies and opportunities for differentiating instruction. Intervention, on level, and challenge activities are outlined after every lesson with accommodations for ELL students in every lesson as well. **Evidence-** Unit 1: Lesson 13: Lesson focus is to solve problems that involve the use of group names and/or have both addends unknown, with differentiated instruction provided for ELL students on page 93 and intervention, on level, and challenge activities on page 97.	**(Reviewer only.)** **_X__Meets** **____Does Not Meet/** **Insufficient Evidence**

Metric NN2E: **Materials re[illegible]on-grade-level concepts explicitly to prior knowledge from earlier grades.** **How to Find the Evidence:** Evaluate both student and teacher materials. NOTE: Examples of evaluating this Criterion might include looking at the way the materials extend basic ideas of place value across the decimal point; or the role that properties of operations play when the materials extend arithmetic beyond whole numbers to fractions, variables, and expressions. More generally, cluster headings in the Standards sometimes signal key moments where reorganizing and extending previous knowledge is important in order to accommodate new knowledge (e.g., see cluster headings that use the phrase "Apply and extend previous understanding"). For context, read Criterion #5c in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	The Overview of each unit explicitly states the on-grade-level concepts taught [illegible]e unit with their relation to prior knowledge from the previous grade. **Evidence-** Unit 2: On-grade-level standard 2.NBT.1: Understand that the three digits of a three-digit number represent amounts of hundreds, tens, and ones. Building on prior grade level standard 1.NBT.2: Understand that the two digits of a two-digit number represent amounts of tens and ones.	**(Reviewer only.)** **_X__Meets** **____Does Not Meet/** **Insufficient Evidence**
Metric NN2F: **Review of material from previous grades is clearly identified as such to the teacher, and teacher and students can see what their specific responsibility is for the current year.** **How to Find the Evidence:** Evaluate the table of contents, but do not stop there; also evaluate units, chapters, lessons, homework assignments and assessments. (Evaluate both student and teacher materials.) Identify any content from previous grades and check whether it is identified as such. For context, read Criterion #5a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Unit 3: 2.MD.4: Measure to determine how much longer one object is than another. Building on prior grade level standard 1.MD.2: Express the length of an object as a whole number of length units; by laying multiple copies of a shorter object end to end.	**(Reviewer only.)** **_X__Meets** **____Does Not Meet/** **Insufficient Evidence**
Metric NN2G: **Materials include learning objectives that are visibly shaped by CCSSM cluster headings.** **How to Find the Evidence:** Select several clusters from the Major Work in the grade being evaluated. Evaluate teacher and student materials in relation to these clusters. For context, read Criterion #6a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	Each unit has an overview of learning progressions and content standards. Each lesson within the unit has a lesson focus for the lesson taught, mathematical practices covered within the lesson, and the Common Core State Standard covered in the lesson as well. Within the lesson, each activity indicates the Common Core State Standards addressed as well as the Mathematical Practices covered explicitly. **Evidence-** Unit 6: Lesson 8 Lesson focus: Use the Add Up method to solve unknown addend problems with 3-digit numbers; Standards identified: 2.OA.1, 2.NBT.7 and 2.NBT.9. Mathematical Practices covered: MP.1, MP.3, MP.6 and MP.8.	**(Reviewer only.)** **_X__Meets** **____Does Not Meet/** **Insufficient Evidence**

Metric NN2H: **Materials include problems and activities that serve to connect two or more clusters in a domain, or two or more domains in a grade, in cases where these connections are natural and important.** **How to Find the Evidence:** In the grade being evaluated, choose two or more clusters or two or more domains for which connections are natural and important. Evaluate the units, chapters, and lessons that deal with the chosen topics, looking for problems and activities that serve to connect the chosen clusters or domains. NOTE: An example of evaluating this Criterion might include looking at whether problems in grade 4 sometimes or often involve students applying their developing computation skills (detailed in domain NBT) in the context of solving word problems (detailed in domain OA). For context, read Criterion #6b in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	Each unit of the materials adequately connects two or more clusters in a domain or two or more domains in grade two. In most units, lessons exceed expectation to include up to 7-8 clusters of a domain. The clusters in a domain are combine in a natural and important way as to connect standards, domains, and clusters fluidly. **Evidence-** Unit 1: • Lessons 1-9: combine clusters 2.OA.1, 2.OA.3 and 2.OA.3, 2.NBT.6, 2.NBT.6, and 2.NBT.9 • Lessons 9-16: combine clusters 1.OA.1, 1.OA.2, 12.NBT.5 and 2.NBT.6 • Lessons 17-21: combine clusters 2.OA.1, 2.OA.2 and 2.OA.3.	**(Reviewer only.)** **_X__Meets** **____Does Not Meet/** **Insufficient Evidence**

Non-Negotiable 2: **Focus and Coherence** **Materials must focus coherently on the Major Work of the grade in a way that is consistent with the progressions in the Standards.** **NN 2** If all Metrics 2A – 2H were rated as Meets, then rate Non-Negotiable 2 as Meets. If one or more Metric was rated Does Not Meet/Insufficient Evidence, then rate Non-Negotiable 2 as Does Not Meet. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)** **Before moving to Alignment Criterion 1, record the final Meets or Does Not Meet rating in the Evaluation Summary.**	**(Reviewer only.)** **_X__Meets** **____Does Not Meet** **Strengths/Weaknesses:**

Now continue by evaluating the Alignment Criterion 1 for Rigor and Balance.

Directions for Alignment Criterion 1

Rigor and Balance

Alignment Criterion 1: Rigor and Balance **Materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.** The Standards set expectations for attention to all three aspects of rigor: conceptual understanding, procedural skill and fluency, and applications. Thus, materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.	**Required Materials** • Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf) • Focus by Grade Level for the grade being evaluated (achievethecore.org/focus) • Situation Types for the Operations in Word Problems (achievethecore.org/situation-types) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion:** Alignment Criterion 1 is rated as Meets or Does Not Meet. To rate Alignment Criterion 1, first rate metrics 1A, 1B, and 1C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). For each metric, guiding questions are provided to aid in gathering evidence. Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 1 if the materials rate 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as rigor and balance, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.
Metric AC1A: **The materials support the development of students' conceptual understanding of key mathematical concepts, especially where called for in specific content Standards or cluster headings.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Major Work for the grade being evaluated that relate specifically conceptual understanding to use throughout the questions associated with this metric. NOTE: Some examples of clusters or Standards that call for conceptual understanding include: K.OA.A.1, (1.NBT.B, 1.NBT.C), (2.NBT.A, 2.NBT.B), (3.OA.A.1, 3.OA.A.2), 4.NF.A, (4.NBT.A, 4.NBT.B), 5.NF.B, (5.NBT.A, 5.NBT.B), 6.RP.A, 6.EE.A.3, 7.NS.A, 7.EE.A, 8.EE.B, 8.F.A, 8.G.A Clusters or Standards grouped by parentheses are closely connected and could be analyzed together. For context, read Criterion #4a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	-Choose a cluster/Standard from the Major Work that is aligned to each aspect of rigor and use it to evaluate these metrics. It is most helpful if the same clusters/Standards are chosen for all of the programs being evaluated. (Guidance in choosing clusters/Standards is included in "How to Find the Evidence".)	**Use the questions for AC Metric 1A to evaluate Metric 1A. Record evidence for each question and rate Metric 1A.** **_X__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**

Is conceptual understanding attended to thoroughly where the Standards set e[illegible] expectations for understanding or interpreting? Evaluate lessons, chapter/unit assessments and homework assignments, paying attention to work aligned to Standards that explicitly call for understanding or interpreting. NOTE: Examples of evaluating this Criterion might include looking at how well the multi-digit addition and subtraction algorithms are developed and explained on the basis of place value and properties of operations; or how well the multi-digit multiplication and division algorithms are developed and explained on the basis of place value and properties of operations; or how well solving equations is presented and explained as a process of reasoning.	**Evidence-** Math Talk is a large an[illegible]dely used feature of the curriculum. It is used in various forms throughout the curriculum – solve and discuss board work, small group discussions. These strategies provide support to students by allowing students to share and talk about the different ways they have solved a problem, which in turn can help other students. The formative assessment at the end of each lesson allows students to explain their reasoning and understanding of a concept instead of just a practice assessment. Curriculum also has Learning Community-Best Practice strategies that incorporate Building Concepts. These prompts focus of building conceptual understanding of standards. Examples: • Unit 4: TE 352, 381, 382, 416, 428, 435, 436, 441, 448, 465	
Do the materials feature high-quality conceptual problems and conceptual discussion questions? Evaluate lessons, chapter/unit assessments, and homework assignments. NOTE: Example of conceptual problems might include such questions as "Find a number greater than 1/5 and less than 1/4," or "If the divisor does not change and the dividend increases, what happens to the quotient?"	**Evidence-** Examples: • Unit 6, Lesson 8: Word Problems: Unknown Addends.	
Do the materials feature opportunities to identify correspondences across mathematical representations? Evaluate lessons, chapter/unit assessments and homework assignments. NOTE: Examples of evaluating this Criterion might include looking at whether students are supported in identifying correspondences among: the verbal description of a situation, the diagrams that distill its mathematical features, and the equations that model it; or equivalent forms of numbers (e.g., 3 and 6/2) and the number line; or rational number operations and representations of them via models such as the vector model; or the expression that defines a function and the graph that shows the relationship.	**Evidence-** Examples: • Unit 6, Lesson 13: Relationships between addition and subtraction methods	

Metric AC1B: **The materials are designed so that students attain the fluencies and procedural skills required by the Standards.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Major Work for the grade being evaluated that relate specifically to fluency and procedural skill to use throughout the questions associated with this metric. NOTE: Some examples of Standards that call for procedural skill and fluency include: K.OA.A.5, 1.OA.C.6, 2.OA.B.2, 2.NBT.B.5, 3.OA.C.7, 3.NBT.A.2, 4.NBT.B.4, 5.NBT.B.5, 6.NS.B.2, and 6.NS.B.3, 6.EE.A, 7.NS.A, 7.EE.A.1,7.EE.B.4a, 8.EE.C.7, 8.EE.C.8b For context, read Criterion #4b in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).		**Use the questions for Metric 1B to evaluate Metric 1 B. Record evidence for each question and rate Metric 1B.** **(Reviewer only.)** **_X__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Is progress toward fluency and procedural skill interwoven with students' developing conceptual understanding of the operations in question? Evaluate lessons, chapter/unit assessments, daily routines, and homework assignments for evidence that the development of fluency and procedural skill is supported by conceptual understanding.	**Evidence-** A Path to Fluency: Kindergarten through Grade 5 is a fluency plan that shows how the curriculum achieves fluency with the Common Core Standards suggested for each grade through targeted practice. This can be found in the Teachers Edition on page xxvi.	
Are purely procedural problems and exercises present that include cases in which opportunistic strategies are valuable and generic cases that require efficient algorithms present? Evaluate lessons, chapter/unit assessments, daily routines, and homework assignments. NOTE: Examples of problems in which opportunistic strategies are valuable might include the sum 698 + 240 or the system x + y = 1, 2x + 2y = 3. Examples of generic cases that require efficient algorithms might include the sum 8767+2286 or the system 6y + x = x + 3, – x = 1 + 2y.	**Evidence-** Common Core Standard 2.OA.2: Add and subtract within 20; Fluently add and subtract within 20 using mental strategies. By the end of Grade 2, know from memory all sums of two one-digit numbers. Examples: • Unit 1: Addition and subtraction within 20 • Unit 2: Use place value and 2-digit numbers • Unit 4: Subtract 2-digit numbers • Unit 6: Addition and Subtraction strategies.	
Do the materials in grades K–6 provide repeated practice toward attainment of fluency Standards? Evaluate lessons, daily routines, and homework assignments for evidence of repeated practice toward attainment of the following K–6 Standards that set an explicit expectation of fluent (accurate and reasonably fast) computation: K.OA.A.5, 1.OA.C.6, 2.OA.B.2, 2.NBT.B.5, 3.OA.C.7, 3.NBT.A.2, 4.NBT.B.4, 5.NBT.B.5, 6.NS.B.2, 6.NS.B.3.	**Evidence-** Curriculum provides repeated practice to attainment of fluency for the standards. • A Path to Fluency: TE page xxvi • Quick Practice: TE opening page to every lesson • Fluency Checks: Assessment Guide • Daily Routines: TE Volume 1 pages xxxi-xxxiv and TE Volume 2 pages xxxi-xxxvi	

Metric AC1C: **The materials are designed so that teachers and students spend sufficient time working with engaging applications, without losing focus on the Major Work of each grade.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Major Work for the grade being evaluated that relate specifically application to use throughout the questions associated with this metric. NOTE: Some examples of clusters or Standards that call for application include: K.OA.A.2, 1.OA.A, 2.OA.A, 3.OA.A.3, 3.OA.D.8, 4.OA.A.3, 4.NF.B.3d, 4.NF.B.4c, 5.NF.B.6, 5.NF.B.7c, 6.RP.A.3, 6.NS.A.1, 6.EE.B.7, 6.EE.C.9, 7.RP.A, 7.NS.A.3, 7.EE.B.3, 8.EE.C.8c, 8.F.B For context, read Criterion #4c in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Curriculum uses a wide range of word problems to expose students to problem solving: understanding the situation, representing the situation, solving the problem with representation, and reflecting on the answer to ensure it makes sense. There are a wide variety of activities to help students understand problems: using math talk, acting out, retelling, etc.	**Use the questions for Metric 1C to evaluate Metric 1C. Record evidence for each question and rate Metric 1C.** **(Reviewer only.)** **_X__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Are there are single- and multi-step contextual problems, including non-routine problems, that develop the mathematics of the grade, afford opportunities for practice, and engage students in problem solving? Do the problems attend thoroughly to those places in the content Standards where expectations for multi-step and real-world problems are explicit? Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** Curriculum encourages student to use math drawings, visual models, and manipulatives as tools to represent problems/situations. Different problem types can be found in the introduction to the curriculum on page xxviii. This table shows how problem types are incorporated across the grades.	
Do application problems particularly stress applying the Major Work of the grade? Evaluate lessons, chapter/unit assessments, and homework assignments. NOTE: Examples of evaluating this Criterion might include looking at: how well, by the end of grade 2, students using the materials as designed can represent and solve a full range of one-step addition and subtraction word problems; or how well, by the end of grade 3, students using the materials as designed can represent and solve a full range of one-step multiplication and division word problems; or how well these basic situation types for each operation are carried coherently across the grades, (e.g., with fractions and algebraic expressions); or, in all grades, whether the problems connect concepts, Standards, and domains in ways that are natural and important. For a list of situation types for one-step addition, subtraction, multiplication, and division problems, see Situation Types for the Operations in Word Problems	**Evidence-** Examples: • Unit 3, Lessons 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, unit test • Unit 4, Lessons 4, 10, 14, 15, unit test • Unit 5, Lessons 1, 3, 4, 5, 10, unit test	
Does modeling build slowly across K–8, with applications that are relatively simple in earlier grades and when students are encountering new content? In grades 6–8, do the problems begin to provide opportunities for students to make their own assumptions or simplifications in order to model a situation mathematically? Read Standard for Mathematical Practice 4, Model with Mathematics. Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** Examples: • Unit 1, Lesson 3: Make a ten strategies; Lesson 7: Strategies using doubles. • Unit 2, Lesson 1: Ones, Tens, and Hundreds; Lesson 5: Compare Numbers within 200.	

Alignment Criterion 1: Rigor and Balance

Materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.

AC1 Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 out of 6 points, the Criterion has not been met. Check the final rating.
Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)**

Before moving to Alignment Criterion 2, record the final Meets or Does Not Meet rating in the Evaluation Summary.

(Reviewer only.)

_X__Meets

____Does Not Meet

Strengths/Weaknesses:

Directions for Alignment Criterion 2

Standards for Mathematical Practice

Alignment Criterion 2: Standards for Mathematical Practice

Materials must demonstrate authentic connections between content Standards and practice Standards.

The Standards require that designers of instructional materials connect the mathematical practices to mathematical content in instruction. Thus, materials must demonstrate authentic connections between content Standards and practice Standards.

Required Materials:

- Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf)
- Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)
- Focus by Grade Level for the grade being evaluated (www.achievethecore.org/focus)
- From the materials being evaluated: teacher guides, student texts and workbooks

Rating this Criterion

Alignment Criterion 2 is rated as Meets or Does Not Meet.

To rate Alignment Criterion 2, first rate metrics 2A, 2B, and 2C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). For each metric, guiding questions are provided to aid in gathering evidence.

Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 2 if the materials earn 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as mathematical practices, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.

Metric AC2A: **Materials address the practice Standards in such a way as to enrich the Major Work of the grade; practices strengthen the focus on Major Work instead of detracting from it, in both teacher and student materials.** **How to Find the Evidence:** Familiarize yourself with the Major Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate teacher and student materials for evidence that the mathematical practices support and connect to the focus of the grade. NOTE: Examples of evaluating this Criterion might include looking at whether, in grades K–5, students using the materials are supported to look for and express regularity in repeated reasoning about the addition table, the multiplication table, the properties of operations, the relationship between addition and subtraction or multiplication and division, and the place value system; or whether, in grades 6–8, students using the materials are supported to look for and express regularity in repeated reasoning about proportional relationships and linear functions. For context, read Criterion #8 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013).	**Evidence-** In the overview for the curriculum, each unit includes a Getting Ready to Teach the Unit using the Common Core Standards for Mathematical Practices. This part of the overview for each unit indicates what concepts, skills, and problem solving the students will learn in that unit and how the students will demonstrate their understanding. Mathematical Standards are also identified in each lesson of every unit. Examples: • Unit 1: TE 1V-1CC • Unit 2: TE 159S-159Z • Unit 3: TE 279Q-279X • Unit 4: TE 351Y-351FF • Unit 5: TE 507Q-507X • Unit 6: TE 583T-583AA • Unit 7: TE 701N-701U	**(Reviewer only.)** **_X__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Metric AC2B: **Materials attend to the full meaning of each practice Standard.** **How to Find the Evidence:** For context, read Criterion #7 and Criterion #9 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).		**Use the questions for Metric 2B to evaluate Metric 2B. Record evidence for each question and rate Metric 2B.** **(Reviewer only.)** **_X__Meets (2)**

Over the course of any given year of instruction, is each mathematical practice Standard meaningfully present in the form of assignments, activities, or problems that stimulate students to develop the habits of mind described in the practice Standard? Evaluate lessons, chapter/ unit assessments, and homework assignments for evidence of each mathematical practice being meaningfully present in instruction.	**Evidence-** At the start of every unit the curriculum provides an over view of Common Core State Standards for Mathematics that aligns every lesson in the unit with the Mathematical Practices and the standards that will be taught in the unit. Examples: • Unit 1: TE 1B-1D • Unit 2: TE 159B-159C • Unit 3: TE 279B-279C • Unit 4: TE 351B-351E • Unit 5: TE 507B-507C • Unit 6: TE 583B-583C • Unit 7: TE 701B Each unit also includes a Getting Ready to Teach the Unit using the Common Core Standards for Mathematical Practices. This part of the overview for each unit indicates what concepts, skills, and problem solving the students will learn in that unit and how the students will demonstrate their understanding. Mathematical Standards are also identified in each lesson of every unit. Examples: • Unit 1: TE 1V-1CC • Unit 2: TE 159S-159Z • Unit 3: TE 279Q-279X • Unit 4: TE 351Y-351FF • Unit 5: TE 507Q-507X • Unit 6: TE 583T-583AA • Unit 7: TE 701N-701U	**____Partially Meets (1)** **____Does Not Meet (0)**
Do the materials treat the practice Standards as developing across grades or grade bands? Are the practice Standards in early grades appropriately simple? Do they display an arc of growing sophistication across the grades?	**Evidence-** The following examples provided evidence of the practice standards developing across the grade level in the Getting to Teach the Unit Using the Common Core Standards for Mathematical Practice. Each Mathematical Practice is listed with examples from within the unit as to how they are developing across the grade. Examples: • Unit 1: TE 1V-1CC • Unit 2: TE 159S-159Z • Unit 3: TE 279Q-279X • Unit 4: TE 351Y-351FF • Unit 5: TE 507Q-507X • Unit 6: TE 583T-583AA • Unit 7: TE 701N-701U	

Are there teacher-directed materials that explain the role of the practice Standards in the classroom and in students' mathematical development? Are alignments to practice Standards accurate?	**Evidence-** Within each lesson of the curriculum the Mathematical Practices incorporated have been identified with each activity and has suggestions for the teacher to help implement and support the practices. The last lesson in every unit focuses explicitly on the Mathematical Practice and their practical application for student to solve real world problem. Examples: • Unit 1, Lesson 21 • Unit 2, Lesson 15 • Unit 3: Lesson 9 • Unit 4: Lesson 23 • Unit 5: Lesson 10 • Unit 6: Lesson 15 • Unit 7: Lesson 6	
Metric AC2C: **Materials support the Standards' emphasis on mathematical reasoning.** **How to Find the Evidence:** For context, read Criterion #10 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).		**Use the questions for Metric 2C to evaluate Metric 2C. Record evidence for each question and rate Metric 2C.** **(Reviewer only.)** **_X__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Do the materials support students in constructing viable arguments and critiquing the arguments of others concerning grade-level mathematics that is detailed in the content Standards? Read Standard for Mathematical Practice 3. Evaluate teacher and student materials to ensure that students are given opportunities to reason with grade-level mathematics.	**Evidence-** Curriculum includes evidence of the progression of Mathematical Practices in the research and background section of the TE. Mathematical Practice 3 – Construct viable arguments and critique the reasoning of others is part of the progression across the grade level curriculum. Mathematical Practices are embedded in every lesson of the curriculum. Evidence of Mathematical Practice 3 is included in the following lessons: • Unit 1 Lessons: 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20, 21 • Unit 2 Lessons: 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15 • Unit 3 Lessons: 1,2,3,4,6,7,8,9 • Unit 4 Lessons: 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20, 21,22,23 • Unit 5 Lessons: 1,2,3,4,5,6,7,8,9,10 • Unit 6 Lessons: 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15 • Unit 7 Lessons: 1,2,3,4,5,6	

Do the materials support students in producing not only answers and solutions, but also in a grade-appropriate way, arguments, explanations, diagrams, mathematical models, etc., especially in the Major Work of the grade? Familiarize yourself with the Major Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate teacher and student materials, to understand the types of work students are expected to produce.	**Evidence-** Curriculum has a Puzzled Penguin throughout the materials that enables students to construct grade-appropriate viable arguments to explain why Puzzled Penguin is wrong and explain how to solve the problem correctly. Examples of Puzzled Penguin found on these pages in the TE: • Unit 2: 180, 213, 264 • Unit 3: 280, 335 • Unit 4: 386 • Unit 5: 531 • Unit 6: 626, 665,682, • Unit 7: 722 Puzzled Penguin can be found on some Student Workbook pages also. **Although it is important to determine why Puzzled Penguin is wrong and construct a grade-appropriate response; it would be helpful if Puzzled Penguin was not always wrong. It would be beneficial for students to construct grade-appropriate arguments to explain why he is right as well.	

Do materials explicitly attend to the specialized language of mathematics? Is the language of argument, problem solving, and mathematical explanations taught rather than assumed? Evaluate teacher and student materials, paying attention to how mathematical language is taught. NOTE: Examples of evaluating this Criterion might include looking at whether students are supported in: basing arguments on definitions; using the method of providing a counterexample; or recognizing that examples alone do not establish a general statement.	**Evidence-** Curriculum materials provide a word list of math vocabulary words used within each lesson. The vocabulary words can be found on the lesson overview for every lesson where new vocabulary is introduced. Vocabulary words are used repeatedly throughout the materials even though they are no longer considered "new". Examples of vocabulary words: • Unit 1, Lesson 1: equation, Math Mountain, partners, addends, total, dime, penny, make-a-ten strategy, unknown addend, pairs, pattern, odd, even, addition doubles • Unit 2, Lesson 1: ones, tens, hundreds, decade numbers, quick tens, expanded form, quick hundreds, number name, less than, greater than, equal to • Unit 3, Lesson 1: angle, right angle, square, rectangle, triangle, quadrilateral, pentagon, hexagon, opposite sides Math Talk is also explicitly used throughout the entire curriculum. It can be found in every lesson within each unit. It is indicated with a red conversation bubble with the words Math Talk. Math Talk allows students to exchange strategies and reasoning with peers to further explain their thinking using precise mathematical vocabulary and Math Talk. Mathematical Practice Standards have been incorporated into all lessons throughout the curriculum. Students are encouraged to use a variety of math drawings, symbols/equations, and models to represent problems and situations. Page xxvii provides an outline of the problem solving processes this curriculum integrates into units and lessons.	

Alignment Criterion 2:
Standards for Mathematical Practice

Materials must demonstrate authentic connections between content Standards and practice Standards.

AC2 Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 out of 6 points, the Criterion has not been met. Check the final rating.
Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion.
(Reviewer only.)

Before moving to Alignment Criterion 3, record the final Meets or Does Not Meet rating in the Evaluation Summary.

(Reviewer only.)

_X__Meets

____Does Not Meet

Strengths/Weaknesses:

Alignment Criterion 3:
Access to the Standards for All Students

Materials must provide supports for English Language Learners and other special populations.

Because Standards are for all students, alignment requires thoughtful support to ensure all students are able to meet the Standards. Thus, aligned materials must provide supports for English Language Learners and other special populations.

Required Materials:

- Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf)
- Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)
- From the materials being evaluated: teacher guides, student texts and workbooks

Rating this Criterion:
Alignment Criterion 3 is rated as Meets or Does Not Meet.

To rate Alignment Criterion 3, first rate metrics 3A, 3B, and 3C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points).

Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 3 if the materials earn 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as support for special population, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.

Metric AC3A: **Support for English Language Learners and other special populations is thoughtful and helps those students meet the same Standards as all other students. The language in which problems are posed is carefully considered.** **How to Find the Evidence:** Evaluate teacher and student materials, paying attention to supports offered for special populations.	**Evidence-** Materials have lessons designed to accommodate a variety of students and academic skills. Each unit has a differentiated instruction overview in the unit planning section where instruction for ELL students is outlined with an overall objective for the unit. Every lesson within the units also has support for ELL students; including leveled support for beginning, intermediate, and advanced ELL students. Examples: • Unit 1: Planning TE 1P-1Q; Lesson 7 page 49. • Unit 2: Planning TE 159L-159M; Lesson 5 page 195 Support is also provided for other special populations with leveled writing prompts and differentiated instruction cards. Examples: • Unit 1: Lesson 15 page 109 • Unit 2: Lesson 1 page 167	**Reviewer only.)** **_X__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Metric AC3B: **Materials provide appropriate level and type of scaffolding, differentiation, intervention, and support for a broad range of learners with gradual removal of supports, when needed, to allow students to demonstrate their mathematical understanding independently.** **How to Find the Evidence:** Evaluate teacher and student materials, paying attention to whether materials provide differentiation that will lead all learners to engage with on-grade-level content.	**Evidence-** Curriculum has a response to intervention overview page that provides focused instruction on the standards for every unit. There were also two separate books provided with the core curriculum for Tier 1 intervention lessons and Tier 2 and 3 intervention skills, examples and lessons. Each response to intervention book provides opportunities for students to have differentiated instruction based on their specific needs.	**Reviewer only.)** **_X__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**

Metric AC3C: **Design of lessons recommends and facilitates a mix of instructional approaches for a variety of learners such as using multiple representations (e.g., including models, using a range of questions, checking for understanding, flexible grouping, pair-share).** **How to Find the Evidence:** Evaluate teacher materials, noting instructional approaches suggested for whole class and differentiated lessons and activities.	**Evidence-** Curriculum provides a variety of methods to enable all students advance. Units are organized into Big Ideas grouping a number of lessons together under one topic with a quick quiz assessment before moving on to the next topic within the unit. Examples: • Unit 1, Lessons 1-9: Big Idea – Strategies for Addition and Subtraction. Each lesson begins with quick practice following daily routines utilizing student leaders. Math background is provided as a resource that can provide conceptual understanding for teachers. • Lesson 1 Activity 1 incorporates whole group discussion with the Ask for Ideas discussion points. The lesson uses manipulatives and whole group strategies to engage students. • Lesson 1 Activity 2 incorporates more manipulatives and kinesthetic movement with student hands in a whole group discussion to elicit varied responses. Puzzled Penguin is also included to construct viable arguments and evaluate student reasoning. • At the end of the lesson is a formative assessment to check for student understanding.	**Reviewer only.)** **_X__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Alignment Criterion 3: **Access to the Standards for All Students** **Materials must provide supports for English Language Learners and other special populations.** **AC3** Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 points, the Criterion has not been met. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion.**(Reviewer only.)** **Move to the Evaluation Summary and record the final Meets or Does Not Meet rating .**		**(Reviewer only.)** **__X_Meets** **____Does Not Meet** **Strengths/Weaknesses:**

Once an evaluation for alignment to the Shifts and major features of the CCSS has been conducted using Sections 1-3, it's important to evaluate for overall quality and best practices. A starting list of Indicators of Quality are suggested below. States, districts and others evaluating instructional materials are encouraged to add to this list to ensure materials reflect local contexts. For background information on some of the Indicators of

Quality in this section, refer to pp.18–21 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spri
2

Indicators of Quality	Evidence- Give specific examples.	Rating: (Reviewers only.)
1. Lessons are thoughtfully structured and support the teacher in leading the class through the learning paths at hand, with active participation by all students in their own learning and in the learning of their classmates.	**Evidence-** Materials provide a clear, thoughtful lesson plan for each lesson. Including math background information, activity focus, differentiated instruction, mathematical practices, Common Core State Standards, quick practice and daily routines. Each lesson provides the teacher with an estimated activity time and focus. Activities have whole class or individual work identified next to the focus strategy so the teacher knows when to allow students to work independently or to continue with a whole group approach. Math talk is encouraged and indicated on the lessons. Group/partner talk is used frequently to encourage interaction with peers enabling them learn from each other not just the teacher. Examples of Math Talk: • Unit 2 Lesson 12 (page 244) Skip Count by 5's using math talk. Best practices and class management tools are given to the teacher to use as needed. Differentiation for ELL, intervention, on-level and challenge extension lessons are provided at the end of each lesson so the teacher can easily adapt as needed while teaching. Examples: • Unit 3 Lesson 7 (page 324): Activity one lesson duration: 20 minutes. Focus: estimate and measure length in inches. Differentiation for ELL students (page 326); differentiation for intervention, on-level, and challenge students (page 329) is clearly outlined and examples of activities are provided within the lesson.	**(Reviewer only.)** **__X___ Yes** **_____ No**
2. The underlying design of the materials includes both problems and exercises. (In solving problems, students learn new mathematics, whereas in working exercises, students apply what they have already learned to build mastery.) Each problem or exercise has a purpose. **NOTE: This Criterion does not require that the problems and exercises be labeled as such.**	**Evidence-** Materials are balanced in the number of problems and exercises. The majority of lessons begin with an activity that involves problems that utilize whole class activities and math talk; then the lesson progresses to individual work with exercises to apply knowledge procured in the current and prior lessons. Problems are well thought out; encouraging students to use background knowledge and their own strategies to begin to work through a new concept.	**(Reviewer only.)** **__X___ Yes** **_____ No**

3. Design of assignments is not haphazard: exercises are given in intentional sequences in order to strengthen students' mathematical understanding.	**Evidence-** The materials have an intentional sequence and pacing. Page xxvi provides a Path to Fluency outline for the curriculum from kindergarten to grade 5. Outlining the progressions each grade level will take to provide students with the necessary skills to be fluent. Math Vocabulary builds on words and skills taught. There is no assumption that students know terminology, it is taught. It is often revisited to a deeper level in a later unit/lesson.	**(Reviewer only.)** __X__ **Yes** _____ **No**
4. There are separate teacher materials that support and reward teacher study including, but not limited to: discussion of the mathematics of the units and the mathematical point of each lesson as it relates to the organizing concepts of the unit, discussion on student ways of thinking and anticipating a variety of students responses, guidance on lesson flow, guidance on questions that prompt students thinking, and discussion of desired mathematical behaviors being elicited among students.	**Evidence-** Prior to teaching a lesson; an extensive introduction is provided in the overview of the curriculum (pages xvii-xxx). In the curriculum introduction teacher learning/study is provided on math talk (pages xx-xxi xviii and xx-xxi), teaching model: an inquiry learning path (page xix), classroom management (page xxii), mathematical practices (pages xxii-xxiv), and algebraic problems that appear in all domains (pages xxiv-xxv). A path to fluency is provided for grades Kindergarten through grade 5 (page xxvi) and a pacing guide for all units and lessons in the Grade 1 curriculum (page xxx). Information is provided on the problem solving process and problem types that will occur within the curriculum (pages xxvii-xxix). Detailed daily routines are outlined for teachers to study and incorporate into their classrooms based on the unit/book volume (pages xxxi-xxxiv) Each unit is provided with a detailed overview including learning progressions across grades and content standards across the grades for the prevalent Common Core Standards addressed within it. Response to intervention and cross curricular connections are provided prior to the unit lessons. A putting the research into practice and math background is also provided prior to teaching each unit. Each unit is provided with a "Getting Ready to Teach Unit .." section that provides teachers with examples of common errors students may make and strategies to help teachers further explain a concept/strategy.	**(Reviewer only.)** __X__ **Yes** _____ **No**
5. Manipulatives suggested in the materials are faithful representations of the mathematical objects they represent and are connected to written methods.	**Evidence-** Manipulatives are faithful representations of the mathematical objects they represent. They DO NOT need to be purchased to teach the curriculum with integrity and fidelity.	**(Reviewer only.)** __X__ **Yes** _____ **No**

6. Materials include a variety of curriculum-embedded assessments. Examples include pre-, formative, summative, and self-assessment resources.	**Evidence-** Materials provide a Beginning of the Year Inventory Test that tests student prior knowledge. Each lesson has a quick Formative Assessment: Check for Understanding that can be done at the end of every lesson to assess student understanding of lesson concepts. Quick Quizzes are provided for every unit; they fall at the end of a group of lessons that have focused on a Big Idea. There are 1-3 quizzes in each unit. There is a Unit Review and Test at the end of every unit with two alternate tests in the Assessment Guide Book. An End of the Year Test is also provided in the Assessment Guide Book to determine student growth and understanding.	**(Reviewer only.)** __X___ **Yes** _____ **No**
7. Assessments contain aligned rubrics, answer keys, and scoring guidelines that provide sufficient guidance for interpreting student performance.	**Evidence-** Curriculum review and test for each unit has an answer key, and each question is aligned the Common Core Standards covered during the course of the unit. The TE provides Common Errors student might face and reteach activities that can be done prior to testing or as a form of remediation post assessment. Two alternate tests are provided for each unit test in the Assessment Guide Book in the event that students need an alternate assessment.	**(Reviewer only.)** __X__ **Yes** _____ **No**
8. Materials assess student proficiency using methods that are accessible and unbiased, including the use of course-level language in student prompts.	**Evidence-** All assessments use student friendly language and are unbiased.	**(Reviewer only.)** __X__ **Yes** _____ **No**
9. Materials are carefully evaluated by qualified individuals, whose names are listed, in an effort to ensure freedom from mathematical errors and course-level appropriateness.	**Evidence-** The author is clearly indicated on the title page of the teacher's edition. Curriculum was developed from the Children's Math Worlds Research Project conducted by Dr. Karen Fuson (author). The material is based upon work supported by the National Science Foundation and is funded in part by the National Science Foundation.	**(Reviewer only.)** __X___ **Yes** _____ **No**
10. The visual design supports students in engaging thoughtfully with the subject. Navigation through the text is clear.	**Evidence-** Materials are bright and colorful. Student workbook pages are not cluttered with too much text, pictures, or drawings. There is a building repetition to the activities that allows students to understand new concepts/lessons based on prior concepts/lessons.	**(Reviewer only.)** __X___ **Yes** _____ **No**

11. The materials engage parents in appropriate ways. For example, homework assignments in elementary grades, consist of routine problems, practice with getting answers, and fluency-building exercises that parents can easily support.	**Evidence-** At the beginning of every unit, in the student handbook, there is a Family Letter that describes the concepts of the upcoming unit. It includes math vocabulary that parents may or may not be familiar with so they can understand the terminology used in the classroom, on workbook pages, and homework. Throughout the rest of the unit there are occasional Family Letters that explain any new math vocabulary or conceptual understandings that have become relevant in the current unit. Homework can be found in the Homework and Remembering Blackline Masters and each page is aligned with the unit and lesson that is being taught. Homework format, vocabulary, and terminology is consistent with lessons and student workbook pages. Homework is a review of prior lessons/units and does not cover a new concept that has not be explicitly taught in the materials.	**(Reviewer only.)** **__X___ Yes** **_____ No**

Reviewer IMET Evaluation Summary **Title/Level:** **___Math Expressions Common Core 1st Grade ____**

Publisher: **Houghton Mifflin Harcourt Publishing Company** **Copyright: 2013** **ISBN:** **978-0-547-82479-6**

Reviewer ID # __KJ_____ Date Review Completed:__March 8, 2016____

Non-Negotiable Criteria- Each Non-Negotiable must be met in order for the Non-Negotiable Alignment Criteria to be met overall.

Non-Negotiable 1: Freedom from Obstacles to Focus	Non- Negotiable 2: Focus and Coherence
___X___ Meets _____ Does Not Meet	__X__ Meets _____ Does Not Meet

Non-Negotiable Overall:

__X__ Meets _____ Does Not Meet

Alignment Criteria- Each Alignment Criterion must be met with a sufficient number of points in order for Alignment Criteria to be labeled as "Meets" overall. The more points the materials receive on the Alignment Criteria, the better they are aligned.

Alignment Criterion 1: Rigor and Balance	Alignment Criterion 2: Standards of Mathematical Practice	Alignment Criterion 3: Access to Standards for All Learners
Points: __6__ of 6 possible. (Materials must receive at least 5 of 6 points to align.) __X___ Meets _____ Does Not Meet	Points: _6___ of 6 possible. (Materials must receive at least 5 of 6 points to align.) ___X__ Meets _____ Does Not Meet	Points: __6__ of 6 possible. (Materials must receive at least 5 of 6 points to align.) __X___ Meets _____ Does Not Meet

Alignment Criteria Overall:

_X__ Meets _____ Does Not Meet

If the materials meet both Non-Negotiables and relevant Alignment Criterion, they are aligned to the Shifts and major features of the Core Standards. **Do the materials meet every Non-Negotiable and Alignment Criterion? _X__ Yes _____ No**

What are the specific areas of strength and weakness based on this evaluation? Publishers or others modifying or developing assessments can use this information to make improvements and/or to remedy gaps in the alignment of assessment materials.

Strengths:
Curriculum provides detailed lessons that can be taught by all teachers with ease and fidelity, including first year teachers, new to grade teachers, and substitute teachers. It also provides a detailed coherent across grade level plan so teachers can see the expectation from grade level to grade level. Support for ALL learners can be found on EVERY lesson, allowing teachers to find the applicable level of intervention for their students.

Weakness:
It would be nice if Puzzled Penguin could be right sometimes, instead of always wrong. This would allow students to construct viable arguments as to why he is right.

2015-16 Mathematics Interim Review Recommendation & Summary

Publisher Name:	Houghton Mifflin Harcourt
Title:	Math Expressions
ISBN #	Various
Grade Level(s) or Course:	3rd Grade
Reviewer ID:	EL + PL

RECOMMENDED AS:

__X__ **Core Mathematics Program-** a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials. Substantial evidence clearly supports the designation of this program as Core.

_____ **Other Mathematics Program-** a program that substantially, but partially, meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for supplemental materials. Substantial evidence clearly supports the designation of this program as Other.

_____ **Component Mathematics Program-** a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs. Substantial evidence clearly supports the designation of this program as Component.

_____ **Intervention Program-** a program designed and intended to target and support students' specific needs. Substantial evidence clearly supports the designation of this program as Intervention.

_____ **Does not meet criteria** for recommendation as a Curricular Material or Online Resource for Mathematics.

EVIDENCE SUMMARY:

FOCUS-*
All the standards that are expected to be taught at the 3rd grade level are the only standards being taught.

COHERENCE-*
72% of the lessons are the major works.

RIGOR-*

CONCEPTUAL UNDERSTANDING-
the units and lessons build on previous lessons and units. Every lesson contains Math talk which gets the students sharing their thinking and problem solving.

MATHEMATICAL PRACTICES-
All mathematical practice are taught. However, throughout the unit students are specifically told what tool to use to solve the problem.

ACCESSIBILITY OF STANDARDS TO ALL STUDENTS-
The ELL + RTI component of this program is extensive and reaches all learners.

OTHER:
* The standard algorithm for addition and subtraction is a 4th grade standard. Time in addition and subtraction should be spent:
  - Using strategies
  - Algorithms- based on place value.

- properties of operations
- relationship between addition and subtraction.

2015-16 Interim Mathematics Review

Mathematics Evaluation Tool Grades K-8

Publisher: Houghton Mifflin Harcourt

Title of Material: Math Expressions 3rd Grade

Author: Dr. Karen Fuson

ISBN #: Various **Copyright** 2013

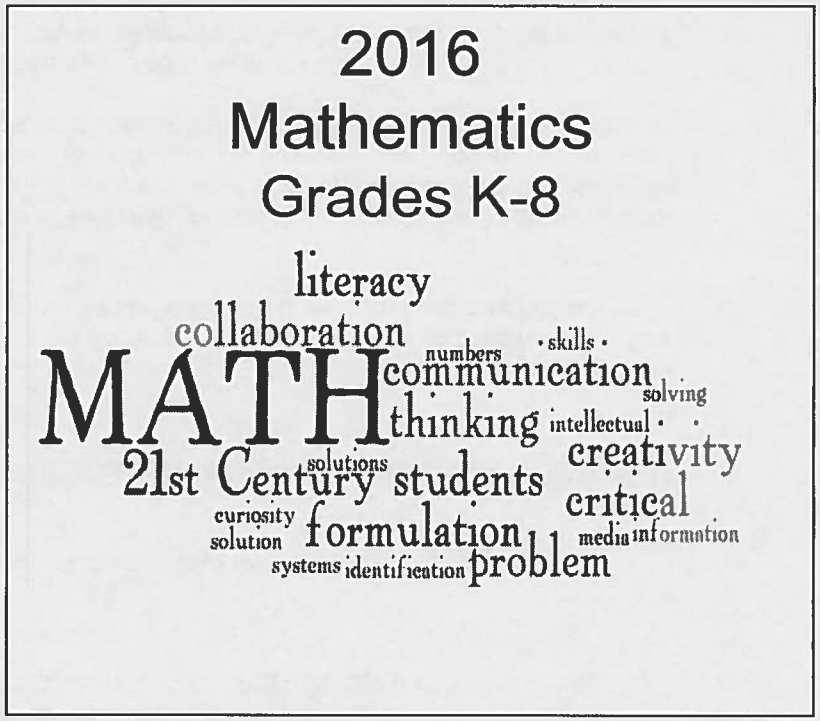
Reviewer ID: EL + PL

Core Mathematics Program- a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Core.

Other Mathematics Program- a program that substantially, but partially, meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Other.

Component Mathematics Program- a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs.
Substantial evidence clearly supports the designation of this program as Component.

Intervention Program- a program designed and intended to target and support students' specific needs.
Substantial evidence clearly supports the designation of this program as Intervention.



- Evaluation Form adapted from Instructional Materials Evaluation Toolkit (IMET).

The IMET was developed by Student Achievement Partners. Educators may use or adapt. http://creativecommons.org/licenses/by/3.0/ Download this tool at http://achievethecore.org/IMET

Instructional Materials Evaluation Tool

Mathematics, Grades K-8

What Are the Purposes of the IMET?

This Math IMET is designed to help educators determine whether instructional materials are aligned to the Shifts and major features of the Common Core State Standards (CCSS). The substantial instructional Shifts (http://www.corestandards.org/other-resources/key-shifts-inmathematics/) at the heart of the Common Core State Standards are:

- **Focus** strongly where the Standards focus
- **Coherence**: Think across grades and link to major topics within the grade
- **Rigor**: In major topics, pursue conceptual understanding, procedural skill and fluency, and application with equal intensity.

The IMET draws directly from the following documents:

- Common Core State Standards for Mathematics (www.corestandards.org/Math)
- Publishers' Criteria for the Common Core State Standards in Mathematics grade K-8 (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)

When to use the IMET

1. Purchasing materials: Many factors go into local purchasing decisions. Alignment to the Standards is a critical factor to consider. This tool is designed to evaluate alignment of instructional materials to the Shifts and the major features of the CCSS. It also provides suggestions of additional indicators to consider in the materials evaluation and purchasing process.

2. Evaluating materials currently in use: The IMET can be used to analyze the degree of alignment of existing materials and help to highlight specific, concrete flaws in alignment. Even where materials and tools currently in use fail to meet one or more of these criteria, the pattern of failure is likely to be informative. States and districts can use the evaluation to create a thoughtful plan to modify or combine existing resources in such a way that students' actual learning experiences approach the focus, coherence, and rigor of the Standards.

3. Developing programs: Those developing new programs can use this tool as guidance for creating aligned curricula.
Please note this tool was designed for evaluating comprehensive curricula (including any supplemental or ancillary materials), but it was not designed for the evaluation of standalone supplemental materials.

Who Uses the IMET?

Evaluating instructional materials requires both subject-matter and pedagogical expertise. Evaluators should be well versed in the Standards (www.corestandards.org/Math) for all grades in which materials are being evaluated. This includes understanding the Major Work of the grade (www.achievethecore/focus), the Supporting and Additional work, how the content fits into the progressions in the Standards (www.achievethecore.org/progressions), and the expectations of the Standards with respect to conceptual understanding, procedural skill and fluency, and application. Evaluators also should be familiar with the substantial instructional Shifts (http:// www.corestandards.org/other-resources/key-shifts-in-mathematics/) of Focus, Coherence and Rigor that are listed above.

Getting Started

Prior to Evaluation

Assemble all of the materials necessary for the evaluation. It is essential for evaluators to have materials for all grades covered by the program, as some criteria cannot be rated without having access to each grade. In addition, each evaluator should have a reference copy of the Common Core State Standards for Mathematics (CCSSM) and the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013).

2015-16 Interim Mathematics Review

Mathematics Evaluation Tool Grades K-8

Publisher: Houghton Mifflin Harcourt Publishing Company

Title of Material: Math Expressions Common Core 3rd Grade

Author: Dr. Karen Fuson

ISBN #: 978-0-547-82481-9 and 978-0-547-824898-5 **Copyright** 2013

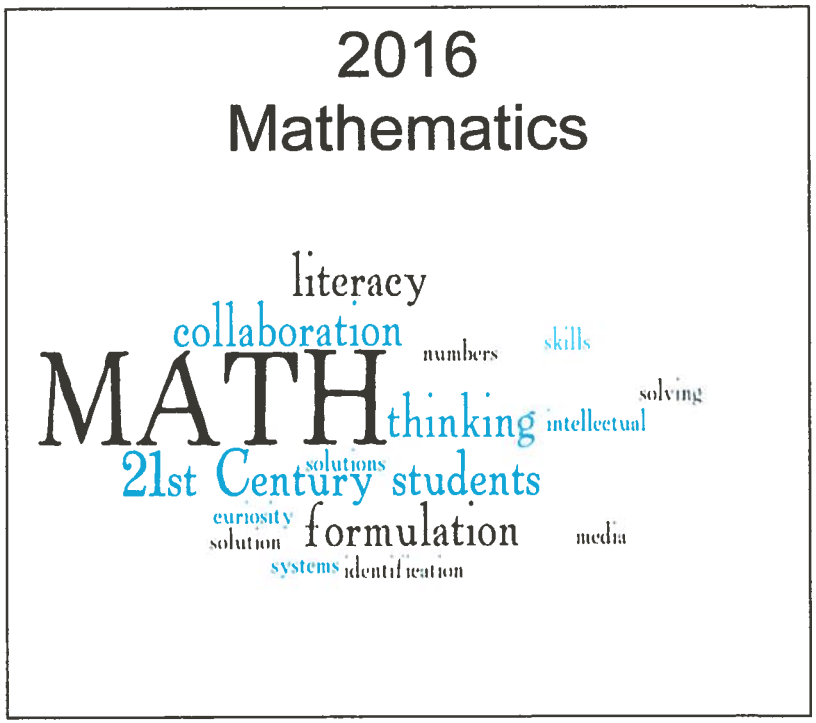
Reviewer ID: EL + PL

Core Mathematics Program- a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Core.

Other Mathematics Program- a program that substantially, but partially, meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Other.

Component Mathematics Program- a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs.
Substantial evidence clearly supports the designation of this program as Component.

Intervention Program- a program designed and intended to target and support students' specific needs.
Substantial evidence clearly supports the designation of this program as Intervention.



- Evaluation Form adapted from Instructional Materials Evaluation Toolkit (IMET).

The IMET was developed by Student Achievement Partners. Educators may use or adapt. http://creativecommons.org/licenses/by/3.0/ Download this tool at http://achievethecore.org/IMET

Instructional Materials Evaluation Tool
Mathematics, Grades K-8

What Are the Purposes of the IMET?
This Math IMET is designed to help educators determine whether instructional materials are aligned to the Shifts and major features of the Common Core State Standards (CCSS). The substantial instructional Shifts (http://www.corestandards.org/other-resources/key-shifts-inmathematics/) at the heart of the Common Core State Standards are:
- **Focus** strongly where the Standards focus
- **Coherence**: Think across grades and link to major topics within the grade
- **Rigor**: In major topics, pursue conceptual understanding, procedural skill and fluency, and application with equal intensity.

The IMET draws directly from the following documents:
- Common Core State Standards for Mathematics (www.corestandards.org/Math)
- Publishers' Criteria for the Common Core State Standards in Mathematics grade K-8 (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)

When to use the IMET
1. Purchasing materials: Many factors go into local purchasing decisions. Alignment to the Standards is a critical factor to consider. This tool is designed to evaluate alignment of instructional materials to the Shifts and the major features of the CCSS. It also provides suggestions of additional indicators to consider in the materials evaluation and purchasing process.

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Please note this tool was designed for evaluating comprehensive curricula (including any supplemental or ancillary materials), but it was not designed for the evaluation of standalone supplemental materials.

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Evaluating instructional materials requires both subject-matter and pedagogical expertise. Evaluators should be well versed in the Standards (www.corestandards.org/Math) for all grades in which materials are being evaluated. This includes understanding the Major Work of the grade (www.achievethecore/focus), the Supporting and Additional work, how the content fits into the progressions in the Standards (www.achievethecore.org/progressions), and the expectations of the Standards with respect to conceptual understanding, procedural skill and fluency, and application. Evaluators also should be familiar with the substantial instructional Shifts (http:// www.corestandards.org/other-resources/key-shifts-in-mathematics/) of Focus, Coherence and Rigor that are listed above.

Getting Started
Prior to Evaluation

Assemble all of the materials necessary for the evaluation. It is essential for evaluators to have materials for all grades covered by the program, as some criteria cannot be rated without having access to each grade. In addition, each evaluator should have a reference copy of the Common Core State Standards for Mathematics (CCSSM) and the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013).

Before conducting the evaluation itself, it is important to develop a protocol for the evaluation process. The protocol should include having evaluators study the Publishers' Criteria and the IMET. It will also be helpful for evaluators to get a sense of each program overall before beginning the process. At a minimum, this would include reading the front matter of the text, looking at the table of contents and paging through multiple chapters.

Sections 1-3 below should be completed to produce a comprehensive picture of the strengths and weaknesses of the materials under evaluation. Information about areas in need of improvement or supplementation should be shared with internal and external stakeholders.

Navigating the Tool

Begin with Section 1: Non-Negotiable Alignment Criteria

- The Non-Negotiable Alignment Criteria must each be met in full for materials to be considered aligned to the Shifts and the major features of the Common Core State Standards. Each Non-Negotiable Alignment Criterion has one or more metrics associated with it; every one of these metrics must be met in order for the criterion as a whole to be met.

- Examine the relevant materials and use evidence to rate the materials against each criterion and its associated metric(s).

- Record and explain the evidence upon which the rating is based.

Continue to Section 2: Alignment Criteria

- The Alignment Criteria must each be met for materials to be considered aligned to the Shifts and the major features of the Common Core State Standards. Each Alignment Criterion has one or more metric associated with it; a specific number of these metrics must be met or partially met in order for the criterion as a whole to be met.

- Examine the materials in relation to these criteria, assigning each metric a point value. Rate the criterion as "Meets" or "Does Note Meet" based on the number of points assigned. The more points the materials receive on the alignment Criteria, the better they are aligned.

- Record and explain the evidence upon which the rating is based.

Proceed to Section 4: Indicators of Quality

- Indicators of Quality are important considerations that will help evaluators better understand the overall quality of instructional materials. These considerations are not criteria for alignment to the CCSS, but they provide valuable information about additional program characteristics. Evaluators may want to add their own indicators to the examples provided.

Directions for Non-Negotiable 1

Freedom from Obstacles to Focus

Criterion	Evidence- Give specific examples.	Rating: (Reviewer only.)
Non-Negotiable 1: **Freedom from Obstacles to Focus** **Materials must reflect the content architecture of the Standards by not assessing the topics named before the grade level where they first appear in the Standards.** The Standards foster students' progress to algebra by focusing strongly on arithmetic. Consistent with this focus, certain topics from outside of arithmetic appear only in later grades. Thus, to be aligned, materials must reflect the content architecture of the Standards by not assessing the topics named before the grade level where they first appear in the Standards. In this criterion, "topics named" means the topics that are explicitly named in Metric 1A. No other topics should be added to the list in Metric 1A. (Note that other topics in the standards are addressed in criterion NN2.)	**Required Materials** • Common Core State Standards for Mathematics (www.corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf) • From the materials being evaluated: teacher guides and all assessment components	**Rating this Criterion**: Non-Negotiable 1 is rated as Meets or Does Not Meet. To rate Non-Negotiable 1, begin by rating Metric 1A. Since Metric 1A is the only metric for Non-Negotiable 1, the rating for Non-Negotiable 1 is the same as the rating for Metric 1A. If Metric 1A is rated as Does Not Meet, include evidence of when the named topic(s) is/are assessed. If the metric is rated as Meets, list the grade(s) examined in the evaluation.

Metric NN1A: **Materials reflect the basic architecture of the Standards by not assessing the listed topics before the grade level indicated.** • Probability, including chance, likely outcomes, probability models. (Introduced in the CCSSM in grade 7) • Statistical distributions, including center, variation, clumping, outliers, mean, median, mode, range, quartiles; and statistical association or trends, including two-way tables, bivariate measurement data, scatter plots, trend line, line of best fit, correlation. (Introduced in the CCSSM in grade 6) • Similarity, congruence, or geometric transformations. (Introduced in the CCSSM in grade 8) • Symmetry of shapes, including line/ reflection symmetry, rotational symmetry. (Introduced in the CCSSM in grade 4) **How to Find the Evidence:** Evaluate the table of contents, all chapter tests, all unit tests, and other such assessment components (including rubrics). For context, read Criterion #2 from the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013). NOTE: Grade alignments of other topics are addressed in Non-Negotiable 2, Focus and Coherence.) In this criterion, "topics named" means the topics that are explicitly named in Metric 1A. No other topics should be added to the list in Metric 1A. (Note that other topics in the standards are addressed in criterion NN2.)	**Evidence-** **After reviewing the table of contents, chapter tests, and unit tests all standards that are expected to be taught at the 3rd grade level are the only standards being tested.**	(Reviewer only.) **_X_ Meets** **____Does Not Meet**
Non-Negotiable 1: Materials must reflect the content architecture of the Standards by not assessing the topics named* before the grade level where they first appear in the Standards. **NN 1** If Metric 1A was rated as Meets, then rate Non-Negotiable 1 as Meets. If Metric 1A was rated as Does Not Meet, then rate Non- Negotiable 1 as Does Not Meet. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion.**(Reviewer only.)** **Before moving to Non-Negotiable 2, record the final Meets or Does Not Meet rating in the Evaluation Summary.**		(Reviewer only.) **_X_ Meets** **____Does Not Meet** **Strengths/Weaknesses:**

Directions for Non-Negotiable 2

Focus and Coherence

Non-Negotiable 2: **Focus and Coherence** **Materials must focus coherently on the Major Work of the grade in a way that is consistent with the progressions in the Standards.** Focus and coherence are the two major evidence-based design principles of the Common Core State Standards for Mathematics (CCSSM, p. 3). Focus is necessary in order to fulfill the ambitious promise the states have made to their students by adopting the Standards: greater achievement at the college and career ready level; greater depth of understanding of mathematics; and a rich classroom environment in which reasoning, sense-making, applications, and a range of mathematical practices flourish. In simpler terms, a mile-wide, inch-deep curriculum translates to less time per topic. Less time means less depth and moving on without many students. Thus, materials must focus coherently on the Major Work of the grade in a way that is consistent with the progressions in the Standards.	**Required Materials** • Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf) • Focus by Grade Level for the grade being evaluated (www.achievethecore.org/focus) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion:** Non-Negotiable 2 is rated as Meets or Does Not Meet. To rate Non-Negotiable 2, first rate metrics 2A–2H. Each of these eight metrics must be rated as Meets in order for Non-Negotiable 2 to be rated as Meets. Rate each metric 2A-2H as Meets or Does Not Meet/Insufficient Evidence. If the evidence examined shows that the Criterion is met, then mark the Criterion Meets. If the evidence examined shows that the Criterion is not met—or if there is insufficient evidence to make a determination—then mark the Criterion as Does Not Meet/Insufficient Evidence. Support all ratings with evidence.
Metric NN2A: **In each grade K–8, students and teachers using the materials as designed devote the large majority of time to the Major Work of the grade.** **How to Find the Evidence:** Familiarize yourself with the Major Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, lessons, homework assignments, and assessments. (Evaluate both student and teacher materials.) Consider time spent on the Major Work of the grade and judge qualitatively whether students and teachers using the materials as designed will devote the large majority of time to the Major Work of the grade. For context, read Criterion #1 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013)	**Evidence-** **There are a total of 93 lessons with 67 of them based on the major works of grade 3.** **72% of the lessons are the major works of the grade.**	**(Reviewer only.)** **_X_ Meets** **____Does Not Meet/** **Insufficient Evidence**

Metric NN2B: **Supporting work, where present, enhances focus and coherence simultaneously by also engaging students in the Major Work of the grade.** **How to Find the Evidence:** Familiarize yourself with the Major Work and Supporting Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate chapters and lessons that focus on Supporting Work. NOTE: Example of evaluating this Criterion might include looking at whether materials for K–5 generally treat data displays as an occasion for solving grade-level word problems using the four operations (e.g., see 3.MD.B.3); or whether materials for grade 7 take advantage of opportunities to use probability to support ratios, proportions, and percentages. For context, read Criterion #3 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** **Students draw picture graphs and bar graphs to represent data and solve simple put-together, take apart, and compare problems using information in the graph.** **These are seen in every unit 3 which supports unit 7.**	(Reviewer only.) **_X_ Meets** **____Does Not Meet/** **Insufficient Evidence**
Metric NN2C: **Materials base content progressions on the grade-by-grade progressions in the Standards. Content from previous or future grades does not unduly interfere with or displace on-grade-level content.** **How to Find the Evidence:** Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, and lessons in both student and teacher materials. NOTE: In some cases it may be possible that aligned materials might address some aspects of a topic in a strategic way before or after the grade level in which the topic is central in the Standards' progressions; for example, a curriculum author might purposefully choose to explore adding fractions with unlike denominators in a way appropriate to grade four, recognizing that this work is not really required until the next grade. However, any such purposeful discrepancies in content progressions should enhance the required learning in each grade; not unduly interfere with or displace grade-level content; and be clearly aimed at helping students meet the Standards as written rather than effectively rewriting the progressions in the Standards. And in all cases, note that Non-Negotiable 1 must be met for materials to be aligned. For context, read Criterion #5a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** **The assessment for Unit 4 does not explicitly state to use the standard algorithm, yet that is what is taught in the unit.** • **The standard algorithm for addition and subtraction is a 4th grade standard. Time in addition and subtraction should be spent:** ✓ **Using strategies** ✓ **Algorithms (based on place value)** ✓ **Properties of operations** ✓ **Relationship between addition and subtraction** **Unit 6 (area and perimeter) using tangrams to find area of rectangle and decomposing L-shaped figures into rectangles then finding the area of the rectangle. These are beyond the rigor of the core expectations.**	(Reviewer only.) **_X_ Meets** **____Does Not Meet/** **Insufficient Evidence**

Metric NN2D: **Materials gi[illegible]l students extensive work with on-grade-level problems.** **How to Find the Evidence:** Evaluate both student and teacher materials. If the materials provide resources for differentiated learning, consider whether lower-performing students have opportunities to engage with grade-level problems. Also consider whether higher-performing students are given opportunities to learn current grade-level content in greater depth. For context, read Criterion #5b in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** **Each lesson has a q[illegible]k practice at the beginning of the lesson to briefly review relevant grade-level content and a remembering page at the end of a lesson to review previously learned grade-level content. In addition the homework page gives additional practice on the lesson.**	(Reviewer only.) __X__ Meets ____Does Not Meet/ Insufficient Evidence
Metric NN2E: **Materials relate on-grade-level concepts explicitly to prior knowledge from earlier grades.** **How to Find the Evidence:** Evaluate both student and teacher materials. NOTE: Examples of evaluating this Criterion might include looking at the way the materials extend basic ideas of place value across the decimal point; or the role that properties of operations play when the materials extend arithmetic beyond whole numbers to fractions, variables, and expressions. More generally, cluster headings in the Standards sometimes signal key moments where reorganizing and extending previous knowledge is important in order to accommodate new knowledge (e.g., see cluster headings that use the phrase "Apply and extend previous understanding"). For context, read Criterion #5c in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** **In third grade students are expanding multi-digit addition and subtraction methods that are meaningful to the students. They then use that with visual models and real world situations throughout unit 4 to show problem solving concepts**	(Reviewer only.) __X__ Meets ____Does Not Meet/ Insufficient Evidence
Metric NN2F: **Review of material from previous grades is clearly identified as such to the teacher, and teacher and students can see what their specific responsibility is for the current year.** **How to Find the Evidence:** Evaluate the table of contents, but do not stop there; also evaluate units, chapters, lessons, homework assignments and assessments. (Evaluate both student and teacher materials.) Identify any content from previous grades and check whether it is identified as such. For context, read Criterion #5a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** **This is found in the Teacher Edition on page xliii**	(Reviewer only.) __X__ Meets ____Does Not Meet/ Insufficient Evidence

Metric NN2G: **Materials include learning objectives that are visibly shaped by CCSSM cluster headings.** **How to Find the Evidence:** Select several clusters from the Major Work in the grade being evaluated. Evaluate teacher and student materials in relation to these clusters. For context, read Criterion #6a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** **Every lesson in the teacher's edition is labeled with a domain, major cluster, and specific standard being taught.** **Each unit has Big Ideas which connect clusters and domains together.**	**(Reviewer only.)** **_X_ Meets** **____Does Not Meet/ Insufficient Evidence**
Metric NN2H: **Materials include problems and activities that serve to connect two or more clusters in a domain, or two or more domains in a grade, in cases where these connections are natural and important.** **How to Find the Evidence:** In the grade being evaluated, choose two or more clusters or two or more domains for which connections are natural and important. Evaluate the units, chapters, and lessons that deal with the chosen topics, looking for problems and activities that serve to connect the chosen clusters or domains. NOTE: An example of evaluating this Criterion might include looking at whether problems in grade 4 sometimes or often involve students applying their developing computation skills (detailed in domain NBT) in the context of solving word problems (detailed in domain OA). For context, read Criterion #6b in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** **Unit 3 Lesson 14 connects 3.MD.B with 3.OA.A** **Unit 4 Lesson 17 connects 3.NBT.A with 3.OA.A** **Unit 7 Lesson 9 connects 3.G.A with 3.NF.A**	**(Reviewer only.)** **_X_ Meets** **____Does Not Meet/ Insufficient Evidence**
Non-Negotiable 2: **Focus and Coherence** **Materials must focus coherently on the Major Work of the grade in a way that is consistent with the progressions in the Standards.** **NN 2** If all Metrics 2A – 2H were rated as Meets, then rate Non-Negotiable 2 as Meets. If one or more Metric was rated Does Not Meet/Insufficient Evidence, then rate Non-Negotiable 2 as Does Not Meet. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)** **Before moving to Alignment Criterion 1, record the final Meets or Does Not Meet rating in the Evaluation Summary.**		**(Reviewer only.)** **_X_ Meets** **____ Does Not Meet** **Strengths/Weaknesses:**

Now continue by evaluating the Alignment Criterion 1 for Rigor and Balance.

Directions for Alignment Criterion 1

Rigor and Balance

Alignment Criterion 1: Rigor and Balance **Materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.** The Standards set expectations for attention to all three aspects of rigor: conceptual understanding, procedural skill and fluency, and applications. Thus, materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.	**Required Materials** • Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf) • Focus by Grade Level for the grade being evaluated (achievethecore.org/focus) • Situation Types for the Operations in Word Problems (achievethecore.org/situation-types) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion:** Alignment Criterion 1 is rated as Meets or Does Not Meet. To rate Alignment Criterion 1, first rate metrics 1A, 1B, and 1C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). For each metric, guiding questions are provided to aid in gathering evidence. Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 1 if the materials rate 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as rigor and balance, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.
Metric AC1A: **The materials support the development of students' conceptual understanding of key mathematical concepts, especially where called for in specific content Standards or cluster headings.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Major Work for the grade being evaluated that relate specifically conceptual understanding to use throughout the questions associated with this metric. NOTE: Some examples of clusters or Standards that call for conceptual understanding include: K.OA.A.1, (1.NBT.B, 1.NBT.C), (2.NBT.A, 2.NBT.B), (3.OA.A.1, 3.OA.A.2), 4.NF.A, (4.NBT.A, 4.NBT.B), 5.NF.B, (5.NBT.A, 5.NBT.B), 6.RP.A, 6.EE.A.3, 7.NS.A, 7.EE.A, 8.EE.B, 8.F.A, 8.G.A Clusters or Standards grouped by parentheses are closely connected and could be analyzed together. For context, read Criterion #4a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	-Choose a cluster/Standard from the Major Work that is aligned to each aspect of rigor and use it to evaluate these metrics. It is most helpful if the same clusters/Standards are chosen for all of the programs being evaluated. (Guidance in choosing clusters/Standards is included in "How to Find the Evidence".)	**Use the questions for AC Metric 1A to evaluate Metric 1A. Record evidence for each question and rate Metric 1A.** __x__ **Meets (2)** ____**Partially Meets (1)** ____**Does Not Meet (0)**

Is conceptual understanding attended to thoroughly where the Standards set e expectations for understanding or interpreting? Evaluate lessons, chapter/unit assessments and homework assignments, paying attention to work aligned to Standards that explicitly call for understanding or interpreting. NOTE: Examples of evaluating this Criterion might include looking at how well the multi-digit addition and subtraction algorithms are developed and explained on the basis of place value and properties of operations; or how well the multi-digit multiplication and division algorithms are developed and explained on the basis of place value and properties of operations; or how well solving equations is presented and explained as a process of reasoning.	**Evidence-** **Each lesson within the unit uses the previous lessons knowledge to go to a deeper understanding of the concept.** **Each lesson contains a Math Talk. The purpose of these is to have students share their thinking and discuss problem solving.** **Unit 1 (multiplication and division), 2(multiplication and division), & 5 (write equations to solve multiplication, division, addition, and subtraction).** • **Drawings** • **Repeated addition** • **Equal groups** • **Relationship between division and multiplication from the beginning**	
Do the materials feature high-quality conceptual problems and conceptual discussion questions? Evaluate lessons, chapter/unit assessments, and homework assignments. NOTE: Example of conceptual problems might include such questions as "Find a number greater than 1/5 and less than 1/4," or "If the divisor does not change and the dividend increases, what happens to the quotient?"	**Evidence-** **Each lesson closes with a formative assessment designed to check students understanding. It asks them to explain their reasoning and understanding of a concept.** **Unit 5 Write equations to solve word problems**	
Do the materials feature opportunities to identify correspondences across mathematical representations? Evaluate lessons, chapter/unit assessments and homework assignments. NOTE: Examples of evaluating this Criterion might include looking at whether students are supported in identifying correspondences among: the verbal description of a situation, the diagrams that distill its mathematical features, and the equations that model it; or equivalent forms of numbers (e.g., 3 and 6/2) and the number line; or rational number operations and representations of them via models such as the vector model; or the expression that defines a function and the graph that shows the relationship.	**Evidence-** **Every lesson has a class activity where the practices are put to work as a whole class discussion. These activities vary by unit.**	

Metric AC1B: **The materials are designed so that students attain the fluencies and procedural skills required by the Standards.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Major Work for the grade being evaluated that relate specifically to fluency and procedural skill to use throughout the questions associated with this metric. NOTE: Some examples of Standards that call for procedural skill and fluency include: K.OA.A.5, 1.OA.C.6, 2.OA.B.2, 2.NBT.B.5, 3.OA.C.7, 3.NBT.A.2, 4.NBT.B.4, 5.NBT.B.5, 6.NS.B.2, and 6.NS.B.3, 6.EE.A, 7.NS.A, 7.EE.A.1,7.EE.B.4a, 8.EE.C.7, 8.EE.C.8b For context, read Criterion #4b in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).		**Use the questions for Metric 1B to evaluate Metric 1 B. Record evidence for each question and rate Metric 1B.** **(Reviewer only.)** **__x__ Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Is progress toward fluency and procedural skill interwoven with students' developing conceptual understanding of the operations in question? Evaluate lessons, chapter/unit assessments, daily routines, and homework assignments for evidence that the development of fluency and procedural skill is supported by conceptual understanding.	**Evidence-** **There is fluency practice in the student activity book; quick practices start every lesson and fluency check in the assessment guide throughout the year.**	
Are purely procedural problems and exercises present that include cases in which opportunistic strategies are valuable and generic cases that require efficient algorithms present? Evaluate lessons, chapter/unit assessments, daily routines, and homework assignments. NOTE: Examples of problems in which opportunistic strategies are valuable might include the sum 698 + 240 or the system x + y = 1, 2x + 2y = 3. Examples of generic cases that require efficient algorithms might include the sum 8767+2286 or the system 6y + x = x + 3, – x = 1 + 2y.	**Evidence-** **Within each lesson students are working toward fluency within the class activity. That is followed up by the homework and remembering part of the lesson.**	
Do the materials in grades K–6 provide repeated practice toward attainment of fluency Standards? Evaluate lessons, daily routines, and homework assignments for evidence of repeated practice toward attainment of the following K–6 Standards that set an explicit expectation of fluent (accurate and reasonably fast) computation: K.OA.A.5, 1.OA.C.6, 2.OA.B.2, 2.NBT.B.5, 3.OA.C.7, 3.NBT.A.2, 4.NBT.B.4, 5.NBT.B.5, 6.NS.B.2, 6.NS.B.3.	**Evidence-** **Within each lesson students are working toward fluency within the class activity. That is followed up by the homework and remembering part of the lesson.**	

Metric AC1C: **The materials are designed so that teachers and students spend sufficient time working with engaging applications, without losing focus on the Major Work of each grade.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Major Work for the grade being evaluated that relate specifically application to use throughout the questions associated with this metric. NOTE: Some examples of clusters or Standards that call for application include: K.OA.A.2, 1.OA.A, 2.OA.A, 3.OA.A.3, 3.OA.D.8, 4.OA.A.3, 4.NF.B.3d, 4.NF.B.4c, 5.NF.B.6, 5.NF.B.7c, 6.RP.A.3, 6.NS.A.1, 6.EE.B.7, 6.EE.C.9, 7.RP.A, 7.NS.A.3, 7.EE.B.3, 8.EE.C.8c, 8.F.B For context, read Criterion #4c in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** **In addition to the student activity book there are also practice opportunities with learning stations.** **Math Expressions encourages students to use math drawings and visual models to represent the situation.**	**Use the questions for Metric 1C to evaluate Metric 1C. Record evidence for each question and rate Metric 1C.** **(Reviewer only.)** **__X__ Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Are there are single- and multi-step contextual problems, including non-routine problems, that develop the mathematics of the grade, afford opportunities for practice, and engage students in problem solving? Do the problems attend thoroughly to those places in the content Standards where expectations for multi-step and real-world problems are explicit? Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** **There are story problems in every lesson.**	
Do application problems particularly stress applying the Major Work of the grade? Evaluate lessons, chapter/unit assessments, and homework assignments. NOTE: Examples of evaluating this Criterion might include looking at: how well, by the end of grade 2, students using the materials as designed can represent and solve a full range of one-step addition and subtraction word problems; or how well, by the end of grade 3, students using the materials as designed can represent and solve a full range of one-step multiplication and division word problems; or how well these basic situation types for each operation are carried coherently across the grades, (e.g., with fractions and algebraic expressions); or, in all grades, whether the problems connect concepts, Standards, and domains in ways that are natural and important. For a list of situation types for one-step addition, subtraction, multiplication, and division problems, see Situation Types for the Operations in Word Problems	**Evidence-** **The problem solving process is used in all of the units.**	
Does modeling build slowly across K–8, with applications that are relatively simple in earlier grades and when students are encountering new content? In grades 6–8, do the problems begin to provide opportunities for students to make their own assumptions or simplifications in order to model a situation mathematically? Read Standard for Mathematical Practice 4, Model with Mathematics. Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** **In first grade they solve word problems, then in second grade they solve one and two-step word problems, which continue into third grade with more difficult, word problems.**	

Alignment Criterion 1: Rigor and Balance

Materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.

AC1 Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 out of 6 points, the Criterion has not been met. Check the final rating.
Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)**

Before moving to Alignment Criterion 2, record the final Meets or Does Not Meet rating in the Evaluation Summary.

(Reviewer only.)

_X_ Meets

____Does Not Meet

Strengths/Weaknesses:

Directions for Alignment Criterion 2

Standards for Mathematical Practice

Alignment Criterion 2: Standards for Mathematical Practice

Materials must demonstrate authentic connections between content Standards and practice Standards.

The Standards require that designers of instructional materials connect the mathematical practices to mathematical content in instruction. Thus, materials must demonstrate authentic connections between content Standards and practice Standards.

Required Materials:

- Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf)
- Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)
- Focus by Grade Level for the grade being evaluated (www.achievethecore.org/focus)
- From the materials being evaluated: teacher guides, student texts and workbooks

Rating this Criterion

Alignment Criterion 2 is rated as Meets or Does Not Meet.

To rate Alignment Criterion 2, first rate metrics 2A, 2B, and 2C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). For each metric, guiding questions are provided to aid in gathering evidence.

Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 2 if the materials earn 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as mathematical practices, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.

Metric AC2A: **Materials address the practice Standards in such a way as to enrich the Major Work of the grade; practices strengthen the focus on Major Work instead of detracting from it, in both teacher and student materials.** **How to Find the Evidence:** Familiarize yourself with the Major Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate teacher and student materials for evidence that the mathematical practices support and connect to the focus of the grade. NOTE: Examples of evaluating this Criterion might include looking at whether, in grades K–5, students using the materials are supported to look for and express regularity in repeated reasoning about the addition table, the multiplication table, the properties of operations, the relationship between addition and subtraction or multiplication and division, and the place value system; or whether, in grades 6–8, students using the materials are supported to look for and express regularity in repeated reasoning about proportional relationships and linear functions. For context, read Criterion #8 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013).	**Evidence-** **Mathematical practices are labeled at key points in the lesson instruction to provide an indication of a clear and specific example for teachers to use to draw students attention to the practice without making it overwhelming.** **Example: MP's are outlined in every unit overview. The outline shows which MP's are covered within the unit and how they are used. See Unit 6 overview on pages 651Q – 651X. They are then called out in the teacher's edition throughout the lesson.** **I did not find any callouts in the student edition.**	**(Reviewer only.)** **__X__ Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Metric AC2B: **Materials attend to the full meaning of each practice Standard.** **How to Find the Evidence:** For context, read Criterion #7 and Criterion #9 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).		**Use the questions for Metric 2B to evaluate Metric 2B. Record evidence for each question and rate Metric 2B.** **(Reviewer only.)** **_____Meets (2)** **__x__Partially Meets (1)** **____Does Not Meet (0)**
Over the course of any given year of instruction, is each mathematical practice Standard meaningfully present in the form of assignments, activities, or problems that stimulate students to develop the habits of mind described in the practice Standard? Evaluate lessons, chapter/ unit assessments, and homework assignments for evidence of each mathematical practice being meaningfully present in instruction.	**Evidence- Unit 1** **MP5: Throughout the unit students are specifically told what tool to use. I found no discussion about why the tool was appropriate or what other choices would make sense. (1)**	
Do the materials treat the practice Standards as developing across grades or grade bands? Are the practice Standards in early grades appropriately simple? Do they display an arc of growing sophistication across the grades?	**Evidence-** **The standards are appropriately treated with an arc of growing sophistication across the grades.**	

Are there teacher-directed materials that explain the role of the practice Standards in the classroom and in students' mathematical development? Are alignments to practice Standards accurate?	**Evidence-** **The teacher's edition calls out each mathematical practice within the lesson and has dialog or a lesson help to help make sure the practice is covered.**	
Metric AC2C: **Materials support the Standards' emphasis on mathematical reasoning.** **How to Find the Evidence:** For context, read Criterion #10 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).		**Use the questions for Metric 2C to evaluate Metric 2C. Record evidence for each question and rate Metric 2C.** **(Reviewer only.)** **__x__ Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Do the materials support students in constructing viable arguments and critiquing the arguments of others concerning grade-level mathematics that is detailed in the content Standards? Read Standard for Mathematical Practice 3. Evaluate teacher and student materials to ensure that students are given opportunities to reason with grade-level mathematics.	**Evidence-** **Each lesson contains a Math Talk. The purpose of these is to have students share their thinking and discuss and or defend their problem solving.** **Every unit, every lesson, except unit 5**	
Do the materials support students in producing not only answers and solutions, but also, in a grade-appropriate way, arguments, explanations, diagrams, mathematical models, etc., especially in the Major Work of the grade? Familiarize yourself with the Major Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate teacher and student materials, to understand the types of work students are expected to produce.	**Evidence-** **Students should be able to use correct logic or reasoning, and should be able to identify incorrect reasoning. There are 2 to 4 situation per unit to use as practice involving the Puzzled Penguin. See the example on page 25 of the student activity book.**	
Do materials explicitly attend to the specialized language of mathematics? Is the language of argument, problem solving, and mathematical explanations taught rather than assumed? Evaluate teacher and student materials, paying attention to how mathematical language is taught. NOTE: Examples of evaluating this Criterion might include looking at whether students are supported in: basing arguments on definitions; using the method of providing a counterexample; or recognizing that examples alone do not establish a general statement.	**Evidence-** **The student edition presents key vocabulary words and defines them. The words are then reviewed on the unit reviews and the unit tests.**	

Alignment Criterion 2:
Standards for Mathematical Practice

Materials must demonstrate authentic connections between content Standards and practice Standards.

AC2 Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 out of 6 points, the Criterion has not been met. Check the final rating.
Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion.
(Reviewer only.)

Before moving to Alignment Criterion 3, record the final Meets or Does Not Meet rating in the Evaluation Summary.

(Reviewer only.)

__X__ Meets

____Does Not Meet

Strengths/Weaknesses:

Alignment Criterion 3:
Access to the Standards for All Students

Materials must provide supports for English Language Learners and other special populations.

Because Standards are for all students, alignment requires thoughtful support to ensure all students are able to meet the Standards. Thus, aligned materials must provide supports for English Language Learners and other special populations.

Required Materials:

- Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf)
- Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)
- From the materials being evaluated: teacher guides, student texts and workbooks

Rating this Criterion:
Alignment Criterion 3 is rated as Meets or Does Not Meet.

To rate Alignment Criterion 3, first rate metrics 3A, 3B, and 3C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points).

Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 3 if the materials earn 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as support for special population, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.

Metric AC3A:
Support for English Language Learners and other special populations is thoughtful and helps those students meet the same Standards as all other students. The language in which problems are posed is carefully considered.

How to Find the Evidence:
Evaluate teacher and student materials, paying attention to supports offered for special populations.

Evidence-

There is ELL Support in the teacher's edition for every lesson. The lessons feature differentiated support for beginning, intermediate, and advanced language proficiency. The activities emphasize oral language development.

Reviewer only.)

__x__ Meets (2)

____Partially Meets (1)

____Does Not Meet (0)

Metric AC3B: **Materials pr[illegible]e appropriate level and type of scaffolding, differentiation, intervention, and support for a broad range of learners with gradual removal of supports, when needed, to allow students to demonstrate their mathematical understanding independently.** **How to Find the Evidence:** Evaluate teacher and student materials, paying attention to whether materials provide differentiation that will lead all learners to engage with on-grade-level content.	**Evidence-** **There are specifically [illegible]ered lessons to cover all 3 tiers. This is an additional resource separate from the core program.**	Reviewer only.) **__X__ Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Metric AC3C: **Design of lessons recommends and facilitates a mix of instructional approaches for a variety of learners such as using multiple representations (e.g., including models, using a range of questions, checking for understanding, flexible grouping, pair-share).** **How to Find the Evidence:** Evaluate teacher materials, noting instructional approaches suggested for whole class and differentiated lessons and activities.	**Evidence-** **There is differentiated instruction for each lesson within a chapter. These include hands on activities, writing, whole class, and small group.**	**Reviewer only.)** **__X___ Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Alignment Criterion 3: **Access to the Standards for All Students** **Materials must provide supports for English Language Learners and other special populations.** AC3 Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 points, the Criterion has not been met. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion.**(Reviewer only.)** **Move to the Evaluation Summary and record the final Meets or Does Not Meet rating.**		**(Reviewer only.)** **__X__ Meets** **____Does Not Meet** **Strengths/Weaknesses:**

Once an evaluation for alignment to the Shifts and major features of the CCSS has been conducted using Sections 1-3, it's important to evaluate for overall quality and best practices. A starting list of Indicators of Quality are suggested below. States, districts and others evaluating instructional materials are encouraged to add to this list to ensure materials reflect local contexts. For background information on some of the Indicators of Quality in this section, refer to pp.18–21 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).

Indicators of Quality	Evidence- Give specific examples.	Rating: (Reviewers only.)
1. Lessons are thoughtfully structured and support the teacher in leading the class through the learning paths at hand, with active participation by all students in their own learning and in the learning of their classmates.	Evidence- Each lesson is organized under a six-step plan for instruction: Get ready, math talk, an activity in which they investigate, model, practice and apply, and a formative assessment, then followed up with a homework and remembering assignment.	(Reviewer only.) __X__ Yes _____ No
2. The underlying design of the materials includes both problems and exercises. (In solving problems, students learn new mathematics, whereas in working exercises, students apply what they have already learned to build mastery.) Each problem or exercise has a purpose. NOTE: This Criterion does not require that the problems and exercises be labeled as such.	Evidence- Math Expressions offers a variety of problems and exercises. There are several problems that mimic the examples of the new mathematics that were introduced in the lesson There are also multi-step problems that allow students to combine the math that they learned with previously learned skills.	(Reviewer only.) __X__ Yes _____ No
3. Design of assignments is not haphazard: exercises are given in intentional sequences in order to strengthen students' mathematical understanding.	Evidence- Each lesson is organized under a six-step plan for instruction: Get ready, math talk, an activity in which they investigate, model, practice and apply, and a formative assessment, then followed up with a homework and remembering assignment.	(Reviewer only.) __X__ Yes _____ No
4. There are separate teacher materials that support and reward teacher study including, but not limited to: discussion of the mathematics of the units and the mathematical point of each lesson as it relates to the organizing concepts of the unit, discussion on student ways of thinking and anticipating a variety of students responses, guidance on lesson flow, guidance on questions that prompt students thinking, and discussion of desired mathematical behaviors being elicited among students.	Evidence- Everything can be taught from print form; however, www-K6.thinkcentral.com which is the online portal has all of the digital resources in one place including teacher's edition, student edition, math i-tools, and assessment resources.	(Reviewer only.) __x__ Yes _____ No
5. Manipulatives suggested in the materials are faithful representations of the mathematical objects they represent and are connected to written methods.	Evidence- There are multiple manipulatives to use with the program to help with the visual and kinesthetic learners. They are primarily used during the modeling math part of the lesson.	(Reviewer only.) __x__ Yes _____ No

6. Materials include a variety of curriculum-embedded assessments. Examples include pre-, formative, summative, and self-assessment resources.	**Evidence-** **There are quick quizzes during the unit and end of chapter tests in multiple formats for all types of learners. Also there are formative assessments in every lesson.**	(Reviewer only.) **__x__ Yes** **_____ No**
7. Assessments contain aligned rubrics, answer keys, and scoring guidelines that provide sufficient guidance for interpreting student performance.	**Evidence-** **Each chapter has a performance activity which includes a rubric for scoring. Also there are answer keys for all assessments.**	(Reviewer only.) **__x__ Yes** **_____ No**
8. Materials assess student proficiency using methods that are accessible and unbiased, including the use of course-level language in student prompts.	**Evidence-** **All tests are in student friendly wording (if you teach the academic vocabulary). See example on pages 77-92 in the assessment guide for all Unit 5 Tests.**	(Reviewer only.) **__x__ Yes** **_____ No**
9. Materials are carefully evaluated by qualified individuals, whose names are listed, in an effort to ensure freedom from mathematical errors and course-level appropriateness.	**Evidence-** **Could not find anything other than author information.**	(Reviewer only.) **_____ Yes** **__x__ No**
10. The visual design supports students in engaging thoughtfully with the subject. Navigation through the text is clear.	**Evidence-** **The text is colorful and student friendly. The teacher's edition is easy to navigate. The exercises are written so students can relate and to make it more interesting. For examples see pages 65-66 in the student edition.**	(Reviewer only.) **__x__ Yes** **_____ No**
11. The materials engage parents in appropriate ways. For example, homework assignments in elementary grades, consist of routine problems, practice with getting answers, and fluency-building exercises that parents can easily support.	**Evidence-** **There are parent letters at the beginning of each chapter to help explain to parents what their child will be learning. There is also an example problem on all homework pages to demonstrate to parents what was learned.**	(Reviewer only.) **__x__ Yes** **_____ No**

Reviewer IMET Evaluation Summary **Title/Level:** Math Expressions Common Core Grade 3

Publisher: Houghton Mifflin Harcourt **Copyright:** 2013
ISBN: various

Reviewer ID # EL & PL **Date Review Completed:** Mar. 9, 2016

Non-Negotiable 1: Freedom from Obstacles to Focus __X__ Meets _____ Does Not Meet	**Non- Negotiable 2: Focus and Coherence** __X__ Meets ___ Does Not Meet (see NN2C)
Non-Negotiable Overall: __X__ Meets ___ Does Not Meet	
Alignment Criteria- Each Alignment Criterion must be met with a sufficient number of points in order for Alignment Criteria to be labeled as "Meets" overall. The more points the materials receive on the Alignment Criteria, the better they are aligned.	

Alignment Criterion 1: Rigor and Balance	Alignment Criterion 2: Standards of Mathematical Practice	Alignment Criterion 3: Access to Standards for All Learners
Points: __6___ of 6 possible. **(Materials must receive at least 5 of 6 points to align.)** **____X___ Meets** **_____ Does Not Meet**	**Points: __5___ of 6 possible.** **(Materials must receive at least 5 of 6 points to align.)** **___X____ Meets** **_____ Does Not Meet**	**Points: __6___ of 6 possible.** **(Materials must receive at least 5 of 6 points to align.)** **___X____ Meets** **_____ Does Not Meet**

Alignment Criteria Overall:

___X__ Meets **_____ Does Not Meet**

If the materials meet both Non-Negotiables and relevant Alignment Criterion, they are aligned to the Shifts and major features of the Core Standards. **the materials meet every Non-Negotiable and Alignment Criterion?** ___X___ **Yes** _____ **No**

What are the specific areas of strength and weakness based on this evaluation? Publishers or others modifying or developing assessments can use this information to make improvements and/or to remedy gaps in the alignment of assessment materials.

Not met because of (NNC2)

The assessment for Unit 4 does not explicitly state to use the standard algorithm, yet that is what is taught in the unit.

- **The standard algorithm for addition and subtraction is a 4th grade standard. Time in addition and subtraction should be spent:**
  - ✓ **Using strategies**
  - ✓ **Algorithms (based on place value)**
  - ✓ **Properties of operations**
  - ✓ **Relationship between addition and subtraction**

Unit 6 (area and perimeter) using tangrams to find area of rectangle and decomposing L-shaped figures into rectangles then finding the area of the rectangle. These are beyond the rigor of the core expectations.

2015-16 Mathematics Interim Review Recommendation & Summary

Publisher Name:	HMH
Title:	Math Expressions Grade 4
ISBN #	978-0-547-82482-6 + 978-0-547-82490-1
Grade Level(s) or Course:	Grade 4
Reviewer ID:	TS, EM

RECOMMENDED AS:

__X__ **Core Mathematics Program-** a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials. Substantial evidence clearly supports the designation of this program as Core.

_____ **Other Mathematics Program-** a program that substantially, but partially, meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for supplemental materials. Substantial evidence clearly supports the designation of this program as Other.

_____ **Component Mathematics Program-** a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs. Substantial evidence clearly supports the designation of this program as Component.

_____ **Intervention Program-** a program designed and intended to target and support students' specific needs. Substantial evidence clearly supports the designation of this program as Intervention.

_____ **Does not meet criteria** for recommendation as a Curricular Material or Online Resource for Mathematics.

EVIDENCE SUMMARY:

FOCUS- Work is focused on grade level standards with emphasis placed on major ~~class~~ grade level clusters.

COHERENCE- Structure and layout is consistant for teacher and students. Differentiation is focused on lesson standards, while supporting a variety of learners.

RIGOR- Rigor is present as work is focused on grade level standards and mathematical practices. Concerned about the amount of time spend on fluency & bare problems.

CONCEPTUAL UNDERSTANDING- Many opportunities for teacher-led whole class development of conceptual understanding. Concerns about opportunities for students to develop conceptual understanding independently.

MATHEMATICAL PRACTICES- Multiple practices interwoven in every lesson with teacher support for implementation & development of practices.

ACCESSIBILITY OF STANDARDS TO ALL STUDENTS- Many supports for students and especially for teachers through ELL support, Tier 1, & 2, & 3 supports, differentiation of activities, cards, etc. Gradual removal of supports.

OTHER:

Teachers will need to ~~create~~ intentionally provide additional opportunities for students to build their own conceptual understanding and possibly bridge conceptual to bare problems for students.

2015-16 Interim Mathematics Review

Mathematics Evaluation Tool Grades K-8

Publisher: HMH

Title of Material: Math Expressions Grade 4

Author: Karen C. Fuson

ISBN #: _____ **Copyright** 2013

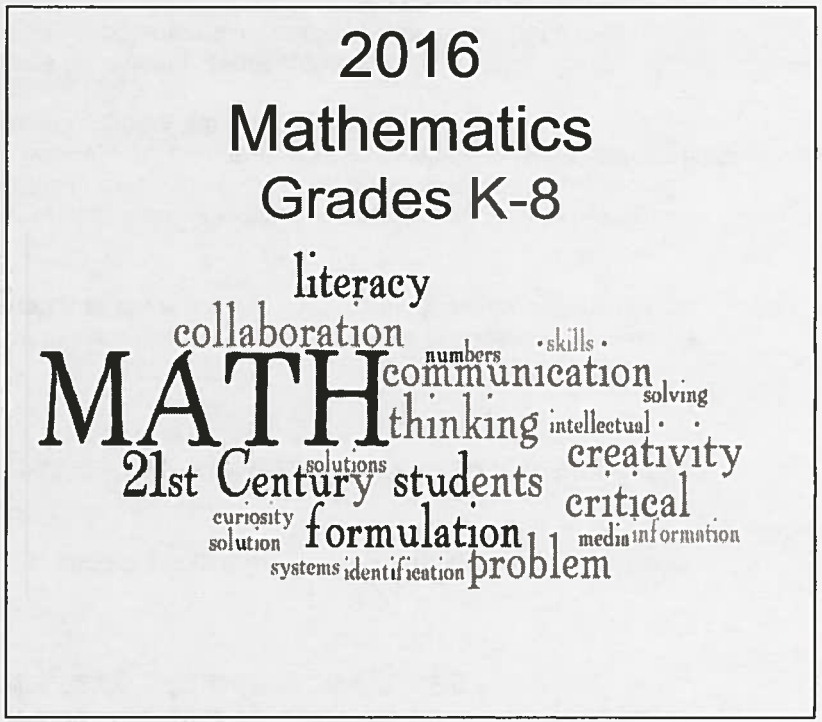
Reviewer ID: TJ EL

Core Mathematics Program- a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Core.

Other Mathematics Program- a program that substantially, but partially, meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Other.

Component Mathematics Program- a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs.
Substantial evidence clearly supports the designation of this program as Component.

Intervention Program- a program designed and intended to target and support students' specific needs.
Substantial evidence clearly supports the designation of this program as Intervention.



- Evaluation Form adapted from Instructional Materials Evaluation Toolkit (IMET).

The IMET was developed by Student Achievement Partners. Educators may use or adapt. http://creativecommons.org/licenses/by/3.0/ Download this tool at http://achievethecore.org/IMET

Instructional Materials Evaluation Tool

Mathematics, Grades K-8

What Are the Purposes of the IMET?

This Math IMET is designed to help educators determine whether instructional materials are aligned to the Shifts and major features of the Common Core State Standards (CCSS). The substantial instructional Shifts (http://www.corestandards.org/other-resources/key-shifts-inmathematics/) at the heart of the Common Core State Standards are:

- **Focus** strongly where the Standards focus
- **Coherence**: Think across grades and link to major topics within the grade
- **Rigor**: In major topics, pursue conceptual understanding, procedural skill and fluency, and application with equal intensity.

The IMET draws directly from the following documents:

- Common Core State Standards for Mathematics (www.corestandards.org/Math)
- Publishers' Criteria for the Common Core State Standards in Mathematics grade K-8 (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)

When to use the IMET

1. Purchasing materials: Many factors go into local purchasing decisions. Alignment to the Standards is a critical factor to consider. This tool is designed to evaluate alignment of instructional materials to the Shifts and the major features of the CCSS. It also provides suggestions of additional indicators to consider in the materials evaluation and purchasing process.

2. Evaluating materials currently in use: The IMET can be used to analyze the degree of alignment of existing materials and help to highlight specific, concrete flaws in alignment. Even where materials and tools currently in use fail to meet one or more of these criteria, the pattern of failure is likely to be informative. States and districts can use the evaluation to create a thoughtful plan to modify or combine existing resources in such a way that students' actual learning experiences approach the focus, coherence, and rigor of the Standards.

3. Developing programs: Those developing new programs can use this tool as guidance for creating aligned curricula.
Please note this tool was designed for evaluating comprehensive curricula (including any supplemental or ancillary materials), but it was not designed for the evaluation of standalone supplemental materials.

Who Uses the IMET?

Evaluating instructional materials requires both subject-matter and pedagogical expertise. Evaluators should be well versed in the Standards (www.corestandards.org/Math) for all grades in which materials are being evaluated. This includes understanding the Major Work of the grade (www.achievethecore/focus), the Supporting and Additional work, how the content fits into the progressions in the Standards (www.achievethecore.org/progressions), and the expectations of the Standards with respect to conceptual understanding, procedural skill and fluency, and application. Evaluators also should be familiar with the substantial instructional Shifts (http:// www.corestandards.org/other-resources/key-shifts-in-mathematics/) of Focus, Coherence and Rigor that are listed above.

Getting Started

Prior to Evaluation

Assemble all of the materials necessary for the evaluation. It is essential for evaluators to have materials for all grades covered by the program, as some criteria cannot be rated without having access to each grade. In addition, each evaluator should have a reference copy of the Common Core State Standards for Mathematics (CCSSM) and the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013).

Before conducting the evaluation itself, it is important to develop a protocol for the evaluation process. The protocol should include having evaluators study the Publishers' Criteria and the IMET. It will also be helpful for evaluators to get a sense of each program overall before beginning the process. At a minimum, this would include reading the front matter of the text, looking at the table of contents and paging through multiple chapters.

Sections 1-3 below should be completed to produce a comprehensive picture of the strengths and weaknesses of the materials under evaluation. Information about areas in need of improvement or supplementation should be shared with internal and external stakeholders.

Navigating the Tool

Begin with Section 1: Non-Negotiable Alignment Criteria

- The Non-Negotiable Alignment Criteria must each be met in full for materials to be considered aligned to the Shifts and the major features of the Common Core State Standards. Each Non-Negotiable Alignment Criterion has one or more metrics associated with it; every one of these metrics must be met in order for the criterion as a whole to be met.

- Examine the relevant materials and use evidence to rate the materials against each criterion and its associated metric(s).

- Record and explain the evidence upon which the rating is based.

Continue to Section 2: Alignment Criteria

- The Alignment Criteria must each be met for materials to be considered aligned to the Shifts and the major features of the Common Core State Standards. Each Alignment Criterion has one or more metric associated with it; a specific number of these metrics must be met or partially met in order for the criterion as a whole to be met.

- Examine the materials in relation to these criteria, assigning each metric a point value. Rate the criterion as "Meets" or "Does Note Meet" based on the number of points assigned. The more points the materials receive on the alignment Criteria, the better they are aligned.

- Record and explain the evidence upon which the rating is based.

Proceed to Section 4: Indicators of Quality

- Indicators of Quality are important considerations that will help evaluators better understand the overall quality of instructional materials. These considerations are not criteria for alignment to the CCSS, but they provide valuable information about additional program characteristics. Evaluators may want to add their own indicators to the examples provided.

Directions for Non-Negotiable 1

Freedom from Obstacles to Focus

Criterion	Evidence- Give specific examples.	Rating: (Reviewer only.)
Non-Negotiable 1: **Freedom from Obstacles to Focus** **Materials must reflect the content architecture of the Standards by not assessing the topics named before the grade level where they first appear in the Standards.** The Standards foster students' progress to algebra by focusing strongly on arithmetic. Consistent with this focus, certain topics from outside of arithmetic appear only in later grades. Thus, to be aligned, materials must reflect the content architecture of the Standards by not assessing the topics named before the grade level where they first appear in the Standards. In this criterion, "topics named" means the topics that are explicitly named in Metric 1A. No other topics should be added to the list in Metric 1A. (Note that other topics in the standards are addressed in criterion NN2.)	**Required Materials** • Common Core State Standards for Mathematics (www.corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf) • From the materials being evaluated: teacher guides and all assessment components	**Rating this Criterion:** Non-Negotiable 1 is rated as Meets or Does Not Meet. To rate Non-Negotiable 1, begin by rating Metric 1A. Since Metric 1A is the only metric for Non-Negotiable 1, the rating for Non-Negotiable 1 is the same as the rating for Metric 1A. If Metric 1A is rated as Does Not Meet, include evidence of when the named topic(s) is/are assessed. If the metric is rated as Meets, list the grade(s) examined in the evaluation.

Metric NN1A: **Materials re[illegible] the basic architecture of the Standards by not assessing the listed topics before the grade level indicated.** • Probability, including chance, likely outcomes, probability models. (Introduced in the CCSSM in grade 7) • Statistical distributions, including center, variation, clumping, outliers, mean, median, mode, range, quartiles; and statistical association or trends, including two-way tables, bivariate measurement data, scatter plots, trend line, line of best fit, correlation. (Introduced in the CCSSM in grade 6) • Similarity, congruence, or geometric transformations. (Introduced in the CCSSM in grade 8) • Symmetry of shapes, including line/ reflection symmetry, rotational symmetry. (Introduced in the CCSSM in grade 4) **How to Find the Evidence:** Evaluate the table of contents, all chapter tests, all unit tests, and other such assessment components (including rubrics). For context, read Criterion #2 from the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013). NOTE: Grade alignments of other topics are addressed in Non-Negotiable 2, Focus and Coherence.) In this criterion, "topics named" means the topics that are explicitly named in Metric 1A. No other topics should be added to the list in Metric 1A. (Note that other topics in the standards are addressed in criterion NN2.)	**Evidence-** Symmetry is introduced in Unit 8 Lesson 11. There is no evidence that probability or statistical distributions are included in the Grade 4 text, nor are coordinate transformations.	**(Reviewer only.)** X **Meets** ____ **Does Not Meet**
Non-Negotiable 1: Materials must reflect the content architecture of the Standards by not assessing the topics named* before the grade level where they first appear in the Standards. **NN 1** If Metric 1A was rated as Meets, then rate Non-Negotiable 1 as Meets. If Metric 1A was rated as Does Not Meet, then rate Non- Negotiable 1 as Does Not Meet. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion.**(Reviewer only.)** **Before moving to Non-Negotiable 2, record the final Meets or Does Not Meet rating in the Evaluation Summary.**		**(Reviewer only.)** X **Meets** ____ **Does Not Meet** **Strengths/Weaknesses:**

Directions for Non-Negotiable 2

Focus and Coherence

Non-Negotiable 2:

Focus and Coherence

Materials must focus coherently on the Major Work of the grade in a way that is consistent with the progressions in the Standards.

Focus and coherence are the two major evidence-based design principles of the Common Core State Standards for Mathematics (CCSSM, p. 3). Focus is necessary in order to fulfill the ambitious promise the states have made to their students by adopting the Standards: greater achievement at the college and career ready level; greater depth of understanding of mathematics; and a rich classroom environment in which reasoning, sense-making, applications, and a range of mathematical practices flourish. In simpler terms, a mile-wide, inch-deep curriculum translates to less time per topic. Less time means less depth and moving on without many students. Thus, materials must focus coherently on the Major Work of the grade in a way that is consistent with the progressions in the Standards.

Required Materials

- Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf)
- Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)
- Focus by Grade Level for the grade being evaluated (www.achievethecore.org/focus)
- From the materials being evaluated: teacher guides, student texts and workbooks

Rating this Criterion:

Non-Negotiable 2 is rated as Meets or Does Not Meet.

To rate Non-Negotiable 2, first rate metrics 2A–2H. Each of these eight metrics must be rated as Meets in order for Non-Negotiable 2 to be rated as Meets. Rate each metric 2A-2H as Meets or Does Not Meet/Insufficient Evidence. If the evidence examined shows that the Criterion is met, then mark the Criterion Meets. If the evidence examined shows that the Criterion is not met—or if there is insufficient evidence to make a determination—then mark the Criterion as Does Not Meet/Insufficient Evidence. Support all ratings with evidence.

Metric NN2A:

In each grade K–8, students and teachers using the materials as designed devote the large majority of time to the Major Work of the grade.

How to Find the Evidence:

Familiarize yourself with the Major Work of the grade being evaluated (see the Focus by Grade Level documents.)

Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, lessons, homework assignments, and assessments. (Evaluate both student and teacher materials.)

Consider time spent on the Major Work of the grade and judge qualitatively whether students and teachers using the materials as designed will devote the large majority of time to the Major Work of the grade.

For context, read Criterion #1 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013)

Evidence-

Pacing calendar and content in TE & Student books strongly focuses on the major works of grade 4 for instruction & student activities.

(Reviewer only.)

X **Meets**

____ **Does Not Meet/**

Insufficient Evidence

Metric NN2B: **Supporting work, where present, enhances focus and coherence simultaneously by also engaging students in the Major Work of the grade.** **How to Find the Evidence:** Familiarize yourself with the Major Work and Supporting Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate chapters and lessons that focus on Supporting Work. NOTE: Example of evaluating this Criterion might include looking at whether materials for K–5 generally treat data displays as an occasion for solving grade-level word problems using the four operations (e.g., see 3.MD.B.3); or whether materials for grade 7 take advantage of opportunities to use probability to support ratios, proportions, and percentages. For context, read Criterion #3 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Students are expected to create line plots in unit 6 of 7 to represent data & use in solving problems. Supporting work does enhance the major work.	(Reviewer only.) X Meets ____Does Not Meet/ Insufficient Evidence
Metric NN2C: **Materials base content progressions on the grade-by-grade progressions in the Standards. Content from previous or future grades does not unduly interfere with or displace on-grade-level content.** **How to Find the Evidence:** Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, and lessons in both student and teacher materials. NOTE: In some cases it may be possible that aligned materials might address some aspects of a topic in a strategic way before or after the grade level in which the topic is central in the Standards' progressions; for example, a curriculum author might purposefully choose to explore adding fractions with unlike denominators in a way appropriate to grade four, recognizing that this work is not really required until the next grade. However, any such purposeful discrepancies in content progressions should enhance the required learning in each grade; not unduly interfere with or displace grade-level content; and be clearly aimed at helping students meet the Standards as written rather than effectively rewriting the progressions in the Standards. And in all cases, note that Non-Negotiable 1 must be met for materials to be aligned. For context, read Criterion #5a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** All of the major clusters for Grade 4 are located throughout the units in Math Expressions. Each unit provides the teacher with important information about what students will be focusing on & reminds teachers about the math progression, both what students should have learned in the previous grade and where they are headed as they move to the next grade.	(Reviewer only.) X Meets ____Does Not Meet/ Insufficient Evidence

Metric NN2D: **Materials give all students extensive work with on-grade-level problems.** **How to Find the Evidence:** Evaluate both student and teacher materials. If the materials provide resources for differentiated learning, consider whether lower-performing students have opportunities to engage with grade-level problems. Also consider whether higher-performing students are given opportunities to learn current grade-level content in greater depth. For context, read Criterion #5b in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Focus is on grade level moments with a variety of resources available/accessible to teacher for interventions & additional practice. Tips for ELL students, use of math talks to expose Sts to ideas & thoughts on how to solve problems - challenges for students who need to be challenged. Differentiation through activity cards, Tier 1, Tier 2 & Tier 3 materials, remembering pages. Digital opportunities to enhance the learning at various levels as well.	(Reviewer only.) X Meets ____Does Not Meet/ Insufficient Evidence
Metric NN2E: **Materials relate on-grade-level concepts explicitly to prior knowledge from earlier grades.** **How to Find the Evidence:** Evaluate both student and teacher materials. NOTE: Examples of evaluating this Criterion might include looking at the way the materials extend basic ideas of place value across the decimal point; or the role that properties of operations play when the materials extend arithmetic beyond whole numbers to fractions, variables, and expressions. More generally, cluster headings in the Standards sometimes signal key moments where reorganizing and extending previous knowledge is important in order to accommodate new knowledge (e.g., see cluster headings that use the phrase "Apply and extend previous understanding"). For context, read Criterion #5c in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Students extend their previous knowledge in the work they do with fractions in the Grade 4 Expressions. This is done by building on previous work with whole numbers & using that knowledge as they compare & apply operations to fractions throughout Units Place value, multiplication & division ~~are~~ have similar progressions found.	(Reviewer only.) X Meets ____Does Not Meet/ Insufficient Evidence
Metric NN2F: **Review of material from previous grades is clearly identified as such to the teacher, and teacher and students can see what their specific responsibility is for the current year.** **How to Find the Evidence:** Evaluate the table of contents, but do not stop there; also evaluate units, chapters, lessons, homework assignments and assessments. (Evaluate both student and teacher materials.) Identify any content from previous grades and check whether it is identified as such. For context, read Criterion #5a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Stresses what Students should know to be successful on each lesson. Learning progression and content standards across grade in TE. Paragraph for teaches describes the learning path on the CCSS for a particular topic being addressed in the unit.	(Reviewer only.) X Meets ____Does Not Meet/ Insufficient Evidence

Metric NN2G: **Materials include learning objectives that are visibly shaped by CCSSM cluster headings.** **How to Find the Evidence:** Select several clusters from the Major Work in the grade being evaluated. Evaluate teacher and student materials in relation to these clusters. For context, read Criterion #6a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Each unit has multiple big ideas that include lessons that are directly correlated to the 4th grade CCSS. -Big ideas broken into topics that are attached to standards. Most big ideas are tied to cluster headings in CCSS.	(Reviewer only.) X Meets ____Does Not Meet/ Insufficient Evidence
Metric NN2H: **Materials include problems and activities that serve to connect two or more clusters in a domain, or two or more domains in a grade, in cases where these connections are natural and important.** **How to Find the Evidence:** In the grade being evaluated, choose two or more clusters or two or more domains for which connections are natural and important. Evaluate the units, chapters, and lessons that deal with the chosen topics, looking for problems and activities that serve to connect the chosen clusters or domains. NOTE: An example of evaluating this Criterion might include looking at whether problems in grade 4 sometimes or often involve students applying their developing computation skills (detailed in domain NBT) in the context of solving word problems (detailed in domain OA). For context, read Criterion #6b in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Unit 4- equations & word problems -measurement with fractions & decimals were paired Unit 3, Lesson 8 connects CC4.OA.3 w/ CC.4.NBT.3 & CC4.NBT.6 Word problems are provided that require students to utilize their computational skills throughout the program	(Reviewer only.) X Meets ____Does Not Meet/ Insufficient Evidence

Non-Negotiable 2:

Focus and Coherence

Materials must focus coherently on the Major Work of the grade in a way that is consistent with the progressions in the Standards.

(Reviewer only.)

X Meets

____Does Not Meet

NN 2 If all Metrics 2A – 2H were rated as Meets, then rate Non-Negotiable 2 as Meets. If one or more Metric was rated Does Not Meet/Insufficient Evidence, then rate Non-Negotiable 2 as Does Not Meet. Check the final rating.
Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)**

Strengths/Weaknesses:

Strengths: Progression charts provided for teachers in each unit

-St- many supports provided for teachers to differentiate for students in each lesson

Weakness: some intervention activities have student not working @ grade level

Before moving to Alignment Criterion 1, record the final Meets or Does Not Meet rating in the Evaluation Summary.

Now continue by evaluating the Alignment Criterion 1 for Rigor and Balance.

If the materials meet both Non-Negotiables and relevant Alignment Criterion, they are aligned to the Shifts and major features of the Core Standards. **Do the materials meet every Non-Negotiable and Alignment Criterion?** ___X___ **Yes** _____ **No**

What are the specific areas of strength and weakness based on this evaluation? Publishers or others modifying or developing assessments can use this information to make improvements and/or to remedy gaps in the alignment of assessment materials.

Strengths:

- focus on grade level standards (major work)
- focus on & support of mathematical practices with each lesson
- use of manipulatives to model and develop conceptual understanding
- multiple supports for differentiation (for teacher & student)

Weakness:

- Lack of independent conceptual work (not teacher lead)
- over abundance of time on fluency/bare problems
- Lack of connection from conceptual work to independent & excercises. (connect fluency work w/ conceptual work).

2015-16 Mathematics Interim Review Recommendation & Summary

Publisher Name:	HMH
Title:	Math Expressions
ISBN #	
Grade Level(s) or Course:	Grade 5
Reviewer ID:	TB EL

RECOMMENDED AS:

X **Core Mathematics Program-** a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials. Substantial evidence clearly supports the designation of this program as Core.

_____ **Other Mathematics Program-** a program that substantially, but partially, meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for supplemental materials. Substantial evidence clearly supports the designation of this program as Other.

_____ **Component Mathematics Program-** a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs. Substantial evidence clearly supports the designation of this program as Component.

_____ **Intervention Program-** a program designed and intended to target and support students' specific needs. Substantial evidence clearly supports the designation of this program as Intervention.

_____ **Does not meet criteria** for recommendation as a Curricular Material or Online Resource for Mathematics.

EVIDENCE SUMMARY:

FOCUS- Work is focused on grade level standards with emphasis placed on the major grade level clusters.

COHERENCE- Structure is consistent for both teacher and students. Differentiated materials are cohesive with the general lessons.

RIGOR- Rigor is present as work is focused on the grade level standards & math practices. Concerned about amount of time spent on fluency & bare problems.

CONCEPTUAL UNDERSTANDING-
Many opportunities for whole class discussion, math talks, etc. teacher modeling of conceptual work. Would like to see more opportunities for students to demonstrate independent understanding & practice with conceptual problems.

MATHEMATICAL PRACTICES-
Incorporated & interwoven in all lessons with specific teacher supports for incorporating the MP's in each lesson & unit.

ACCESSIBILITY OF STANDARDS TO ALL STUDENTS-
Many supports for teachers & students through EL support, Tier 1, 2 & 3 supports, differentiated activity cards, etc. Math Challenge Center
gradual removal of supports.

OTHER:
- Teachers will need to make intentional decisions in creating more opportunities for students to work on conceptual work at a more independent level.
- Teachers will need to help bridge conceptual work ~~with~~ to fluency work.

2015-16 Interim Mathematics Review

Mathematics Evaluation Tool Grades K-8

Publisher: HMH

Title of Material: Math Expressions Grade 5

Author: Karen C. Fuson

ISBN #: _____ **Copyright** 2013

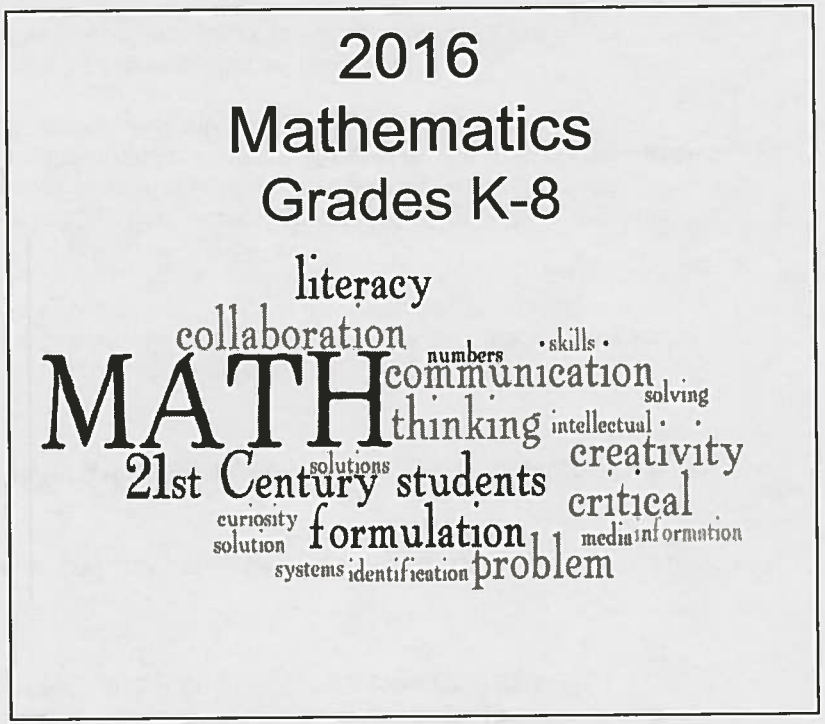
Reviewer ID: TJ, EGL

Core Mathematics Program- a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Core.

Other Mathematics Program- a program that substantially, but partially, meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Other.

Component Mathematics Program- a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs.
Substantial evidence clearly supports the designation of this program as Component.

Intervention Program- a program designed and intended to target and support students' specific needs.
Substantial evidence clearly supports the designation of this program as Intervention.



- Evaluation Form adapted from Instructional Materials Evaluation Toolkit (IMET).

The IMET was developed by Student Achievement Partners. Educators may use or adapt. http://creativecommons.org/licenses/by/3.0/ Download this tool at http://achievethecore.org/IMET

Instructional Materials Evaluation Tool

Mathematics, Grades K-8

What Are the Purposes of the IMET?

This Math IMET is designed to help educators determine whether instructional materials are aligned to the Shifts and major features of the Common Core State Standards (CCSS). The substantial instructional Shifts (http://www.corestandards.org/other-resources/key-shifts-inmathematics/) at the heart of the Common Core State Standards are:

- **Focus** strongly where the Standards focus
- **Coherence**: Think across grades and link to major topics within the grade
- **Rigor**: In major topics, pursue conceptual understanding, procedural skill and fluency, and application with equal intensity.

The IMET draws directly from the following documents:

- Common Core State Standards for Mathematics (www.corestandards.org/Math)
- Publishers' Criteria for the Common Core State Standards in Mathematics grade K-8 (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)

When to use the IMET

1. Purchasing materials: Many factors go into local purchasing decisions. Alignment to the Standards is a critical factor to consider. This tool is designed to evaluate alignment of instructional materials to the Shifts and the major features of the CCSS. It also provides suggestions of additional indicators to consider in the materials evaluation and purchasing process.

2. Evaluating materials currently in use: The IMET can be used to analyze the degree of alignment of existing materials and help to highlight specific, concrete flaws in alignment. Even where materials and tools currently in use fail to meet one or more of these criteria, the pattern of failure is likely to be informative. States and districts can use the evaluation to create a thoughtful plan to modify or combine existing resources in such a way that students' actual learning experiences approach the focus, coherence, and rigor of the Standards.

3. Developing programs: Those developing new programs can use this tool as guidance for creating aligned curricula.
Please note this tool was designed for evaluating comprehensive curricula (including any supplemental or ancillary materials), but it was not designed for the evaluation of standalone supplemental materials.

Who Uses the IMET?

Evaluating instructional materials requires both subject-matter and pedagogical expertise. Evaluators should be well versed in the Standards (www.corestandards.org/Math) for all grades in which materials are being evaluated. This includes understanding the Major Work of the grade (www.achievethecore/focus), the Supporting and Additional work, how the content fits into the progressions in the Standards (www.achievethecore.org/progressions), and the expectations of the Standards with respect to conceptual understanding, procedural skill and fluency, and application. Evaluators also should be familiar with the substantial instructional Shifts (http:// www.corestandards.org/other-resources/key-shifts-in-mathematics/) of Focus, Coherence and Rigor that are listed above.

Getting Started

Prior to Evaluation

Assemble all of the materials necessary for the evaluation. It is essential for evaluators to have materials for all grades covered by the program, as some criteria cannot be rated without having access to each grade. In addition, each evaluator should have a reference copy of the Common Core State Standards for Mathematics (CCSSM) and the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013).

Before conducting the evaluation itself, it is important to develop a protocol for the evaluation process. The protocol should include having evaluators study the Publishers' Criteria and the IMET. It will also be helpful for evaluators to get a sense of each program overall before beginning the process. At a minimum, this would include reading the front matter of the text, looking at the table of contents and paging through multiple chapters.

Sections 1-3 below should be completed to produce a comprehensive picture of the strengths and weaknesses of the materials under evaluation. Information about areas in need of improvement or supplementation should be shared with internal and external stakeholders.

Navigating the Tool

Begin with Section 1: Non-Negotiable Alignment Criteria

- The Non-Negotiable Alignment Criteria must each be met in full for materials to be considered aligned to the Shifts and the major features of the Common Core State Standards. Each Non-Negotiable Alignment Criterion has one or more metrics associated with it; every one of these metrics must be met in order for the criterion as a whole to be met.

- Examine the relevant materials and use evidence to rate the materials against each criterion and its associated metric(s).

- Record and explain the evidence upon which the rating is based.

Continue to Section 2: Alignment Criteria

- The Alignment Criteria must each be met for materials to be considered aligned to the Shifts and the major features of the Common Core State Standards. Each Alignment Criterion has one or more metric associated with it; a specific number of these metrics must be met or partially met in order for the criterion as a whole to be met.

- Examine the materials in relation to these criteria, assigning each metric a point value. Rate the criterion as "Meets" or "Does Note Meet" based on the number of points assigned. The more points the materials receive on the alignment Criteria, the better they are aligned.

- Record and explain the evidence upon which the rating is based.

Proceed to Section 4: Indicators of Quality

- Indicators of Quality are important considerations that will help evaluators better understand the overall quality of instructional materials. These considerations are not criteria for alignment to the CCSS, but they provide valuable information about additional program characteristics. Evaluators may want to add their own indicators to the examples provided.

Directions for Non-Negotiable 1 **Freedom from Obstacles to Focus**		
Criterion	**Evidence- Give specific examples.**	**Rating: (Reviewer only.)**
Non-Negotiable 1: **Freedom from Obstacles to Focus** **Materials must reflect the content architecture of the Standards by not assessing the topics named before the grade level where they first appear in the Standards.** The Standards foster students' progress to algebra by focusing strongly on arithmetic. Consistent with this focus, certain topics from outside of arithmetic appear only in later grades. Thus, to be aligned, materials must reflect the content architecture of the Standards by not assessing the topics named before the grade level where they first appear in the Standards. In this criterion, "topics named" means the topics that are explicitly named in Metric 1A. No other topics should be added to the list in Metric 1A. (Note that other topics in the standards are addressed in criterion NN2.)	**Required Materials** • Common Core State Standards for Mathematics (www.corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf) • From the materials being evaluated: teacher guides and all assessment components	**Rating this Criterion:** Non-Negotiable 1 is rated as Meets or Does Not Meet. To rate Non-Negotiable 1, begin by rating Metric 1A. Since Metric 1A is the only metric for Non-Negotiable 1, the rating for Non-Negotiable 1 is the same as the rating for Metric 1A. If Metric 1A is rated as Does Not Meet, include evidence of when the named topic(s) is/are assessed. If the metric is rated as Meets, list the grade(s) examined in the evaluation.

Metric NN1A:
Materials re[illegible] the basic architecture of the Standards by not assessing the listed topics before the grade level indicated.

- Probability, including chance, likely outcomes, probability models. (Introduced in the CCSSM in grade 7)
- Statistical distributions, including center, variation, clumping, outliers, mean, median, mode, range, quartiles; and statistical association or trends, including two-way tables, bivariate measurement data, scatter plots, trend line, line of best fit, correlation. (Introduced in the CCSSM in grade 6)
- Similarity, congruence, or geometric transformations. (Introduced in the CCSSM in grade 8)
- Symmetry of shapes, including line/ reflection symmetry, rotational symmetry. (Introduced in the CCSSM in grade 4)

How to Find the Evidence:

Evaluate the table of contents, all chapter tests, all unit tests, and other such assessment components (including rubrics).

For context, read Criterion #2 from the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013). NOTE: Grade alignments of other topics are addressed in Non-Negotiable 2, Focus and Coherence.)

In this criterion, "topics named" means the topics that are explicitly named in Metric 1A. No other topics should be added to the list in Metric 1A. (Note that other topics in the standards are addressed in criterion NN2.)

Evidence-

The review of assessments indicates that the program is assessing grade level topics in accordance with CCSS.

There was no evidence of topics beyond grade 5 being assessed.

(Reviewer only.)

X **Meets**

____ **Does Not Meet**

Non-Negotiable 1: Materials must reflect the content architecture of the Standards by not assessing the topics named* before the grade level where they first appear in the Standards.

NN 1 If Metric 1A was rated as Meets, then rate Non-Negotiable 1 as Meets. If Metric 1A was rated as Does Not Meet, then rate Non- Negotiable 1 as Does Not Meet. Check the final rating.

Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion.**(Reviewer only.)**

- Publisher was cognizant of the shifts in standards and not assessing standards beyond the grade level—such as probability.
-

Before moving to Non-Negotiable 2, record the final Meets or Does Not Meet rating in the Evaluation Summary.

(Reviewer only.)

X **Meets**

____ **Does Not Meet**

Strengths/Weaknesses:

Directions for Non-Negotiable 2

Focus and Coherence

Non-Negotiable 2:

Focus and Coherence

Materials must focus coherently on the Major Work of the grade in a way that is consistent with the progressions in the Standards.

Focus and coherence are the two major evidence-based design principles of the Common Core State Standards for Mathematics (CCSSM, p. 3). Focus is necessary in order to fulfill the ambitious promise the states have made to their students by adopting the Standards: greater achievement at the college and career ready level; greater depth of understanding of mathematics; and a rich classroom environment in which reasoning, sense-making, applications, and a range of mathematical practices flourish. In simpler terms, a mile-wide, inch-deep curriculum translates to less time per topic. Less time means less depth and moving on without many students. Thus, materials must focus coherently on the Major Work of the grade in a way that is consistent with the progressions in the Standards.

Required Materials

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- Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)
- Focus by Grade Level for the grade being evaluated (www.achievethecore.org/focus)
- From the materials being evaluated: teacher guides, student texts and workbooks

Rating this Criterion:

Non-Negotiable 2 is rated as Meets or Does Not Meet.

To rate Non-Negotiable 2, first rate metrics 2A–2H. Each of these eight metrics must be rated as Meets in order for Non-Negotiable 2 to be rated as Meets. Rate each metric 2A-2H as Meets or Does Not Meet/Insufficient Evidence. If the evidence examined shows that the Criterion is met, then mark the Criterion Meets. If the evidence examined shows that the Criterion is not met—or if there is insufficient evidence to make a determination—then mark the Criterion as Does Not Meet/Insufficient Evidence. Support all ratings with evidence.

Metric NN2A:

In each grade K–8, students and teachers using the materials as designed devote the large majority of time to the Major Work of the grade.

How to Find the Evidence:

Familiarize yourself with the Major Work of the grade being evaluated (see the Focus by Grade Level documents.)

Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, lessons, homework assignments, and assessments. (Evaluate both student and teacher materials.)

Consider time spent on the Major Work of the grade and judge qualitatively whether students and teachers using the materials as designed will devote the large majority of time to the Major Work of the grade.

For context, read Criterion #1 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013)

Evidence-

The majority of time in this program is spent on the major clusters for grade 5, specifically 5.NBT and 5.NF.

Units 1-6 focused solely on the major works for Grade 5 CCSS.

(Reviewer only.)

X **Meets**

____ **Does Not Meet/ Insufficient Evidence**

Metric NN2B: **Supporting work, where present, enhances focus and coherence simultaneously by also engaging students in the Major Work of the grade.** **How to Find the Evidence:** Familiarize yourself with the Major Work and Supporting Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate chapters and lessons that focus on Supporting Work. NOTE: Example of evaluating this Criterion might include looking at whether materials for K–5 generally treat data displays as an occasion for solving grade-level word problems using the four operations (e.g., see 3.MD.B.3); or whether materials for grade 7 take advantage of opportunities to use probability to support ratios, proportions, and percentages. For context, read Criterion #3 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Units 7 and 8 seem to provide supporting work that does enhance the focus and coherence of the major work found in Units 1-6. ex... Connecting line plot data collection into the fraction work in unit 3 and unit 8.	(Reviewer only.) X Meets ____Does Not Meet/ Insufficient Evidence
Metric NN2C: **Materials base content progressions on the grade-by-grade progressions in the Standards. Content from previous or future grades does not unduly interfere with or displace on-grade-level content.** **How to Find the Evidence:** Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, and lessons in both student and teacher materials. NOTE: In some cases it may be possible that aligned materials might address some aspects of a topic in a strategic way before or after the grade level in which the topic is central in the Standards' progressions; for example, a curriculum author might purposefully choose to explore adding fractions with unlike denominators in a way appropriate to grade four, recognizing that this work is not really required until the next grade. However, any such purposeful discrepancies in content progressions should enhance the required learning in each grade; not unduly interfere with or displace grade-level content; and be clearly aimed at helping students meet the Standards as written rather than effectively rewriting the progressions in the Standards. And in all cases, note that Non-Negotiable 1 must be met for materials to be aligned. For context, read Criterion #5a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Learning progressions are reviewed at the beginning of each unit for the teacher, connecting the work that will be focused on for each unit.	(Reviewer only.) X Meets ____Does Not Meet/ Insufficient Evidence

Metric NN2D: **Materials give all students extensive work with on-grade-level problems.** **How to Find the Evidence:** Evaluate both student and teacher materials. If the materials provide resources for differentiated learning, consider whether lower-performing students have opportunities to engage with grade-level problems. Also consider whether higher-performing students are given opportunities to learn current grade-level content in greater depth. For context, read Criterion #5b in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Most work is giving students time to work on grade level problems. Differentiation is provided through intervention & challenge activities, providing supports as needed. ELL supports, suggestions for extra support are identified.	(Reviewer only.) X Meets ____Does Not Meet/ Insufficient Evidence
Metric NN2E: **Materials relate on-grade-level concepts explicitly to prior knowledge from earlier grades.** **How to Find the Evidence:** Evaluate both student and teacher materials. NOTE: Examples of evaluating this Criterion might include looking at the way the materials extend basic ideas of place value across the decimal point; or the role that properties of operations play when the materials extend arithmetic beyond whole numbers to fractions, variables, and expressions. More generally, cluster headings in the Standards sometimes signal key moments where reorganizing and extending previous knowledge is important in order to accommodate new knowledge (e.g., see cluster headings that use the phrase "Apply and extend previous understanding"). For context, read Criterion #5c in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Connections to prior grade level work are not thorough, but do exist. The progressions chart is presented at the beginning of each unit, but that does not make clear connections to prior knowledge for each lesson.	(Reviewer only.) X Meets ____Does Not Meet/ Insufficient Evidence
Metric NN2F: **Review of material from previous grades is clearly identified as such to the teacher, and teacher and students can see what their specific responsibility is for the current year.** **How to Find the Evidence:** Evaluate the table of contents, but do not stop there; also evaluate units, chapters, lessons, homework assignments and assessments. (Evaluate both student and teacher materials.) Identify any content from previous grades and check whether it is identified as such. For context, read Criterion #5a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** There is a review of the learning progression in each unit overview. There is also a complete list of units and lessons for the CCSS in the TE. The progressions for the CCSS at the beginning of the units specifies prior learnings that will be utilized in the new unit for the standards	(Reviewer only.) X Meets ____Does Not Meet/ Insufficient Evidence

Metric NN2G: **Materials in[illegible]e learning objectives that are visibly shaped by CCSSM cluster headings.** **How to Find the Evidence:** Select several clusters from the Major Work in the grade being evaluated. Evaluate teacher and student materials in relation to these clusters. For context, read Criterion #6a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** The focus for each lesson is clearly shaped by the CCSS cluster headings in the TE. The Big Ideas for each unit are also clearly linked to CCSS cluster headings.	(Reviewer only.) X Meets ____Does Not Meet/ Insufficient Evidence
Metric NN2H: **Materials include problems and activities that serve to connect two or more clusters in a domain, or two or more domains in a grade, in cases where these connections are natural and important.** **How to Find the Evidence:** In the grade being evaluated, choose two or more clusters or two or more domains for which connections are natural and important. Evaluate the units, chapters, and lessons that deal with the chosen topics, looking for problems and activities that serve to connect the chosen clusters or domains. NOTE: An example of evaluating this Criterion might include looking at whether problems in grade 4 sometimes or often involve students applying their developing computation skills (detailed in domain NBT) in the context of solving word problems (detailed in domain OA). For context, read Criterion #6b in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Many examples of multiple clusters being connected throughout the program. Connections between domains are also found. Ex. Fractions to decimals & decimals to fractions – Ex.2-Connections in Unit 3 between addition & and multiplication fractions	(Reviewer only.) X Meets ____Does Not Meet/ Insufficient Evidence

Non-Negotiable 2:

Focus and Coherence

Materials must focus coherently on the Major Work of the grade in a way that is consistent with the progressions in the Standards.

(Reviewer only.)

X Meets

____Does Not Meet

NN 2 If all Metrics 2A – 2H were rated as Meets, then rate Non-Negotiable 2 as Meets. If one or more Metric was rated Does Not Meet/Insufficient Evidence, then rate Non-Negotiable 2 as Does Not Meet. Check the final rating.
Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)**

Strengths/Weaknesses:

S: The front loading provided for teachers at the beginning of each unit (progressions etc.)

S: TE provides many supports throughout each lesson to help teachers meet varying student needs

Weakness:
Sometimes interventions are not expecting the Sts to do 'grade level' work.

Before moving to Alignment Criterion 1, record the final Meets or Does Not Meet rating in the Evaluation Summary.

Now continue by evaluating the Alignment Criterion 1 for Rigor and Balance.

Directions for Alignment Criterion 1

Rigor and Balance

Alignment Criterion 1: Rigor and Balance

Materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.

The Standards set expectations for attention to all three aspects of rigor: conceptual understanding, procedural skill and fluency, and applications. Thus, materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.

Required Materials

- Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf)
- Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)
- Focus by Grade Level for the grade being evaluated (achievethecore.org/focus)
- Situation Types for the Operations in Word Problems (achievethecore.org/situation-types)
- From the materials being evaluated: teacher guides, student texts and workbooks

Rating this Criterion:

Alignment Criterion 1 is rated as Meets or Does Not Meet.

To rate Alignment Criterion 1, first rate metrics 1A, 1B, and 1C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). For each metric, guiding questions are provided to aid in gathering evidence.
Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 1 if the materials rate 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as rigor and balance, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.

Metric AC1A:
The materials support the development of students' conceptual understanding of key mathematical concepts, especially where called for in specific content Standards or cluster headings.

How to Find the Evidence:

Select one or more cluster(s) or Standard(s) from the Major Work for the grade being evaluated that relate specifically conceptual understanding to use throughout the questions associated with this metric. NOTE: Some examples of clusters or Standards that call for conceptual understanding include: K.OA.A.1, (1.NBT.B, 1.NBT.C), (2.NBT.A, 2.NBT.B), (3.OA.A.1, 3.OA.A.2), 4.NF.A, (4.NBT.A, 4.NBT.B), 5.NF.B, (5.NBT.A, 5.NBT.B), 6.RP.A, 6.EE.A.3, 7.NS.A, 7.EE.A, 8.EE.B, 8.F.A, 8.G.A

Clusters or Standards grouped by parentheses are closely connected and could be analyzed together.

For context, read Criterion #4a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).

-Choose a cluster/Standard from the Major Work that is aligned to each aspect of rigor and use it to evaluate these metrics. It is most helpful if the same clusters/Standards are chosen for all of the programs being evaluated. (Guidance in choosing clusters/Standards is included in "How to Find the Evidence".)

The program does attend to conceptual understanding through modeling by the teacher and through math talks. There were not a large number of opportunities for students to demonstrate independent conceptual understanding. Most were in whole group activities

Use the questions for AC Metric 1A to evaluate Metric 1A. Record evidence for each question and rate Metric 1A.

____**Meets (2)**

X **Partially Meets (1)**

____**Does Not Meet (0)**

Is conceptual understanding attended to thoroughly where the Standards set e expectations for understanding or interpreting? Evaluate lessons, chapter/unit assessments and homework assignments, paying attention to work aligned to Standards that explicitly call for understanding or interpreting. NOTE: Examples of evaluating this Criterion might include looking at how well the multi-digit addition and subtraction algorithms are developed and explained on the basis of place value and properties of operations; or how well the multi-digit multiplication and division algorithms are developed and explained on the basis of place value and properties of operations; or how well solving equations is presented and explained as a process of reasoning.	**Evidence-** The program does attend to conceptual understanding through modeling by the teacher and use of math talks. There are not a large number of opportunities for students to demonstrate conceptual understanding independently, most are in whole group activities.	
Do the materials feature high-quality conceptual problems and conceptual discussion questions? Evaluate lessons, chapter/unit assessments, and homework assignments. NOTE: Example of conceptual problems might include such questions as "Find a number greater than 1/5 and less than 1/4," or "If the divisor does not change and the dividend increases, what happens to the quotient?"	**Evidence-** There are some good conceptual problems, but they are almost always presented as whole class, guided instruction work. Very little opportunity for students to attempt independently. Many have "1 answer" & are not conducive to "productive struggle" or multiple answers	- limited opportunities for students to write about their reasoning or explain their thinking.
Do the materials feature opportunities to identify correspondences across mathematical representations? Evaluate lessons, chapter/unit assessments and homework assignments. NOTE: Examples of evaluating this Criterion might include looking at whether students are supported in identifying correspondences among: the verbal description of a situation, the diagrams that distill its mathematical features, and the equations that model it; or equivalent forms of numbers (e.g., 3 and 6/2) and the number line; or rational number operations and representations of them via models such as the vector model; or the expression that defines a function and the graph that shows the relationship.	**Evidence-** Fractions & decimals are represented in many different ways (ie area model, # line, etc) Students are supported in various representations - but mostly in symbolic representations - concern about lack of opportunities for independent work in this area	
Metric AC1B: **The materials are designed so that students attain the fluencies and procedural skills required by the Standards.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Major Work for the grade being evaluated that relate specifically to fluency and procedural skill to use throughout the questions associated with this metric. NOTE: Some examples of Standards that call for procedural skill and fluency include: K.OA.A.5, 1.OA.C.6, 2.OA.B.2, 2.NBT.B.5, 3.OA.C.7, 3.NBT.A.2, 4.NBT.B.4, 5.NBT.B.5, 6.NS.B.2, and 6.NS.B.3, 6.EE.A, 7.NS.A, 7.EE.A.1,7.EE.B.4a, 8.EE.C.7, 8.EE.C.8b For context, read Criterion #4b in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).		**Use the questions for Metric 1B to evaluate Metric 1 B. Record evidence for each question and rate Metric 1B.** **(Reviewer only.)** X **Meets (2)** **Partially Meets (1)** **Does Not Meet (0)**

Is progress toward fluency and procedural skill interwoven with students' developing conceptual understanding of the operations in question? Evaluate lessons, chapter/unit assessments, daily routines, and homework assignments for evidence that the development of fluency and procedural skill is supported by conceptual understanding.	**Evidence-** There are many opportunities for attainment of fluency – it is ~~integrated~~ interwoven w/ conceptual whole group activities but there is concern with whether students are developing the conceptual understanding at an independent level.	
Are purely procedural problems and exercises present that include cases in which opportunistic strategies are valuable and generic cases that require efficient algorithms present? Evaluate lessons, chapter/unit assessments, daily routines, and homework assignments. NOTE: Examples of problems in which opportunistic strategies are valuable might include the sum 698 + 240 or the system x + y = 1, 2x + 2y = 3. Examples of generic cases that require efficient algorithms might include the sum 8767+2286 or the system 6y + x = x + 3, – x = 1 + 2y.	**Evidence-** Many opportunities to complete purely procedural problems. & fluency checks, quick checks, Remember Pages etc.	
Do the materials in grades K–6 provide repeated practice toward attainment of fluency Standards? Evaluate lessons, daily routines, and homework assignments for evidence of repeated practice toward attainment of the following K–6 Standards that set an explicit expectation of fluent (accurate and reasonably fast) computation: K.OA.A.5, 1.OA.C.6, 2.OA.B.2, 2.NBT.B.5, 3.OA.C.7, 3.NBT.A.2, 4.NBT.B.4, 5.NBT.B.5, 6.NS.B.2, 6.NS.B.3.	**Evidence-** Yes – Path to fluency practices, Quick Practices, fluency checks etc. Multi-digit multiplication fluency appears in 14 lessons across 3 units.	
Metric AC1C: **The materials are designed so that teachers and students spend sufficient time working with engaging applications, without losing focus on the Major Work of each grade.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Major Work for the grade being evaluated that relate specifically application to use throughout the questions associated with this metric. NOTE: Some examples of clusters or Standards that call for application include: K.OA.A.2, 1.OA.A, 2.OA.A, 3.OA.A.3, 3.OA.D.8, 4.OA.A.3, 4.NF.B.3d, 4.NF.B.4c, 5.NF.B.6, 5.NF.B.7c, 6.RP.A.3, 6.NS.A.1, 6.EE.B.7, 6.EE.C.9, 7.RP.A, 7.NS.A.3, 7.EE.B.3, 8.EE.C.8c, 8.F.B For context, read Criterion #4c in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-**	**Use the questions for Metric 1C to evaluate Metric 1C. Record evidence for each question and rate Metric 1C.** **(Reviewer only.)** **X Meets (2)** **____ Partially Meets (1)** **____ Does Not Meet (0)**
Are there are single- and multi-step contextual problems, including non-routine problems, that develop the mathematics of the grade, afford opportunities for practice, and engage students in problem solving? Do the problems attend thoroughly to those places in the content Standards where expectations for multi-step and real-world problems are explicit? Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** The program does provide single and multi-step problems for students to solve in all units, and covering a variety of the grade level content.	

Do application problems particularly stress applying the Major Work of the grade? Evaluate lessons, chapter/unit assessments, and homework assignments. NOTE: Examples of evaluating this Criterion might include looking at: how well, by the end of grade 2, students using the materials as designed can represent and solve a full range of one-step addition and subtraction word problems; or how well, by the end of grade 3, students using the materials as designed can represent and solve a full range of one-step multiplication and division word problems; or how well these basic situation types for each operation are carried coherently across the grades, (e.g., with fractions and algebraic expressions); or, in all grades, whether the problems connect concepts, Standards, and domains in ways that are natural and important. For a list of situation types for one-step addition, subtraction, multiplication, and division problems, see Situation Types for the Operations in Word Problems	**Evidence-** There are lessons that specifically target the MF standards that explicitly target applications: for students to solve word problems w/ fractions using the 4 operations + assessing the reasonableness of their answers. The lessons connect the use of visual models, estimation and reasoning to support sts thinking and checking answers. Not many problems were found on assessments, making it hard to truly assess these standards.	
Does modeling build slowly across K–8, with applications that are relatively simple in earlier grades and when students are encountering new content? In grades 6–8, do the problems begin to provide opportunities for students to make their own assumptions or simplifications in order to model a situation mathematically? Read Standard for Mathematical Practice 4, Model with Mathematics. Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** 4-5 we believe used modeling with 4th having more than 5th. * Only reviewed 4th & 5th.	

Alignment Criterion 1: Rigor and Balance

Materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.

AC1 Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 out of 6 points, the Criterion has not been met. Check the final rating.
Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)**

Before moving to Alignment Criterion 2, record the final Meets or Does Not Meet rating in the Evaluation Summary.

(Reviewer only.)

X **Meets**

____ **Does Not Meet**

Strengths/Weaknesses:

Strengths: Lots of fluency practice
- very focused on standards
- conceptual is modeled whole year

Weakness - need more opportunities for sts to demonstrate conceptual understanding independently

Directions for Alignment Criterion 2

Standards for Mathematical Practice

Alignment Criterion 2: Standards for Mathematical Practice

Materials must demonstrate authentic connections between content Standards and practice Standards.

The Standards require that designers of instructional materials connect the mathematical practices to mathematical content in instruction. Thus, materials must demonstrate authentic connections between content Standards and practice Standards.

Required Materials:

- Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf)
- Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)
- Focus by Grade Level for the grade being evaluated (www.achievethecore.org/focus)
- From the materials being evaluated: teacher guides, student texts and workbooks

Rating this Criterion

Alignment Criterion 2 is rated as Meets or Does Not Meet.

To rate Alignment Criterion 2, first rate metrics 2A, 2B, and 2C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). For each metric, guiding questions are provided to aid in gathering evidence.

Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 2 if the materials earn 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as mathematical practices, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.

Metric AC2A:
Materials address the practice Standards in such a way as to enrich the Major Work of the grade; practices strengthen the focus on Major Work instead of detracting from it, in both teacher and student materials.

How to Find the Evidence:

Familiarize yourself with the Major Work of the grade being evaluated (see the Focus by Grade Level documents.)

Evaluate teacher and student materials for evidence that the mathematical practices support and connect to the focus of the grade.

NOTE: Examples of evaluating this Criterion might include looking at whether, in grades K–5, students using the materials are supported to look for and express regularity in repeated reasoning about the addition table, the multiplication table, the properties of operations, the relationship between addition and subtraction or multiplication and division, and the place value system; or whether, in grades 6–8, students using the materials are supported to look for and express regularity in repeated reasoning about proportional relationships and linear functions.

For context, read Criterion #8 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013).

Evidence-

The program weaves all 8 mathematical practices, intentionally, throughout each unit, to support students learning of the content. The mathematical practices are clearly identified & explained for teachers in the introductory, unit planning, getting ready to teach the unit & the introductory page of each lesson, as well as in daily lesson guidelines.

There is a real world application of math content in the final lesson of each unit. These problems allow students opportunity to engage in the math practices on a regular basis as well.

(Reviewer only.)

X **Meets (2)**

____ **Partially Meets (1)**

____ **Does Not Meet (0)**

Metric AC2B: **Materials attend to the full meaning of each practice Standard.** **How to Find the Evidence:** For context, read Criterion #7 and Criterion #9 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).		**Use the questions for Metric 2B to evaluate Metric 2B. Record evidence for each question and rate Metric 2B.** **(Reviewer only.)** X **Meets (2)** ____ **Partially Meets (1)** ____ **Does Not Meet (0)**
Over the course of any given year of instruction, is each mathematical practice Standard meaningfully present in the form of assignments, activities, or problems that stimulate students to develop the habits of mind described in the practice Standard? Evaluate lessons, chapter/ unit assessments, and homework assignments for evidence of each mathematical practice being meaningfully present in instruction.	**Evidence-** Practice standards are meaningfully present. Concern is present ~~about~~ that demonstration of practices is more whole group through discussion of math talks – would like to see independent demonstration.	
Do the materials treat the practice Standards as developing across grades or grade bands? Are the practice Standards in early grades appropriately simple? Do they display an arc of growing sophistication across the grades?	**Evidence-** Looking at 4th & 5th we see more development from 4th to 5th	
Are there teacher-directed materials that explain the role of the practice Standards in the classroom and in students' mathematical development? Are alignments to practice Standards accurate?	**Evidence-** Each unit explains to tchr where each practice is addressed throughout the unit, – so many opportunities that tchr may need to pick a practice to focus on for in-depth practice/instruction	
Metric AC2C: **Materials support the Standards' emphasis on mathematical reasoning.** **How to Find the Evidence:** For context, read Criterion #10 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).		**Use the questions for Metric 2C to evaluate Metric 2C. Record evidence for each question and rate Metric 2C.** **(Reviewer only.)** X **Meets (2)** ____ **Partially Meets (1)** ____ **Does Not Meet (0)**
Do the materials support students in constructing viable arguments and critiquing the arguments of others concerning grade-level mathematics that is detailed in the content Standards? Read Standard for Mathematical Practice 3. Evaluate teacher and student materials to ensure that students are given opportunities to reason with grade-level mathematics.	**Evidence-** The program is pretty strong in supporting sts in constructing viable arguments, through math talks and the questions provided for teachers to utilize. Critiquing others seems more limited – takes-lower need to provide additional opportunities for this. Lesson is always an error – would like to see sts have chance to decide if error or accurate & explain their thinking.	
Do the materials support students in producing not only answers and solutions, but also, in a grade-appropriate way, arguments, explanations, diagrams, mathematical models, etc., especially in the Major Work of the grade? Familiarize yourself with the Major Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate teacher and student materials, to understand the types of work students are expected to produce.	**Evidence-** There are opportunities for students to explain their work and show their work throughout the program – math talks etc.	

Do materials explicitly attend to the specialized language of mathematics? Is the language of argument, problem solving, and mathematical explanations taught rather than assumed? Evaluate teacher and student materials, paying attention to how mathematical language is taught. NOTE: Examples of evaluating this Criterion might include looking at whether students are supported in: basing arguments on definitions; using the method of providing a counterexample; or recognizing that examples alone do not establish a general statement.	**Evidence-** Vocabulary is specific in both TE + St materials. Math Talks provide opportunities for use of specialized math language. Teacher dependent on making sure ALL students are participating + keeping focus on the math language	

Alignment Criterion 2:
Standards for Mathematical Practice

Materials must demonstrate authentic connections between content Standards and practice Standards.

AC2 Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 out of 6 points, the Criterion has not been met. Check the final rating.
Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion.
(Reviewer only.)

Before moving to Alignment Criterion 3, record the final Meets or Does Not Meet rating in the Evaluation Summary.

(Reviewer only.)

X **Meets**

____ **Does Not Meet**

Strengths/Weaknesses:
Sts Makes clear connections for teachers from Standards to mathematical practices.
-opportunities for students to construct arguments through math talks etc.

Weakness: Need more opportunities for critiquing others arguments

Alignment Criterion 3:
Access to the Standards for All Students

Materials must provide supports for English Language Learners and other special populations.

Because Standards are for all students, alignment requires thoughtful support to ensure all students are able to meet the Standards. Thus, aligned materials must provide supports for English Language Learners and other special populations.

Required Materials:

- Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf)
- Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)
- From the materials being evaluated: teacher guides, student texts and workbooks

Rating this Criterion:
Alignment Criterion 3 is rated as Meets or Does Not Meet.

To rate Alignment Criterion 3, first rate metrics 3A, 3B, and 3C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points).

Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 3 if the materials earn 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as support for special population, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.

Metric AC3A: **Support for [redacted]lish Language Learners and other special populations is thoughtful and helps those students meet the same Standards as all other students. The language in which problems are posed is carefully considered.** **How to Find the Evidence:** Evaluate teacher and student materials, paying attention to supports offered for special populations.	**Evidence-** ELL notes + supports are in every unit & lesson. [redacted] provides leveled math writing prompts, RTI Tier 1, 2 + Challenge activities & notes, differentiated instruction cards & the Math Extra Challenge Easel. All facets of support seem tied to the grade level standards	Reviewer only.) X Meets (2) ____Partially Meets (1) ____Does Not Meet (0)
Metric AC3B: **Materials provide appropriate level and type of scaffolding, differentiation, intervention, and support for a broad range of learners with gradual removal of supports, when needed, to allow students to demonstrate their mathematical understanding independently.** **How to Find the Evidence:** Evaluate teacher and student materials, paying attention to whether materials provide differentiation that will lead all learners to engage with on-grade-level content.	**Evidence-** The RTI for each unit provides teacher with ideas for scaffolding + differentiating as needed for all students. Provides Tier I, II + III lessons that provide different instruction on the standards a child may be struggling with. Students can move through the tiered intervention, gaining more skills in concepts w/ Tier 3 being on grade level - gradual removal of supports through tiers.	Reviewer only.) X Meets (2) ____Partially Meets (1) ____Does Not Meet (0)
Metric AC3C: **Design of lessons recommends and facilitates a mix of instructional approaches for a variety of learners such as using multiple representations (e.g., including models, using a range of questions, checking for understanding, flexible grouping, pair-share).** **How to Find the Evidence:** Evaluate teacher materials, noting instructional approaches suggested for whole class and differentiated lessons and activities.	**Evidence-** Variety of activities for differentiation. Questions are written + 'teaching notes' provided for teachers to use in their instruction. Helpful suggestions are made for modeling and/or use of manipulatives to meet student needs.	Reviewer only.) X Meets (2) ____Partially Meets (1) ____Does Not Meet (0)

Alignment Criterion 3: **Access to the Standards for All Students** **Materials must provide supports for English Language Learners and other special populations.** **AC3** Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 points, the Criterion has not been met. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion.**(Reviewer only.)** **Move to the Evaluation Summary and record the final Meets or Does Not Meet rating .**	**(Reviewer only.)** X **Meets** ____ **Does Not Meet** **Strengths/Weaknesses:** S: Many teacher supports for meeting varying needs. S: Providing specific questions to assist teachers for instruction is helpful. Weakness: Would like to see visual learning in every lesson.

Once an evaluation for alignment to the Shifts and major features of the CCSS has been conducted using Sections 1-3, it's important to evaluate for overall quality and best practices. A starting list of Indicators of Quality are suggested below. States, districts and others evaluating instructional materials are encouraged to add to this list to ensure materials reflect local contexts. For background information on some of the Indicators of Quality in this section, refer to pp.18–21 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).

Indicators of Quality	**Evidence- Give specific examples.**	**Rating: (Reviewers only.)**
1. Lessons are thoughtfully structured and support the teacher in leading the class through the learning paths at hand, with active participation by all students in their own learning and in the learning of their classmates.	**Evidence-** - math talks - many notes & suggestions for tchrs in each lesson in TE - questioning in each lesson - class discussions	**(Reviewer only.)** X **Yes** ____ **No**
2. The underlying design of the materials includes both problems and exercises. (In solving problems, students learn new mathematics, whereas in working exercises, students apply what they have already learned to build mastery.) Each problem or exercise has a purpose. **NOTE: This Criterion does not require that the problems and exercises be labeled as such.**	**Evidence-** - real world problems → tied to standards - exercises (bare problems) - purpose & options for a variety of learners	**(Reviewer only.)** X **Yes** ____ **No**

3. Design of assignments is not haphazard: exercises are given in intentional sequences in order to strengthen students' mathematical understanding.	**Evidence-** * Clear sequence w/ spiraling in practice activities. * Easy to see how lessons & units build on each other.	**(Reviewer only.)** X Yes ____ No
4. There are separate teacher materials that support and reward teacher study including, but not limited to: discussion of the mathematics of the units and the mathematical point of each lesson as it relates to the organizing concepts of the unit, discussion on student ways of thinking and anticipating a variety of students responses, guidance on lesson flow, guidance on questions that prompt students thinking, and discussion of desired mathematical behaviors being elicited among students.	**Evidence-**<br~~There~~ Teacher notes include research-what to expect from students, class management activities for lessons, watch fors, etc. Lots of info connecting lessons to the math practices as well as guidance for math talks	**(Reviewer only.)** X Yes ____ No
5. Manipulatives suggested in the materials are faithful representations of the mathematical objects they represent and are connected to written methods.	**Evidence-** Those supplied do support decimals, fractions & geometry Base 10 blocks, fraction bars, math boards etc.	**(Reviewer only.)** X Yes ____ No
6. Materials include a variety of curriculum-embedded assessments. Examples include pre-, formative, summative, and self-assessment resources.	**Evidence-** mid unit checks, unit assessments, portfolios, formative, performance assessment	**(Reviewer only.)** X Yes ____ No
7. Assessments contain aligned rubrics, answer keys, and scoring guidelines that provide sufficient guidance for interpreting student performance.	**Evidence-** Rubrics for performance assessments - keys found at back of assessment guide.	**(Reviewer only.)** X Yes ____ No
8. Materials assess student proficiency using methods that are accessible and unbiased, including the use of course-level language in student prompts.	**Evidence-** Multiple assessment options - aligned w course level language - culturally diverse names utilized throughout	**(Reviewer only.)** X Yes ____ No

9. Materials are carefully evaluated by qualified individuals, whose names are listed, in an effort to ensure freedom from mathematical errors and course-level appropriateness.	**Evidence-** Dr. Karen Fuson & Reagy -supported by National Science Foundation -provided a research pamphlet	**(Reviewer only.)** X **Yes** ____ **No**
10. The visual design supports students in engaging thoughtfully with the subject. Navigation through the text is clear.	**Evidence-** Very consistent – extensive amount of information could make it difficult for teachers to navigate initially, but once you learn the format it is consistent + easy to follow	**(Reviewer only.)** X **Yes** ____ **No**
11. The materials engage parents in appropriate ways. For example, homework assignments in elementary grades, consist of routine problems, practice with getting answers, and fluency-building exercises that parents can easily support.	**Evidence-** Routine problems -Parent letters (Eng. & Spanish) that explain in user friendly language what Ss are working on – seemed they would be helpful for helping at home work	**(Reviewer only.)** X **Yes** ____ **No**

Reviewer IMET Evaluation Summary **Title/Level:** Math Expressions 5th

Publisher: HMH **Copyright:** 2013 **ISBN:** _____

Reviewer ID # TD, EL **Date Review Completed:** 3/8/16

Non-Negotiable Criteria- Each Non-Negotiable must be met in order for the Non-Negotiable Alignment Criteria to be met overall.

Non-Negotiable 1: Freedom from Obstacles to Focus	Non- Negotiable 2: Focus and Coherence
X Meets	X Meets
_____ Does Not Meet	_____ Does Not Meet

Non-Negotiable Overall:

X **Meets** _____ **Does Not Meet**

Alignment Criteria- Each Alignment Criterion must be met with a sufficient number of points in order for Alignment Criteria to be labeled as "Meets" overall. The more points the materials receive on the Alignment Criteria, the better they are aligned.

Alignment Criterion 1: Rigor and Balance	Alignment Criterion 2: Standards of Mathematical Practice	Alignment Criterion 3: Access to Standards for All Learners
Points: 5 of 6 possible. (Materials must receive at least 5 of 6 points to align.)	Points: 6 of 6 possible. (Materials must receive at least 5 of 6 points to align.)	Points: 6 of 6 possible. (Materials must receive at least 5 of 6 points to align.)
X Meets	X Meets	X Meets
_____ Does Not Meet	_____ Does Not Meet	_____ Does Not Meet

Alignment Criteria Overall:

X **Meets** _____ **Does Not Meet**

If the materials meet both Non-Negotiables and relevant Alignment Criterion, they are aligned to the Shifts and major features of the Core Standards. **Do the materials meet every Non-Negotiable and Alignment Criterion?** X **Yes** ____ **No**

What are the specific areas of strength and weakness based on this evaluation? Publishers or others modifying or developing assessments can use this information to make improvements and/or to remedy gaps in the alignment of assessment materials.

Strengths:
- focus on grade level standards (major work)
- connections to math practices (focus & support)
- use of manipulatives to model & build a base for conceptual understanding
- multiple supports for differentiation (st. & tch. supports)

Weakness:
- lack of independent conceptual work (not teacher led)
- over abundance of time spent on fluency & bare problem solving.
- lack of connection between conceptual opportunities & independent exercises (connect fluency work w/ the conceptual work)

EVIDENCE SUMMARY:

FOCUS-

The major works were evident throughout the program.

COHERENCE-

The supporting works enhance the ~~major~~ major works.

RIGOR-

It is at an appropriate level for 6th grade and accessible for all learners.

CONCEPTUAL UNDERSTANDING-

Conceptual understanding is taught and supported by fluency, practice, and application.

MATHEMATICAL PRACTICES-

Evident and attended to throughout units and lessons.

ACCESSIBILITY OF STANDARDS TO ALL STUDENTS-

Materials are presented in multiple methods with varying strategies. Materials are available to ELL and lower level learners as well as on grade level and gifted learners.

OTHER:

2015-16 Interim Mathematics Review

Mathematics Evaluation Tool Grades K-8

Publisher: HMH

Title of Material: Math Expressions Common Core

Author: Fusion / Beckman

ISBN #: _____ **Copyright** 2013

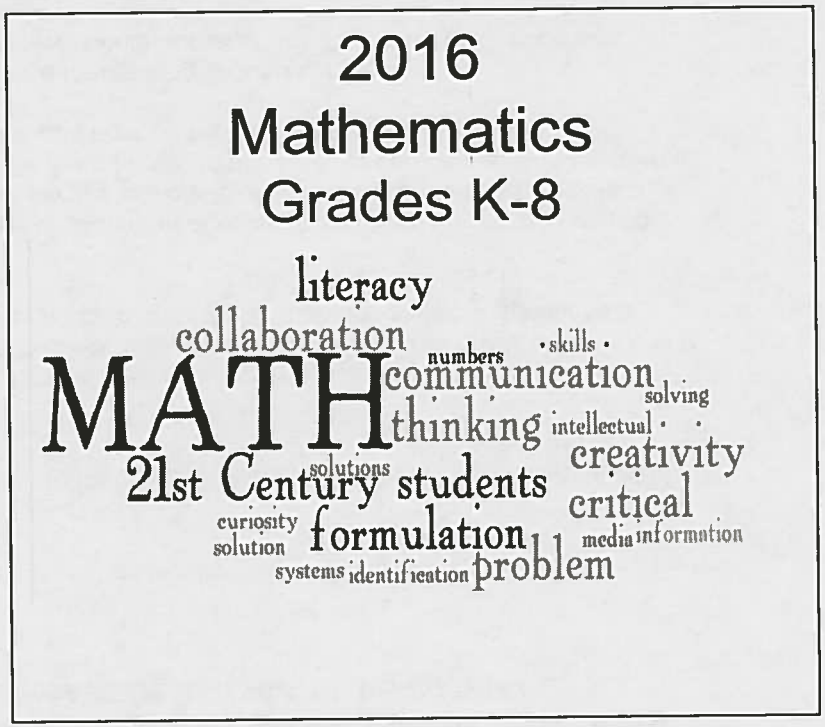
Reviewer ID: AP CB

Core Mathematics Program- a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Core.

Other Mathematics Program- a program that substantially, but partially, meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Other.

Component Mathematics Program- a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs.
Substantial evidence clearly supports the designation of this program as Component.

Intervention Program- a program designed and intended to target and support students' specific needs.
Substantial evidence clearly supports the designation of this program as Intervention.



- Evaluation Form adapted from Instructional Materials Evaluation Toolkit (IMET).

The IMET was developed by Student Achievement Partners. Educators may use or adapt. http://creativecommons.org/licenses/by/3.0/ Download this tool at http://achievethecore.org/IMET

Instructional Materials Evaluation Tool

Mathematics, Grades K-8

What Are the Purposes of the IMET?

This Math IMET is designed to help educators determine whether instructional materials are aligned to the Shifts and major features of the Common Core State Standards (CCSS). The substantial instructional Shifts (http://www.corestandards.org/other-resources/key-shifts-inmathematics/) at the heart of the Common Core State Standards are:

- **Focus** strongly where the Standards focus
- **Coherence**: Think across grades and link to major topics within the grade
- **Rigor**: In major topics, pursue conceptual understanding, procedural skill and fluency, and application with equal intensity.

The IMET draws directly from the following documents:

- Common Core State Standards for Mathematics (www.corestandards.org/Math)
- Publishers' Criteria for the Common Core State Standards in Mathematics grade K-8 (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)

When to use the IMET

1. Purchasing materials: Many factors go into local purchasing decisions. Alignment to the Standards is a critical factor to consider. This tool is designed to evaluate alignment of instructional materials to the Shifts and the major features of the CCSS. It also provides suggestions of additional indicators to consider in the materials evaluation and purchasing process.

2. Evaluating materials currently in use: The IMET can be used to analyze the degree of alignment of existing materials and help to highlight specific, concrete flaws in alignment. Even where materials and tools currently in use fail to meet one or more of these criteria, the pattern of failure is likely to be informative. States and districts can use the evaluation to create a thoughtful plan to modify or combine existing resources in such a way that students' actual learning experiences approach the focus, coherence, and rigor of the Standards.

3. Developing programs: Those developing new programs can use this tool as guidance for creating aligned curricula.
Please note this tool was designed for evaluating comprehensive curricula (including any supplemental or ancillary materials), but it was not designed for the evaluation of standalone supplemental materials.

Who Uses the IMET?

Evaluating instructional materials requires both subject-matter and pedagogical expertise. Evaluators should be well versed in the Standards (www.corestandards.org/Math) for all grades in which materials are being evaluated. This includes understanding the Major Work of the grade (www.achievethecore/focus), the Supporting and Additional work, how the content fits into the progressions in the Standards (www.achievethecore.org/progressions), and the expectations of the Standards with respect to conceptual understanding, procedural skill and fluency, and application. Evaluators also should be familiar with the substantial instructional Shifts (http:// www.corestandards.org/other-resources/key-shifts-in-mathematics/) of Focus, Coherence and Rigor that are listed above.

Getting Started

Prior to Evaluation

Assemble all of the materials necessary for the evaluation. It is essential for evaluators to have materials for all grades covered by the program, as some criteria cannot be rated without having access to each grade. In addition, each evaluator should have a reference copy of the Common Core State Standards for Mathematics (CCSSM) and the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013).

2015-16 Interim Mathematics Review

Mathematics Evaluation Tool Grades K-8

Publisher: Houghton Mifflin Harcourt

Title of Material: Math Expressions, Grade 6

Author: Fusion/Beckmann

ISBN #: 978-0-547-56755-6 **Copyright** 2012

Reviewer ID: CB, AP

Core Mathematics Program- a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Core.

Other Mathematics Program- a program that substantially, but partially, meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Other.

Component Mathematics Program- a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs.
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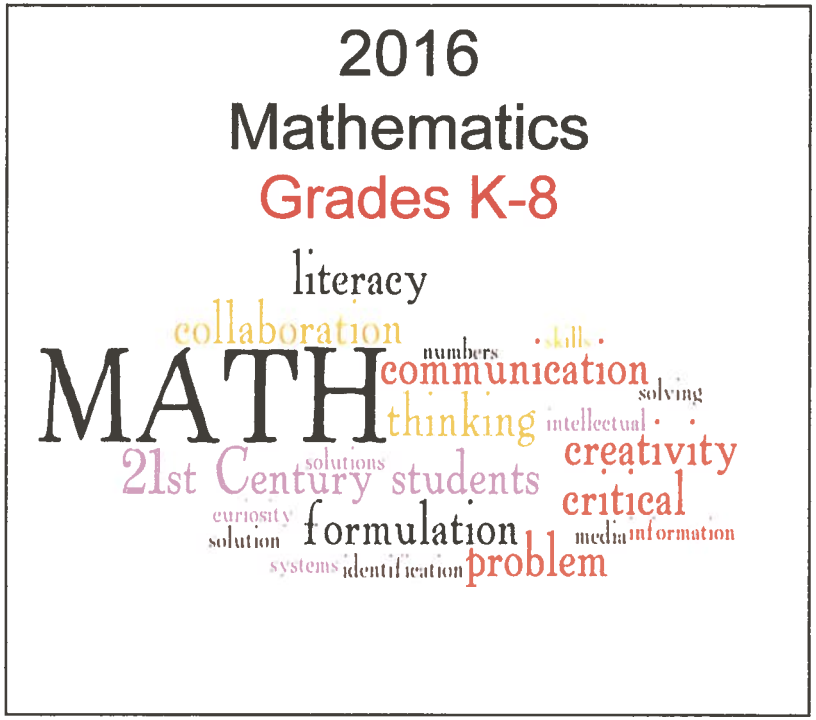
Substantial evidence clearly supports the designation of this program as Intervention.



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Instructional Materials Evaluation Tool
Mathematics, Grades K-8

What Are the Purposes of the IMET?
This Math IMET is designed to help educators determine whether instructional materials are aligned to the Shifts and major features of the Common Core State Standards (CCSS). The substantial instructional Shifts (http://www.corestandards.org/other-resources/key-shifts-inmathematics/) at the heart of the Common Core State Standards are:
- **Focus** strongly where the Standards focus
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The IMET draws directly from the following documents:
- Common Core State Standards for Mathematics (www.corestandards.org/Math)
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2. Evaluating materials currently in use: The IMET can be used to analyze the degree of alignment of existing materials and help to highlight specific, concrete flaws in alignment. Even where materials and tools currently in use fail to meet one or more of these criteria, the pattern of failure is likely to be informative. States and districts can use the evaluation to create a thoughtful plan to modify or combine existing resources in such a way that students' actual learning experiences approach the focus, coherence, and rigor of the Standards.

3. Developing programs: Those developing new programs can use this tool as guidance for creating aligned curricula.
Please note this tool was designed for evaluating comprehensive curricula (including any supplemental or ancillary materials), but it was not designed for the evaluation of standalone supplemental materials.

Who Uses the IMET?
Evaluating instructional materials requires both subject-matter and pedagogical expertise. Evaluators should be well versed in the Standards (www.corestandards.org/Math) for all grades in which materials are being evaluated. This includes understanding the Major Work of the grade (www.achievethecore/focus), the Supporting and Additional work, how the content fits into the progressions in the Standards (www.achievethecore.org/progressions), and the expectations of the Standards with respect to conceptual understanding, procedural skill and fluency, and application. Evaluators also should be familiar with the substantial instructional Shifts (http:// www.corestandards.org/other-resources/key-shifts-in-mathematics/) of Focus, Coherence and Rigor that are listed above.

Getting Started
Prior to Evaluation

Assemble all of the materials necessary for the evaluation. It is essential for evaluators to have materials for all grades covered by the program, as some criteria cannot be rated without having access to each grade. In addition, each evaluator should have a reference copy of the Common Core State Standards for Mathematics (CCSSM) and the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013).

Before conducting the evaluation itself, it is important to develop a protocol for the evaluation process. The protocol should include having evaluators study the Publishers' Criteria and the IMET. It will also be helpful for evaluators to get a sense of each program overall before beginning the process. At a minimum, this would include reading the front matter of the text, looking at the table of contents and paging through multiple chapters.

Sections 1-3 below should be completed to produce a comprehensive picture of the strengths and weaknesses of the materials under evaluation. Information about areas in need of improvement or supplementation should be shared with internal and external stakeholders.

Navigating the Tool

Begin with Section 1: Non-Negotiable Alignment Criteria

- The Non-Negotiable Alignment Criteria must each be met in full for materials to be considered aligned to the Shifts and the major features of the Common Core State Standards. Each Non-Negotiable Alignment Criterion has one or more metrics associated with it; every one of these metrics must be met in order for the criterion as a whole to be met.

- Examine the relevant materials and use evidence to rate the materials against each criterion and its associated metric(s).

- Record and explain the evidence upon which the rating is based.

Continue to Section 2: Alignment Criteria

- The Alignment Criteria must each be met for materials to be considered aligned to the Shifts and the major features of the Common Core State Standards. Each Alignment Criterion has one or more metric associated with it; a specific number of these metrics must be met or partially met in order for the criterion as a whole to be met.

- Examine the materials in relation to these criteria, assigning each metric a point value. Rate the criterion as "Meets" or "Does Note Meet" based on the number of points assigned. The more points the materials receive on the alignment Criteria, the better they are aligned.

- Record and explain the evidence upon which the rating is based.

Proceed to Section 4: Indicators of Quality

- Indicators of Quality are important considerations that will help evaluators better understand the overall quality of instructional materials. These considerations are not criteria for alignment to the CCSS, but they provide valuable information about additional program characteristics. Evaluators may want to add their own indicators to the examples provided.

Directions for Non-Negotiable 1

Freedom from Obstacles to Focus

Criterion	Evidence- Give specific examples.	Rating: (Reviewer only.)
Non-Negotiable 1: **Freedom from Obstacles to Focus** **Materials must reflect the content architecture of the Standards by not assessing the topics named before the grade level where they first appear in the Standards.** The Standards foster students' progress to algebra by focusing strongly on arithmetic. Consistent with this focus, certain topics from outside of arithmetic appear only in later grades. Thus, to be aligned, materials must reflect the content architecture of the Standards by not assessing the topics named before the grade level where they first appear in the Standards. In this criterion, "topics named" means the topics that are explicitly named in Metric 1A. No other topics should be added to the list in Metric 1A. (Note that other topics in the standards are addressed in criterion NN2.)	**Required Materials** • Common Core State Standards for Mathematics (www.corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf) • From the materials being evaluated: teacher guides and all assessment components	**Rating this Criterion:** Non-Negotiable 1 is rated as Meets or Does Not Meet. To rate Non-Negotiable 1, begin by rating Metric 1A. Since Metric 1A is the only metric for Non-Negotiable 1, the rating for Non-Negotiable 1 is the same as the rating for Metric 1A. If Metric 1A is rated as Does Not Meet, include evidence of when the named topic(s) is/are assessed. If the metric is rated as Meets, list the grade(s) examined in the evaluation.

Metric NN1A **Materials re[illegible] the basic architecture of the Standards by not assessing the listed topics before the grade level indicated.** • Probability, including chance, likely outcomes, probability models. (Introduced in the CCSSM in grade 7) • Statistical distributions, including center, variation, clumping, outliers, mean, median, mode, range, quartiles; and statistical association or trends, including two-way tables, bivariate measurement data, scatter plots, trend line, line of best fit, correlation. (Introduced in the CCSSM in grade 6) • Similarity, congruence, or geometric transformations. (Introduced in the CCSSM in grade 8) • Symmetry of shapes, including line/ reflection symmetry, rotational symmetry. (Introduced in the CCSSM in grade 4) **How to Find the Evidence:** Evaluate the table of contents, all chapter tests, all unit tests, and other such assessment components (including rubrics). For context, read Criterion #2 from the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013). NOTE: Grade alignments of other topics are addressed in Non-Negotiable 2, Focus and Coherence.) In this criterion, "topics named" means the topics that are explicitly named in Metric 1A. No other topics should be added to the list in Metric 1A. (Note that other topics in the standards are addressed in criterion NN2.)	**Evidence-** **Table of contents a[illegible]essons are all 6th grade clusters**	**(Reviewer only.)** **_X___Meets** **____Does Not Meet**
Non-Negotiable 1: Materials must reflect the content architecture of the Standards by not assessing the topics named* before the grade level where they first appear in the Standards. **NN 1** If Metric 1A was rated as Meets, then rate Non-Negotiable 1 as Meets. If Metric 1A was rated as Does Not Meet, then rate Non- Negotiable 1 as Does Not Meet. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion.**(Reviewer only.)** **Before moving to Non-Negotiable 2, record the final Meets or Does Not Meet rating in the Evaluation Summary.**		**(Reviewer only.)** **_X___Meets** **____Does Not Meet** **Strengths/Weaknesses:**

Directions for Non-Negotiable 2

Focus and Coherence

Non-Negotiable 2: **Focus and Coherence** **Materials must focus coherently on the Major Work of the grade in a way that is consistent with the progressions in the Standards.** Focus and coherence are the two major evidence-based design principles of the Common Core State Standards for Mathematics (CCSSM, p. 3). Focus is necessary in order to fulfill the ambitious promise the states have made to their students by adopting the Standards: greater achievement at the college and career ready level; greater depth of understanding of mathematics; and a rich classroom environment in which reasoning, sense-making, applications, and a range of mathematical practices flourish. In simpler terms, a mile-wide, inch-deep curriculum translates to less time per topic. Less time means less depth and moving on without many students. Thus, materials must focus coherently on the Major Work of the grade in a way that is consistent with the progressions in the Standards.	**Required Materials** • Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf) • Focus by Grade Level for the grade being evaluated (www.achievethecore.org/focus) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion:** Non-Negotiable 2 is rated as Meets or Does Not Meet. To rate Non-Negotiable 2, first rate metrics 2A–2H. Each of these eight metrics must be rated as Meets in order for Non-Negotiable 2 to be rated as Meets. Rate each metric 2A-2H as Meets or Does Not Meet/Insufficient Evidence. If the evidence examined shows that the Criterion is met, then mark the Criterion Meets. If the evidence examined shows that the Criterion is not met—or if there is insufficient evidence to make a determination—then mark the Criterion as Does Not Meet/Insufficient Evidence. Support all ratings with evidence.
Metric NN2A: **In each grade K–8, students and teachers using the materials as designed devote the large majority of time to the Major Work of the grade.** **How to Find the Evidence:** Familiarize yourself with the Major Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, lessons, homework assignments, and assessments. (Evaluate both student and teacher materials.) Consider time spent on the Major Work of the grade and judge qualitatively whether students and teachers using the materials as designed will devote the large majority of time to the Major Work of the grade. For context, read Criterion #1 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013)	**Evidence-** **155/185 days 83% spent on major works of grade level according to pacing guide** **6/9 units (surface area, volume, area of polygons) were supporting works**	**(Reviewer only.)** **__X__Meets** **____Does Not Meet/** **Insufficient Evidence**

Metric NN2B **Supporting Work, where present, enhances focus and coherence simultaneously by also engaging students in the Major Work of the grade.** **How to Find the Evidence:** Familiarize yourself with the Major Work and Supporting Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate chapters and lessons that focus on Supporting Work. NOTE: Example of evaluating this Criterion might include looking at whether materials for K–5 generally treat data displays as an occasion for solving grade-level word problems using the four operations (e.g., see 3.MD.B.3); or whether materials for grade 7 take advantage of opportunities to use probability to support ratios, proportions, and percentages. For context, read Criterion #3 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** **Major works are enhanced by the supporting works** **6.G.1-4 Lesson 2-1 supports extension of previous understandings of arithmetic to algebraic expression and represent and analyze relationships between variables**	**(Reviewer only.)** **_X___Meets** **____Does Not Meet/** **Insufficient Evidence**
Metric NN2C: **Materials base content progressions on the grade-by-grade progressions in the Standards. Content from previous or future grades does not unduly interfere with or displace on-grade-level content.** **How to Find the Evidence:** Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, and lessons in both student and teacher materials. NOTE: In some cases it may be possible that aligned materials might address some aspects of a topic in a strategic way before or after the grade level in which the topic is central in the Standards' progressions; for example, a curriculum author might purposefully choose to explore adding fractions with unlike denominators in a way appropriate to grade four, recognizing that this work is not really required until the next grade. However, any such purposeful discrepancies in content progressions should enhance the required learning in each grade; not unduly interfere with or displace grade-level content; and be clearly aimed at helping students meet the Standards as written rather than effectively rewriting the progressions in the Standards. And in all cases, note that Non-Negotiable 1 must be met for materials to be aligned. For context, read Criterion #5a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** The "Get Ready to Teach" and the learning progressions for the common core show the standards previously taught and how they connect to the current standards being taught.	**(Reviewer only.)** **__X__Meets** **____Does Not Meet/** **Insufficient Evidence**

Metric NN2D: **Materials gi[illegible]l students extensive work with on-grade-level problems.** **How to Find the Evidence:** Evaluate both student and teacher materials. If the materials provide resources for differentiated learning, consider whether lower-performing students have opportunities to engage with grade-level problems. Also consider whether higher-performing students are given opportunities to learn current grade-level content in greater depth. For context, read Criterion #5b in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Variety of problem[illegible]pes, practice tables, create own tables, fill in the blank, graphs, explanations, and use of multiple models provides access for all students on various levels	**(Reviewer only.)** **__X__Meets** **____Does Not Meet/ Insufficient Evidence**
Metric NN2E: **Materials relate on-grade-level concepts explicitly to prior knowledge from earlier grades.** **How to Find the Evidence:** Evaluate both student and teacher materials. NOTE: Examples of evaluating this Criterion might include looking at the way the materials extend basic ideas of place value across the decimal point; or the role that properties of operations play when the materials extend arithmetic beyond whole numbers to fractions, variables, and expressions. More generally, cluster headings in the Standards sometimes signal key moments where reorganizing and extending previous knowledge is important in order to accommodate new knowledge (e.g., see cluster headings that use the phrase "Apply and extend previous understanding"). For context, read Criterion #5c in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Math background is explained in lessons and at the beginning of the book, but there are no standards connected. There is a skills trace which shows student progression on standards. Quick practice from 1.1 reviews factor puzzles for multiplication and division strategies from 5th grade. Anytime problems review prior knowledge as it relates to grade level concepts.	**(Reviewer only.)** **__X__Meets** **____Does Not Meet/ Insufficient Evidence**
Metric NN2F: **Review of material from previous grades is clearly identified as such to the teacher, and teacher and students can see what their specific responsibility is for the current year.** **How to Find the Evidence:** Evaluate the table of contents, but do not stop there; also evaluate units, chapters, lessons, homework assignments and assessments. (Evaluate both student and teacher materials.) Identify any content from previous grades and check whether it is identified as such. For context, read Criterion #5a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** There are math background notes that provide teachers with standards and connections from previous years. The standards that are taught and assessed are also listed in the teacher materials for the current year. Skills trace found at the beginning of each unit shows previous, current, and next grade level material. Teaching notes explain connections to learning.	**(Reviewer only.)** **_X___Meets** **____Does Not Meet/ Insufficient Evidence**

Metric NN2G: **Materials include learning objectives that are visibly shaped by CCSSM cluster headings.** **How to Find the Evidence:** Select several clusters from the Major Work in the grade being evaluated. Evaluate teacher and student materials in relation to these clusters. For context, read Criterion #6a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** **Unit introductions, lesson introductions, and pacing guides explicitly show cluster headings, objectives, and mathematical practices.**	(Reviewer only.) **__X__Meets** **____Does Not Meet/ Insufficient Evidence**
Metric NN2H: **Materials include problems and activities that serve to connect two or more clusters in a domain, or two or more domains in a grade, in cases where these connections are natural and important.** **How to Find the Evidence:** In the grade being evaluated, choose two or more clusters or two or more domains for which connections are natural and important. Evaluate the units, chapters, and lessons that deal with the chosen topics, looking for problems and activities that serve to connect the chosen clusters or domains. NOTE: An example of evaluating this Criterion might include looking at whether problems in grade 4 sometimes or often involve students applying their developing computation skills (detailed in domain NBT) in the context of solving word problems (detailed in domain OA). For context, read Criterion #6b in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** **Unit introductions explain extensions. Lessons 5.15-5.17 connect 6.EE.5 to 6.EE.6-8.** **Page 609-660 requires page 759-768 to apply previous skills.**	(Reviewer only.) **_X___Meets** **____Does Not Meet/ Insufficient Evidence**
Non-Negotiable 2: **Focus and Coherence** **Materials must focus coherently on the Major Work of the grade in a way that is consistent with the progressions in the Standards.** **NN 2** If all Metrics 2A – 2H were rated as Meets, then rate Non-Negotiable 2 as Meets. If one or more Metric was rated Does Not Meet/Insufficient Evidence, then rate Non-Negotiable 2 as Does Not Meet. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)** **Before moving to Alignment Criterion 1, record the final Meets or Does Not Meet rating in the Evaluation Summary.**		(Reviewer only.) **_X___Meets** **____Does Not Meet** **Strengths/Weaknesses:** **Standards and clusters were clearly identified when they were being taught. There are multiple opportunities for students to work through the problems.**

Now continue by evaluating the Alignment Criterion 1 for Rigor and Balance.

Directions for Alignment Criterion 1

Rigor and Balance

Alignment Criterion 1: Rigor and Balance

Materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.

The Standards set expectations for attention to all three aspects of rigor: conceptual understanding, procedural skill and fluency, and applications. Thus, materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.

Required Materials

- Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf)
- Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)
- Focus by Grade Level for the grade being evaluated (achievethecore.org/focus)
- Situation Types for the Operations in Word Problems (achievethecore.org/situation-types)
- From the materials being evaluated: teacher guides, student texts and workbooks

Rating this Criterion:

Alignment Criterion 1 is rated as Meets or Does Not Meet.

To rate Alignment Criterion 1, first rate metrics 1A, 1B, and 1C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). For each metric, guiding questions are provided to aid in gathering evidence.
Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 1 if the materials rate 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as rigor and balance, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.

Metric AC1A:
The materials support the development of students' conceptual understanding of key mathematical concepts, especially where called for in specific content Standards or cluster headings.

How to Find the Evidence:

Select one or more cluster(s) or Standard(s) from the Major Work for the grade being evaluated that relate specifically conceptual understanding to use throughout the questions associated with this metric. NOTE: Some examples of clusters or Standards that call for conceptual understanding include: K.OA.A.1, (1.NBT.B, 1.NBT.C), (2.NBT.A, 2.NBT.B), (3.OA.A.1, 3.OA.A.2), 4.NF.A, (4.NBT.A, 4.NBT.B), 5.NF.B, (5.NBT.A, 5.NBT.B), 6.RP.A, 6.EE.A.3, 7.NS.A, 7.EE.A, 8.EE.B, 8.F.A, 8.G.A

Clusters or Standards grouped by parentheses are closely connected and could be analyzed together.

For context, read Criterion #4a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).

-Choose a cluster/Standard from the Major Work that is aligned to each aspect of rigor and use it to evaluate these metrics. It is most helpful if the same clusters/Standards are chosen for all of the programs being evaluated. (Guidance in choosing clusters/Standards is included in "How to Find the Evidence".)

Use the questions for AC Metric 1A to evaluate Metric 1A. Record evidence for each question and rate Metric 1A.

__X__Meets (2)

____Partially Meets (1)

____Does Not Meet (0)

Is conceptual understanding attended to thoroughly where the Standards set explicit expectations for understanding or interpreting? Evaluate lessons, chapter/unit assessments and homework assignments, paying attention to work aligned to Standards that explicitly call for understanding or interpreting. NOTE: Examples of evaluating this Criterion might include looking at how well the multi-digit addition and subtraction algorithms are developed and explained on the basis of place value and properties of operations; or how well the multi-digit multiplication and division algorithms are developed and explained on the basis of place value and properties of operations; or how well solving equations is presented and explained as a process of reasoning.	**Evidence-** Math talk provided students different strategies to learn and practice. There are individual, collaborative, hands-on, writing, and virtual tools available for students to work through. Examples in the teacher edition include pages 75-82, 575-584, 791-808.	
Do the materials feature high-quality conceptual problems and conceptual discussion questions? Evaluate lessons, chapter/unit assessments, and homework assignments. NOTE: Example of conceptual problems might include such questions as "Find a number greater than 1/5 and less than 1/4," or "If the divisor does not change and the dividend increases, what happens to the quotient?"	**Evidence-** Lesson 1.7 has several representations of understanding (completing function tables, creating graphs, puzzled penguin) for practice with concepts.	
Do the materials feature opportunities to identify correspondences across mathematical representations? Evaluate lessons, chapter/unit assessments and homework assignments. NOTE: Examples of evaluating this Criterion might include looking at whether students are supported in identifying correspondences among: the verbal description of a situation, the diagrams that distill its mathematical features, and the equations that model it; or equivalent forms of numbers (e.g., 3 and 6/2) and the number line; or rational number operations and representations of them via models such as the vector model; or the expression that defines a function and the graph that shows the relationship.	**Evidence-** Students solve problems, create diagrams, models, and explain solutions and thinking.	
Metric AC1B: **The materials are designed so that students attain the fluencies and procedural skills required by the Standards.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Major Work for the grade being evaluated that relate specifically to fluency and procedural skill to use throughout the questions associated with this metric. NOTE: Some examples of Standards that call for procedural skill and fluency include: K.OA.A.5, 1.OA.C.6, 2.OA.B.2, 2.NBT.B.5, 3.OA.C.7, 3.NBT.A.2, 4.NBT.B.4, 5.NBT.B.5, 6.NS.B.2, and 6.NS.B.3, 6.EE.A, 7.NS.A, 7.EE.A.1,7.EE.B.4a, 8.EE.C.7, 8.EE.C.8b For context, read Criterion #4b in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).		**Use the questions for Metric 1B to evaluate Metric 1 B. Record evidence for each question and rate Metric 1B.** **(Reviewer only.)** **__X__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**

Is progress toward fluency and procedural skill interwoven with students' developing conceptual understanding of the operations in question? Evaluate lessons, chapter/unit assessments, daily routines, and homework assignments for evidence that the development of fluency and procedural skill is supported by conceptual understanding.	**Evidence-** The program follows phases of learning from conceptual understanding to fluency and application.	
Are purely procedural problems and exercises present that include cases in which opportunistic strategies are valuable and generic cases that require efficient algorithms present? Evaluate lessons, chapter/unit assessments, daily routines, and homework assignments. NOTE: Examples of problems in which opportunistic strategies are valuable might include the sum 698 + 240 or the system x + y = 1, 2x + 2y = 3. Examples of generic cases that require efficient algorithms might include the sum 8767+2286 or the system 6y + x = x + 3, – x = 1 + 2y.	**Evidence-** Opportunistic strategies found on page 468, 480, 908. There are multiple strategies for learning including use of manipulatives and online tools.	
Do the materials in grades K–6 provide repeated practice toward attainment of fluency Standards? Evaluate lessons, daily routines, and homework assignments for evidence of repeated practice toward attainment of the following K–6 Standards that set an explicit expectation of fluent (accurate and reasonably fast) computation: K.OA.A.5, 1.OA.C.6, 2.OA.B.2, 2.NBT.B.5, 3.OA.C.7, 3.NBT.A.2, 4.NBT.B.4, 5.NBT.B.5, 6.NS.B.2, 6.NS.B.3.	**Evidence-** **The program offers a fluency plan and quick practices for the students. For example, IJJ, 211 in the teacher edition and page 19 and 123.**	
Metric AC1C: **The materials are designed so that teachers and students spend sufficient time working with engaging applications, without losing focus on the Major Work of each grade.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Major Work for the grade being evaluated that relate specifically application to use throughout the questions associated with this metric. NOTE: Some examples of clusters or Standards that call for application include: K.OA.A.2, 1.OA.A, 2.OA.A, 3.OA.A.3, 3.OA.D.8, 4.OA.A.3, 4.NF.B.3d, 4.NF.B.4c, 5.NF.B.6, 5.NF.B.7c, 6.RP.A.3, 6.NS.A.1, 6.EE.B.7, 6.EE.C.9, 7.RP.A, 7.NS.A.3, 7.EE.B.3, 8.EE.C.8c, 8.F.B For context, read Criterion #4c in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** There is ample mathematical thinking required that scaffolds students to independence in solving problems.	**Use the questions for Metric 1C to evaluate Metric 1C. Record evidence for each question and rate Metric 1C.** **(Reviewer only.)** **__X__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Are there are single- and multi-step contextual problems, including non-routine problems, that develop the mathematics of the grade, afford opportunities for practice, and engage students in problem solving? Do the problems attend thoroughly to those places in the content Standards where expectations for multi-step and real-world problems are explicit? Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** Examples of multi-step problems include pages 317-354, 387-392, 953-964.	

Do application problems particularly stress applying the Major Work of the grade? Evaluate lessons, chapter/unit assessments, and homework assignments. NOTE: Examples of evaluating this Criterion might include looking at: how well, by the end of grade 2, students using the materials as designed can represent and solve a full range of one-step addition and subtraction word problems; or how well, by the end of grade 3, students using the materials as designed can represent and solve a full range of one-step multiplication and division word problems; or how well these basic situation types for each operation are carried coherently across the grades, (e.g., with fractions and algebraic expressions); or, in all grades, whether the problems connect concepts, Standards, and domains in ways that are natural and important. For a list of situation types for one-step addition, subtraction, multiplication, and division problems, see Situation Types for the Operations in Word Problems	**Evidence-** Problems with procedural fluency extend to more advanced applictions through student created representations. For example, pages 404, 556-557.	
Does modeling build slowly across K–8, with applications that are relatively simple in earlier grades and when students are encountering new content? In grades 6–8, do the problems begin to provide opportunities for students to make their own assumptions or simplifications in order to model a situation mathematically? Read Standard for Mathematical Practice 4, Model with Mathematics. Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** Modeling includes representations in books or charts or manipulatives and builds upon initial modeling. Examples include pages 368, 458-459, 466, and 468.	

Alignment Criterion 1: Rigor and Balance

Materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.

AC1 Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 out of 6 points, the Criterion has not been met. Check the final rating.
Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)**

Before moving to Alignment Criterion 2, record the final Meets or Does Not Meet rating in the Evaluation Summary.

(Reviewer only.)

_X___Meets

____Does Not Meet

Strengths/Weaknesses:
There is a variety of learning options for students and ancillary materials such as manipulatives, charts, posters are essential.

Directions for Alignment Criterion 2

Standards for Mathematical Practice

Alignment Criterion 2: Standards for Mathematical Practice **Materials must demonstrate authentic connections between content Standards and practice Standards.** The Standards require that designers of instructional materials connect the mathematical practices to mathematical content in instruction. Thus, materials must demonstrate authentic connections between content Standards and practice Standards.	**Required Materials:** • Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf) • Focus by Grade Level for the grade being evaluated (www.achievethecore.org/focus) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion** Alignment Criterion 2 is rated as Meets or Does Not Meet. To rate Alignment Criterion 2, first rate metrics 2A, 2B, and 2C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). For each metric, guiding questions are provided to aid in gathering evidence. Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 2 if the materials earn 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as mathematical practices, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.
Metric AC2A: **Materials address the practice Standards in such a way as to enrich the Major Work of the grade; practices strengthen the focus on Major Work instead of detracting from it, in both teacher and student materials.** **How to Find the Evidence:** Familiarize yourself with the Major Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate teacher and student materials for evidence that the mathematical practices support and connect to the focus of the grade. NOTE: Examples of evaluating this Criterion might include looking at whether, in grades K–5, students using the materials are supported to look for and express regularity in repeated reasoning about the addition table, the multiplication table, the properties of operations, the relationship between addition and subtraction or multiplication and division, and the place value system; or whether, in grades 6–8, students using the materials are supported to look for and express regularity in repeated reasoning about proportional relationships and linear functions. For context, read Criterion #8 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013).	**Evidence-** The math practice standards are addressed in lessons and in preview materials. Activities also target mathematical practices.	**(Reviewer only.)** **_X___Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**

Metric AC2B: **Materials attend to the full meaning of each practice Standard.** **How to Find the Evidence:** For context, read Criterion #7 and Criterion #9 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).		**Use the questions for Metric 2B to evaluate Metric 2B. Record evidence for each question and rate Metric 2B.** **(Reviewer only.)** **_X___Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Over the course of any given year of instruction, is each mathematical practice Standard meaningfully present in the form of assignments, activities, or problems that stimulate students to develop the habits of mind described in the practice Standard? Evaluate lessons, chapter/ unit assessments, and homework assignments for evidence of each mathematical practice being meaningfully present in instruction.	**Evidence-** **Mathematical practices are presented in assignments, activities, problems, and assessments. Unit introductions lists lessons correlated with practices.**	
Do the materials treat the practice Standards as developing across grades or grade bands? Are the practice Standards in early grades appropriately simple? Do they display an arc of growing sophistication across the grades?	**Evidence-** **Progressions were found in the teacher edition of page I-IVI. Practices develop across grade levels.**	
Are there teacher-directed materials that explain the role of the practice Standards in the classroom and in students' mathematical development? Are alignments to practice Standards accurate?	**Evidence-** **Unit introductions explained application of units that are being taught.**	
Metric AC2C: **Materials support the Standards' emphasis on mathematical reasoning.** **How to Find the Evidence:** For context, read Criterion #10 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).		**Use the questions for Metric 2C to evaluate Metric 2C. Record evidence for each question and rate Metric 2C.** **(Reviewer only.)** **__X__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Do the materials support students in constructing viable arguments and critiquing the arguments of others concerning grade-level mathematics that is detailed in the content Standards? Read Standard for Mathematical Practice 3. Evaluate teacher and student materials to ensure that students are given opportunities to reason with grade-level mathematics.	**Evidence-** **The students are supported by math talk, writing prompts, performance tasks, and checks for understanding.**	
Do the materials support students in producing not only answers and solutions, but also, in a grade-appropriate way, arguments, explanations, diagrams, mathematical models, etc., especially in the Major Work of the grade? Familiarize yourself with the Major Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate teacher and student materials, to understand the types of work students are expected to produce.	**Evidence-** **Explanations, Puzzled Penguin, diagrams and models that represent problems and/or explanations support students in producing answers, solutions, and arguments. Examples include pages 20 and 83A-86 in the student edition.**	

Do materials explicitly attend to the specialized language of mathematics? Is the language of argument, problem solving, and mathematical explanations taught rather than assumed? Evaluate teacher and student materials, paying attention to how mathematical language is taught. NOTE: Examples of evaluating this Criterion might include looking at whether students are supported in: basing arguments on definitions; using the method of providing a counterexample; or recognizing that examples alone do not establish a general statement.	**Evidence-** **Vocabulary is highlighted at the introduction of each lesson. The textbook highlights and defines vocabulary. The glossary is also a language resource.**	

Alignment Criterion 2:
Standards for Mathematical Practice

Materials must demonstrate authentic connections between content Standards and practice Standards.

AC2 Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 out of 6 points, the Criterion has not been met. Check the final rating.
Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion.
(Reviewer only.)

Before moving to Alignment Criterion 3, record the final Meets or Does Not Meet rating in the Evaluation Summary.

(Reviewer only.)

_X___Meets

____Does Not Meet

Strengths/Weaknesses:
Standards are clearly listed and there are many opportunities to represent them variable throughout the lessons.

Alignment Criterion 3:
Access to the Standards for All Students

Materials must provide supports for English Language Learners and other special populations.

Because Standards are for all students, alignment requires thoughtful support to ensure all students are able to meet the Standards. Thus, aligned materials must provide supports for English Language Learners and other special populations.

Required Materials:

- Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf)
- Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)
- From the materials being evaluated: teacher guides, student texts and workbooks

Rating this Criterion:
Alignment Criterion 3 is rated as Meets or Does Not Meet.

To rate Alignment Criterion 3, first rate metrics 3A, 3B, and 3C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points).

Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 3 if the materials earn 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as support for special population, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.

Metric AC3A: **Support for English Language Learners and other special populations is thoughtful and helps those students meet the same Standards as all other students. The language in which problems are posed is carefully considered.** **How to Find the Evidence:** Evaluate teacher and student materials, paying attention to supports offered for special populations.	**Evidence-** There is vocabulary each new lesson introduction and in student books. There is an ELL section for beginning, intermediate, and advanced students. There's a family letter for English and Spanish speakers.	**Reviewer only.)** **__X__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Metric AC3B: **Materials provide appropriate level and type of scaffolding, differentiation, intervention, and support for a broad range of learners with gradual removal of supports, when needed, to allow students to demonstrate their mathematical understanding independently.** **How to Find the Evidence:** Evaluate teacher and student materials, paying attention to whether materials provide differentiation that will lead all learners to engage with on-grade-level content.	**Evidence-** There are print materials, online materials, differentiated instruction, manipulatives, math boards, collaborative activities, math center challenges, and RtI materials.	**Reviewer only.)** **__X__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Metric AC3C: **Design of lessons recommends and facilitates a mix of instructional approaches for a variety of learners such as using multiple representations (e.g., including models, using a range of questions, checking for understanding, flexible grouping, pair-share).** **How to Find the Evidence:** Evaluate teacher materials, noting instructional approaches suggested for whole class and differentiated lessons and activities.	**Evidence-** There are models, diagrams, graphs, groupings, math talk, and manipulatives to provide a variety of presentations.	**Reviewer only.)** **_X___Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**

Alignment Criterion 3: **Access to the Standards for All Students** **Materials must provide supports for English Language Learners and other special populations.** AC3 Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 points, the Criterion has not been met. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion.**(Reviewer only.)** **Move to the Evaluation Summary and record the final Meets or Does Not Meet rating .**	**(Reviewer only.)** **__X__Meets** **____Does Not Meet** **Strengths/Weaknesses:** There are multiple methods of learning for all populations.

Once an evaluation for alignment to the Shifts and major features of the CCSS has been conducted using Sections 1-3, it's important to evaluate for overall quality and best practices. A starting list of Indicators of Quality are suggested below. States, districts and others evaluating instructional materials are encouraged to add to this list to ensure materials reflect local contexts. For background information on some of the Indicators of Quality in this section, refer to pp.18–21 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).

Indicators of Quality	Evidence- Give specific examples.	Rating: (Reviewers only.)
1. Lessons are thoughtfully structured and support the teacher in leading the class through the learning paths at hand, with active participation by all students in their own learning and in the learning of their classmates.	**Evidence-** **Students do independent, group, and pair share work, as well as math talk.**	**(Reviewer only.)** **__X____ Yes** **_____ No**
2. The underlying design of the materials includes both problems and exercises. (In solving problems, students learn new mathematics, whereas in working exercises, students apply what they have already learned to build mastery.) Each problem or exercise has a purpose. **NOTE: This Criterion does not require that the problems and exercises be labeled as such.**	**Evidence-** **Problems begin with teacher support and progress through concept mastery, fluency, and application.**	**(Reviewer only.)** **__X____ Yes** **_____ No**

3. Design of assignments is not haphazard: exercises are given in intentional sequences in order to strengthen students' mathematical understanding.	**Evidence-** **There is an intentional sequence for the introduction of materials.**	**(Reviewer only.)** **___X___ Yes** **_____ No**
4. There are separate teacher materials that support and reward teacher study including, but not limited to: discussion of the mathematics of the units and the mathematical point of each lesson as it relates to the organizing concepts of the unit, discussion on student ways of thinking and anticipating a variety of students responses, guidance on lesson flow, guidance on questions that prompt students thinking, and discussion of desired mathematical behaviors being elicited among students.	**Evidence-** **"Math Background" enriches teacher instruction. Introduction prepares teacher for what to expect and instructs proper use of manuals. There are teacher suggestions for support in the lessons.**	**(Reviewer only.)** **__X____ Yes** **_____ No**
5. Manipulatives suggested in the materials are faithful representations of the mathematical objects they represent and are connected to written methods.	**Evidence-** **Concrete manipulatives are available in the kit as well as online tools.**	**(Reviewer only.)** **___X___ Yes** **_____ No**
6. Materials include a variety of curriculum-embedded assessments. Examples include pre-, formative, summative, and self-assessment resources.	**Evidence-** **The assessments guide has quick quizzes, two test forms, and a performance test. There are also inventory and tests for the beginning of the year.**	**(Reviewer only.)** **____X__ Yes** **_____ No**
7. Assessments contain aligned rubrics, answer keys, and scoring guidelines that provide sufficient guidance for interpreting student performance.	**Evidence-** **Rubrics are provided and sample solutions for student problems.**	**(Reviewer only.)** **X_____ Yes** **_____ No**
8. Materials assess student proficiency using methods that are accessible and unbiased, including the use of course-level language in student prompts.	**Evidence-** **There are two test formats (multiple choice and open-ended, as well as extended response options.) The curriculum is accessible for all socio-economic levels of students.**	**(Reviewer only.)** **___X___ Yes** **_____ No**

9. Materials are carefully evaluated by qualified individuals, whose names are listed, in an effort to ensure freedom from mathematical errors and course-level appropriateness.	**Evidence-** **The authors are qualified and listed in the materials.**	**(Reviewer only.)** **___X___ Yes** **_____ No**
10. The visual design supports students in engaging thoughtfully with the subject. Navigation through the text is clear.	**Evidence-** **The visual design and support is appealing to students and is easy to use for both students and teachers.**	**(Reviewer only.)** **__X____ Yes** **_____ No**
11. The materials engage parents in appropriate ways. For example, homework assignments in elementary grades, consist of routine problems, practice with getting answers, and fluency-building exercises that parents can easily support.	**Evidence-** **The student letter home, and family extensions inform and support parents with aiding their child's learning.**	**(Reviewer only.)** **__X____ Yes** **_____ No**

Reviewer IMET Evaluation Summary **Title/Level: Math Expressions Common Core, 6th Grade**

Publisher: HMH **Copyright: 2013** **ISBN: 978-0-547-56755-6**

Reviewer ID # CB, AP **Date Review Completed: 3/8/16**

Non-Negotiable Criteria- Each Non-Negotiable must be met in order for the Non-Negotiable Alignment Criteria to be met overall.

Non-Negotiable 1: Freedom from Obstacles to Focus	Non- Negotiable 2: Focus and Coherence
X Meets _____ Does Not Meet	X Meets _____ Does Not Meet

Non-Negotiable Overall:

X Meets **_____ Does Not Meet**

Alignment Criteria- Each Alignment Criterion must be met with a sufficient number of points in order for Alignment Criteria to be labeled as "Meets" overall. The more points the materials receive on the Alignment Criteria, the better they are aligned.

Alignment Criterion 1: Rigor and Balance	Alignment Criterion 2: Standards of Mathematical Practice	Alignment Criterion 3: Access to Standards for All Learners
Points: 6 of 6 possible. (Materials must receive at least 5 of 6 points to align.) X Meets _____ Does Not Meet	Points: 6 of 6 possible. (Materials must receive at least 5 of 6 points to align.) X Meets _____ Does Not Meet	Points: 6 of 6 possible. (Materials must receive at least 5 of 6 points to align.) X Meets _____ Does Not Meet

Alignment Criteria Overall:

X Meets **_____ Does Not Meet**

If the materials meet both Non-Negotiables and relevant Alignment Criterion, they are aligned to the Shifts and major features of the Core Standards. **the materials meet every Non-Negotiable and Alignment Criterion? __X___ Yes _____ No**

What are the specific areas of strength and weakness based on this evaluation? Publishers or others modifying or developing assessments can use this information to make improvements and/or to remedy gaps in the alignment of assessment materials.

All standards were cross referenced throughout introductions and lessons, which made everything easy to find.

The manipulative kit was very useful and is necessary to make the program successful.

The various test forms are beneficial for different learners.

The program flowed seamlessly.

2015-16 Mathematics Interim Review Recommendation & Summary

Publisher Name:	HMH
Title:	Go Math K
ISBN #	
Grade Level(s) or Course:	K
Reviewer ID:	SJ PS

RECOMMENDED AS:

_____**Core Mathematics Program-** a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials. Substantial evidence clearly supports the designation of this program as Core.

__X__**Other Mathematics Program-** a program that substantially, but partially, meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for supplemental materials. Substantial evidence clearly supports the designation of this program as Other.

_____**Component Mathematics Program-** a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs. Substantial evidence clearly supports the designation of this program as Component.

_____**Intervention Program-** a program designed and intended to target and support students' specific needs. Substantial evidence clearly supports the designation of this program as Intervention.

_____ **Does not meet criteria** for recommendation as a Curricular Material or Online Resource for Mathematics.

EVIDENCE SUMMARY:

FOCUS- no prob, ~~stat~~, symmetry included on assessments
Chap 5 assess. does ~~Each~~ assess missing # addend

COHERENCE- info from previous & future grades does not interfer w major works. However additional & supporting clusters not integrated or used to enhance mgor works of grade.

RIGOR- Many chances for fluency practice but no assessment to determine fluency and fluency Practice drops after Chap 8 w/ exception of 1 or 2 fluency practice sessions per Chapter.

CONCEPTUAL UNDERSTANDING- Mathematical practices are listed throughout SE & TE. However not deeply integrated w/in curriculum & parts not met such as choose appropriate tools, no chance to critique work of others.

MATHEMATICAL PRACTICES-

Conceptual understanding is there but Procedural is emphasized more

ACCESSIBILITY OF STANDARDS TO ALL STUDENTS-
This is good throughout. RTI, Go To Centers, ELL & Challenge info is available

OTHER:

2015-1 terim Mathematics Review

Mathematics Evaluation Tool – High School

Publisher: HMH

Title of Material: Go Math K

Author: Dixon Sandoval-Martinez

ISBN #: 978-0-544-29330-4 **Copyright** 2015

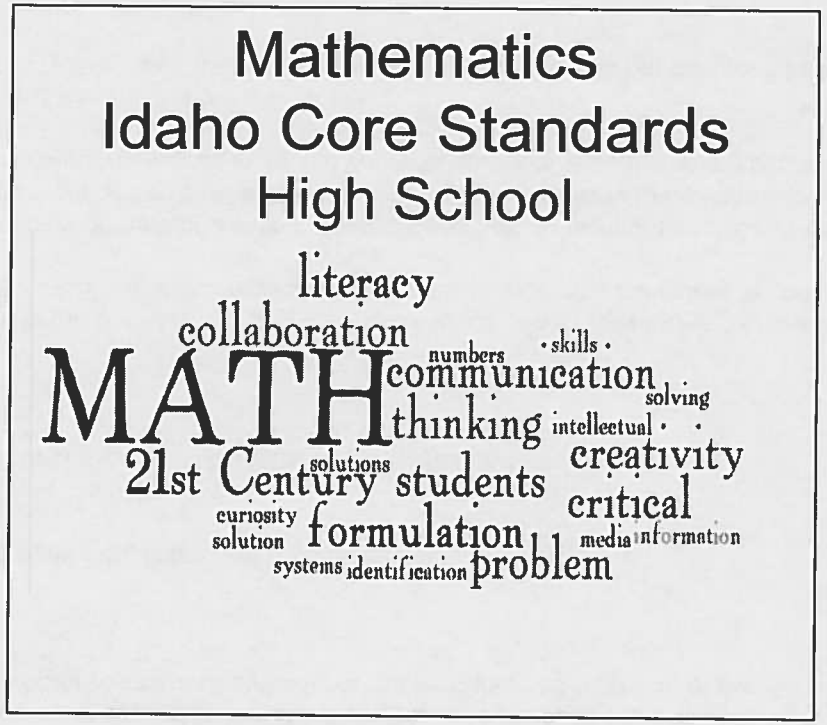
Reviewer ID: SJ PL

Core Mathematics Program- a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Core.

Other Mathematics Program- a program that substantially, but partially, meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Other.

Component Mathematics Program- a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs.
Substantial evidence clearly supports the designation of this program as Component.

Intervention Program- a program designed and intended to target and support students' specific needs.
Substantial evidence clearly supports the designation of this program as Intervention.



- Evaluation Form adapted from Instructional Materials Evaluation Toolkit (IMET).

The IMET was developed by Student Achievement Partners. Educators may use or adapt. http://creativecommons.org/licenses/by/3.0/ Download this tool at http://achievethecore.org/IMET

Instructional Materials Evaluation Tool

Mathematics, High School

What Are the Purposes of the IMET?

This Math IMET is designed to help educators determine whether instructional materials are aligned to the Shifts and major features of the Common Core State Standards (CCSS). The substantial instructional Shifts (http://www.corestandards.org/other-resources/key-shifts-in-mathematics/) at the heart of the Common Core State Standards are:

- **Focus** strongly where the Standards focus
- **Coherence**: Think across grades and link to major topics within the grade
- **Rigor**: In major topics, pursue conceptual understanding, procedural skill and fluency, and application with equal intensity.

The IMET draws directly from the following documents:

- Common Core State Standards for Mathematics (www.corestandards.org/Math)
- Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013) (http://www. corestandards.org/wp-content/uploads/Math_Publishers_Criteria_ HS_Spring_2013_FINAL1.pdf)

When to use the IMET

1. Purchasing materials: Many factors go into local purchasing decisions. Alignment to the Standards is a critical factor to consider. This tool is designed to evaluate alignment of instructional materials to the Shifts and the major features of the CCSS. It also provides suggestions of additional indicators to consider in the materials evaluation and purchasing process
2. Evaluating materials currently in use: The IMET can be used to analyze the degree of alignment of existing materials and help to highlight specific, concrete flaws in alignment. Even where materials and tools currently in use fail to meet one or more of these criteria, the pattern of failure is likely to be informative. States and districts can use the evaluation to create a thoughtful plan to modify or combine existing resources in such a way that students' actual learning experiences approach the focus, coherence, and rigor of the Standards.
3. Developing programs: Those developing new programs can use this tool as guidance for creating aligned curricula.

Please note this tool was designed for evaluating comprehensive curricula (including any supplemental or ancillary materials), but it was not designed for the evaluation of standalone supplemental materials.

Who Uses the IMET?

Evaluating instructional materials requires both subject-matter and pedagogical expertise. Evaluators should be well versed in the Standards (www.corestandards.org/Math) for all grades in which materials are being evaluated. This includes understanding the Widely Applicable Prerequisites (www.achievethecore.org/prerequisites), how the content fits into the progressions in the Standards (www. achievethecore.org/progressions), and the expectations of the Standards with respect to conceptual understanding, procedural skill and fluency, and application. Evaluators also should be familiar with the substantial instructional Shifts (http://www.corestandards.org/other-resources/key-shifts-in-mathematics/) of Focus, Coherence and Rigor that are listed above.

Getting Started

Prior to Evaluation

Assemble all of the materials necessary for the evaluation. It is essential for evaluators to have materials for all grades covered by the program, as some criteria cannot be rated without having access to each grade. In addition, each evaluator should have a reference copy of the Common Core State Standards for Mathematics (CCSSM) and the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).

2015-16 Interim Mathematics Review

Mathematics Evaluation Tool Grades K-8

Publisher: Houghton Mifflin Harcourt (hmhco.com)

Title of Material: Go Math Kindergarten

Authors: Julie K. Dixon Ph.D., Martha E. Sandoval-Martinez, Edward B. Burger, Phd, Matthew R. Larson, Ph.D., Steven Leinwand

ISBN #: 978-0-544-29330-4 **Copyright:** 2015

Reviewer ID: [redacted]

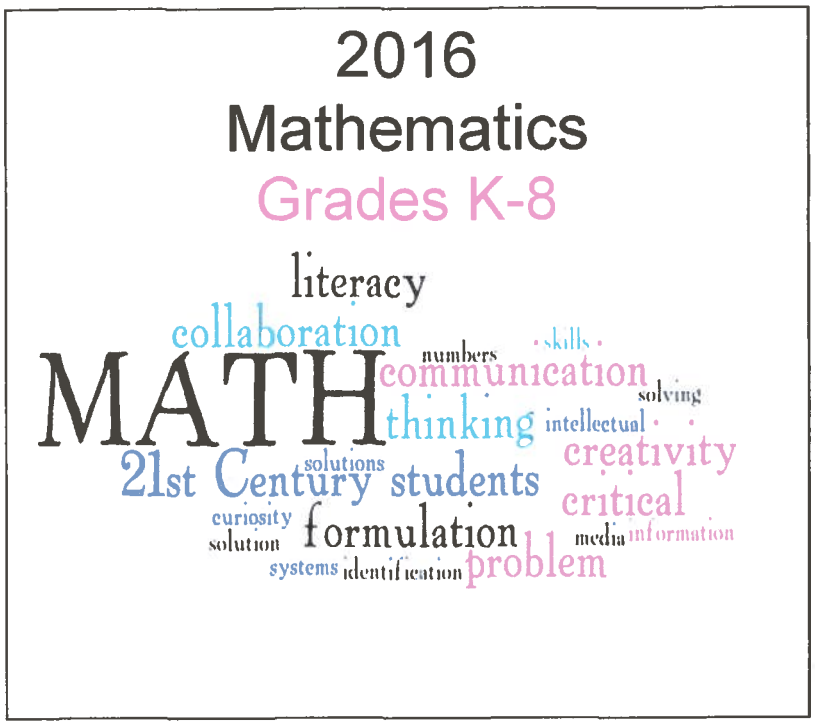
Kindergarten

Core Mathematics Program- a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Core.

Other Mathematics Program- a program that substantially, but partially, meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Other.

Component Mathematics Program- a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs.
Substantial evidence clearly supports the designation of this program as Component.

Intervention Program- a program designed and intended to target and support students' specific needs.
Substantial evidence clearly supports the designation of this program as Intervention.



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Instructional Materials Evaluation Tool
Mathematics, Grades K-8

What Are the Purposes of the IMET?
This Math IMET is designed to help educators determine whether instructional materials are aligned to the Shifts and major features of the Common Core State Standards (CCSS). The substantial instructional Shifts (http://www.corestandards.org/other-resources/key-shifts-inmathematics/) at the heart of the Common Core State Standards are:
- **Focus** strongly where the Standards focus
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- **Rigor**: In major topics, pursue conceptual understanding, procedural skill and fluency, and application with equal intensity.

The IMET draws directly from the following documents:
- Common Core State Standards for Mathematics (www.corestandards.org/Math)
- Publishers' Criteria for the Common Core State Standards in Mathematics grade K-8 (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)

When to use the IMET
1. Purchasing materials: Many factors go into local purchasing decisions. Alignment to the Standards is a critical factor to consider. This tool is designed to evaluate alignment of instructional materials to the Shifts and the major features of the CCSS. It also provides suggestions of additional indicators to consider in the materials evaluation and purchasing process.

2. Evaluating materials currently in use: The IMET can be used to analyze the degree of alignment of existing materials and help to highlight specific, concrete flaws in alignment. Even where materials and tools currently in use fail to meet one or more of these criteria, the pattern of failure is likely to be informative. States and districts can use the evaluation to create a thoughtful plan to modify or combine existing resources in such a way that students' actual learning experiences approach the focus, coherence, and rigor of the Standards.

3. Developing programs: Those developing new programs can use this tool as guidance for creating aligned curricula.
Please note this tool was designed for evaluating comprehensive curricula (including any supplemental or ancillary materials), but it was not designed for the evaluation of standalone supplemental materials.

Who Uses the IMET?
Evaluating instructional materials requires both subject-matter and pedagogical expertise. Evaluators should be well versed in the Standards (www.corestandards.org/Math) for all grades in which materials are being evaluated. This includes understanding the Major Work of the grade (www.achievethecore/focus), the Supporting and Additional work, how the content fits into the progressions in the Standards (www.achievethecore.org/progressions), and the expectations of the Standards with respect to conceptual understanding, procedural skill and fluency, and application. Evaluators also should be familiar with the substantial instructional Shifts (http:// www.corestandards.org/other-resources/key-shifts-in-mathematics/) of Focus, Coherence and Rigor that are listed above.

Getting Started
Prior to Evaluation

Assemble all of the materials necessary for the evaluation. It is essential for evaluators to have materials for all grades covered by the program, as some criteria cannot be rated without having access to each grade. In addition, each evaluator should have a reference copy of the Common Core State Standards for Mathematics (CCSSM) and the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013).

Before conducting the evaluation itself, it is important to develop a protocol for the evaluation process. The protocol should include having evaluators study the Publishers' Criteria and the IMET. It will also be helpful for evaluators to get a sense of each program overall before beginning the process. At a minimum, this would include reading the front matter of the text, looking at the table of contents and paging through multiple chapters.

Sections 1-3 below should be completed to produce a comprehensive picture of the strengths and weaknesses of the materials under evaluation. Information about areas in need of improvement or supplementation should be shared with internal and external stakeholders.

Navigating the Tool

Begin with Section 1: Non-Negotiable Alignment Criteria

- The Non-Negotiable Alignment Criteria must each be met in full for materials to be considered aligned to the Shifts and the major features of the Common Core State Standards. Each Non-Negotiable Alignment Criterion has one or more metrics associated with it; every one of these metrics must be met in order for the criterion as a whole to be met.

- Examine the relevant materials and use evidence to rate the materials against each criterion and its associated metric(s).

- Record and explain the evidence upon which the rating is based.

Continue to Section 2: Alignment Criteria

- The Alignment Criteria must each be met for materials to be considered aligned to the Shifts and the major features of the Common Core State Standards. Each Alignment Criterion has one or more metric associated with it; a specific number of these metrics must be met or partially met in order for the criterion as a whole to be met.

- Examine the materials in relation to these criteria, assigning each metric a point value. Rate the criterion as "Meets" or "Does Note Meet" based on the number of points assigned. The more points the materials receive on the alignment Criteria, the better they are aligned.

Record and explain the evidence upon which the rating is based.

Proceed to Section 4: Indicators of Quality

- Indicators of Quality are important considerations that will help evaluators better understand the overall quality of instructional materials. These considerations are not criteria for alignment to the CCSS, but they provide valuable information about additional program characteristics. Evaluators may want to add their own indicators to the examples provided.

Directions for Non-Negotiable 1

Freedom from Obstacles to Focus

Criterion	Evidence- Give specific examples.	Rating: (Reviewer only.)
Non-Negotiable 1: **Freedom from Obstacles to Focus** **Materials must reflect the content architecture of the Standards by not assessing the topics named before the grade level where they first appear in the Standards.** The Standards foster students' progress to algebra by focusing strongly on arithmetic. Consistent with this focus, certain topics from outside of arithmetic appear only in later grades. Thus, to be aligned, materials must reflect the content architecture of the Standards by not assessing the topics named before the grade level where they first appear in the Standards. In this criterion, "topics named" means the topics that are explicitly named in Metric 1A. No other topics should be added to the list in Metric 1A. (Note that other topics in the standards are addressed in criterion NN2.)	**Required Materials** • Common Core State Standards for Mathematics (www.corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf) • From the materials being evaluated: teacher guides and all assessment components	**Rating this Criterion:** Non-Negotiable 1 is rated as Meets or Does Not Meet. To rate Non-Negotiable 1, begin by rating Metric 1A. Since Metric 1A is the only metric for Non-Negotiable 1, the rating for Non-Negotiable 1 is the same as the rating for Metric 1A. If Metric 1A is rated as Does Not Meet, include evidence of when the named topic(s) is/are assessed. If the metric is rated as Meets, list the grade(s) examined in the evaluation.

Metric NN1A:
Materials r[redacted] the basic architecture of the Standards by not assessing the listed topics before the grade level indicated.

- Probability, including chance, likely outcomes, probability models. (Introduced in the CCSSM in grade 7)
- Statistical distributions, including center, variation, clumping, outliers, mean, median, mode, range, quartiles; and statistical association or trends, including two-way tables, bivariate measurement data, scatter plots, trend line, line of best fit, correlation. (Introduced in the CCSSM in grade 6)
- Similarity, congruence, or geometric transformations. (Introduced in the CCSSM in grade 8)
- Symmetry of shapes, including line/ reflection symmetry, rotational symmetry. (Introduced in the CCSSM in grade 4)

How to Find the Evidence:

Evaluate the table of contents, all chapter tests, all unit tests, and other such assessment components (including rubrics).

For context, read Criterion #2 from the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013). NOTE: Grade alignments of other topics are addressed in Non- Negotiable 2, Focus and Coherence.)

In this criterion, "topics named" means the topics that are explicitly named in Metric 1A. No other topics should be added to the list in Metric 1A. (Note that other topics in the standards are addressed in criterion NN2.)

Evidence-
Chapter 1 Assessme[redacted]ounting 1-5, Writing Numbers, and Show ways to make 5
Chapter 2 Assessment---Write Number 2-5, Compare Numbers
Chapter 3 Assessment---Count, Circle, Write Numbers 6-9
Chapter 4 Assessment—Count, Draw, Compare Numbers 4-10, 1 Way to make 10
Chapter 5 Assessment—Addition with numbers up to 10*(Addition sentences with missing addends for mastery--.a first grade concept not kindergarten. Kindergarten students are to be given/exposed to missing addends types but not expected to achieve mastery)*
Chapter 6—Subtraction with numbers up to 10 in subtrahend, Draw pictures, Write Number Sentences
Chapter 7 Assessment—Teen numbers (10 plus some more)
Chapter 8 Assessment—County by 10s, Write 11-30, Underline last number, know 83-89
Chapter 9 Assessment—Draw and Recognize two-dimensional shapes
Chapter 10 Assessment—Recognize three-dimensional shapes
Chapter 11 Assessment—Measurement know longer, shorter, different, heavier, lighter, length, taller
Chapter 12 Assessment—Sort and Classify…What set does this belong in? Are these classified correctly?

There is no probability, statistical distributions, Symmetry included on any of the Kindergarten Assessments

___Meets

___Does Not Meet

Non-Negotiable 1: Materials must reflect the content architecture of the Standards by not assessing the topics named* before the grade level where they first appear in the Standards.

NN 1 If Metric 1A was rated as Meets, then rate Non-Negotiable 1 as Meets. If Metric 1A was rated as Does Not Meet, then rate Non- Negotiable 1 as Does Not Meet. Check the final rating.

Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion.**(Reviewer only.)**

Before moving to Non-Negotiable 2, record the final Meets or Does Not Meet rating in the Evaluation Summary.

_X___Meets

____Does Not Meet

Strengths/Weaknesses:
Strength: There are none of the non-allowable criteria stated in NN1 in any assessment throughout K Go Math.

Directions for Non-Negotiable 2

Focus and Coherence

Non-Negotiable 2:

Focus and Coherence

Materials must focus coherently on the Major Work of the grade in a way that is consistent with the progressions in the Standards.

Focus and coherence are the two major evidence-based design principles of the Common Core State Standards for Mathematics (CCSSM, p. 3). Focus is necessary in order to fulfill the ambitious promise the states have made to their students by adopting the Standards: greater achievement at the college and career ready level; greater depth of understanding of mathematics; and a rich classroom environment in which reasoning, sense-making, applications, and a range of mathematical practices flourish. In simpler terms, a mile-wide, inch-deep curriculum translates to less time per topic. Less time means less depth and moving on without many students. Thus, materials must focus coherently on the Major Work of the grade in a way that is consistent with the progressions in the Standards.

Required Materials

- Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf)
- Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)
- Focus by Grade Level for the grade being evaluated (www.achievethecore.org/focus)
- From the materials being evaluated: teacher guides, student texts and workbooks

Rating this Criterion:

Non-Negotiable 2 is rated as Meets or Does Not Meet.

To rate Non-Negotiable 2, first rate metrics 2A–2H. Each of these eight metrics must be rated as Meets in order for Non-Negotiable 2 to be rated as Meets. Rate each metric 2A-2H as Meets or Does Not Meet/Insufficient Evidence. If the evidence examined shows that the Criterion is met, then mark the Criterion Meets. If the evidence examined shows that the Criterion is not met—or if there is insufficient evidence to make a determination—then mark the Criterion as Does Not Meet/Insufficient Evidence. Support all ratings with evidence.

Metric NN2A:

In each gr[redacted]-8, students and teachers using the materials as designed devote the large majority of time to the Major Work of the grade.

How to Find the Evidence:

Familiarize yourself with the Major Work of the grade being evaluated (see the Focus by Grade Level documents.)

Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, lessons, homework assignments, and assessments. (Evaluate both student and teacher materials.)

Consider time spent on the Major Work of the grade and judge qualitatively whether students and teachers using the materials as designed will devote the large majority of time to the Major Work of the grade.

For context, read Criterion #1 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013)

Evidence-

- **The Planning [redacted]de—Year-at-a-Glance shows there are 130 lessons with 98 of [redacted]n the major work of the grade 98 out of 130 is 75% of the time spent on the major work of the grade. (It appears that the GoMath program considers the supporting cluster as part of the major work of the grade)**
- **The Planning Guide--Has a getting ready for Grade 1 with 20 lessons (20 days) and 3 days for a Review Project all 23 days are a part of the major work of the grade level. (118 out of 150 is 79%)**
- **Chapter 1 has a Project (that is a part of the major work of the grade) at the beginning that is supposed to take 1 day and 2 lessons that say they should take 1-2 days. With that information you can add 2 more days to the 118 days. (120/152)**
- **Chapter 2 (Major Works) has two lesson that say 1-2 days so add another day (121/153)**
- **Chapter 3 (Major Works) add one day (122/154)**
- **Chapter 4 (Major Works) add one day (123/155)**
- **Chapter 5 (Major Works) add one day (124/156)**
- **Chapter 6 (Major Works) No days added**
- **Chapter 7 (Major Works) Add one day (125/157)**
- **Chapter 8 (Major Works) add one day (126/158)**
- **Chapter 9 (Not a Major Work) Add one day (126/159)**
- **Chapter 10 (Not a Major Work) Add one day (126/160)**
- **Chapter 11(Not a Major Work) Add one day (126/161)**
- **Chapter 12 (Not a Major Work) Add one day (126/162)**

Major Works Approximately 126 Days (78%)
Non Major Works Approximately 36 Days (22%)

X Meets **____Does Not Meet/Insufficient Evidence**

Metric NN2B: **Supporting [redacted], where present, enhances focus and coherence simultaneously by also engaging students in the Major Work of the grade.** **How to Find the Evidence:** Familiarize yourself with the Major Work and Supporting Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate chapters and lessons that focus on Supporting Work. NOTE: Example of evaluating this Criterion might include looking at whether materials for K–5 generally treat data displays as an occasion for solving grade-level word problems using the four operations (e.g., see 3.MD.B.3); or whether materials for grade 7 take advantage of opportunities to use probability to support ratios, proportions, and percentages. For context, read Criterion #3 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** **Chapter 12 is the supporting work of kindergarten and is the only chapter that has classify and sort data. The supporting work of chapter 12 does work on counting and cardinality in some of the lessons. Also count and write 20.** **Chapters 9-11 Have some counting example: 4 vertices, 3 vertices… They all have lesson checks with spiral reviews and/or practice of the major works of kindergarten** **The standards are not taught as supporting each supporting standard and additional standard has its own unit.** **_X_ Meets ____ Does Not Meet/Insufficient Evidence**

Metric NN2C: **Materials b[redacted]ontent progressions on the grade-by-grade progressions in the Standards. Content from previous or future grades does not unduly interfere with or displace on-grade-level content.** **How to Find the Evidence:** Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, and lessons in both student and teacher materials. NOTE: In some cases it may be possible that aligned materials might address some aspects of a topic in a strategic way before or after the grade level in which the topic is central in the Standards' progressions; for example, a curriculum author might purposefully choose to explore adding fractions with unlike denominators in a way appropriate to grade four, recognizing that this work is not really required until the next grade. However, any such purposeful discrepancies in content progressions should enhance the required learning in each grade; not unduly interfere with or displace grade-level content; and be clearly aimed at helping students meet the Standards as written rather than effectively rewriting the progressions in the Standards. And in all cases, note that Non-Negotiable 1 must be met for materials to be aligned. For context, read Criterion #5a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence:** **Chapter 1 Assessme[redacted]ounting 1-5, Writing Numbers, and Show ways to make 5** **Chapter 2 Assessment--Write Number 2-5, Compare Numbers** **Chapter 3 Assessment---Count, Circle, Write Numbers 6-9** **Chapter 4 Assessment—Count, Draw, Compare Numbers 4-10, 1 Way to make 10** **Chapter 5 Assessment—Addition with numbers up to 10** *(Addition sentences with missing addends for mastery--.a first grade concept not kindergarten. Kindergarten students are to be given/exposed to missing addends types but not expected to achieve mastery)* **Chapter 6—Subtraction with numbers up to 10 in subtrahend, Draw pictures, Write Number Sentences** **Chapter 7 Assessment—Teen numbers (10 plus some more)** **Chapter 8 Assessment—County by 10s, Write 11-30, Underline last number, know 83-89** **Chapter 9 Assessment—Draw and Recognize two-dimensional shapes** **Chapter 10 Assessment—Recognize three-dimensional shapes** **Chapter 11 Assessment—Measurement know longer, shorter, different, heavier, lighter, length, taller** **Chapter 12 Assessment—Sort and Classify…What set does this belong in? Are these classified correctly?** **Go Math has a logical progression of math content. At the beginning of each chapter Go Math identifies what came before, what is happening during, and what happens after (the next grade level) for the teacher. This information is not shared specifically with the students.** **(It is as Go Math said: Each chapter in the GO MATH! Teacher Edition includes a chart listing the Common Core Learning Progressions)** **_x_ Meets ____Does Not Meet/Insufficient Evidence**
Metric NN2D: **Materials give all students extensive work with on-grade-level problems.** **How to Find the Evidence:** Evaluate both student and teacher materials. If the materials provide resources for differentiated learning, consider whether lower-performing students have opportunities to engage with grade-level problems. Also consider whether higher-performing students are given opportunities to learn current grade-level content in greater depth. For context, read Criterion #5b in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** **Each lesson is designed for whole group grade level instruction and comes with reteach and an enrichment. The reteach is designed to reteach the lesson and give more practice but it is not designed review or go over unlearned prerequisites. There is an RTI component designed to teach/catch the unfinished learning. There is also an online personal math trainer that is designed to review the specific content being taught not unlearned skills from previous chapters.** **__x__ Meets ____Does Not Meet/Insufficient Evidence**

Metric NN2F: **Materials [illegible]on-grade-level concepts explicitly to prior knowledge from earlier grades.** **How to Find the Evidence:** Evaluate both student and teacher materials. NOTE: Examples of evaluating this Criterion might include looking at the way the materials extend basic ideas of place value across the decimal point; or the role that properties of operations play when the materials extend arithmetic beyond whole numbers to fractions, variables, and expressions. More generally, cluster headings in the Standards sometimes signal key moments where reorganizing and extending previous knowledge is important in order to accommodate new knowledge (e.g., see cluster headings that use the phrase "Apply and extend previous understanding"). For context, read Criterion #5c in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** **Due to the fact that [illegible]are kindergarten materials, there is no earlier grades that the [illegible]erials can relate explicitly to. On the other hand Chapter 7 with teen numbers relates explicitly to chapters 1-4 where students are learning the structure and patterns of numbers 1-10. Chapter 7 relates to chapters 1-4 where students learned the numbers 0-10. Teachers can definitely talk to students about the pattern of numbers and how that same pattern/structure is in the teen numbers but I have not found anything in the teacher's guide or student books that asks such questions.** **___x_Meets ____Does Not Meet/Insufficient Evidence**
Metric NN2F: **Review of material from previous grades is clearly identified as such to the teacher, and teacher and students can see what their specific responsibility is for the current year.** **How to Find the Evidence:** Evaluate the table of contents, but do not stop there; also evaluate units, chapters, lessons, homework assignments and assessments. (Evaluate both student and teacher materials.) Identify any content from previous grades and check whether it is identified as such. For context, read Criterion #5a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** **Due to the fact that this is Kindergarten materials there is no previous grade level to clearly identify. The Common Core Learning Progressions and the Common Core State Standards that GO MATH shares at the beginning of each chapter identifies the prerequisites and each lesson has a coherence piece that identifies the Kindergarten standard and what First Grade standard follows.** **__x__Meets _____Does Not Meet/Insufficient Evidence**

Metric NN2G: **Materials in[illegible]e learning objectives that are visibly shaped by CCSSM cluster headings.** **How to Find the Evidence:** Select several clusters from the Major Work in the grade being evaluated. Evaluate teacher and student materials in relation to these clusters. For context, read Criterion #6a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** **Chapter 1 learning o[illegible]ves relate to the cluster heading *Count to tell the number of [illegible]cts* AND *Know number names and the count sequence*** **1.1 Model and count 1 and 2 objects** **1.2 Represent 1 and 2 objects with number names** **1.3 Model and count 3 and 4 with objects** **1.4 Represent 3 and 4 number names with written numerals** **1.5 Model and count up to 5 with objects** **1.6 Represent up to 5 objects with number name and written numeral** **1.7 Use objects and drawings to decompose 5 into pairs in more than one way** **1.8 Know that each successive number refers to a quantity that is one larger** **1.9 Solve problems by using the strategy make a model** **1.10 Represent 0 objects with a number name and a written numeral** **__x__Meets ____Does Not Meet/Insufficient Evidence**
Metric NN2H: **Materials include problems and activities that serve to connect two or more clusters in a domain, or two or more domains in a grade, in cases where these connections are natural and important.** **How to Find the Evidence:** In the grade being evaluated, choose two or more clusters or two or more domains for which connections are natural and important. Evaluate the units, chapters, and lessons that deal with the chosen topics, looking for problems and activities that serve to connect the chosen clusters or domains. NOTE: An example of evaluating this Criterion might include looking at whether problems in grade 4 sometimes or often involve students applying their developing computation skills (detailed in domain NBT) in the context of solving word problems (detailed in domain OA). For context, read Criterion #6b in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** **In chapter 7 students work on numbers 11-19 (K.NBT) and while they are learning those numbers they are working on count to tell the number of objects, know number names, and compare number(K.CC.)** **In chapter 5 students are learning the skills of addition (K.OA.1 and K.OA.2) –subtraction is chapter 6 and they are using their counting and cardinality skills at the same time** **Students are working on K.OA.4 and K.OA.3 while working on K.OA.2 in chapter 5** **(I am not sure where this fits but the required fluency for kindergarten is fluently add and subtract within 5 and there does not seem to be enough opportunities for students to reach that required fluency)….Fluency Builder at the beginning of some lessons** **__X__Meets _____Does Not Meet/Insufficient Evidence**

Non-Negotiable 2:

Focus and Coherence

Materials must focus coherently on the Major Work of the grade in a way that is consistent with the progressions in the Standards.

NN 2 If all Metrics 2A – 2H were rated as Meets, then rate Non-Negotiable 2 as Meets. If one or more Metric was rated Does Not Meet/Insufficient Evidence, then rate Non-Negotiable 2 as Does Not Meet. Check the final rating.
Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)**

Before moving to Alignment Criterion 1, record the final Meets or Does Not Meet rating in the Evaluation Summary.

(Reviewer only.)

X **Meets**

____ **Does Not Meet**

Strengths/Weaknesses:

Weakness: The required fluency (K.OA.A.5 Add/subtract within 5)

Each cluster is taught in a chapter and although there is some review through the spiral review the supporting and additional cluster are not present in the teaching of the focal points. The focal points are not present in the additional and supporting chapters. Basically, the clusters each have their own chapter.

Now continue by evaluating the Alignment Criterion 1 for Rigor and Balance.

Directions for Alignment Criterion 1

Rigor and Balance

Alignment Criterion 1: Rigor and Balance **Materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.** The Standards set expectations for attention to all three aspects of rigor: conceptual understanding, procedural skill and fluency, and applications. Thus, materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.	**Required Materials** • Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf) • Focus by Grade Level for the grade being evaluated (achievethecore.org/focus) • Situation Types for the Operations in Word Problems (achievethecore.org/situation-types) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion** Alignment Criterion 1 is rated as Meets or Does Not Meet. To rate Alignment Criterion 1, first rate metrics 1A, 1B, and 1C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). For each metric, guiding questions are provided to aid in gathering evidence. Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 1 if the materials rate 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as rigor and balance, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.
Metric AC1A: **The materials support the development of students' conceptual understanding of key mathematical concepts, especially where called for in specific content Standards or cluster headings.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Major Work for the grade being evaluated that relate specifically conceptual understanding to use throughout the questions associated with this metric. NOTE: Some examples of clusters or Standards that call for conceptual understanding include: K.OA.A.1, (1.NBT.B, 1.NBT.C), (2.NBT.A, 2.NBT.B), (3.OA.A.1, 3.OA.A.2), 4.NF.A, (4.NBT.A, 4.NBT.B), 5.NF.B, (5.NBT.A, 5.NBT.B), 6.RP.A, 6.EE.A.3, 7.NS.A, 7.EE.A, 8.EE.B, 8.F.A, 8.G.A Clusters or Standards grouped by parentheses are closely connected and could be analyzed together. For context, read Criterion #4a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	-Choose a cluster/Standard from the Major Work that is aligned to each aspect of rigor and use it to evaluate these metrics. It is most helpful if the same clusters/Standards are chosen for all of the programs being evaluated. (Guidance in choosing clusters/Standards is included in "How to Find the Evidence".)	**Use the questions for AC Metric 1A to evaluate Metric 1A. Record evidence for each question and rate Metric 1A.** **_x___Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**

Is conceptual understanding attended to thoroughly where the Standards set expectations for understanding or interpreting? Evaluate lessons, chapter/unit assessments and homework assignments, paying attention to work aligned to Standards that explicitly call for understanding or interpreting. NOTE: Examples of evaluating this Criterion might include looking at how well the multi-digit addition and subtraction algorithms are developed and explained on the basis of place value and properties of operations; or how well the multi-digit multiplication and division algorithms are developed and explained on the basis of place value and properties of operations; or how well solving equations is presented and explained as a process of reasoning.	**Evidence- K.CC.4a. 4b. 4c. 5** Count to tell the number of objects Chapter 1—GoMath assumes that children use counting and numbers to determine quantities up to 5 before beginning kindergarten. GoMath also assumes children come to kindergarten with a recognition of letters. If children have not been taught the prerequisite skills before kindergarten they will need extensive interventions before beginning the math program. The program offers a review of prerequisite skills and RtI Tier 2 activities for those kindergarten students matching quantities with the numbers. Within each lesson GoMath give teachers questions and/or activities (the side information) for children to engage in the mathematical practices. Examples: Lesson 1.1 MP2 Reason Abstractly and quantitatively---Have children discuss how one object is one fewer than two objects Lesson 1.1 MP4 Model with mathematics (page 15) not a real life situation Lesson 3.1 (page 120) MP7—Look for and make use of structure…program is looking for the structure of the model rather than focusing on the structure numbers teachers could easily focus the conversation on the structure of numbers but what the program suggests as answers from students does not do that. Lesson 3.1 (page 119) MP5 Use appropriate tools strategically ..ten frame Lesson 3.1 (page 119) MP4 Model with mathematics ..real life situation for students **K.OA Understand addition as putting together and adding to, and understand subtraction as taking apart and taking from** Chapter 5 focuses on addition. Children are shown how to use cubes to find/make addition sentences, students see pictures involving addition sentences and the sentences are below for them to copy over. Throughout chapter five students are given practice with addition sentences There is little time spent with addition sentences where the student reads/hears the story problem and then figures out how to represent the problem on their own. According to the learning progressions and the standards kindergartens should master add to and put together types addition problems GoMath has those types of addition sentences and missing addends addition sentences. Assessments expect kindergarten students to achieve mastery in both types. **Evidence-**	
Do the materials feature high-quality conceptual problems and conceptual discussion questions? Evaluate lessons, chapter/unit assessments, and homework assignments. NOTE: Example of conceptual problems might include such questions as "Find a number greater than 1/5 and less than 1/4," or "If the divisor does not change and the dividend increases, what happens to the quotient?"		

Do the materials feature opportunities to identify correspondences across mathe[illegible]representations? Evaluate lessons, chapter/unit assessments and homework assignments. NOTE: Examples of evaluating this Criterion might include looking at whether students are supported in identifying correspondences among: the verbal description of a situation, the diagrams that distill its mathematical features, and the equations that model it; or equivalent forms of numbers (e.g., 3 and 6/2) and the number line; or rational number operations and representations of them via models such as the vector model; or the expression that defines a function and the graph that shows the relationship.	**Evidence-** Throughout [illegible] lessons students are asked to draw and show what they know and the[illegible]eady to explain their pictures. Chapter 3 The Write way introduction to the chapter (page 1189B teachers book) Lesson 3.1 Math Journal—When finished, allow time for children to communicate about what their drawings show and discuss other possible methods for showing the number 6 (page 122 teachers book) Lesson 3.2 Math Journal—Let children describe their drawings to the class. Throughout the kindergarten curriculum there are math journal questions that connect the verbal description with diagrams and models.	
Metric AC1B: **The materials are designed so that students attain the fluencies and procedural skills required by the Standards.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Major Work for the grade being evaluated that relate specifically to fluency and procedural skill to use throughout the questions associated with this metric. NOTE: Some examples of Standards that call for procedural skill and fluency include: K.OA.A.5, 1.OA.C.6, 2.OA.B.2, 2.NBT.B.5, 3.OA.C.7, 3.NBT.A.2, 4.NBT.B.4, 5.NBT.B.5, 6.NS.B.2, and 6.NS.B.3, 6.EE.A, 7.NS.A, 7.EE.A.1,7.EE.B.4a, 8.EE.C.7, 8.EE.C.8b For context, read Criterion #4b in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).		**Use the questions for Metric 1B to evaluate Metric 1 B. Record evidence for each question and rate Metric 1B.** **(Reviewer only.)** **____Meets (2)** **_X_Partially Meets (1)** **____Does Not Meet (0)**
Is progress toward fluency and procedural skill interwoven with students' developing conceptual understanding of the operations in question? Evaluate lessons, chapter/unit assessments, daily routines, and homework assignments for evidence that the development of fluency and procedural skill is supported by conceptual understanding.	**Evidence** **Lesson 8.1… Fluency Builder Add within 5 (page 441B teachers edition)** **Lesson 8.5….Fluency Builder Subtract within 5 (page 453B teachers edition)** **Lesson 8.6….Lesson Check 4-1=3 (page 464)** **Lesson 8.8…Lesson check 4=1+3 (page 476)** **Chapter 9 has similar amount of time as chapter 8 on developing fluencies** **There is some built in review of fluency add and subtract within 5 but not a lot of it.**	

Are purely procedural problems and exercises present that include cases in which opportunistic strategies are valuable and generic cases that require efficient algorithms present? Evaluate lessons, chapter/unit assessments, daily routines, and homework assignments. NOTE: Examples of problems in which opportunistic strategies are valuable might include the sum 698 + 240 or the system x + y = 1, 2x + 2y = 3. Examples of generic cases that require efficient algorithms might include the sum 8767+2286 or the system 6y + x = x + 3, – x = 1 + 2y.	**Evidence-** **Lesson 1.3..Place counters on pictures move to 5 frame…Practice and homework both procedural** **Lesson 1.7 Share and Show Procedural the problem solving and application piece encourages students to use their procedural skills in an application problem.** **Lots of procedural practice**	
Do the materials in grades K–6 provide repeated practice toward attainment of fluency Standards? Evaluate lessons, daily routines, and homework assignments for evidence of repeated practice toward attainment of the following K–6 Standards that set an explicit expectation of fluent (accurate and reasonably fast) computation: K.OA.A.5, 1.OA.C.6, 2.OA.B.2, 2.NBT.B.5, 3.OA.C.7, 3.NBT.A.2, 4.NBT.B.4, 5.NBT.B.5, 6.NS.B.2, 6.NS.B.3.	**Evidence-** **There is practice of required fluency throughout each chapter but not repeated practice throughout the learning. (Chapter 8 has 4 opportunities for fluency practice and two of them are of only one problem)** **Lesson 8.1… Fluency Builder Add within 5 (page 441B teachers edition)** **Lesson 8.5….Fluency Builder Subtract within 5 (page 453B teachers edition)** **Lesson 8.6….Lesson Check 4-1=3 (page 464)** **Lesson 8.8…Lesson check 4=1+3 (page 476)** **Chapter 9 has similar amount of time as chapter 8 on developing fluencies**	
Metric AC1C: **The materials are designed so that teachers and students spend sufficient time working with engaging applications, without losing focus on the Major Work of each grade.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Major Work for the grade being evaluated that relate specifically application to use throughout the questions associated with this metric. NOTE: Some examples of clusters or Standards that call for application include: K.OA.A.2, 1.OA.A, 2.OA.A, 3.OA.A.3, 3.OA.D.8, 4.OA.A.3, 4.NF.B.3d, 4.NF.B.4c, 5.NF.B.6, 5.NF.B.7c, 6.RP.A.3, 6.NS.A.1, 6.EE.B.7, 6.EE.C.9, 7.RP.A, 7.NS.A.3, 7.EE.B.3, 8.EE.C.8c, 8.F.B For context, read Criterion #4c in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** **K.NBT.1 Work with numbers 11-19 to gain foundations for place value** Chapter 7 begins the work of K.NBT.1 Throughout chapter 7 the teen numbers are introduced as a ten and some more. Students use ten frames and beads on a string to help them see that. The learning progressions suggest the use of place value cards to help with their understanding of the teen numbers. There are place value cards in the manipulatives but I did not find reference to using them in chapter 7. There are some application problems (page 391-393) where students are solving problems based on ten and some more. The assessment for chapter 7 works on the teen numbers but explicitly tells students what to do in order for them to solve the problem so it is more procedural than application.	**Use the questions for Metric 1C to evaluate Metric 1C. Record evidence for each question and rate Metric 1C.** **(Reviewer only.)** **X Meets (2)** **___ Partially Meets (1)** **___ Does Not Meet (0)**

Are there are single- and multi-step contextual problems, including non-routine problems, that develop the mathematics of the grade, afford opportunities for practice, and engage students in problem solving? Do the problems attend thoroughly to those places in the content Standards where expectations for multi-step and real-world problems are explicit? Evaluate lessons, chapter/unit assessments, and homework assignments.	Lesson 8.1, 8.2, 8.3, and 8.4, review the teen numbers while introducing the number 20. These lessons also have application problems with the teen numbers without the students being explicitly told how to solve the problems. Chapter 7 has procedural problems, even though there are real world problems the chapter explicitly tells students what to do and how to solve.	
Do application problems particularly stress applying the Major Work of the grade? Evaluate lessons, chapter/unit assessments, and homework assignments. NOTE: Examples of evaluating this Criterion might include looking at: how well, by the end of grade 2, students using the materials as designed can represent and solve a full range of one-step addition and subtraction word problems; or how well, by the end of grade 3, students using the materials as designed can represent and solve a full range of one-step multiplication and division word problems; or how well these basic situation types for each operation are carried coherently across the grades, (e.g., with fractions and algebraic expressions); or, in all grades, whether the problems connect concepts, Standards, and domains in ways that are natural and important. For a list of situation types for one-step addition, subtraction, multiplication, and division problems, see Situation Types for the Operations in Word Problems	**Evidence- --Sample of chapters** Lesson 3.1 page 122 K.CC Draw, Count, and Show 6 Lesson 3.2 page 128 K.CC.6 less than, greater than 6 Lesson 3.3 page 134 K.CC Draw, Count, and Show 7 Lesson 3.5 page 146 K.CC Draw, Count, and Show 8 Lesson 5.5 page 258 K.OA Addition with word problems BUT the problems are missing addend problems Regarding addition and subtraction problems GoMath treats types of addition problems equally or even more emphasis on First Grade story types rather than Kindergarten types See Lesson 5.5…Chapter 5 and 6 specifically.	
Does modeling build slowly across K–8, with applications that are relatively simple in earlier grades and when students are encountering new content? In grades 6–8, do the problems begin to provide opportunities for students to make their own assumptions or simplifications in order to model a situation mathematically? Read Standard for Mathematical Practice 4, Model with Mathematics. Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** Kindergarten chapter 1 begins with counters being placed in the five frame. As chapters progress students move up into 10 frames or two 10 frames to make 11-20. Introduced with the 10 frames are beads on a string (each bead stings have 2 colors each color is in sets of 5 before it changes) They have students count the counters in the 5 and 10 frames and also draw the counters in the 5 and 10 frames. Sample of misunderstanding of MP4--Chapter 1 teacher edition page 15 states that students are working on MP4 yet the problem is not real world application, which could lead to misunderstanding of teacher or student on what exactly MP4 means.	

Alignment Criterion 1: Rigor and Balance

Materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.

AC1 Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 out of 6 points, the Criterion has not been met. Check the final rating.
Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)**

Before moving to Alignment Criterion 2, record the final Meets or Does Not Meet rating in the Evaluation Summary.

(Reviewer only.)

X Meets 5/6

___ Does Not Meet

Strengths/Weaknesses:

Weakness: Children never have the opportunity to choose their appropriate tool or efficient strategy or tool. The book always chooses for them.

Directions for Alignment Criterion 2

Standards for Mathematical Practice

Alignment Criterion 2: Standards for Mathematical Practice

Materials must demonstrate authentic connections between content Standards and practice Standards.

The Standards require that designers of instructional materials connect the mathematical practices to mathematical content in instruction. Thus, materials must demonstrate authentic connections between content Standards and practice Standards.

Rating this Criterion

Alignment Criterion 2 is rated as Meets or Does Not Meet.

To rate Alignment Criterion 2, first rate metrics 2A, 2B, and 2C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). For each metric, guiding questions are provided to aid in gathering evidence. Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 2 if the materials earn 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as mathematical practices, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.

Metric AC2A: **Materials [redacted]s the practice Standards in such a way as to enrich the Major Work of the grade; practices strengthen the focus on Major Work instead of detracting from it, in both teacher and student materials.** **How to Find the Evidence:** Familiarize yourself with the Major Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate teacher and student materials for evidence that the mathematical practices support and connect to the focus of the grade. NOTE: Examples of evaluating this Criterion might include looking at whether, in grades K–5, students using the materials are supported to look for and express regularity in repeated reasoning about the addition table, the multiplication table, the properties of operations, the relationship between addition and subtraction or multiplication and division, and the place value system; or whether, in grades 6–8, students using the materials are supported to look for and express regularity in repeated reasoning about proportional relationships and linear functions. For context, read Criterion #8 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013).	**Evidence-** In the Publi[redacted]IMET materials they say there is a Listen and draw feature that suppo[redacted] Standards for Mathematical Practice and enriches the Major Work of the grade. Lesson 12.1 Listen and Draw activity has teachers read a problem to children. (Anita has some shapes. Some shapes are red, some are blue, and some are green. How can she sort and classify them?) The problem leads children to sort and classify by colors and no other way. The next step is to have the children use an assortment of 2-dimensional shapes to do their sorting. Next students are asked to find a flat shape that is blue and put that on the left side of the work space. GOMath suggests this is MP2 Reason abstractly and quantitatively...the activity in itself gives students to opportunity to reason abstractly and quantitatively yet the wording and the directions given to children do not fully allow for student reasoning. Lesson 7.5 (Julia needs 15 strawberries to make her fruit salsa. Use counters to show the strawberries Julia needs.) GoMath says this support MP5 Use appropriate tools strategically...students do not have the opportunity to choose the appropriate tool MP7 Look for and make use of structure—the counters for the 15 strawberries are already placed on a ten frame and students are asked how are all of the rows alike? How is the bottom row different from the other two rows? Students really are being asked to look at the structure of the model not the 10 plus five more to make 15. There are opportunities for use of the Mathematical Practices but teachers will need to set up the problems and questions differently to reach the full intent of the mathematical practices.	**(Reviewer only.)** [redacted] X **Meets (2)** ____ **Partially Meets (1)** ____ **Does Not Meet (0)**
Metric AC2B: **Materials attend to the full meaning of each practice Standard.** **How to Find the Evidence:** For context, read Criterion #7 and Criterion #9 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).		**Use the questions for Metric 2B to evaluate Metric 2B. Record evidence for each question and rate Metric 2B.** **(Reviewer only.)** X **Meets (2)**

Over the course of any given year of instruction, is each mathematical [illegible] Standard meaningfully present in the form of assignments, activities, or problems that stimulate students to develop the habits of mind described in the practice Standard? Evaluate lessons, chapter/ unit assessments, and homework assignments for evidence of each mathematical practice being meaningfully present in instruction.	**Evidence-** Chapter 5 Addition MP2 Students select the correct operation. Since chapter 5 is all about addition and subtraction is not introduced students do not have the opportunity to select the correct operation. Chapter 6 Subtraction –Students are given the subtraction sign each time and they are not required to choose the correct operation. Chapter 7 has addition and subtraction review problems but each time students are given the operation sign to use. Throughout the teachers edition the mathematical practices are given and questions are included to help support the practices.	**____Partially M[illegible](1)** **____Does Not Meet (0)**
Do the materials treat the practice Standards as developing across grades or grade bands? Are the practice Standards in early grades appropriately simple? Do they display an arc of growing sophistication across the grades?	**Evidence-** In Kindergarten the practices start simply (chapter 1) where students are explicitly told how to solve but then are asked questions to help them make connections. By chapter 8 students are still receiving questions to help support the mathematical practices and they are also being expected to solve application problems where they use their learning from previous chapters and are not explicitly told how to solve.	
Are there teacher-directed materials that explain the role of the practice Standards in the classroom and in students' mathematical development? Are alignments to practice Standards accurate?	**Evidence-** The planning guide pages 20-29 give the elementary definition for the mathematical practices. These pages do not explicitly describe what the practices would look and sound like in a kindergarten classroom. Page 23 gives general questions a teacher can ask to support the mathematical practices. Pages 24-29 tells where you will see the different practices at different grade levels (K-2). Each lesson throughout the kindergarten curriculum lists where the students will see or questions to use to help the students use mathematical practices. I have found that is not always accurate is MP 4 where sometimes the curriculum claims MP4 but the problems are not based on real world problems. •	
Metric AC2C: **Materials support the Standards' emphasis on mathematical reasoning.** **How to Find the Evidence:** For context, read Criterion #10 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).		**Use the questions for Metric 2C to evaluate Metric 2C. Record evidence for each question and rate Metric 2C.** **(Reviewer only.)** **____Meets (2)**

Do the materials support students in constructing viable arguments and critiquing the arguments of others concerning grade-level mathematics that is detailed in the content Standards? Read Standard for Mathematical Practice 3. Evaluate teacher and student materials to ensure that students are given opportunities to reason with grade-level mathematics.	**Evidence-** Lesson 7.1 notes on sidebar "Why does it make sense to use a ten frame to solve problems about the number 11?" Lesson 7.4 asks children to explain how they know that 10 + 3 = 13 Lesson 7.5 has children draw or model five frames and counters to show and answer then explain their model and solution to a partner. Lesson 8.1 has children showing 20 in their math journals and then explaining to a partner their drawing and how it relates to 20. The teacher would need to circulate and listen to child conversations to know if they were successfully using MP3 There are opportunities during application problems where students could critique reasoning and construct viable arguments but the teacher edition does not necessarily instruct teachers to use MP3.	X **Partially Meets (1)** ____ **Does Not Meet (0)**
Do the materials support students in producing not only answers and solutions, but also, in a grade-appropriate way, arguments, explanations, diagrams, mathematical models, etc., especially in the Major Work of the grade? Familiarize yourself with the Major Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate teacher and student materials, to understand the types of work students are expected to produce.	**Evidence-** Often times students are asked to use their math journals to prove their answers. Lesson 1.1 (page 12 A-12B teacher edition) students are asked to draw pictures or use numbers to show what the vocabulary words mean, then discuss the words and their pictures with a partner. (I question whether the children will even understand what is being asked) Children use five frames and 10 frames regularly to show numbers and explain their numbers/answers.	
Do materials explicitly attend to the specialized language of mathematics? Is the language of argument, problem solving, and mathematical explanations taught rather than assumed? Evaluate teacher and student materials, paying attention to how mathematical language is taught. NOTE: Examples of evaluating this Criterion might include looking at whether students are supported in: basing arguments on definitions; using the method of providing a counterexample; or recognizing that examples alone do not establish a general statement.	**Evidence-** At the beginning of each chapter there is a developing math language/vocabulary builder to introduce the vocabulary. Vocabulary words are used throughout the chapter and then in the rest of the following chapters when appropriate. Students are given vocabulary cards with words on one side and pictures on the other at the beginning of each chapter. Teachers are encouraged to have a math word wall, have children practice as a warm up as each lesson is introduced and to reinforce vocabulary by pointing the word out on the word wall whenever the word appears in the lesson. Teachers need to encourage/help the children use the appropriate vocabulary when they are having math discussion.	

Alignment Criterion 2: Standards for Mathematical Practice

Materials must demonstrate authentic connections between content Standards and practice Standards.

AC2 Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 out of 6 points, the Criterion has not been met. Check the final rating.
Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion.
(Reviewer only.)

Before moving to Alignment Criterion 3, record the final Meets or Does Not Meet rating in the Evaluation Summary.

(Reviewer only.)

X Meets 5/6

___ Does Not Meet

Strengths/Weaknesses:

- Not much critiquing of others
- Shows how to use the tool but not choose appropriate tools
- Due to the fact that students are explicitly shown how to solve there is no need for persevere
- Pattern of numbers not stressed or even taught
- The program does attend to precision

Alignment Criterion 3: Access to the Standards for All Students

Materials must provide supports for English Language Learners and other special populations.

Because Standards are for all students, alignment requires thoughtful support to ensure all students are able to meet the Standards. Thus, aligned materials must provide supports for English Language Learners and other special populations.

Required Materials:

- Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf)
- Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)
- From the materials being evaluated: teacher guides, student texts and workbooks

Rating this Criterion:
Alignment Criterion 3 is rated as Meets or Does Not Meet.

To rate Alignment Criterion 3, first rate metrics 3A, 3B, and 3C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points).

Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 3 if the materials earn 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as support for special population, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.

Metric AC3A: **Support f[illegible]glish Language Learners and other special populations is thoughtful and helps those students meet the same Standards as all other students. The language in which problems are posed is carefully considered.** **How to Find the Evidence:** Evaluate teacher and student materials, paying attention to supports offered for special populations.	**Evidence-** All vocabulary cards ha[illegible]th English and Spanish on them. Throughout the curriculum there are ELL Strategy instructions. The ELL strategies would be useful strategies to use with all struggling students.	**Reviewer only.)** __X__**Meets (2)** ____**Partially Meets (1)** ____**Does Not Meet (0)**
Metric AC3B: **Materials provide appropriate level and type of scaffolding, differentiation, intervention, and support for a broad range of learners with gradual removal of supports, when needed, to allow students to demonstrate their mathematical understanding independently.** **How to Find the Evidence:** Evaluate teacher and student materials, paying attention to whether materials provide differentiation that will lead all learners to engage with on-grade-level content.	**Evidence-** The curriculum provides scaffolding, intervention, and extension in each lesson. The scaffolding includes the following: _____ + _____ = _____ or _____- _____= _____ But does not have the gradual removal.	**Reviewer only.)** ____**Meets (2)** __X__**Partially Meets (1)** ____**Does Not Meet (0)**
Metric AC3C: **Design of lessons recommends and facilitates a mix of instructional approaches for a variety of learners such as using multiple representations (e.g., including models, using a range of questions, checking for understanding, flexible grouping, pair-share).** **How to Find the Evidence:** Evaluate teacher materials, noting instructional approaches suggested for whole class and differentiated lessons and activities.	**Evidence-** Each lesson provides different approaches. The structure from lesson to lesson and unit to unit is similar and the types of questioning is similar. Students use 5 frames, 10 frames, red/yellow counters and connecting cubes. There is no choice given to children about which manipulative or model they are routinely told which to use. Throughout the addition and subtraction chapters students are given _____ + _____ = _____ or _____- _____= _____ I have not found any problems where students make the choice of addition or subtraction.	**Reviewer only.)** __X__**Meets (2)** ____**Partially Meets (1)** ____**Does Not Meet (0)**

Alignment Criterion 3: Access to the Standards for All Students **Materials must provide supports for English Language Learners and other special populations.** AC3 Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 points, the Criterion has not been met. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion.**(Reviewer only.)** **Move to the Evaluation Summary and record the final Meets or Does Not Meet rating .**	**(Reviewer only.)** __X__ Meets __ _Does Not Meet **Strengths/Weaknesses:**

Once an evaluation for alignment to the Shifts and major features of the CCSS has been conducted using Sections 1-3, it's important to evaluate for overall quality and best practices. A starting list of Indicators of Quality are suggested below. States, districts and others evaluating instructional materials are encouraged to add to this list to ensure materials reflect local contexts. For background information on some of the Indicators of Quality in this section, refer to pp.18–21 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).

Indicators of Quality	Evidence- Give specific examples.	Rating: (Reviewers only.)
1. Lessons are thoughtfully structured and support the teacher in leading the class through the learning paths at hand, with active participation by all students in their own learning and in the learning of their classmates.	**Evidence-** The structure of the lesson is easy for teachers to follow and support the teacher in leading each child the learning. Every student regardless of ability will be able to participate in the lesson. There are collaboration opportunities given (example: lesson 1.4 have teams of four children collaborate to answer the essential question)	**(Reviewer only.)** __x____ **Yes** _____ **No**
2. The underlying design of the materials includes both problems and exercises. (In solving problems, students learn new mathematics, whereas in working exercises, students apply what they have already learned to build mastery.) Each problem or exercise has a purpose. **NOTE: This Criterion does not require that the problems and exercises be labeled as such.**	**Evidence-** Each lesson has a Listen and Draw (problem) Practice and Homework (exercises), Each problem has a purpose, either, practice, problem or review.	**(Reviewer only.)** ____x__ **Yes** _____ **No**

3. Design of assignments is not haphazard: exercises are given in intentional sequences in order to strengthen students' mathematical understanding.	**Evidence-** Lessons follow in a sequential way and the level of difficulty increases as the unit progresses.	**(Reviewer only.)** **___x___ Yes** **_____ No**
4. There are separate teacher materials that support and reward teacher study including, but not limited to: discussion of the mathematics of the units and the mathematical point of each lesson as it relates to the organizing concepts of the unit, discussion on student ways of thinking and anticipating a variety of students responses, guidance on lesson flow, guidance on questions that prompt students thinking, and discussion of desired mathematical behaviors being elicited among students.	**Evidence-** The teacher edition has the information throughout each lesson showing student look-fors and how to intervene, extend, and differentiate. There are professional development videos to support teachers with their teaching and learning.	**(Reviewer only.)** **___x___ Yes** **_____ No**
5. Manipulatives suggested in the materials are faithful representations of the mathematical objects they represent and are connected to written methods.	**Evidence-The two most common manipulatives used throughout Kindergarten GOMath are the red/yellow counters and connecting cubes. The manipulatives are used to encourage student thinking.**	**(Reviewer only.)** **____x__ Yes** **_____ No**
6. Materials include a variety of curriculum-embedded assessments. Examples include pre-, formative, summative, and self-assessment resources.	**Evidence-** Every lesson comes with formative assessment in the teacher's guide with what to look for and things to do intervene or extend the lesson. There is a summative assessment at the end of each chapter with a performance task being a part of it. Self-assessment piece for kindergarten students comes in the draw and explain your picture to another student (of course the teacher will need to help students realize it.)	**(Reviewer only.)** **___x___ Yes** **_____ No**
7. Assessments contain aligned rubrics, answer keys, and scoring guidelines that provide sufficient guidance for interpreting student performance.	**Evidence-** Each summative assessment comes with an answer key and, a rubric. Formative assessments throughout the lessons tell teachers what to look for and what to do if students are not mastering the content.	**(Reviewer only.)** **___x___ Yes** **_____ No**

8. Materials assess student proficiency using methods that are accessible and unbiased, including the use of course-level language in student prompts.	**Evidence-** The language is easy to understand for kindergarten students. They are introduced to the vocabulary at the beginning of each chapter and then the vocabulary is used throughout the lessons so it is not new when students get to the summative assessment.	**(Reviewer only.)** **___x___ Yes** **_____ No**
9. Materials are carefully evaluated by qualified individuals, whose names are listed, in an effort to ensure freedom from mathematical errors and course-level appropriateness.	**Evidence-** Planning Guide pages 16-17	**(Reviewer only.)** **___x__ Yes** **_____ No**
10. The visual design supports students in engaging thoughtfully with the subject. Navigation through the text is clear.	**Evidence-** The visual design supports students in engaging thoughtfully with the math through real pictures that show the acting out of the problem, through cartoon pictures that encourage students to really look at what his happening and through use of color to keep students interested.	**(Reviewer only.)** **___x___ Yes** **_____ No**
11. The materials engage parents in appropriate ways. For example, homework assignments in elementary grades, consist of routine problems, practice with getting answers, and fluency-building exercises that parents can easily support.	**Evidence-** Each lesson has a Home Activity that engages the parents in the work their child is doing. The Home Activities are in the student workbook and easy for parents to follow and engage in.	**(Reviewer only.)** **___x___ Yes** **_____ No**

Reviewer IMET Evaluation Summary **Title/Level:** Go Math

Publisher: HMH **Copyright:** 2015 **ISBN:**

Reviewer ID # SJ PD **Date Review Completed:** March 7

Non-Negotiable Criteria- Each Non-Negotiable must be met in order for the Non-Negotiable Alignment Criteria to be met overall.

Non-Negotiable 1: Freedom from Obstacles to Focus	Non- Negotiable 2: Focus and Coherence
X Meets	X Meets
_____ Does Not Meet	_____ Does Not Meet

Non-Negotiable Overall:

X **Meets** _____ **Does Not Meet**

Alignment Criteria- Each Alignment Criterion must be met with a sufficient number of points in order for Alignment Criteria to be labeled as "Meets" overall. The more points the materials receive on the Alignment Criteria, the better they are aligned.

Alignment Criterion 1: Rigor and Balance	Alignment Criterion 2: Standards of Mathematical Practice	Alignment Criterion 3: Access to Standards for All Learners
Points: 5 of 6 possible. (Materials must receive at least 5 of 6 points to align.)	Points: 5 of 6 possible. (Materials must receive at least 5 of 6 points to align.)	Points: 5 of 6 possible. (Materials must receive at least 5 of 6 points to align.)
X Meets	X Meets	X Meets
_____ Does Not Meet	_____ Does Not Meet	_____ Does Not Meet

Alignment Criteria Overall:

_____ **Meets** _____ **Does Not Meet**

If the materials meet both Non-Negotiables and relevant Alignment criterion, they are aligned to the Shifts and major features of the Core Standards. **Do the materials meet every Non-Negotiable and Alignment Criterion? _____ Yes _____ No**

What are the specific areas of strength and weakness based on this evaluation? Publishers or others modifying or developing assessments can use this information to make improvements and/or to remedy gaps in the alignment of assessment materials.

2015-16 Mathematics Interim Review Recommendation & Summary

Publisher Name:	HMH
Title:	Go Math
ISBN #	
Grade Level(s) or Course:	1st Gr
Reviewer ID:	SJ BK

RECOMMENDED AS:

_____**Core Mathematics Program-** a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials. Substantial evidence clearly supports the designation of this program as Core.

__X__**Other Mathematics Program-** a program that substantially, but partially, meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for supplemental materials. Substantial evidence clearly supports the designation of this program as Other.

_____**Component Mathematics Program-** a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs. Substantial evidence clearly supports the designation of this program as Component.

_____**Intervention Program-** a program designed and intended to target and support students' specific needs. Substantial evidence clearly supports the designation of this program as Intervention.

_____ **Does not meet criteria** for recommendation as a Curricular Material or Online Resource for Mathematics.

EVIDENCE SUMMARY:

FOCUS- no assessments outside of grade level

COHERENCE- 71% lessons spent on major works.

RIGOR- fluency practice isn't always about fluency skills for 1st grade +- to 10 more or a daily review of all skills.

CONCEPTUAL UNDERSTANDING- is utilized throughout w/ deeper understanding & questioning.

MATHEMATICAL PRACTICES- are not necessarily taught thoroughly & deeply. They are integrated w/ SE & TE. Sometimes mis identified. No chances to critique of others work or choose tools.

ACCESSIBILITY OF STANDARDS TO ALL STUDENTS- Lots of differentiation ELL info Go To Centers Challenge activities

OTHER:

2015-16 Interim Mathematics Review

Mathematics Evaluation Tool Grades K-8

Publisher: HMH

Title of Material: Go Math 1

Author: Dixon

ISBN #: _____ **Copyright** 2015

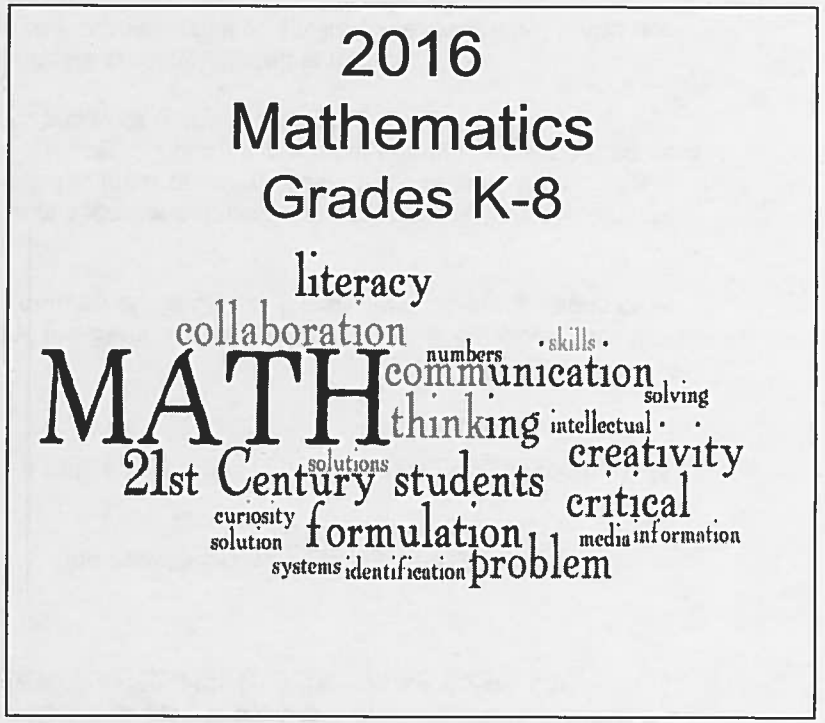
Reviewer ID: NJ PK

Core Mathematics Program- a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Core.

Other Mathematics Program- a program that substantially, but partially, meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Other.

Component Mathematics Program- a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs.
Substantial evidence clearly supports the designation of this program as Component.

Intervention Program- a program designed and intended to target and support students' specific needs.
Substantial evidence clearly supports the designation of this program as Intervention.



- Evaluation Form adapted from Instructional Materials Evaluation Toolkit (IMET).

The IMET was developed by Student Achievement Partners. Educators may use or adapt. http://creativecommons.org/licenses/by/3.0/ Download this tool at http://achievethecore.org/IMET

Instructional Materials Evaluation Tool
Mathematics, Grades K-8

What Are the Purposes of the IMET?
This Math IMET is designed to help educators determine whether instructional materials are aligned to the Shifts and major features of the Common Core State Standards (CCSS). The substantial instructional Shifts (http://www.corestandards.org/other-resources/key-shifts-inmathematics/) at the heart of the Common Core State Standards are:
- **Focus** strongly where the Standards focus
- **Coherence**: Think across grades and link to major topics within the grade
- **Rigor**: In major topics, pursue conceptual understanding, procedural skill and fluency, and application with equal intensity.

The IMET draws directly from the following documents:
- Common Core State Standards for Mathematics (www.corestandards.org/Math)
- Publishers' Criteria for the Common Core State Standards in Mathematics grade K-8 (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)

When to use the IMET
1. Purchasing materials: Many factors go into local purchasing decisions. Alignment to the Standards is a critical factor to consider. This tool is designed to evaluate alignment of instructional materials to the Shifts and the major features of the CCSS. It also provides suggestions of additional indicators to consider in the materials evaluation and purchasing process.

2. Evaluating materials currently in use: The IMET can be used to analyze the degree of alignment of existing materials and help to highlight specific, concrete flaws in alignment. Even where materials and tools currently in use fail to meet one or more of these criteria, the pattern of failure is likely to be informative. States and districts can use the evaluation to create a thoughtful plan to modify or combine existing resources in such a way that students' actual learning experiences approach the focus, coherence, and rigor of the Standards.

3. Developing programs: Those developing new programs can use this tool as guidance for creating aligned curricula.
Please note this tool was designed for evaluating comprehensive curricula (including any supplemental or ancillary materials), but it was not designed for the evaluation of standalone supplemental materials.

Who Uses the IMET?
Evaluating instructional materials requires both subject-matter and pedagogical expertise. Evaluators should be well versed in the Standards (www.corestandards.org/Math) for all grades in which materials are being evaluated. This includes understanding the Major Work of the grade (www.achievethecore/focus), the Supporting and Additional work, how the content fits into the progressions in the Standards (www.achievethecore.org/progressions), and the expectations of the Standards with respect to conceptual understanding, procedural skill and fluency, and application. Evaluators also should be familiar with the substantial instructional Shifts (http:// www.corestandards.org/other-resources/key-shifts-in-mathematics/) of Focus, Coherence and Rigor that are listed above.

Getting Started
Prior to Evaluation

Assemble all of the materials necessary for the evaluation. It is essential for evaluators to have materials for all grades covered by the program, as some criteria cannot be rated without having access to each grade. In addition, each evaluator should have a reference copy of the Common Core State Standards for Mathematics (CCSSM) and the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013).

2015-16 Interim Mathematics Review

Mathematics Evaluation Tool Grades K-8

Publisher: Houghton Mifflin Harcourt (hmhco.com)

Title of Material: Go Math 1st Grade

Authors: Julie K. Dixon Ph.D., Martha E. Sandoval-Martinez, Edward B. Burger, Phd, Matthew R. Larson, Ph.D., Steven Leinwand

ISBN #: 978-0-544--29331-1 **Copyright:** 2015

Reviewer ID: Peggy Loutzenhiser

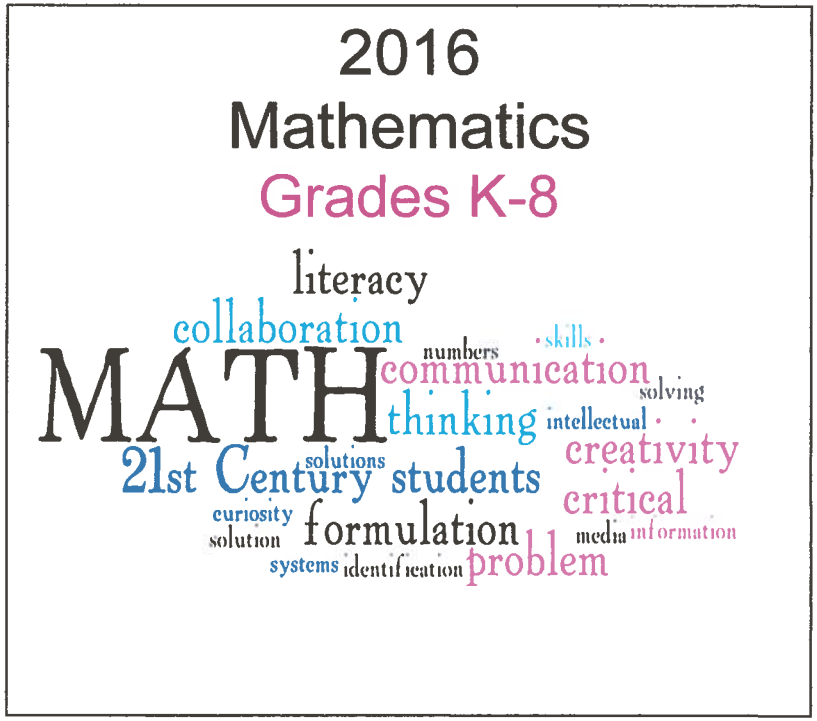
First Grade

Core Mathematics Program- a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Core.

Other Mathematics Program- a program that substantially, but partially, meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Other.

Component Mathematics Program- a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs.
Substantial evidence clearly supports the designation of this program as Component.

Intervention Program- a program designed and intended to target and support students' specific needs.
Substantial evidence clearly supports the designation of this program as Intervention.



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Instructional Materials Evaluation Tool

Mathematics, Grades K-8

What Are the Purposes of the IMET?

This Math IMET is designed to help educators determine whether instructional materials are aligned to the Shifts and major features of the Common Core State Standards (CCSS). The substantial instructional Shifts (http://www.corestandards.org/other-resources/key-shifts-inmathematics/) at the heart of the Common Core State Standards are:

- **Focus** strongly where the Standards focus
- **Coherence**: Think across grades and link to major topics within the grade
- **Rigor**: In major topics, pursue conceptual understanding, procedural skill and fluency, and application with equal intensity.

The IMET draws directly from the following documents:

- Common Core State Standards for Mathematics (www.corestandards.org/Math)
- Publishers' Criteria for the Common Core State Standards in Mathematics grade K-8 (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)

When to use the IMET

1. Purchasing materials: Many factors go into local purchasing decisions. Alignment to the Standards is a critical factor to consider. This tool is designed to evaluate alignment of instructional materials to the Shifts and the major features of the CCSS. It also provides suggestions of additional indicators to consider in the materials evaluation and purchasing process.

2. Evaluating materials currently in use: The IMET can be used to analyze the degree of alignment of existing materials and help to highlight specific, concrete flaws in alignment. Even where materials and tools currently in use fail to meet one or more of these criteria, the pattern of failure is likely to be informative. States and districts can use the evaluation to create a thoughtful plan to modify or combine existing resources in such a way that students' actual learning experiences approach the focus, coherence, and rigor of the Standards.

3. Developing programs: Those developing new programs can use this tool as guidance for creating aligned curricula.
Please note this tool was designed for evaluating comprehensive curricula (including any supplemental or ancillary materials), but it was not designed for the evaluation of standalone supplemental materials.

Who Uses the IMET?

Evaluating instructional materials requires both subject-matter and pedagogical expertise. Evaluators should be well versed in the Standards (www.corestandards.org/Math) for all grades in which materials are being evaluated. This includes understanding the Major Work of the grade (www.achievethecore/focus), the Supporting and Additional work, how the content fits into the progressions in the Standards (www.achievethecore.org/progressions), and the expectations of the Standards with respect to conceptual understanding, procedural skill and fluency, and application. Evaluators also should be familiar with the substantial instructional Shifts (http:// www.corestandards.org/other-resources/key-shifts-in-mathematics/) of Focus, Coherence and Rigor that are listed above.

Getting Started

Prior to Evaluation

Assemble all of the materials necessary for the evaluation. It is essential for evaluators to have materials for all grades covered by the program, as some criteria cannot be rated without having access to each grade. In addition, each evaluator should have a reference copy of the Common Core State Standards for Mathematics (CCSSM) and the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013).

Before conducting the evaluation itself, it is important to develop a protocol for the evaluation process. The protocol should include having evaluators study the Publishers' Criteria and the IMET. It will also be helpful for evaluators to get a sense of each program overall before beginning the process. At a minimum, this would include reading the front matter of the text, looking at the table of contents and paging through multiple chapters.

Sections 1-3 below should be completed to produce a comprehensive picture of the strengths and weaknesses of the materials under evaluation. Information about areas in need of improvement or supplementation should be shared with internal and external stakeholders.

Navigating the Tool

Begin with Section 1: Non-Negotiable Alignment Criteria

- The Non-Negotiable Alignment Criteria must each be met in full for materials to be considered aligned to the Shifts and the major features of the Common Core State Standards. Each Non-Negotiable Alignment Criterion has one or more metrics associated with it; every one of these metrics must be met in order for the criterion as a whole to be met.

- Examine the relevant materials and use evidence to rate the materials against each criterion and its associated metric(s).

- Record and explain the evidence upon which the rating is based.

Continue to Section 2: Alignment Criteria

- The Alignment Criteria must each be met for materials to be considered aligned to the Shifts and the major features of the Common Core State Standards. Each Alignment Criterion has one or more metric associated with it; a specific number of these metrics must be met or partially met in order for the criterion as a whole to be met.

- Examine the materials in relation to these criteria, assigning each metric a point value. Rate the criterion as "Meets" or "Does Note Meet" based on the number of points assigned. The more points the materials receive on the alignment Criteria, the better they are aligned.

- Record and explain the evidence upon which the rating is based.

Proceed to Section 4: Indicators of Quality

- Indicators of Quality are important considerations that will help evaluators better understand the overall quality of instructional materials. These considerations are not criteria for alignment to the CCSS, but they provide valuable information about additional program characteristics. Evaluators may want to add their own indicators to the examples provided.

Directions for Non-Negotiable 1

Freedom from Obstacles to Focus

Criterion	Evidence- Give specific examples.	Rating: (Reviewer only.)
Non-Negotiable 1: **Freedom from Obstacles to Focus** **Materials must reflect the content architecture of the Standards by not assessing the topics named before the grade level where they first appear in the Standards.** The Standards foster students' progress to algebra by focusing strongly on arithmetic. Consistent with this focus, certain topics from outside of arithmetic appear only in later grades. Thus, to be aligned, materials must reflect the content architecture of the Standards by not assessing the topics named before the grade level where they first appear in the Standards. In this criterion, "topics named" means the topics that are explicitly named in Metric 1A. No other topics should be added to the list in Metric 1A. (Note that other topics in the standards are addressed in criterion NN2.)	**Required Materials** • Common Core State Standards for Mathematics (www.corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf) • From the materials being evaluated: teacher guides and all assessment components	**Rating this Criterion:** Non-Negotiable 1 is rated as Meets or Does Not Meet. To rate Non-Negotiable 1, begin by rating Metric 1A. Since Metric 1A is the only metric for Non-Negotiable 1, the rating for Non-Negotiable 1 is the same as the rating for Metric 1A. If Metric 1A is rated as Does Not Meet, include evidence of when the named topic(s) is/are assessed. If the metric is rated as Meets, list the grade(s) examined in the evaluation.

Metric NN1A: **Materials reflect the basic architecture of the Standards by not assessing the listed topics before the grade level indicated.** • Probability, including chance, likely outcomes, probability models. (Introduced in the CCSSM in grade 7) • Statistical distributions, including center, variation, clumping, outliers, mean, median, mode, range, quartiles; and statistical association or trends, including two-way tables, bivariate measurement data, scatter plots, trend line, line of best fit, correlation. (Introduced in the CCSSM in grade 6) • Similarity, congruence, or geometric transformations. (Introduced in the CCSSM in grade 8) • Symmetry of shapes, including line/ reflection symmetry, rotational symmetry. (Introduced in the CCSSM in grade 4) **How to Find the Evidence:** Evaluate the table of contents, all chapter tests, all unit tests, and other such assessment components (including rubrics). For context, read Criterion #2 from the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013). NOTE: Grade alignments of other topics are addressed in Non-Negotiable 2, Focus and Coherence.) In this criterion, "topics named" means the topics that are explicitly named in Metric 1A. No other topics should be added to the list in Metric 1A. (Note that other topics in the standards are addressed in criterion NN2.)	**Evidence-** **Chapter 1—Addition at grade level** **Chapter 2—Subtractions at grade level** **Chapter 3—Addition strategies (doubles, make 10)at grade level** **Chapter 4—Subtraction strategies (count back, subtract from 10, Missing addend) at grade level** **Chapter 5—Addition and Subtraction Relationships at grade level** **Chapter 6—Count and model numbers at grade level** **Chapter 7—Compare Numbers at grade level** **Chapter 8—Two-digit Addition and Subtraction at grade level** **Chapter 9—Measurement at grade level** **Chapter 10—Represent Data at grade level** **Chapter 11—3-dimensional Geometry at grade level** **Chapter 12—2-dimensional Geometry at grade level** **Types of story problem assessed are appropriate for the grade level (i.e. Add To result unknown and change unknown. Take From Result unknown and change unknown.)**	(Reviewer only.) **___x_Meets** **____Does Not Meet**
Non-Negotiable 1: Materials must reflect the content architecture of the Standards by not assessing the topics named* before the grade level where they first appear in the Standards. **NN 1** If Metric 1A was rated as Meets, then rate Non-Negotiable 1 as Meets. If Metric 1A was rated as Does Not Meet, then rate Non- Negotiable 1 as Does Not Meet. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion.**(Reviewer only.)** **Before moving to Non-Negotiable 2, record the final Meets or Does Not Meet rating in the Evaluation Summary.**		(Reviewer only.) **____Meets** **____Does Not Meet** **Strengths/Weaknesses:**

Directions for Non-Negotiable 2

Focus and Coherence

Non-Negotiable 2: **Focus and Coherence** **Materials must focus coherently on the Major Work of the grade in a way that is consistent with the progressions in the Standards.** Focus and coherence are the two major evidence-based design principles of the Common Core State Standards for Mathematics (CCSSM, p. 3). Focus is necessary in order to fulfill the ambitious promise the states have made to their students by adopting the Standards: greater achievement at the college and career ready level; greater depth of understanding of mathematics; and a rich classroom environment in which reasoning, sense-making, applications, and a range of mathematical practices flourish. In simpler terms, a mile-wide, inch-deep curriculum translates to less time per topic. Less time means less depth and moving on without many students. Thus, materials must focus coherently on the Major Work of the grade in a way that is consistent with the progressions in the Standards.	**Required Materials** • Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf) • Focus by Grade Level for the grade being evaluated (www.achievethecore.org/focus) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion:** Non-Negotiable 2 is rated as Meets or Does Not Meet. To rate Non-Negotiable 2, first rate metrics 2A–2H. Each of these eight metrics must be rated as Meets in order for Non-Negotiable 2 to be rated as Meets. Rate each metric 2A-2H as Meets or Does Not Meet/Insufficient Evidence. If the evidence examined shows that the Criterion is met, then mark the Criterion Meets. If the evidence examined shows that the Criterion is not met—or if there is insufficient evidence to make a determination—then mark the Criterion as Does Not Meet/Insufficient Evidence. Support all ratings with evidence.
Metric NN2A: **In each grade K–8, students and teachers using the materials as designed devote the large majority of time to the Major Work of the grade.** **How to Find the Evidence:** Familiarize yourself with the Major Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, lessons, homework assignments, and assessments. (Evaluate both student and teacher materials.) Consider time spent on the Major Work of the grade and judge qualitatively whether students and teachers using the materials as designed will devote the large majority of time to the Major Work of the grade. For context, read Criterion #1 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013)	**Evidence-** **There are 100 lessons in the First Grade GoMath. 71 lessons focus on the major work of first grade and 29 lessons are the additional and supporting clusters. (71% and 29 %)** **65%-85% of the time is to be devoted to the Major Works of the grade. First grade is supposed to be close to 85% of the time devoted to the major works.**	**(Reviewer only.)** **__x__Meets** **____Does Not Meet/** **Insufficient Evidence** It meets the requirement of at least 65% of the time on the major work of the grade but falls short of the 85%.

Metric NN2B: **Supporting Work, where present, enhances focus and coherence simultaneously by also engaging students in the Major Work of the grade.** **How to Find the Evidence:** Familiarize yourself with the Major Work and Supporting Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate chapters and lessons that focus on Supporting Work. NOTE: Example of evaluating this Criterion might include looking at whether materials for K–5 generally treat data displays as an occasion for solving grade-level word problems using the four operations (e.g., see 3.MD.B.3); or whether materials for grade 7 take advantage of opportunities to use probability to support ratios, proportions, and percentages. For context, read Criterion #3 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Chapter 10 is the chapter represent data, which is the supporting work of the grade level. Lesson 10.1 graphs where students compare data through addition and subtraction (yes) 10.2 (no) addition, least to greatest, 10.4 (no) 10.5 (yes) greater than, less than 10.6 (No) 10.7 (No) The supporting and additional clusters are taught separately and given as much importance as the focal points (individual chapters)	**(Reviewer only.)** **____Meets** **__x__Does Not Meet/** **Insufficient Evidence**
Metric NN2C: **Materials base content progressions on the grade-by-grade progressions in the Standards. Content from previous or future grades does not unduly interfere with or displace on-grade-level content.** **How to Find the Evidence:** Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, and lessons in both student and teacher materials. NOTE: In some cases it may be possible that aligned materials might address some aspects of a topic in a strategic way before or after the grade level in which the topic is central in the Standards' progressions; for example, a curriculum author might purposefully choose to explore adding fractions with unlike denominators in a way appropriate to grade four, recognizing that this work is not really required until the next grade. However, any such purposeful discrepancies in content progressions should enhance the required learning in each grade; not unduly interfere with or displace grade-level content; and be clearly aimed at helping students meet the Standards as written rather than effectively rewriting the progressions in the Standards. And in all cases, note that Non-Negotiable 1 must be met for materials to be aligned. For context, read Criterion #5a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** **Chapter 1—Addition** **Chapter 2—Subtraction** **Chapter 3—Addition strategies (doubles, make 10)** **Chapter 4—Subtraction strategies (count back, subtract from 10, Missing addend)** **Chapter 5—Addition and Subtraction Relationships** **Chapter 6—Count and model numbers** **Chapter 7—Compare Numbers** **Chapter 8—Two-digit Addition and Subtraction** **Chapter 9—Measurement** **Chapter 10—Represent Data** **Chapter 11—3-dimensional Geometry** **Chapter 12—2-dimensional Geometry** **(See Planning Guide page 98-99 for accurate progressions of content)** **Go Math has a logical progression of math content. At the beginning of each chapter Go Math identifies what came before, what is happening during, and what happens after (the next grade level) for the teacher. This information is not shared specifically with the students.**	**(Reviewer only.)** **__x__Meets** **____Does Not Meet/** **Insufficient Evidence**

Metric NN2D: **Materials give all students extensive work with on-grade-level problems.** **How to Find the Evidence:** Evaluate both student and teacher materials. If the materials provide resources for differentiated learning, consider whether lower-performing students have opportunities to engage with grade-level problems. Also consider whether higher-performing students are given opportunities to learn current grade-level content in greater depth. For context, read Criterion #5b in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** **Each lesson is designed for whole group grade level instruction and comes with reteach and an enrichment. The reteach is designed to reteach the lesson and give more practice but it is not designed review or go over unlearned prerequisites. There is an RTI component designed to teach/catch the unfinished learning. There is also an online personal math trainer that is designed to review the specific content being taught not unlearned skills from previous chapters.**	(Reviewer only.) **__x__Meets** **____Does Not Meet/** **Insufficient Evidence**
Metric NN2E: **Materials relate on-grade-level concepts explicitly to prior knowledge from earlier grades.** **How to Find the Evidence:** Evaluate both student and teacher materials. NOTE: Examples of evaluating this Criterion might include looking at the way the materials extend basic ideas of place value across the decimal point; or the role that properties of operations play when the materials extend arithmetic beyond whole numbers to fractions, variables, and expressions. More generally, cluster headings in the Standards sometimes signal key moments where reorganizing and extending previous knowledge is important in order to accommodate new knowledge (e.g., see cluster headings that use the phrase "Apply and extend previous understanding"). For context, read Criterion #5c in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Chapter 6 (1.NBT.1 extend the counting sequence to 120) Students review the work of Kindergarten by counting with smaller numbers and different starting points and then build up to counting up to 120 from any number. At the beginning of each chapter there is a piece that says Common Core State Standards Across the Grades and it show teachers (not students) the connected standards K, 1, & 2. This is not explicit in each lesson but teachers can easily refer back to the Common Core State Standards Across the Grades at the beginning of the chapter.	(Reviewer only.) **__x__Meets** **____Does Not Meet/** **Insufficient Evidence**
Metric NN2F: **Review of material from previous grades is clearly identified as such to the teacher, and teacher and students can see what their specific responsibility is for the current year.** **How to Find the Evidence:** Evaluate the table of contents, but do not stop there; also evaluate units, chapters, lessons, homework assignments and assessments. (Evaluate both student and teacher materials.) Identify any content from previous grades and check whether it is identified as such. For context, read Criterion #5a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** The Learning Progression at the beginning of the chapter is the place where teachers are informed about concepts prior to grade level knowledge. .	(Reviewer only.) **_x___Meets** **____Does Not Meet/** **Insufficient Evidence**

Metric NN2G: **Materials include learning objectives that are visibly shaped by CCSSM cluster headings.** **How to Find the Evidence:** Select several clusters from the Major Work in the grade being evaluated. Evaluate teacher and student materials in relation to these clusters. For context, read Criterion #6a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** **1.NBT.2 &3 Understand Place Value** **1.OA.5 & 6 Add and Subtract within 20** Chapters 6 & 7 cover 1.NBT2 & 3. It would make sense to use the idea of 10 and some more in 1.OA 5 & 6 but they teach them as separate ideas/chapters without the connections.	(Reviewer only.) **_x___Meets** **____Does Not Meet/** **Insufficient Evidence**
Metric NN2H: **Materials include problems and activities that serve to connect two or more clusters in a domain, or two or more domains in a grade, in cases where these connections are natural and important.** **How to Find the Evidence:** In the grade being evaluated, choose two or more clusters or two or more domains for which connections are natural and important. Evaluate the units, chapters, and lessons that deal with the chosen topics, looking for problems and activities that serve to connect the chosen clusters or domains. NOTE: An example of evaluating this Criterion might include looking at whether problems in grade 4 sometimes or often involve students applying their developing computation skills (detailed in domain NBT) in the context of solving word problems (detailed in domain OA). For context, read Criterion #6b in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	The clusters have their own chapters and in the teachers edition there is no specific connection made, although teachers could easily and explicitly teach their students the connections. The problems students are given are specific to the cluster being taught in that chapter. Students do have a spiral review with problems from previous chapters but the questions do not connect two or more clusters.	(Reviewer only.) **_X_Meets** **__-__Does Not Meet/** **Insufficient Evidence**

Non-Negotiable 2:

Focus and Coherence

Materials must focus coherently on the Major Work of the grade in a way that is consistent with the progressions in the Standards.

NN 2 If all Metrics 2A – 2H were rated as Meets, then rate Non-Negotiable 2 as Meets. If one or more Metric was rated Does Not Meet/Insufficient Evidence, then rate Non-Negotiable 2 as Does Not Meet. Check the final rating.
Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)**

Before moving to Alignment Criterion 1, record the final Meets or Does Not Meet rating in the Evaluation Summary.

(Reviewer only.)

_X_ Meets

___ Does Not Meet

Strengths/Weaknesses:

Each cluster is taught in a chapter and although there is some review through the spiral review the supporting and additional cluster are not present in the teaching of the focal points. The focal points are not present in the additional and supporting chapters. Basically, the clusters each have their own chapter.

No-- Specifically the models. Some models were introduced in kindergarten (ten frame, counters, and matching), when they show up in first grade the teachers edition does not tell teachers this is a previously learned model. When a model (Bar diagram) shows up teachers are not told this is a new model that children have not experienced before.

Now continue by evaluating the Alignment Criterion 1 for Rigor and Balance.

Directions for Alignment Criterion 1

Rigor and Balance

Alignment Criterion 1: Rigor and Balance **Materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.** The Standards set expectations for attention to all three aspects of rigor: conceptual understanding, procedural skill and fluency, and applications. Thus, materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.	**Required Materials** • Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf) • Focus by Grade Level for the grade being evaluated (achievethecore.org/focus) • Situation Types for the Operations in Word Problems (achievethecore.org/situation-types) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion:** Alignment Criterion 1 is rated as Meets or Does Not Meet. To rate Alignment Criterion 1, first rate metrics 1A, 1B, and 1C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). For each metric, guiding questions are provided to aid in gathering evidence. Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 1 if the materials rate 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as rigor and balance, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.
Metric AC1A: **The materials support the development of students' conceptual understanding of key mathematical concepts, especially where called for in specific content Standards or cluster headings.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Major Work for the grade being evaluated that relate specifically conceptual understanding to use throughout the questions associated with this metric. NOTE: Some examples of clusters or Standards that call for conceptual understanding include: K.OA.A.1, (1.NBT.B, 1.NBT.C), (2.NBT.A, 2.NBT.B), (3.OA.A.1, 3.OA.A.2), 4.NF.A, (4.NBT.A, 4.NBT.B), 5.NF.B, (5.NBT.A, 5.NBT.B), 6.RP.A, 6.EE.A.3, 7.NS.A, 7.EE.A, 8.EE.B, 8.F.A, 8.G.A Clusters or Standards grouped by parentheses are closely connected and could be analyzed together. For context, read Criterion #4a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	-Choose a cluster/Standard from the Major Work that is aligned to each aspect of rigor and use it to evaluate these metrics. It is most helpful if the same clusters/Standards are chosen for all of the programs being evaluated. (Guidance in choosing clusters/Standards is included in "How to Find the Evidence".) For this section I will choose 1.NBT.B2 Understand place value. According to the Planning Guide this standard is taught in chapter 6. According to the teachers edition this standard is addressed in 6.3, 6.4, 6.5, 6.6, 6.7, and 6.8. (up to 8 days)	**Use the questions for AC Metric 1A to evaluate Metric 1A. Record evidence for each question and rate Metric 1A.** **____Meets (2)** **__x__Partially Meets (1)** **____Does Not Meet (0)** (Weakness: Wouldn't it make more sense to do this chapter before you add and subtract within 20 and then connect the two?)

Is conceptual understanding attended to thoroughly where the Standards set explicit expectations for understanding or interpreting? Evaluate lessons, chapter/unit assessments and homework assignments, paying attention to work aligned to Standards that explicitly call for understanding or interpreting. NOTE: Examples of evaluating this Criterion might include looking at how well the multi-digit addition and subtraction algorithms are developed and explained on the basis of place value and properties of operations; or how well the multi-digit multiplication and division algorithms are developed and explained on the basis of place value and properties of operations; or how well solving equations is presented and explained as a process of reasoning.	**Evidence-** Throughout lessons 6.3-6.8 there are opportunities for students to use their procedural skills. Each lesson provides a Go Deeper with questions for the teacher to ask. Some of the Go Deeper questions push conceptual understanding. When you look at the number 19, how do you know .... If the one in19 means 1 ten, what do you think the 2 in 29 means? How are the numbers ____ & ____ alike? Different? What are two ways to model 20? What patterns do you see_____? There are some conceptual problems but the thought that in 5 lessons children will master the understand place value	
Do the materials feature high-quality conceptual problems and conceptual discussion questions? Evaluate lessons, chapter/unit assessments, and homework assignments. NOTE: Example of conceptual problems might include such questions as "Find a number greater than 1/5 and less than 1/4," or "If the divisor does not change and the dividend increases, what happens to the quotient?"	**Evidence-** There are some examples: I am a number less than 50. I have 8 ones and some tens. What numbers can I be? There are 35 cubes. Jun says that there are 3 ones and 5 tens. Rob says there are 3 tens and 5 ones. Who is correct? (With a simple adjustment in the question the teacher could push more conceptually)	
Do the materials feature opportunities to identify correspondences across mathematical representations? Evaluate lessons, chapter/unit assessments and homework assignments. NOTE: Examples of evaluating this Criterion might include looking at whether students are supported in identifying correspondences among: the verbal description of a situation, the diagrams that distill its mathematical features, and the equations that model it; or equivalent forms of numbers (e.g., 3 and 6/2) and the number line; or rational number operations and representations of them via models such as the vector model; or the expression that defines a function and the graph that shows the relationship.	**Evidence- Yes** Students use ten frames and written numbers, ten frames and cubes to show the same number, the cubes and place value blocks, always with numbers included. Students are asked to show the numbers in different ways not only 1 ten and 10 ones but also show with different models.	

And then gives a Metric AC1B: **The materials are designed so that students attain the fluencies and procedural skills required by the Standards.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Major Work for the grade being evaluated that relate specifically to fluency and procedural skill to use throughout the questions associated with this metric. NOTE: Some examples of Standards that call for procedural skill and fluency include: K.OA.A.5, 1.OA.C.6, 2.OA.B.2, 2.NBT.B.5, 3.OA.C.7, 3.NBT.A.2, 4.NBT.B.4, 5.NBT.B.5, 6.NS.B.2, and 6.NS.B.3, 6.EE.A, 7.NS.A, 7.EE.A.1,7.EE.B.4a, 8.EE.C.7, 8.EE.C.8b For context, read Criterion #4b in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	Required fluency for 1st grade: Add/Subtract within 10 1.OA.C A add and Subtract Within 20	**Use the questions for Metric 1B to evaluate Metric 1 B. Record evidence for each question and rate Metric 1B.** **(Reviewer only.)** **____Meets (2)** **_X__Partially Meets (1)** **____Does Not Meet (0)**
Is progress toward fluency and procedural skill interwoven with students' developing conceptual understanding of the operations in question? Evaluate lessons, chapter/unit assessments, daily routines, and homework assignments for evidence that the development of fluency and procedural skill is supported by conceptual understanding.	**Evidence-** There seems to be a bigger emphasis on procedural rather than on conceptual. Chapter 8 begins with 42 practice problems then is followed by 2 Application problems (conceptual). Next comes 12 practice and 1 conceptual.	
Are purely procedural problems and exercises present that include cases in which opportunistic strategies are valuable and generic cases that require efficient algorithms present? Evaluate lessons, chapter/unit assessments, daily routines, and homework assignments. NOTE: Examples of problems in which opportunistic strategies are valuable might include the sum 698 + 240 or the system x + y = 1, 2x + 2y = 3. Examples of generic cases that require efficient algorithms might include the sum 8767+2286 or the system 6y + x = x + 3, – x = 1 + 2y.	**Evidence-** **Lesson 8.1 (description above)** Lesson 1.1 begins with pictures showing the concept of putting together and having student draw pictures to show putting together then it goes to story problems/applications. Students then practice putting together with pictures several times so it becomes more procedural. 1.2 moves to connecting cube to show putting together 1.3 goes to drawing circles to represent the story problem and writing number sentences	

Do the materials in grades K–6 provide repeated practice toward attainment of fluency Standards? Evaluate lessons, daily routines, and homework assignments for evidence of repeated practice toward attainment of the following K–6 Standards that set an explicit expectation of fluent (accurate and reasonably fast) computation: K.OA.A.5, 1.OA.C.6, 2.OA.B.2, 2.NBT.B.5, 3.OA.C.7, 3.NBT.A.2, 4.NBT.B.4, 5.NBT.B.5, 6.NS.B.2, 6.NS.B.3.	**Evidence-** Chapter 1 has addition practice in every lesson Chapter 2 has subtraction in every lesson plus some addition throughout (not daily) Chapter 3 has addition practice in every lesson plus some subtraction practice (not daily) Chapter has subtraction practice in every lesson plus some addition (not daily) Chapter 5 has addition and subtraction throughout the lessons Chapter 8 has addition and subtraction practice throughout. The other chapters have a daily spiral review in every lesson which sometimes has addition and subtraction practice in them. The curriculum relies on the fluency builder to practice and master addition and subtraction up to 10. Once the topic is not addition and subtraction the fluency practice is limited (0-2 times) per unit.	
Metric AC1C: **The materials are designed so that teachers and students spend sufficient time working with engaging applications, without losing focus on the Major Work of each grade.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Major Work for the grade being evaluated that relate specifically application to use throughout the questions associated with this metric. NOTE: Some examples of clusters or Standards that call for application include: K.OA.A.2, 1.OA.A, 2.OA.A, 3.OA.A.3, 3.OA.D.8, 4.OA.A.3, 4.NF.B.3d, 4.NF.B.4c, 5.NF.B.6, 5.NF.B.7c, 6.RP.A.3, 6.NS.A.1, 6.EE.B.7, 6.EE.C.9, 7.RP.A, 7.NS.A.3, 7.EE.B.3, 8.EE.C.8c, 8.F.B For context, read Criterion #4c in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** 1.OA.A.1 Lesson 1.4 is all addition problem solving that focus on the major work of the grade. There is also a mid-chapter checkpoint with application problems. Lesson 2.4 is all subtraction problem solving that focus on the major work	**Use the questions for Metric 1C to evaluate Metric 1C. Record evidence for each question and rate Metric 1C.** **(Reviewer only.)** **_x___Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Are there are single- and multi-step contextual problems, including non-routine problems, that develop the mathematics of the grade, afford opportunities for practice, and engage students in problem solving? Do the problems attend thoroughly to those places in the content Standards where expectations for multi-step and real-world problems are explicit? Evaluate lessons, chapter/unit assessments, and homework assignments.	1.OA.A.2 Lesson 3.11 Problem solving and application Lesson 3.12 Problem Solving Use addition strategies Lesson 4.4 Problem Solving and Applications Subtraction Lesson 4.6 Problem Solving use subtraction strategies	

Do application problems particularly stress applying the Major Work of the grade? Evaluate lessons, chapter/unit assessments, and homework assignments. NOTE: Examples of evaluating this Criterion might include looking at: how well, by the end of grade 2, students using the materials as designed can represent and solve a full range of one-step addition and subtraction word problems; or how well, by the end of grade 3, students using the materials as designed can represent and solve a full range of one-step multiplication and division word problems; or how well these basic situation types for each operation are carried coherently across the grades, (e.g., with fractions and algebraic expressions); or, in all grades, whether the problems connect concepts, Standards, and domains in ways that are natural and important. For a list of situation types for one-step addition, subtraction, multiplication, and division problems, see Situation Types for the Operations in Word Problems	**Evidence-** 1.OA.A.2 Lesson 3.11 Problem solving and application Lesson 3.12 Problem Solving Use addition strategies Lesson 4.4 Problem Solving and Applications Subtraction Lesson 4.6 Problem Solving use subtraction strategies Chapter 3 Performance Task Chapter 4 Performance Task Chapter 5 Performance Task and assessment 1.OA.A.1 Lesson 1.4 is all addition problem solving that focus on the major work of the grade. There is also a mid-chapter checkpoint with application problems. Lesson 2.4 is all subtraction problem solving that focus on the major work Chapter 1 Performance Task Assessment Chapter 2 Performance Task	
Does modeling build slowly across K–8, with applications that are relatively simple in earlier grades and when students are encountering new content? In grades 6–8, do the problems begin to provide opportunities for students to make their own assumptions or simplifications in order to model a situation mathematically? Read Standard for Mathematical Practice 4, Model with Mathematics. Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** Students use math journals, write addition equations, use bar models, draw pictures, starting with basic and building up.	

Alignment Criterion 1: Rigor and Balance

Materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.

AC1 Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 out of 6 points, the Criterion has not been met. Check the final rating.
Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)**

Before moving to Alignment Criterion 2, record the final Meets or Does Not Meet rating in the Evaluation Summary.

(Reviewer only.)

____Meets

____Does Not Meet

Strengths/Weaknesses:

Fluency addition and subtraction essentially stops at chapter 8. There are not performance tasks where students work collaboratively and then discuss whole group.

Strength There is a variety of daily review activities.

Directions for Alignment Criterion 2

Standards for Mathematical Practice

Alignment Criterion 2: Standards for Mathematical Practice

Materials must demonstrate authentic connections between content Standards and practice Standards.

The Standards require that designers of instructional materials connect the mathematical practices to mathematical content in instruction. Thus, materials must demonstrate authentic connections between content Standards and practice Standards.

Required Materials:

- Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf)
- Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)
- Focus by Grade Level for the grade being evaluated (www.achievethecore.org/focus)
- From the materials being evaluated: teacher guides, student texts and workbooks

Rating this Criterion

Alignment Criterion 2 is rated as Meets or Does Not Meet.

To rate Alignment Criterion 2, first rate metrics 2A, 2B, and 2C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). For each metric, guiding questions are provided to aid in gathering evidence.

Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 2 if the materials earn 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as mathematical practices, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.

Metric AC2A: **Materials address the practice Standards in such a way as to enrich the Major Work of the grade; practices strengthen the focus on Major Work instead of detracting from it, in both teacher and student materials.** **How to Find the Evidence:** Familiarize yourself with the Major Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate teacher and student materials for evidence that the mathematical practices support and connect to the focus of the grade. NOTE: Examples of evaluating this Criterion might include looking at whether, in grades K–5, students using the materials are supported to look for and express regularity in repeated reasoning about the addition table, the multiplication table, the properties of operations, the relationship between addition and subtraction or multiplication and division, and the place value system; or whether, in grades 6–8, students using the materials are supported to look for and express regularity in repeated reasoning about proportional relationships and linear functions. For context, read Criterion #8 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013).	**Evidence- According to teacher edition** 6.1 MP7 Look for and make use of structure—What patterns do you see (hundreds chart) (only) 6.1 MP2 Reason Abstractly and quantitatively--How did you decide what your first number was? _____, _____, _____, _____, _____, 120 (The problem says use the counting chart so students do not have to do a lot of reasoning --contrived) Lesson 6.2 MP8 Look for and express regularity in repeated reasoning Look at the first column. How is it different from the one you colored? How is it the same? (MP7 instead) Chapter 1-5 students select the correct operation MP2 MP5 Use appropriate tools strategically…Most lesson set up which tools to use so students are not selecting. The teachers edition lists the Mathematical Practices throughout and yet often the work does not fit the listed practice Examples: Mathematical Practice 4 is designed for real life situations but it is not always presented that way Lesson 7.3 MP3 Construct viable book says tell students there can be more than one correct answer but no discussion from there. Lesson 6.4 12.5—MP4 Student use shapes to build more shapes (not MP4)	**(Reviewer only.)** X **Meets (2)** __ **Partially Meets (1)** ____ **Does Not Meet (0)**
Metric AC2B: **Materials attend to the full meaning of each practice Standard.** **How to Find the Evidence:** For context, read Criterion #7 and Criterion #9 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).		**Use the questions for Metric 2B to evaluate Metric 2B. Record evidence for each question and rate Metric 2B.** **(Reviewer only.)**

Over the course of any given year of instruction, is each mathematical practice Standard meaningfully present in the form of assignments, activities, or problems that stimulate students to develop the habits of mind described in the practice Standard? Evaluate lessons, chapter/ unit assessments, and homework assignments for evidence of each mathematical practice being meaningfully present in instruction.	**Evidence-** MP1—Most problems in a lesson are in the same format so students practice the same format (example 2.4, 1.3, 5.1) and do not have to push themselves beyond the normal. MP2—Through story problems children are asked to select the correct operation, break apart the information to solve, reason and process information. MP4—Solve problems in everyday life. Many of the story and application problems are real life but the teacher edition often suggests that using a model satisfies MP4. MP5—Program most often tells students which tools and models to use.	X **Meets (2)** __ **Partially Meets (1)** ____ **Does Not Meet (0)**
Do the materials treat the practice Standards as developing across grades or grade bands? Are the practice Standards in early grades appropriately simple? Do they display an arc of growing sophistication across the grades?	**Evidence-** Across the grades???? Chapter 1 starts MP4 by looking at pictures and drawing attention to how the picture is modeling the math problem. 1.4 has children use a bar model (more difficult) 12.5 has children has children describe how they use shapes to combine two and make a new shape (MP4 ?????) 12.6 MP4 Shapes again (??) MP1 Make sense of problems and persevere in solving them—Story Problems/Application Problems are given in the same format taught so students do not necessarily have to make sense and persevere to solve.	
Are there teacher-directed materials that explain the role of the practice Standards in the classroom and in students' mathematical development? Are alignments to practice Standards accurate?	**Evidence-** Planning Guide Program Overview describes the role of the mathematical practices –not specifically how they look in 1st grade but rather overall how they look at different times. The Planning Guide also gives questions to support the Mathematical Practices. It would be important that teachers keep this questions close at hand because those questions are not always in the teacher editions.	
Metric AC2C: **Materials support the Standards' emphasis on mathematical reasoning.** **How to Find the Evidence:** For context, read Criterion #10 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).		**Use the questions for Metric 2C to evaluate Metric 2C. Record evidence for each question and rate Metric 2C.** **(Reviewer only.)**

Do the materials support students in constructing viable arguments and critiquing the arguments of others concerning grade-level mathematics that is detailed in the content Standards? Read Standard for Mathematical Practice 3. Evaluate teacher and student materials to ensure that students are given opportunities to reason with grade-level mathematics.	**Evidence-** Students write in their journals and explain their reasoning/drawings/math work to a classmate. (construct viable arguments) Students could critique the reasoning of other through the journals,(opportunities exist but the program does not explicitly describe) most of the time the teacher would need to plan questions. Teachers can go to page 23 in the Planning Guide to find appropriate questions.	**____Meets (2)** **X Partially Meets (1)** **____Does Not Meet (0)**
Do the materials support students in producing not only answers and solutions, but also, in a grade-appropriate way, arguments, explanations, diagrams, mathematical models, etc., especially in the Major Work of the grade? Familiarize yourself with the Major Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate teacher and student materials, to understand the types of work students are expected to produce.	**Evidence-** The text suggests or specifically tells students which models and manipulatives to use. The teacher edition gives questions for the teacher to ask to promote thinking and arguments. The teacher materials often give possible answers student may have or misconceptions and questions to be asked to help overcome them.	
Do materials explicitly attend to the specialized language of mathematics? Is the language of argument, problem solving, and mathematical explanations taught rather than assumed? Evaluate teacher and student materials, paying attention to how mathematical language is taught. NOTE: Examples of evaluating this Criterion might include looking at whether students are supported in: basing arguments on definitions; using the method of providing a counterexample; or recognizing that examples alone do not establish a general statement.	**Evidence-** Vocabulary is introduced to at the beginning of each chapter, games are played to help teach vocabulary and then the vocabulary is used throughout the chapter.	

Alignment Criterion 2:
Standards for Mathematical Practice

Materials must demonstrate authentic connections between content Standards and practice Standards.

AC2 Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 out of 6 points, the Criterion has not been met. Check the final rating.
Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion.
(Reviewer only.)

Before moving to Alignment Criterion 3, record the final Meets or Does Not Meet rating in the Evaluation Summary.

(Reviewer only.)

__x__Meets

____Does Not Meet

Strengths/Weaknesses:

Alignment Criterion 3: **Access to the Standards for All Students** **Materials must provide supports for English Language Learners and other special populations.** Because Standards are for all students, alignment requires thoughtful support to ensure all students are able to meet the Standards. Thus, aligned materials must provide supports for English Language Learners and other special populations.	**Required Materials:** • Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion:** Alignment Criterion 3 is rated as Meets or Does Not Meet. To rate Alignment Criterion 3, first rate metrics 3A, 3B, and 3C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 3 if the materials earn 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as support for special population, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.
Metric AC3A: **Support for English Language Learners and other special populations is thoughtful and helps those students meet the same Standards as all other students. The language in which problems are posed is carefully considered.** **How to Find the Evidence:** Evaluate teacher and student materials, paying attention to supports offered for special populations.	**Evidence-** All vocabulary cards have both English and Spanish on them. Throughout the curriculum there are ELL Strategy instructions. The ELL strategies would be useful strategies to use with all struggling students.	Reviewer only.) __x__Meets (2) ____Partially Meets (1) ____Does Not Meet (0)
Metric AC3B: **Materials provide appropriate level and type of scaffolding, differentiation, intervention, and support for a broad range of learners with gradual removal of supports, when needed, to allow students to demonstrate their mathematical understanding independently.** **How to Find the Evidence:** Evaluate teacher and student materials, paying attention to whether materials provide differentiation that will lead all learners to engage with on-grade-level content.	**Evidence-** The curriculum provides scaffolding, intervention, and extension in each lesson. The practice and homework is designed to allow students to demonstrate their mathematical independently.	Reviewer only.) __x__Meets (2) ____Partially Meets (1) ____Does Not Meet (0)
Metric AC3C: **Design of lessons recommends and facilitates a mix of instructional approaches for a variety of learners such as using multiple representations (e.g., including models, using a range of questions, checking for understanding, flexible grouping, pair-share).** **How to Find the Evidence:** Evaluate teac[illegible]aterials, noting instructional approaches suggested for whole class[illegible] differentiated lessons and activities.	**Evidence-** Flexible grouping is accomplished when there is reteach, intervention, and extend. The lessons themselves are mostly whole group. The questioning is more student—teacher rather than student—student. The journal writing when they share with a classmate is student-student.	Reviewer only.) __X__Meets (2) __Partially Meets (1) ____Does Not Meet (0)

Alignment Criterion 3: **Access to the Standards for All Students** **Materials must provide supports for English Language Learners and other special populations.** AC3 Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 points, the Criterion has not been met. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion.**(Reviewer only.)** **Move to the Evaluation Summary and record the final Meets or Does Not Meet rating .**	**(Reviewer only.)** **_x___Meets** **____Does Not Meet** **Strengths/Weaknesses:**

Once an evaluation for alignment to the Shifts and major features of the CCSS has been conducted using Sections 1-3, it's important to evaluate for overall quality and best practices. A starting list of Indicators of Quality are suggested below. States, districts and others evaluating instructional materials are encouraged to add to this list to ensure materials reflect local contexts. For background information on some of the Indicators of Quality in this section, refer to pp.18–21 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).

Indicators of Quality	**Evidence- Give specific examples.**	**Rating: (Reviewers only.)**
1. Lessons are thoughtfully structured and support the teacher in leading the class through the learning paths at hand, with active participation by all students in their own learning and in the learning of their classmates.	**Evidence-** Lessons are thoughtfully structured, designed to support the teacher in leading the class through the learning. Most of the work of this program is book work there are very few activities that deal with math outside of the textbook.	**(Reviewer only.)** **__X__ Yes** **__ ____ No**
2. The underlying design of the materials includes both problems and exercises. (In solving problems, students learn new mathematics, whereas in working exercises, students apply what they have already learned to build mastery.) Each problem or exercise has a purpose. **NOTE: This Criterion does not require that the problems and exercises be labeled as such.**	**Evidence-** The design of the materials includes both problems and exercise. Problems that students work through with their teacher and then On Your Own and Homework designed to give students practice to build mastery.	**(Reviewer only.)** **__x____ Yes** **_____ No**

3. Design of assignments is not haphazard: exercises are given in intentional sequences in order to strengthen students' mathematical understanding.	**Evidence-** Each assignment is given to reflect the new learning, to review previous taught concepts, and to strengthen students mathematical understanding.	**(Reviewer only.)** **__x____ Yes** **_____ No**
4. There are separate teacher materials that support and reward teacher study including, but not limited to: discussion of the mathematics of the units and the mathematical point of each lesson as it relates to the organizing concepts of the unit, discussion on student ways of thinking and anticipating a variety of students responses, guidance on lesson flow, guidance on questions that prompt students thinking, and discussion of desired mathematical behaviors being elicited among students.	**Evidence-** The teacher edition has the information throughout each lesson showing student look-fors and how to intervene, extend, and differentiate. There are professional development videos to support teachers with their teaching and learning.	**(Reviewer only.)** **___x___ Yes** **_____ No**
5. Manipulatives suggested in the materials are faithful representations of the mathematical objects they represent and are connected to written methods.	**Evidence-** Connecting cubes---used to add and subtract, make and show 10 and some more, pattern blocks used for chapter 12 2-dimensional shapes. These are the main manipulatives used.	**(Reviewer only.)** **__x____ Yes** **_____ No**
6. Materials include a variety of curriculum-embedded assessments. Examples include pre-, formative, summative, and self-assessment resources.	**Evidence-** Every lesson comes with formative assessment in the teacher's guide with what to look for and things to do intervene or extend the lesson. There is a summative assessment at the end of each chapter with a performance task being a part of it. Self-assessment piece for kindergarten students comes in the draw and explain your picture to another student (of course the teacher will need to help students realize it.)	**(Reviewer only.)** **___x___ Yes** **_____ No**
7. Assessments contain aligned rubrics, answer keys, and scoring guidelines that provide sufficient guidance for interpreting student performance.	**Evidence-** Each summative assessment comes with an answer key and, a rubric. Formative assessments throughout the lessons tell teachers what to look for and what to do if students are not mastering the content.	**(Reviewer only.)** **__x____ Yes** **_____ No**

8. Materials assess student proficiency using methods that are accessible and unbiased, including the use of course-level language in student prompts.	**Evidence-** The language is easy to understand for first grade students. They are introduced to the vocabulary at the beginning of each chapter and then the vocabulary is used throughout the lessons so it is not new when students get to the summative assessment	**(Reviewer only.)** **__x____ Yes** **_____ No**
9. Materials are carefully evaluated by qualified individuals, whose names are listed, in an effort to ensure freedom from mathematical errors and course-level appropriateness.	**Evidence-** Planning Guide pages 16-17	**(Reviewer only.)** **____x__ Yes** **_____ No**
10. The visual design supports students in engaging thoughtfully with the subject. Navigation through the text is clear.	**Evidence-** The visual design supports students in engaging thoughtfully with the math through real pictures that show the acting out of the problem, through cartoon pictures that encourage students to really look at what his happening and through use of color to keep students interested.	**(Reviewer only.)** **___x___ Yes** **_____ No**
11. The materials engage parents in appropriate ways. For example, homework assignments in elementary grades, consist of routine problems, practice with getting answers, and fluency-building exercises that parents can easily support.	Each lesson has a Home Activity that engages the parents in the work their child is doing. The Home Activities are in the student workbook and easy for parents to follow and engage in.	**(Reviewer only.)** **___x___ Yes** **_____ No**

Reviewer IMET Evaluation Summary **Title/Level:** Go Math

Publisher: HMH **Copyright:** _____ **ISBN:** _____

Reviewer ID # SJ PL **Date Review Completed:** March 7, 2016

Non-Negotiable Criteria- Each Non-Negotiable must be met in order for the Non-Negotiable Alignment Criteria to be met overall.

Non-Negotiable 1: Freedom from Obstacles to Focus	Non- Negotiable 2: Focus and Coherence
X Meets	X Meets
_____ Does Not Meet	_____ Does Not Meet

Non-Negotiable Overall:

X **Meets** _____ **Does Not Meet**

Alignment Criteria- Each Alignment Criterion must be met with a sufficient number of points in order for Alignment Criteria to be labeled as "Meets" overall. The more points the materials receive on the Alignment Criteria, the better they are aligned.

Alignment Criterion 1: Rigor and Balance	Alignment Criterion 2: Standards of Mathematical Practice	Alignment Criterion 3: Access to Standards for All Learners
Points: 5 of 6 possible. (Materials must receive at least 5 of 6 points to align.)	Points: 5 of 6 possible. (Materials must receive at least 5 of 6 points to align.)	Points: 5 of 6 possible. (Materials must receive at least 5 of 6 points to align.)
X Meets	X Meets	X Meets
_____ Does Not Meet	_____ Does Not Meet	_____ Does Not Meet

Alignment Criteria Overall:

_____ Meets **_____ Does Not Meet**

If the materials meet both Non-Negotiables and relevant Alignment Criterion, they are aligned to the Shifts and major features of the Core Standards. **Do the materials meet every Non-Negotiable and Alignment Criterion? _____ Yes _____ No**

What are the specific areas of strength and weakness based on this evaluation? Publishers or others modifying or developing assessments can use this information to make improvements and/or to remedy gaps in the alignment of assessment materials.

2015-16 Mathematics Interim Review Recommendation & Summary

Publisher Name:	Houghton Mifflin Harcourt
Title:	Go Math! Second Grade
ISBN #	
Grade Level(s) or Course:	2
Reviewer ID:	VF and SJ

RECOMMENDED AS:

_____**Core Mathematics Program-** a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials. Substantial evidence clearly supports the designation of this program as Core.

__X__**Other Mathematics Program-** a program that substantially, but partially, meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for supplemental materials. Substantial evidence clearly supports the designation of this program as Other.

_____**Component Mathematics Program-** a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs. Substantial evidence clearly supports the designation of this program as Component.

_____**Intervention Program-** a program designed and intended to target and support students' specific needs. Substantial evidence clearly supports the designation of this program as Intervention.

_____ **Does not meet criteria** for recommendation as a Curricular Material or Online Resource for Mathematics.

EVIDENCE SUMMARY:

FOCUS-

Program doesn't assess on listed topics before grade level indicated.

COHERENCE-

Program spends the majority of the time on the major work of second grade.

RIGOR-

Materials have plenty of rigor via problem solving, go deeper, think smarter questions.

CONCEPTUAL UNDERSTANDING-

Materials teach and give students practice with conceptual understanding.

MATHEMATICAL PRACTICES-

Weaker in some areas of mathematical practices such as writing an argument, choosing math tools, and critiquing arguments/errors of others.

ACCESSIBILITY OF STANDARDS TO ALL STUDENTS-

Program has a strong RtI, intervention, ELL, reteaching, enrichment supports.

OTHER:

2015-16 Interim Mathematics Review

Mathematics Evaluation Tool Grades K-8

Publisher: Houghton Mifflin Harcourt

Title of Material: Go Math! second grade

Author: Burger, Dixon, Larson, Sandoval-Martinez, Leinwand

ISBN #: _____ **Copyright** 2015

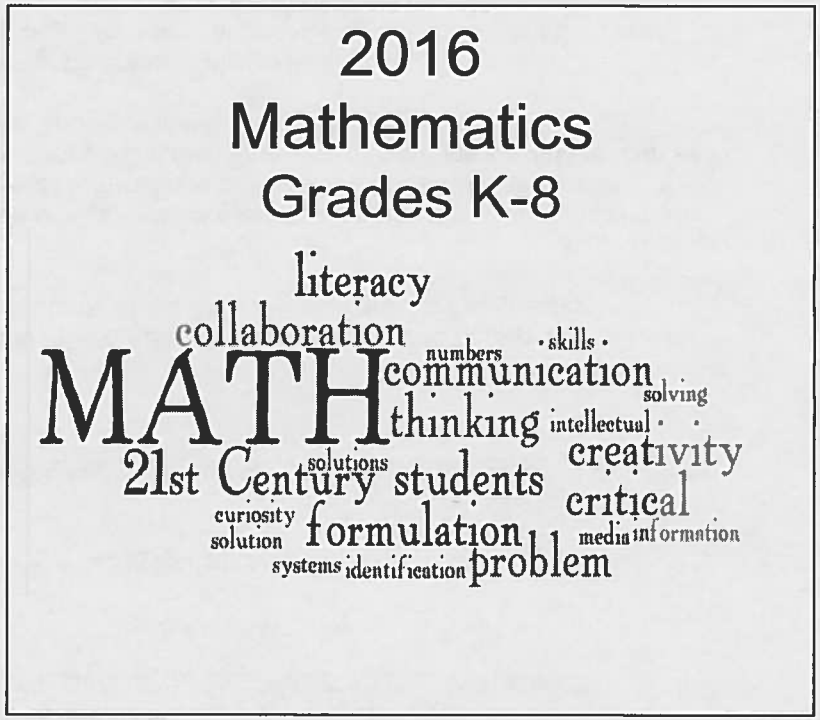
Reviewer ID: VF and SJ

Core Mathematics Program- a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Core.

Other Mathematics Program- a program that substantially, but partially, meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Other.

Component Mathematics Program- a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs.
Substantial evidence clearly supports the designation of this program as Component.

Intervention Program- a program designed and intended to target and support students' specific needs.
Substantial evidence clearly supports the designation of this program as Intervention.



- Evaluation Form adapted from Instructional Materials Evaluation Toolkit (IMET).

The IMET was developed by Student Achievement Partners. Educators may use or adapt. http://creativecommons.org/licenses/by/3.0/ Download this tool at http://achievethecore.org/IMET

Instructional Materials Evaluation Tool

Mathematics, Grades K-8

What Are the Purposes of the IMET?

This Math IMET is designed to help educators determine whether instructional materials are aligned to the Shifts and major features of the Common Core State Standards (CCSS). The substantial instructional Shifts (http://www.corestandards.org/other-resources/key-shifts-inmathematics/) at the heart of the Common Core State Standards are:

- **Focus** strongly where the Standards focus
- **Coherence**: Think across grades and link to major topics within the grade
- **Rigor**: In major topics, pursue conceptual understanding, procedural skill and fluency, and application with equal intensity.

The IMET draws directly from the following documents:

- Common Core State Standards for Mathematics (www.corestandards.org/Math)
- Publishers' Criteria for the Common Core State Standards in Mathematics grade K-8 (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)

When to use the IMET

1. Purchasing materials: Many factors go into local purchasing decisions. Alignment to the Standards is a critical factor to consider. This tool is designed to evaluate alignment of instructional materials to the Shifts and the major features of the CCSS. It also provides suggestions of additional indicators to consider in the materials evaluation and purchasing process.

2. Evaluating materials currently in use: The IMET can be used to analyze the degree of alignment of existing materials and help to highlight specific, concrete flaws in alignment. Even where materials and tools currently in use fail to meet one or more of these criteria, the pattern of failure is likely to be informative. States and districts can use the evaluation to create a thoughtful plan to modify or combine existing resources in such a way that students' actual learning experiences approach the focus, coherence, and rigor of the Standards.

3. Developing programs: Those developing new programs can use this tool as guidance for creating aligned curricula.
Please note this tool was designed for evaluating comprehensive curricula (including any supplemental or ancillary materials), but it was not designed for the evaluation of standalone supplemental materials.

Who Uses the IMET?

Evaluating instructional materials requires both subject-matter and pedagogical expertise. Evaluators should be well versed in the Standards (www.corestandards.org/Math) for all grades in which materials are being evaluated. This includes understanding the Major Work of the grade (www.achievethecore/focus), the Supporting and Additional work, how the content fits into the progressions in the Standards (www.achievethecore.org/progressions), and the expectations of the Standards with respect to conceptual understanding, procedural skill and fluency, and application. Evaluators also should be familiar with the substantial instructional Shifts (http:// www.corestandards.org/other-resources/key-shifts-in-mathematics/) of Focus, Coherence and Rigor that are listed above.

Getting Started

Prior to Evaluation

Assemble all of the materials necessary for the evaluation. It is essential for evaluators to have materials for all grades covered by the program, as some criteria cannot be rated without having access to each grade. In addition, each evaluator should have a reference copy of the Common Core State Standards for Mathematics (CCSSM) and the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013).

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Mathematics, Grades K-8

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Prior to Evaluation

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Before conducting the evaluation itself, it is important to develop a protocol for the evaluation process. The protocol should include having evaluators study the Publishers' Criteria and the IMET. It will also be helpful for evaluators to get a sense of each program overall before beginning the process. At a minimum, this would include reading the front matter of the text, looking at the table of contents and paging through multiple chapters.

Sections 1-3 below should be completed to produce a comprehensive picture of the strengths and weaknesses of the materials under evaluation. Information about areas in need of improvement or supplementation should be shared with internal and external stakeholders.

Navigating the Tool

Begin with Section 1: Non-Negotiable Alignment Criteria

- The Non-Negotiable Alignment Criteria must each be met in full for materials to be considered aligned to the Shifts and the major features of the Common Core State Standards. Each Non-Negotiable Alignment Criterion has one or more metrics associated with it; every one of these metrics must be met in order for the criterion as a whole to be met.

- Examine the relevant materials and use evidence to rate the materials against each criterion and its associated metric(s).

- Record and explain the evidence upon which the rating is based.

Continue to Section 2: Alignment Criteria

- The Alignment Criteria must each be met for materials to be considered aligned to the Shifts and the major features of the Common Core State Standards. Each Alignment Criterion has one or more metric associated with it; a specific number of these metrics must be met or partially met in order for the criterion as a whole to be met.

- Examine the materials in relation to these criteria, assigning each metric a point value. Rate the criterion as "Meets" or "Does Note Meet" based on the number of points assigned. The more points the materials receive on the alignment Criteria, the better they are aligned.

- Record and explain the evidence upon which the rating is based.

Proceed to Section 4: Indicators of Quality

- Indicators of Quality are important considerations that will help evaluators better understand the overall quality of instructional materials. These considerations are not criteria for alignment to the CCSS, but they provide valuable information about additional program characteristics. Evaluators may want to add their own indicators to the examples provided.

Direc ns for Non-Negotiable 1

Freedom from Obstacles to Focus

Criterion	Evidence- Give specific examples.	Rating: (Reviewer only.)
Non-Negotiable 1: **Freedom from Obstacles to Focus** **Materials must reflect the content architecture of the Standards by not assessing the topics named before the grade level where they first appear in the Standards.** The Standards foster students' progress to algebra by focusing strongly on arithmetic. Consistent with this focus, certain topics from outside of arithmetic appear only in later grades. Thus, to be aligned, materials must reflect the content architecture of the Standards by not assessing the topics named before the grade level where they first appear in the Standards. In this criterion, "topics named" means the topics that are explicitly named in Metric 1A. No other topics should be added to the list in Metric 1A. (Note that other topics in the standards are addressed in criterion NN2.)	**Required Materials** • Common Core State Standards for Mathematics (www.corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf) • From the materials being evaluated: teacher guides and all assessment components	**Rating this Criterion:** Non-Negotiable 1 is rated as Meets or Does Not Meet. To rate Non-Negotiable 1, begin by rating Metric 1A. Since Metric 1A is the only metric for Non-Negotiable 1, the rating for Non-Negotiable 1 is the same as the rating for Metric 1A. If Metric 1A is rated as Does Not Meet, include evidence of when the named topic(s) is/are assessed. If the metric is rated as Meets, list the grade(s) examined in the evaluation.
Metric NN1A: **Materials reflect the basic architecture of the Standards by not assessing the listed topics before the grade level indicated.** • Probability, including chance, likely outcomes, probability models. (Introduced in the CCSSM in grade 7) • Statistical distributions, including center, variation, clumping, outliers, mean, median, mode, range, quartiles; and statistical association or trends, including two-way tables, bivariate measurement data, scatter plots, trend line, line of best fit, correlation. (Introduced in the CCSSM in grade 6) • Similarity, congruence, or geometric transformations. (Introduced in the CCSSM in grade 8) • Symmetry of shapes, including line/ reflection symmetry, rotational symmetry. (Introduced in the CCSSM in grade 4) **How to Find the Evidence:** Evaluate the table of contents, all chapter tests, all unit tests, and other such assessment components (including rubrics). For context, read Criterion #2 from the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013). NOTE: Grade alignments of other topics are addressed in Non-Negotiable 2, Focus and Coherence.)	**Evidence-** **After reviewing all units in the curriculum, specifically the data and geometry units, I found no evidence of any of these items being assessed in the second grade curriculum.**	**(Reviewer only.)** **Yes! ____ Meets** **____Does Not Meet**

In this criterion, "topics named" means the topics that are explicitly named in Metric 1A. No other topics should be added to the list in Metric 1A. (Note that other topics in the standards are addressed in criterion NN2.)		

Non-Negotiable 1: Materials must reflect the content architecture of the Standards by not assessing the topics named* before the grade level where they first appear in the Standards.

NN 1 If Metric 1A was rated as Meets, then rate Non-Negotiable 1 as Meets. If Metric 1A was rated as Does Not Meet, then rate Non- Negotiable 1 as Does Not Meet. Check the final rating.

Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)**

Before moving to Non-Negotiable 2, record the final Meets or Does Not Meet rating in the Evaluation Summary.

(Reviewer only.)

Yes!____Meets

____Does Not Meet

Strengths/Weaknesses:

All units appear to align with the CCSS for second grade standards. I found no evidence that topics were assessed before introduced in the grade level.

Directions for Non-Negotiable 2

Focus and Coherence

Non-Negotiable 2:

Focus and Coherence

Materials must focus coherently on the Major Work of the grade in a way that is consistent with the progressions in the Standards.

Focus and coherence are the two major evidence-based design principles of the Common Core State Standards for Mathematics (CCSSM, p. 3). Focus is necessary in

Required Materials

- Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf)
- Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)
- Focus by Grade Level for the grade being evaluated (www.achievethecore.org/focus)

Rating this Criterion:

Non-Negotiable 2 is rated as Meets or Does Not Meet.

To rate Non-Negotiable 2, first rate metrics 2A–2H. Each of these eight metrics must be rated as Meets in order for Non-Negotiable 2 to be rated as Meets. Rate each metric 2A-2H as Meets or Does Not Meet/Insufficient Evidence. If the evidence examined shows that the Criterion is met, then mark the Criterion Meets. If the evidence examined shows that the Criterion is not met—or if there is insufficient evidence to make a determination—then mark the Criterion as Does Not Meet/Insufficient Evidence. Support all ratings with evidence.

order to fulfill the ambitious promise the states have made to their students by adopting the Standards: greater achievement at the college and career ready level; greater depth of understanding of mathematics; and a rich classroom environment in which reasoning, sense-making, applications, and a range of mathematical practices flourish. In simpler terms, a mile-wide, inch-deep curriculum translates to less time per topic. Less time means less depth and moving on without many students. Thus, materials must focus coherently on the Major Work of the grade in a way that is consistent with the progressions in the Standards.	• From the materials being evaluated: teacher guides, student texts and workbooks	
Metric NN2A: **In each grade K–8, students and teachers using the materials as designed devote the large majority of time to the Major Work of the grade.** **How to Find the Evidence:** Familiarize yourself with the Major Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, lessons, homework assignments, and assessments. (Evaluate both student and teacher materials.) Consider time spent on the Major Work of the grade and judge qualitatively whether students and teachers using the materials as designed will devote the large majority of time to the Major Work of the grade. For context, read Criterion #1 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013)	**Evidence-** **There are five major cluster is second grade math. This curriculum spends 8 out of 11 units (approximately 73%) of the time on these clusters as shown below:** **-Understand place value:** Unit 1: Number Concepts Unit 2: Numbers to 1,000 **- Use place value understanding and properties of operations to add and subtract** **- Represent and solve problems involving addition and subtraction** **- Add and subtract within 20 (CCSS says 100 and 1000)** Unit 3: Basic facts and relationships Unit 4: 2-digit addition Unit 5: 2-digit subtraction Unit 6: 3-digit addition and subtraction **- Measure and estimate lengths in standard units** Unit 8: Length in customary units Unit 9: Length in metric units **- Relate addition and subtraction to length (weaker)** Unit 8: Length in customary units (L5) Unit 9: Length in metric units (L4)	(Reviewer only.) **Yes! ____Meets** **____Does Not Meet/** **Insufficient Evidence**
Metric NN2B: **Supporting Work, where present, enhances focus and coherence simultaneously by also engaging students in the Major Work of the grade.** **How to Find the Evidence:** Familiarize yourself with the Major Work and Supporting Work of the grade being evaluated (see the Focus by Grade Level documents.)	**Evidence-** **Supporting clusters are sufficiently covered by units and they support the major clusters of second grade.** **- Work with time and money (Unit 7)** Students are using "Counting On" to count coins, relating	(Reviewer only.) **Yes! ____Meets** **____Does Not Meet/**

Evaluate cha[illegible] and lessons that focus on Supporting Work. NOTE: Example of e[illegible]ting this Criterion might include looking at whether materials for K–5 generally treat data displays as an occasion for solving grade-level word problems using the four operations (e.g., see 3.MD.B.3); or whether materials for grade 7 take advantage of opportunities to use probability to support ratios, proportions, and percentages. For context, read Criterion #3 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	back to place value c[illegible]epts taught in Unit 2. **- Work with equal groups of objects to gain foundations for multiplication** Students are working with equal groups and repeated addition in Unit 3 **- Represent and interpret data (unit 10)** Students are using addition and subtraction concepts from units 3-6 to answer word problems based on graphs. **- Reason with shapes and their attributes (unit 11)** Students are using even/odd numbers (unit 1) to count sides and vertices to find patterns (unit 1) in geometric shapes.	**Insufficient Evidence**
Metric NN2C: **Materials base content progressions on the grade-by-grade progressions in the Standards. Content from previous or future grades does not unduly interfere with or displace on-grade-level content.** **How to Find the Evidence:** Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, and lessons in both student and teacher materials. NOTE: In some cases it may be possible that aligned materials might address some aspects of a topic in a strategic way before or after the grade level in which the topic is central in the Standards' progressions; for example, a curriculum author might purposefully choose to explore adding fractions with unlike denominators in a way appropriate to grade four, recognizing that this work is not really required until the next grade. However, any such purposeful discrepancies in content progressions should enhance the required learning in each grade; not unduly interfere with or displace grade-level content; and be clearly aimed at helping students meet the Standards as written rather than effectively rewriting the progressions in the Standards. And in all cases, note that Non-Negotiable 1 must be met for materials to be aligned. For context, read Criterion #5a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** **After thoroughly reviewing the curriculum, I found no discrepancies in the content progression that unduly interfered with grade level content.** **There were a couple times where further grade level concepts were strategically placed, such as repeated addition and equal groups, in the appropriate addition and subtraction unit that build a base for third grade multiplication standards.**	**(Reviewer only.)** **Yes! ____Meets** **____Does Not Meet/** **Insufficient Evidence**
Metric NN2D: **Materials give all students extensive work with on-grade-level problems.** **How to Find the Evidence:** Evaluate both student and teacher materials. If the materials provide resources for differentiated learning, consider whether lower-performing students have opportunities to engage with grade-level problems. Also consider whether higher-performing students are given opportunities to learn current grade-level content in greater	**Evidence-** **Each lesson of each unit contains on-grade level real world problems to solve that align with the skills stated in the CCSS. In addition, many of the lessons contain 'think smarter' questions which give students the opportunity to problem solve with grade-level problems. Each lesson in each unit contains a reteaching and enrichment pages for differentiated**	**(Reviewer only.)** **Yes! ____Meets** **____Does Not Meet/** **Insufficient Evidence**

depth. For context, read Criterion #5b in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**instruction. The reteaching pages still contain on-grade-level problems for lower-performing students to engage in with the guidance of the teacher. The enrichment pages take an on-grade level problem and give the higher-performing students the opportunity to take the day's lesson and go deeper. For example, in Unit 3 lesson 7 the students are working with 'use 10 to subtract.' There is an on-grade-level real world math problem to solve, in addition to 14 more grade level problems. There is one think smarter question where the students are still subtracting from 10, but then have to compare their answer to see if it has the same difference as another equation. The reteaching page has students still working with on-grade-level problems using ten to subtract, but with the guidance of teacher and using unifix cubes for support. The enrich page has higher-performing students creating and solving their own word subtraction from twn problems.**	
Metric NN2E: **Materials relate on-grade-level concepts explicitly to prior knowledge from earlier grades.** **How to Find the Evidence:** Evaluate both student and teacher materials. NOTE: Examples of evaluating this Criterion might include looking at the way the materials extend basic ideas of place value across the decimal point; or the role that properties of operations play when the materials extend arithmetic beyond whole numbers to fractions, variables, and expressions. More generally, cluster headings in the Standards sometimes signal key moments where reorganizing and extending previous knowledge is important in order to accommodate new knowledge (e.g., see cluster headings that use the phrase "Apply and extend previous understanding"). For context, read Criterion #5c in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** **There are no cluster headings in second grade that specifically state for students to "apply and extend previous understanding."** **Each unit begins with a "show what you know" check up that assesses skills from first grade. Teachers can use this diagnostic assessment to intervene with students who have yet to meet first grade standards.** **Each lesson, in the "lesson at a glance" section contains a "coherence" chart showing the concepts (and standards) from the previous grade, for this lesson, and the link to the after (3rd grade). Example, p. 187 A (Lesson 3.5) shows:** **Standards before: 1.OA.A.1 1.OA.C.6** **Grade 2: 2.OA.B.2** **Grades After: 3.OA.D.8**	**(Reviewer only.)** **Yes! ____Meets** **____Does Not Meet/** **Insufficient Evidence**
Metric NN2F: **Review of material from previous grades is clearly identified as such to the teacher, and teacher and students can see what their specific responsibility is for the current year.** **How to Find the Evidence:** Evaluate the table of contents, but do not stop there; also evaluate units, chapters, lessons, homework assignments and assessments. (Evaluate both student and teacher materials.) Identify any content from previous grades and check whether it is identified as such.	**Evidence-** **There are no cluster headings in second grade that specifically state for students to "apply and extend previous understanding."** **Each unit begins with a "show what you know" check up that assesses skills from first grade. Teachers can use this diagnostic assessment to intervene with students who have yet to meet first grade standards.** **Each lesson, in the "lesson at a glance" section**	**(Reviewer only.)** **Yes! ____Meets** **____Does Not Meet/** **Insufficient Evidence**

For context, r[illegible]riterion #5a in the Publishers' Criteria for the Common Core [illegible]ate Standards for Mathematics, Grades K–8 (Spring 2013).	**contains a "coherer[illegible] chart showing the concepts (and standards) fro[illegible]e previous grade, for this lesson, and the link to the after (3rd grade). Example, p. 187 A (Lesson 3.5) shows:** **Standards before: 1.OA.A.1 1.OA.C.6** **Grade 2: 2.OA.B.2** **Grades After: 3.OA.D.8**	
Metric NN2G: **Materials include learning objectives that are visibly shaped by CCSSM cluster headings.** **How to Find the Evidence:** Select several clusters from the Major Work in the grade being evaluated. Evaluate teacher and student materials in relation to these clusters. For context, read Criterion #6a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** **Each lesson has a "lesson at a glance" section that states the CCSSM as well as the learning objective. Eight units in the second grade curriculum focus on the major work clusters. For example, lesson 3.5 states that is meets the CCSS 2.OA.C.3. Fluently add and subtract within 20 using mental strategies. The learning objective is 'Use the inverse relationship of addition and subtraction to recall basic facts.'** **Each unit has a "critical area" section at the beginning of the chapter the shows the major clusters met by each lesson. For example, Unit 3 state the critical area met by the unit is "Building fluency with addition and subtraction." It then break down Lesson 3.8-3.9 meet the major cluster "represent and solve problems involving addition and subtraction." Lessons 3.1-3.7 meet the major cluster "Add and subtract within 20." Lessons 3.10-3.11 meet the supporting cluster "work with equal groups of objects to gain foundations for multiplication."**	**(Reviewer only.)** **Yes! ____Meets** **____Does Not Meet/** **Insufficient Evidence**
Metric NN2H: **Materials include problems and activities that serve to connect two or more clusters in a domain, or two or more domains in a grade, in cases where these connections are natural and important.** **How to Find the Evidence:** In the grade being evaluated, choose two or more clusters or two or more domains for which connections are natural and important. Evaluate the units, chapters, and lessons that deal with the chosen topics, looking for problems and activities that serve to connect the chosen clusters or domains. NOTE: An example of evaluating this Criterion might include looking at whether problems in grade 4 sometimes or often involve students applying their developing computation skills (detailed in domain NBT) in the context of solving word problems (detailed in domain OA). For context, read Criterion #6b in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** **Example of a connection between clusters in a domain:** In chapter 3, basic facts and relationships, students spend lessons 3.1-3.9 in the OA cluster "Add and subtract within 20." Then it naturally moves students into the OA cluster "work with equal groups of objects to gain foundations for multiplication" by counting equals groups and using repeated addition in lessons 3.10-3.11. Students must use their add and subtract within 20 skills in order to work with equal groups. **Example of a connection between domains:** Students spend the entire chapter 5 in '2-digit subtraction' in the cluster "use addition and subtraction within 100 to solve one- and two-step word problems…" in the Operation and Algebraic Thinking Domain. Then, students use these addition concepts in lessons 8.1-8.7 to "use addition and subtraction within 100 to solve word problems involving	**(Reviewer only.)** **Yes! ____Meets** **____Does Not Meet/** **Insufficient Evidence**

	lengths…" in the Mea ement and Data Domain.	

Non-Negotiable 2:

Focus and Coherence

Materials must focus coherently on the Major Work of the grade in a way that is consistent with the progressions in the Standards.

NN 2 If all Metrics 2A – 2H were rated as Meets, then rate Non-Negotiable 2 as Meets. If one or more Metric was rated Does Not Meet/Insufficient Evidence, then rate Non-Negotiable 2 as Does Not Meet. Check the final rating.
Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)**

Before moving to Alignment Criterion 1, record the final Meets or Does Not Meet rating in the Evaluation Summary.

(Reviewer only.)

Yes! ____Meets

____Does Not Meet

Strengths/Weaknesses:

There is multiple evidence, as outlined above, that this programs is strong when it comes to focusing on the major work of second grade and the CCSS.

Now continue by evaluating the Alignment Criterion 1 for Rigor and Balance.

Directions for Alignment Criterion 1

Rigor and Balance

9. Materials are carefully evaluated by qualified individuals, whose names are listed, in an effort to ensure freedom from mathematical errors and course-level appropriateness.	**Evidence-** **The authors of this program are listed with their credentials. The reviewers and field test teachers are also listed with their titles. It appears that these are qualified teachers, professors, instructional coaches, interventionists, and principals.**	**(Reviewer only.)** **Yes _____ Yes** **_____ No**
10. The visual design supports students in engaging thoughtfully with the subject. Navigation through the text is clear.	**Evidence-** **The students work is visually appealing with text clearly and the sections labeled. There are graphs, pictures, models, and so on used to support students learning.**	**(Reviewer only.)** **Yes _____ Yes** **_____ No**
11. The materials engage parents in appropriate ways. For example, homework assignments in elementary grades, consist of routine problems, practice with getting answers, and fluency-building exercises that parents can easily support.	**Evidence-** **There is daily homework included in this programs, each contains questions from the lesson, problem solving, and then spiral review questions.**	**(Reviewer only.)** **Yes _____ Yes** **_____ No**

Alignment Criterion 1: Rigor and Balance **Materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.** The Standards set expectations for attention to all three aspects of rigor: conceptual understanding, procedural skill and fluency, and applications. Thus, materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.	**Required Materials** • Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf) • Focus by Grade Level for the grade being evaluated (achievethecore.org/focus) • Situation Types for the Operations in Word Problems (achievethecore.org/situation-types) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion:** Alignment Criterion 1 is rated as Meets or Does Not Meet. To rate Alignment Criterion 1, first rate metrics 1A, 1B, and 1C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). For each metric, guiding questions are provided to aid in gathering evidence. Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 1 if the materials rate 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as rigor and balance, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.
Metric AC1A: **The materials support the development of students' conceptual understanding of key mathematical concepts, especially where called for in specific content Standards or cluster headings.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Major Work for the grade being evaluated that relate specifically conceptual understanding to use throughout the questions associated with this metric. NOTE: Some examples of clusters or Standards that call for conceptual understanding include: K.OA.A.1, (1.NBT.B, 1.NBT.C), (2.NBT.A, 2.NBT.B), (3.OA.A.1, 3.OA.A.2), 4.NF.A, (4.NBT.A, 4.NBT.B), 5.NF.B, (5.NBT.A, 5.NBT.B), 6.RP.A, 6.EE.A.3, 7.NS.A, 7.EE.A, 8.EE.B, 8.F.A, 8.G.A Clusters or Standards grouped by parentheses are closely connected and could be analyzed together. For context, read Criterion #4a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	-Choose a cluster/Standard from the Major Work that is aligned to each aspect of rigor and use it to evaluate these metrics. It is most helpful if the same clusters/Standards are chosen for all of the programs being evaluated. (Guidance in choosing clusters/Standards is included in "How to Find the Evidence".)	**Use the questions for AC Metric 1A to evaluate Metric 1A. Record evidence for each question and rate Metric 1A.** **Yes! ____Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**

Is conceptual understanding attended to thoroughly where the Standards set explicit expectations for understanding or interpreting? Evaluate lessons, chapter/unit assessments and homework assignments, paying attention to work aligned to Standards that explicitly call for understanding or interpreting. NOTE: Examples of evaluating this Criterion might include looking at how well the multi-digit addition and subtraction algorithms are developed and explained on the basis of place value and properties of operations; or how well the multi-digit multiplication and division algorithms are developed and explained on the basis of place value and properties of operations; or how well solving equations is presented and explained as a process of reasoning.	**Evidence-** **- 2.NBT "<u>Understand</u> that the three digits of a three-digit number represent amounts of hundreds, tens, and ones..."** Lesson 1.1 Groups Tens as Hundreds Lesson 2.2 Explore 3-Digit Numbers Lesson 2.3 Model 3-Digit Numbers Lesson 2.4 Hundreds, Tens, and Ones Lesson 2.5 Place Value to 1,000 Lesson 2.6 Number Names Lesson 2.7 Different Forms of Numbers Lesson 2.8 Different Ways to Show Numbers	
Do the materials feature high-quality conceptual problems and conceptual discussion questions? Evaluate lessons, chapter/unit assessments, and homework assignments. NOTE: Example of conceptual problems might include such questions as "Find a number greater than 1/5 and less than 1/4," or "If the divisor does not change and the dividend increases, what happens to the quotient?"	**Evidence-** For example, lesson 2.3 from above, has a question that asks the student "There are 2 boxes of 100 pencils and some single pencils on the table. Choose all the numbers that could show how many pencils could be on the table." There are two answers that could be correct and two that could not be correct.	
Do the materials feature opportunities to identify correspondences across mathematical representations? Evaluate lessons, chapter/unit assessments and homework assignments. NOTE: Examples of evaluating this Criterion might include looking at whether students are supported in identifying correspondences among: the verbal description of a situation, the diagrams that distill its mathematical features, and the equations that model it; or equivalent forms of numbers (e.g., 3 and 6/2) and the number line; or rational number operations and representations of them via models such as the vector model; or the expression that defines a function and the graph that shows the relationship.	**Evidence-** For example, lesson 2.3 from above, has questions that ask students to write the number for a verbal description of a model. "Write the number for the clue. A model for my number has 2 hundreds blocks, no tens blocks, and 3 ones blocks."	
Metric AC1B: **The materials are designed so that students attain the fluencies and procedural skills required by the Standards.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Major Work for the grade being evaluated that relate specifically to fluency and procedural skill to use throughout the questions associated with this metric. NOTE: Some examples of Standards that call for procedural skill and fluency include: K.OA.A.5, 1.OA.C.6, 2.OA.B.2, 2.NBT.B.5, 3.OA.C.7, 3.NBT.A.2,		**Use the questions for Metric 1B to evaluate Metric 1 B. Record evidence for each question and rate Metric 1B.** **(Reviewer only.)** **Yes! ____Meets (2)**

4.NBT.B.4, 5.[illegible]B.5, 6.NS.B.2, and 6.NS.B.3, 6.EE.A, 7.NS.A, 7.EE.A.1,7.E[illegible]a, 8.EE.C.7, 8.EE.C.8b For context, read Criterion #4b in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).		____Partially Meets (1) ____Does Not Meet (0)
Is progress toward fluency and procedural skill interwoven with students' developing conceptual understanding of the operations in question? Evaluate lessons, chapter/unit assessments, daily routines, and homework assignments for evidence that the development of fluency and procedural skill is supported by conceptual understanding.	**Evidence-** **2.OA.2 <u>Fluently</u> add and subtract within 20 using mental strategies.** Unit 3 covers 'basic facts and relationships of addition and subtraction,' teaching mental math strategies such as using doubles **2.NBT.5 <u>Fluently</u> add and subtract within 100 using strategies based on place value, properties of operations, and/or the relationship between addition and subtraction.** Chapter 4 teaches two-digit addition and chapter 5 teaches two-digit subtraction The "Fluency Builder section" at the beginning of certain lessons in each of these chapters is an additional bonus for students to practice fluency, but in my opinion, is not enough practice. I think students will need more practice (like daily). More practice is available on the online component.	
Are purely procedural problems and exercises present that include cases in which opportunistic strategies are valuable and generic cases that require efficient algorithms present? Evaluate lessons, chapter/unit assessments, daily routines, and homework assignments. NOTE: Examples of problems in which opportunistic strategies are valuable might include the sum 698 + 240 or the system x + y = 1, 2x + 2y = 3. Examples of generic cases that require efficient algorithms might include the sum 8767+2286 or the system 6y + x = x + 3, – x = 1 + 2y.	**Evidence-** Yes, I checked several of the lessons in the chapters listed above, and they all had plenty of purely procedural problems where students could use strategies to solve. For example, lesson 3.5 has students using related facts to solve 4+3 and then 7-3.	
Do the materials in grades K–6 provide repeated practice toward attainment of fluency Standards? Evaluate lessons, daily routines, and homework assignments for evidence of repeated practice toward attainment of the following K–6 Standards that set an explicit expectation of fluent (accurate and reasonably fast) computation: K.OA.A.5, 1.OA.C.6, 2.OA.B.2, 2.NBT.B.5, 3.OA.C.7, 3.NBT.A.2, 4.NBT.B.4, 5.NBT.B.5, 6.NS.B.2, 6.NS.B.3.	**Evidence-** The lessons all appear to have plenty of repeated practice. For example, lesson 3.5, as cited above has 25 problems for students to solve to practice that lesson's concept. Repeated practice is also present on the homework. *Note, there are several more resources (games, flashcards, practice sheets) that came in what appears a separate centers kit and on the online portion, so this is much stronger	

	if these additions are p[illegible]ased.	
Metric AC1C: **The materials are designed so that teachers and students spend sufficient time working with engaging applications, without losing focus on the Major Work of each grade.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Major Work for the grade being evaluated that relate specifically application to use throughout the questions associated with this metric. NOTE: Some examples of clusters or Standards that call for application include: K.OA.A.2, 1.OA.A, 2.OA.A, 3.OA.A.3, 3.OA.D.8, 4.OA.A.3, 4.NF.B.3d, 4.NF.B.4c, 5.NF.B.6, 5.NF.B.7c, 6.RP.A.3, 6.NS.A.1, 6.EE.B.7, 6.EE.C.9, 7.RP.A, 7.NS.A.3, 7.EE.B.3, 8.EE.C.8c, 8.F.B For context, read Criterion #4c in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).		**Use the questions for Metric 1C to evaluate Metric 1C. Record evidence for each question and rate Metric 1C.** **(Reviewer only.)** **Yes! ____Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Are there are single- and multi-step contextual problems, including non-routine problems, that develop the mathematics of the grade, afford opportunities for practice, and engage students in problem solving? Do the problems attend thoroughly to those places in the content Standards where expectations for multi-step and real-world problems are explicit? Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** There are specific problem solving lessons in each chapter. Unit 1, lesson 7 Unit 2, lesson 11 Unit 3, lesson 10 Unit 4, lesson 9 Unit 5, lesson 9, 11 Unit 6, lesson 6 Unit 7, lesson 7 Unit 8, lesson 5 Unit 9, lesson 4 Unit 10, lesson 6 Unit 11, lesson 11 In addition to this, each lesson starts with a single-step "Unlock the Problem" question for students to be guided through problem solving. Furthermore, each lesson contains "Go Deeper" questions which are often two-step and "Think Smarter" questions where students must use what they are learning to solve a related problem.	
Do application problems particularly stress applying the Major Work of the grade? Evaluate lessons, chapter/unit assessments, and homework assignments. NOTE: Examples of evaluating this Criterion might include looking at: how well, by the end of grade 2, students using the materials as designed can represent and solve a full range of one-step addition and subtraction word problems; or how well, by the end of grade 3, students using the materials as designed can	**Evidence-** Chapters 3, 4, 5, 6 are all on addition and subtraction, which is a major work of 2nd grade. Each lesson in each chapter contains several problems to solve via "Unlock the problem – Real	

represent and solve a full range of one-step multiplication and division word problems. Show how well these basic situation types for each operation are carried coherently across the grades, (e.g., with fractions and algebraic expressions); or, in all grades, whether the problems connect concepts, Standards, and domains in ways that are natural and important. For a list of situation types for one-step addition, subtraction, multiplication, and division problems, see Situation Types for the Operations in Word Problems	World" and "Unlock the problem – Applications."	
Does modeling build slowly across K–8, with applications that are relatively simple in earlier grades and when students are encountering new content? In grades 6–8, do the problems begin to provide opportunities for students to make their own assumptions or simplifications in order to model a situation mathematically? Read Standard for Mathematical Practice 4, Model with Mathematics. Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** I viewed the progress of modeling in addition and subtraction. In second grade, they begin with using counters to double, ten frames to made a ten, number bonds to add 3 addends, and squares to practice basic subtractions. It then builds into 2-digit and then further on 3-digit addition and subtraction with place value blocks.	

Alignment Criterion 1: Rigor and Balance

Materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.

AC1 Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 out of 6 points, the Criterion has not been met. Check the final rating.
Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)**

Before moving to Alignment Criterion 2, record the final Meets or Does Not Meet rating in the Evaluation Summary.

(Reviewer only.)

Yes! ____Meets

____Does Not Meet

Strengths/Weaknesses:

Directions for Alignment Criterion 2

Standards for Mathematical Practice

Alignment Criterion 2: Standards for Mathematical Practice

Materials must demonstrate authentic connections between content Standards and practice Standards.

Required Materials:

- Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf)
- Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)

Rating this Criterion
Alignment Criterion 2 is rated as Meets or Does Not Meet.
To rate Alignment Criterion 2, first rate metrics 2A, 2B, and 2C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). For each metric, guiding questions are provided to aid in gathering evidence.
Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will

The Stand require that designers of instructional materials c ect the mathematical practices to mathematical content in instruction. Thus, materials must demonstrate authentic connections between content Standards and practice Standards.	• Focus by Grade Leve e grade being evaluated (www.achievethecore.org/foc • From the materials being evaluated: teacher guides, student texts and workbooks	earn all 6 points; materials are judged ve met Alignment Criterion 2 if the materials e or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as mathematical practices, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.
Metric AC2A: **Materials address the practice Standards in such a way as to enrich the Major Work of the grade; practices strengthen the focus on Major Work instead of detracting from it, in both teacher and student materials.** **How to Find the Evidence:** Familiarize yourself with the Major Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate teacher and student materials for evidence that the mathematical practices support and connect to the focus of the grade. NOTE: Examples of evaluating this Criterion might include looking at whether, in grades K–5, students using the materials are supported to look for and express regularity in repeated reasoning about the addition table, the multiplication table, the properties of operations, the relationship between addition and subtraction or multiplication and division, and the place value system; or whether, in grades 6–8, students using the materials are supported to look for and express regularity in repeated reasoning about proportional relationships and linear functions. For context, read Criterion #8 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013).	**Evidence-** **addition table** not found – big weak spot **multiplication table** (not found in second grade, but not a major work) **the properties of operations** No specific Lessons found – big weak spot **the relationship between addition and subtraction** Lesson 3.5 Relate Addition and Subtraction **The relationship between multiplication and division** (not found in second grade, but not a major work) **Other:** Students use ten frames to break apart numbers to find sums of ten is lesson 3.3. Students use number bonds in lesson 3.4 to add three addends.	**(Reviewer only.)** **____Meets (2)** **Yes ____Partially Meets (1)** **____Does Not Meet (0)**
Metric AC2B: **Materials attend to the full meaning of each practice Standard.** **How to Find the Evidence:** For context, read Criterion #7 and Criterion #9 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).		**Use the questions for Metric 2B to evaluate Metric 2B. Record evidence for each question and rate Metric 2B.** **(Reviewer only.)** **Yes! ____Meets (2)**
Over the course of any given year of instruction, is each mathematical practice Standard meaningfully present in the form of assignments, activities, or problems that stimulate students to develop the habits of mind described in the practice Standard? Evaluate lessons, chapter/ unit assessments, and homework assignments for evidence of each mathematical practice being meaningfully present in instruction.	**Evidence-** The full language of the standards is emphasized through the whole year and are specifically marked in the lessons with red 'mathematical practice' bubble and the number of the mathematical practice. For example, Lesson 1.2 #12 has 'mathematical practice ' red bubble by it and students are asked to use reasoning.	**____Partially Meets (1)** **____Does Not Meet (0)**

Do the materials treat the practice Standards as developing across grades or grade bands? Are the practice Standards in early grades appropriately simple? Do they display an arc of growing sophistication across the grades?	**Evidence-** From what I can tell, yes the practice standards are grade appropriate (this is hard to fully say yes, since I've only looked at two grade levels). For example, the make argument question listed above from lesson 1.2 asks students to use reasoning to figure out the problem "Jacob and Lucas each have the same number of shells. Together they have 16 shells. How many shells do Jacob and Lucas each have?" That is developmentally appropriate for a second grader to use reasoning to solve that problem.	
Are there teacher-directed materials that explain the role of the practice Standards in the classroom and in students' mathematical development? Are alignments to practice Standards accurate?	**Evidence-** Pages PG20-PG22 fully explains the mathematical standards.	
Metric AC2C: **Materials support the Standards' emphasis on mathematical reasoning.** **How to Find the Evidence:** For context, read Criterion #10 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).		**Use the questions for Metric 2C to evaluate Metric 2C. Record evidence for each question and rate Metric 2C.** **(Reviewer only.)** **____Meets (2)** **Yes ____Partially Meets (1)** **____Does Not Meet (0)**
Do the materials support students in constructing viable arguments and critiquing the arguments of others concerning grade-level mathematics that is detailed in the content Standards? Read Standard for Mathematical Practice 3. Evaluate teacher and student materials to ensure that students are given opportunities to reason with grade-level mathematics.	**Evidence-** Each lesson contains "Math talk" bubbles where it asks students to describe or explain a math concept. There are also problems called "Make Arguments" where students must explain (make an argument) in order to fully solve and answer a problem. There are also "Think smarter" questions where a student's work is shown on the paper with an error and students must explain the mistake.	
Do the materials support students in producing not only answers and solutions, but also, in a grade-appropriate way, arguments, explanations, diagrams, mathematical models, etc., especially in the Major Work of the grade? Familiarize yourself with the Major Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate teacher and student materials, to understand the types of work students are expected to produce.	**Evidence-** Yes, I have stated several times above where students are asked to make arguments, write explanations, and well as use models to solve problems.	
Do materials explicitly attend to the specialized language of mathematics? Is the language of argument, problem solving, and mathematical explanations taught rather than assumed? Evaluate teacher and student materials, paying attention to how mathematical language is taught. NOTE: Examples of evaluating this Criterion might include looking at whether students are supported in: basing arguments on definitions; using the method of providing a counterexample; or recognizing that examples alone do not establish a general statement.	**Evidence-** The language of mathematics via the vocabulary is taught at the beginning of each unit. There are plenty of times students are asked to make an argument or write an explanation. However, I did not find where students are specifically taught how to write an argument of explanation.	

Alignment Criterion 2:
Standards for Mathematical Practice

Materials must demonstrate authentic connections between content Standards and practice Standards.

AC2 Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 out of 6 points, the Criterion has not been met. Check the final rating.
Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion.
(Reviewer only.)

Before moving to Alignment Criterion 3, record the final Meets or Does Not Meet rating in the Evaluation Summary.

(Reviewer only.)

____Meets

Yes ____Does Not Meet

Strengths/Weaknesses:

There are multiple times in each unit/chapter where students are asked to make connections in math via math talk, vocabulary, written explanations and so on. It's lacking on having students choose a tool and critique the work/errors/arguments of others. It's also lacking in using addition and subtraction tables and teaching relationships, which is a major work of second grade.

Alignment Criterion 3:
Access to the Standards for All Students

Materials must provide supports for English Language Learners and other special populations.

Because Standards are for all students, alignment requires thoughtful support to ensure all students are able to meet the Standards. Thus, aligned materials must provide supports for English Language Learners and other special populations.

Required Materials:

- Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf)
- Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)
- From the materials being evaluated: teacher guides, student texts and workbooks

Rating this Criterion:
Alignment Criterion 3 is rated as Meets or Does Not Meet.

To rate Alignment Criterion 3, first rate metrics 3A, 3B, and 3C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points).

Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 3 if the materials earn 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as support for special population, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.

Metric AC3A: **Support for English Language Learners and other special populations is thoughtful and helps those students meet the same Standards as all other students. The language in which problems are posed is carefully considered.** **How to Find the Evidence:** Evaluate teacher and student materials, paying attention to supports offered for special populations.	**Evidence-** In each lesson there is a black and green 'ELL' bubble (in the teacher's edition) with a strategy and an explanation of that strategy to develop vocabulary and understanding within the ELL population.	**Reviewer only.)** **Yes ____Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Metric AC3B: **Materials provide appropriate level and type of scaffolding, differentiation, intervention, and support for a broad range of learners with gradual removal of supports, when needed, to allow students to demonstrate their mathematical understanding independently.** **How to Find the Evidence:** Evaluate teacher and student materials, paying attention to whether materials provide differentiation that will lead all learners to engage with on-grade-level content.	**Evidence-** In each lesson there is a reteach lesson (for scaffolding and intervention support) as well as an advanced learns and an enrich section (for differentiation of advanced students). In the teacher edition, there is also the ELL section described above, a common errors box, and also the show what you know check-up previously described to make sure students are ready for the third grade instruction. There is also a (separate) tier 2 and tier 3 intervention books. The online component offer additional help for differentiation.	**Reviewer only.)** **Yes ____Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Metric AC3C: **Design of lessons recommends and facilitates a mix of instructional approaches for a variety of learners such as using multiple representations (e.g., including models, using a range of questions, checking for understanding, flexible grouping, pair-share).** **How to Find the Evidence:** Evaluate teacher materials, noting instructional approaches suggested for whole class and differentiated lessons and activities.	**Evidence-** The addition and subtraction units that I focused my time on evaluating had multiple opportunities for hands-on lessons by modeling with counters, squares, ten frames number bonds, and place value blocks. There's also small group and pair-share instructional approaches.	**Reviewer only.)** **Yes ____Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Alignment Criterion 3: **Access to the Standards for All Students** **Materials must provide supports for English Language Learners and other special populations.** **AC3** Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 points, the Criterion has not been met.		**(Reviewer only.)** **Yes ____Meets** **____Does Not Meet** **Strengths/Weaknesses:**

Check the fin ing. Then, briefly be the strengths and weaknesses of these materials in light of the above Criterion. ewer only.) **Move to the Evaluation Summary and record the final Meets or Does Not Meet rating .**	This programs includes reteac enrichment, ELL support, RtI intervention components, online support, various instructional strategies, use of models and manipulatives.

Once an evaluation for alignment to the Shifts and major features of the CCSS has been conducted using Sections 1-3, it's important to evaluate for overall quality and best practices. A starting list of Indicators of Quality are suggested below. States, districts and others evaluating instructional materials are encouraged to add to this list to ensure materials reflect local contexts. For background information on some of the Indicators of Quality in this section, refer to pp.18–21 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).

Indicators of Quality	Evidence- Give specific examples.	Rating: (Reviewers only.)
1. Lessons are thoughtfully structured and support the teacher in leading the class through the learning paths at hand, with active participation by all students in their own learning and in the learning of their classmates.	**Evidence-** **Each lesson is broken into five parts which instruct the teacher on how to guide and support his/her students through the learning paths.**	**(Reviewer only.)** **Yes_____ Yes** **_____ No**
2. The underlying design of the materials includes both problems and exercises. (In solving problems, students learn new mathematics, whereas in working exercises, students apply what they have already learned to build mastery.) Each problem or exercise has a purpose. **NOTE: This Criterion does not require that the problems and exercises be labeled as such.**	**Evidence-** **Each lesson has guided, as well as on your own section problems for students to solve based on new information learned. Additionally, there's an applications section at the end of the lessons where students have to apply what they have learned in order to solve an exercise.**	**(Reviewer only.)** **Yes _____ Yes** **_____ No**
3. Design of assignments is not haphazard: exercises are given in intentional sequences in order to strengthen students' mathematical understanding.	**Evidence-** **The design of assignments is not haphazard, each lesson has a great flow of sequence and students are building knowledge of knowledge in order to reach a high understanding of the concepts.**	**(Reviewer only.)** **Yes _____ Yes** **_____ No**

4. There are separate teacher materials that support and reward teacher study including, but not limited to: discussion of the mathematics of the units and the mathematical point of each lesson as it relates to the organizing concepts of the unit, discussion on student ways of thinking and anticipating a variety of students responses, guidance on lesson flow, guidance on questions that prompt students thinking, and discussion of desired mathematical behaviors being elicited among students.	**Evidence-** **Each chapter comes with a teacher book. The teacher book contains:** **- guidance on lesson flow (per lesson)** **- suggestions for ELL, reteaching, enrichment, and differentiated instruction** **- interventions** **- math talk prompts** **- common error alerts** **- developing math language** **- teaching for depth** **- daily classroom management**	**(Reviewer only.)** **Yes _____ Yes** **_____ No**
5. Manipulatives suggested in the materials are faithful representations of the mathematical objects they represent and are connected to written methods.	**Evidence-** **Yes manipulatives are often suggested (without being too much) are help the students to visually understand the concepts they are writing.**	**(Reviewer only.)** **Yes _____ Yes** **_____ No**
6. Materials include a variety of curriculum-embedded assessments. Examples include pre-, formative, summative, and self-assessment resources.	**Evidence-** **Each chapter contains a pre, mid, and post test summative assessment. In addition, each lesson contains a formative quick-check assessment for daily intervention and enrichment. Each chapter also contains a performance task.**	**(Reviewer only.)** **Yes _____ Yes** **_____ No**
7. Assessments contain aligned rubrics, answer keys, and scoring guidelines that provide sufficient guidance for interpreting student performance.	**Evidence-** **The summative and formative assessments mentioned above each have a scoring guide that shows teachers where and how to intervene based on which questions were missed, in addition to how to accelerate for high achieving students. The performance task also includes a scoring rubric and samples of student work that received each score.**	**(Reviewer only.)** **Yes _____ Yes** **_____ No**
8. Materials assess student proficiency using methods that are accessible and unbiased, including the use of course-level language in student prompts.	**Evidence-** **Based on the tests I reviewed, the assessments in the chapters are accessible and unbiased and the student at this grade level should be able to understand the language used in student prompts.**	**(Reviewer only.)** **Yes _____ Yes** **_____ No**

Reviewer IMET Evaluation Summary **Title/Level: Second Grade**

Publisher: Houghton Mifflin Court **Copyright: 2015** **ISBN:_____**

Reviewer ID # VF and SJ **Date Review Completed:2/15/2016**

Non-Negotiable Criteria- Each Non-Negotiable must be met in order for the Non-Negotiable Alignment Criteria to be met overall.	
Non-Negotiable 1: Freedom from Obstacles to Focus **Yes! _____ Meets** **_____ Does Not Meet**	**Non- Negotiable 2: Focus and Coherence** **Yes! _____ Meets** **_____ Does Not Meet**
Non-Negotiable Overall: **Yes! _____ Meets** **_____ Does Not Meet**	

Alignment Criteria- Each Alignment Criterion must be met with a sufficient number of points in order for Alignment Criteria to be labeled as "Meets" overall. The more points the materials receive on the Alignment Criteria, the better they are aligned.

Alignment Criterion 1: Rigor and Balance	**Alignment Criterion 2: Standards of Mathematical Practice**	**Alignment Criterion 3: Access to Standards for All Learners**
Points: 6 of 6 possible. **(Materials must receive at least 5 of 6 points to align.)** **Yes_____ Meets** **_____ Does Not Meet**	**Points: 4 of 6 possible.** **(Materials must receive at least 5 of 6 points to align.)** **_____ Meets** **NO _____ Does Not Meet**	**Points: 6 of 6 possible.** **(Materials must receive at least 5 of 6 points to align.)** **Yes _____ Meets** **_____ Does Not Meet**

Alignment Criteria Overall: **_____ Meets No _____ Does Not Meet**		

If the materials meet both Non-Negotiables and relevant Alignment Criterion, they are aligned to the Shifts and major features of Core Standards. **Do the materials meet every Non-Negotiable and Alignment Criterion? _____ Yes NO _____ No**

What are the specific areas of strength and weakness based on this evaluation? Publishers or others modifying or developing assessments can use this information to make improvements and/or to remedy gaps in the alignment of assessment materials.

This program meets all of the non-negotiables and most of the alignment criterion. The program is strong with use of instructional strategies, using manipulatives, vocabulary, ELL support, differentiation, assessment, performance tasks, RtI guides, and homework. The program is lacking in mathematical practices as it is weaker is teaching some addition and subtraction concepts, which is a major work in second grade. It also lacks in critiquing the arguments of others and having students pick their own tools.

2015-16 Mathematics Interim Review Recommendation & Summary

Publisher Name:	Houghton Mifflin Harcourt
Title:	GO Math Grade 3
ISBN #	
Grade Level(s) or Course:	3
Reviewer ID:	VF, DD

RECOMMENDED AS:

__X__ **Core Mathematics Program-** a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials. Substantial evidence clearly supports the designation of this program as Core.

_____ **Other Mathematics Program-** a program that substantially, but partially, meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for supplemental materials. Substantial evidence clearly supports the designation of this program as Other.

_____ **Component Mathematics Program-** a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs. Substantial evidence clearly supports the designation of this program as Component.

_____ **Intervention Program-** a program designed and intended to target and support students' specific needs. Substantial evidence clearly supports the designation of this program as Intervention.

_____ **Does not meet criteria** for recommendation as a Curricular Material or Online Resource for Mathematics.

EVIDENCE SUMMARY: Go Math meets all criterion for a Core Math program

FOCUS- Go Math 3 NN1 + 2 - This program does not assess any listed topics before the grade level and focuses on the major work of third grade

COHERENCE- NN2 - GoMath 3 supports all content clusters with respect of previous and future grade level work.

RIGOR- AC1 - GoMath 3 address understanding and fluency through modeling and problem-solving with rigor and balance.

CONCEPTUAL UNDERSTANDING- AC1 - Go Math 3 addresses conceptual understanding throught each chapter and lesson.

MATHEMATICAL PRACTICES- AC2 - Go Math 3 includes and emphasized all mathematical practices in all chapters and lessons

ACCESSIBILITY OF STANDARDS TO ALL STUDENTS- AC3 - Go Math provided lesson that are clearly explained for studens and teachers with support for all groups of learners and teachers.

OTHER:
The RTI - Tier I and 3 are very supportive of the RTI process as well as ELL students.

2015-16 Interim Mathematics Review

Mathematics Evaluation Tool Grades K-8

Publisher: Houghton, Mifflin, Harcourt

Title of Material: GO Math! 3

Author: Burger, Dixon, Larsen, Sandoval-Martinez, Leonard

ISBN #: _____ **Copyright** 2015

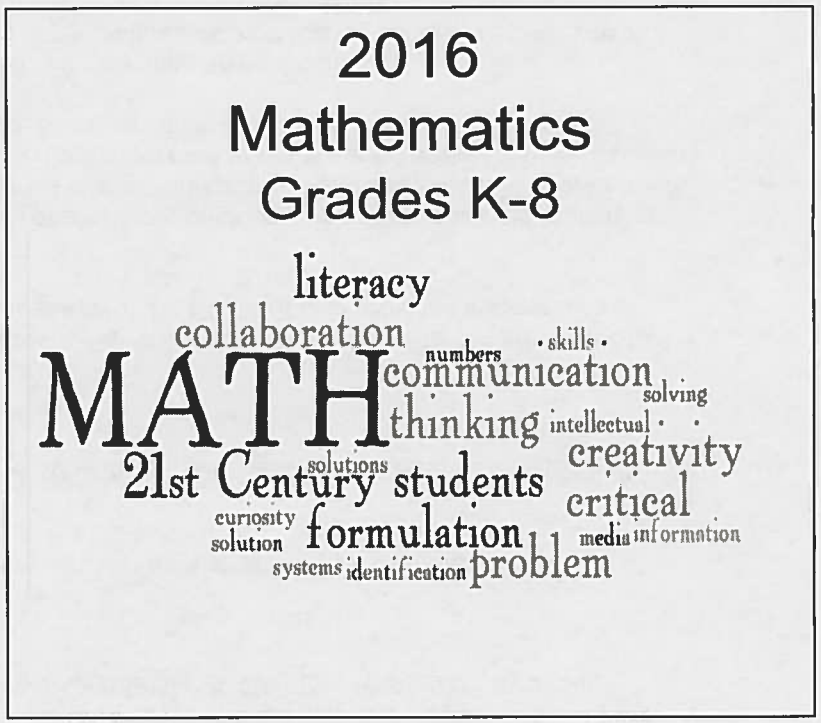
Reviewer ID: Debbie Dawes * VF

Core Mathematics Program- a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Core.

Other Mathematics Program- a program that substantially, but partially, meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Other.

Component Mathematics Program- a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs.
Substantial evidence clearly supports the designation of this program as Component.

Intervention Program- a program designed and intended to target and support students' specific needs.
Substantial evidence clearly supports the designation of this program as Intervention.



- Evaluation Form adapted from Instructional Materials Evaluation Toolkit (IMET).

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Instructional Materials Evaluation Tool

Mathematics, Grades K-8

What Are the Purposes of the IMET?

This Math IMET is designed to help educators determine whether instructional materials are aligned to the Shifts and major features of the Common Core State Standards (CCSS). The substantial instructional Shifts (http://www.corestandards.org/other-resources/key-shifts-inmathematics/) at the heart of the Common Core State Standards are:

- **Focus** strongly where the Standards focus
- **Coherence**: Think across grades and link to major topics within the grade
- **Rigor**: In major topics, pursue conceptual understanding, procedural skill and fluency, and application with equal intensity.

The IMET draws directly from the following documents:

- Common Core State Standards for Mathematics (www.corestandards.org/Math)
- Publishers' Criteria for the Common Core State Standards in Mathematics grade K-8 (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)

When to use the IMET

1. Purchasing materials: Many factors go into local purchasing decisions. Alignment to the Standards is a critical factor to consider. This tool is designed to evaluate alignment of instructional materials to the Shifts and the major features of the CCSS. It also provides suggestions of additional indicators to consider in the materials evaluation and purchasing process.

2. Evaluating materials currently in use: The IMET can be used to analyze the degree of alignment of existing materials and help to highlight specific, concrete flaws in alignment. Even where materials and tools currently in use fail to meet one or more of these criteria, the pattern of failure is likely to be informative. States and districts can use the evaluation to create a thoughtful plan to modify or combine existing resources in such a way that students' actual learning experiences approach the focus, coherence, and rigor of the Standards.

3. Developing programs: Those developing new programs can use this tool as guidance for creating aligned curricula.
Please note this tool was designed for evaluating comprehensive curricula (including any supplemental or ancillary materials), but it was not designed for the evaluation of standalone supplemental materials.

Who Uses the IMET?

Evaluating instructional materials requires both subject-matter and pedagogical expertise. Evaluators should be well versed in the Standards (www.corestandards.org/Math) for all grades in which materials are being evaluated. This includes understanding the Major Work of the grade (www.achievethecore/focus), the Supporting and Additional work, how the content fits into the progressions in the Standards (www.achievethecore.org/progressions), and the expectations of the Standards with respect to conceptual understanding, procedural skill and fluency, and application. Evaluators also should be familiar with the substantial instructional Shifts (http:// www.corestandards.org/other-resources/key-shifts-in-mathematics/) of Focus, Coherence and Rigor that are listed above.

Getting Started

Prior to Evaluation

Assemble all of the materials necessary for the evaluation. It is essential for evaluators to have materials for all grades covered by the program, as some criteria cannot be rated without having access to each grade. In addition, each evaluator should have a reference copy of the Common Core State Standards for Mathematics (CCSSM) and the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013).

5-16 Interim Mathematics Review

Mathematics Evaluation Tool Grades K-8

Publisher: Houghton Mifflin Harcourt

Title of Material: Go Math! Third Grade

Author: Burger, Dixon, Larson, Sandoval-Martinez, Leinwand

ISBN #: _____ **Copyright:** 2015

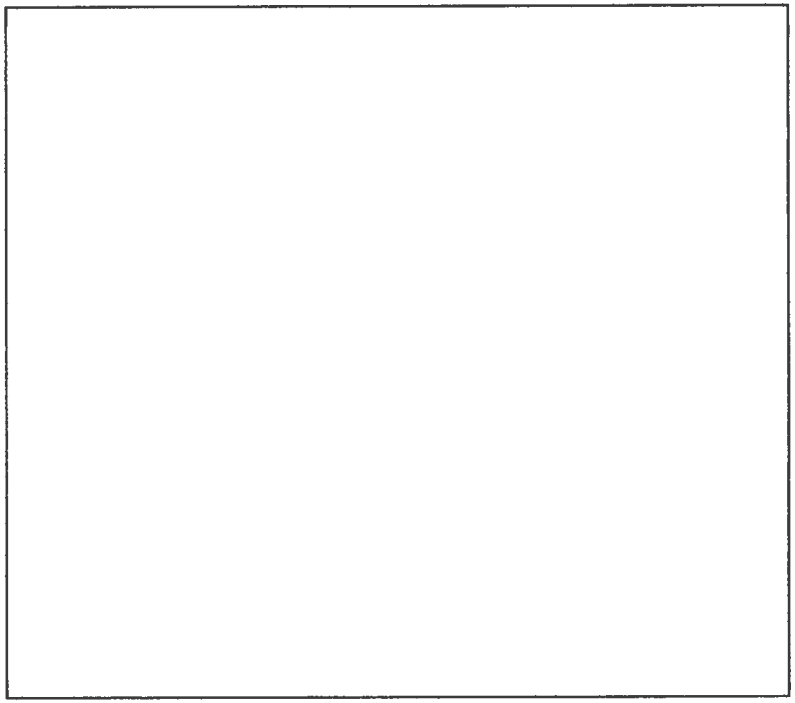
Reviewer ID: VF and DD

Core Mathematics Program- a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Core.

Other Mathematics Program- a program that substantially, but partially, meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Other.

Component Mathematics Program- a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs.
Substantial evidence clearly supports the designation of this program as Component.

Intervention Program- a program designed and intended to target and support students' specific needs.
Substantial evidence clearly supports the designation of this program as Intervention.



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Instructional Materials Evaluation Tool

Mathematics, Grades K-8

What Are the Purposes of the IMET?

This Math IMET is designed to help educators determine whether instructional materials are aligned to the Shifts and major features of the Common Core State Standards (CCSS). The substantial instructional Shifts (http://www.corestandards.org/other-resources/key-shifts-inmathematics/) at the heart of the Common Core State Standards are:

- **Focus** strongly where the Standards focus
- **Coherence**: Think across grades and link to major topics within the grade
- **Rigor**: In major topics, pursue conceptual understanding, procedural skill and fluency, and application with equal intensity.

The IMET draws directly from the following documents:

- Common Core State Standards for Mathematics (www.corestandards.org/Math)
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2. Evaluating materials currently in use: The IMET can be used to analyze the degree of alignment of existing materials and help to highlight specific, concrete flaws in alignment. Even where materials and tools currently in use fail to meet one or more of these criteria, the pattern of failure is likely to be informative. States and districts can use the evaluation to create a thoughtful plan to modify or combine existing resources in such a way that students' actual learning experiences approach the focus, coherence, and rigor of the Standards.

3. Developing programs: Those developing new programs can use this tool as guidance for creating aligned curricula.
Please note this tool was designed for evaluating comprehensive curricula (including any supplemental or ancillary materials), but it was not designed for the evaluation of standalone supplemental materials.

Who Uses the IMET?

Evaluating instructional materials requires both subject-matter and pedagogical expertise. Evaluators should be well versed in the Standards (www.corestandards.org/Math) for all grades in which materials are being evaluated. This includes understanding the Major Work of the grade (www.achievethecore/focus), the Supporting and Additional work, how the content fits into the progressions in the Standards (www.achievethecore.org/progressions), and the expectations of the Standards with respect to conceptual understanding, procedural skill and fluency, and application. Evaluators also should be familiar with the substantial instructional Shifts (http:// www.corestandards.org/other-resources/key-shifts-in-mathematics/) of Focus, Coherence and Rigor that are listed above.

Getting Started

Prior to Evaluation

Assemble all of the materials necessary for the evaluation. It is essential for evaluators to have materials for all grades covered by the program, as some criteria cannot be rated without having access to each grade. In addition, each evaluator should have a reference copy of the Common Core State Standards for Mathematics (CCSSM) and the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013).

	various lessons fro rious units) Unit 1: Addition and Subtraction Within 1000 (specifically lesson 12) Unit 3: Understand Multiplication (specifically lesson 4) Unit 4: Multiplication Facts and Strategies(specifically lesson 10) Unit 5: Use Multiplication Facts (specifically lesson 3) Unit 6: Understand Division (specifically lesson 1) Unit 7: Division Facts and Strategies (specifically lesson 10)	
Metric NN2B: **Supporting Work, where present, enhances focus and coherence simultaneously by also engaging students in the Major Work of the grade.** **How to Find the Evidence:** Familiarize yourself with the Major Work and Supporting Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate chapters and lessons that focus on Supporting Work. NOTE: Example of evaluating this Criterion might include looking at whether materials for K–5 generally treat data displays as an occasion for solving grade-level word problems using the four operations (e.g., see 3.MD.B.3); or whether materials for grade 7 take advantage of opportunities to use probability to support ratios, proportions, and percentages. For context, read Criterion #3 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** **Supporting clusters are sufficiently covered by units and they support the major clusters of third grade.** **- Represent and Interpret Data:** Unit 2: Represent and Interpret Data **- Reason with shapes and their attributes** Unit 12: Two-Dimensional Shapes	**(Reviewer only.)** **Yes! ____Meets** **____Does Not Meet/** **Insufficient Evidence**
Metric NN2C: **Materials base content progressions on the grade-by-grade progressions in the Standards. Content from previous or future grades does not unduly interfere with or displace on-grade-level content.** **How to Find the Evidence:** Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, and lessons in both student and teacher materials. NOTE: In some cases it may be possible that aligned materials might address some aspects of a topic in a strategic way before or after the grade level in which the topic is central in the Standards' progressions; for example, a curriculum author might purposefully choose to explore adding fractions with unlike denominators in a way appropriate to grade four, recognizing that this work is not really required until the next grade. However, any such purposeful	**Evidence-** **After thoroughly reviewing the curriculum, I found no discrepancies in the content progression that unduly interfered with grade level content.** **There was a couple times where further grade level concepts were strategically placed. For example, in fractions where students had to find ¼ of 12. This meets the third grade standard of understanding of fraction as a whole partitioned into equal parts, but also develops a base for multiplication of fractions, which is a fourth grade standard.**	**(Reviewer only.)** **Yes! ____Meets** **____Does Not Meet/** **Insufficient Evidence**

discrepancies; content progressions should enhance the required learning in each grade; not unduly interfere with or displace grade-level content; and be clearly aimed at helping students meet the Standards as written rather than effectively rewriting the progressions in the Standards. And in all cases, note that Non-Negotiable 1 must be met for materials to be aligned. For context, read Criterion #5a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).		
Metric NN2D: **Materials give all students extensive work with on-grade-level problems.** **How to Find the Evidence:** Evaluate both student and teacher materials. If the materials provide resources for differentiated learning, consider whether lower-performing students have opportunities to engage with grade-level problems. Also consider whether higher-performing students are given opportunities to learn current grade-level content in greater depth. For context, read Criterion #5b in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** **Each lesson of each unit contains on-grade level real world problems to solve that align with the skills stated in the CCSS. In addition, many of the lessons contain 'think smarter' questions which give students the opportunity to problem solve with grade-level problems. Each lesson in each unit contains a reteaching and enrichment pages for differentiated instruction. The reteaching pages still contain on-grade-level problems for lower-performing students to engage in with the guidance of the teacher. The enrichment pages take an on-grade level problem and give the higher-performing students the opportunity to take the day's lesson and go deeper. For example, in Unit 4 lesson 2 the students are working with 'multiply with 5 and 10.' There are two on-grade-level real world math problems to solve, in addition to 29 more grade level problems. There are two think smarter questions where the students are still multiplying with 5 and 10, but then have to solve more than one multiplication fact, and then add one of them in order to solve. There are also two go deeper questions where the students have to problems with multiple steps. The reteaching page has students still working with on-grade-level problems to multiply, but with the guidance of teacher and using colored tiles for support. The enrich page has higher-performing students solving missing number equations involving multiplying with 5 and 10.**	**(Reviewer only.)** **Yes! ____Meets** **____Does Not Meet/** **Insufficient Evidence**

Metric NN2: **Materials relate on-grade-level concepts explicitly to prior knowledge from earlier grades.** **How to Find the Evidence:** Evaluate both student and teacher materials. NOTE: Examples of evaluating this Criterion might include looking at the way the materials extend basic ideas of place value across the decimal point; or the role that properties of operations play when the materials extend arithmetic beyond whole numbers to fractions, variables, and expressions. More generally, cluster headings in the Standards sometimes signal key moments where reorganizing and extending previous knowledge is important in order to accommodate new knowledge (e.g., see cluster headings that use the phrase "Apply and extend previous understanding"). For context, read Criterion #5c in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** **There are no cluster headings in third grade that specifically state for students to "apply and extend previous understanding."** **Each unit begins with a "show what you know" check-up that assesses skills from second grade. Teachers can use this diagnostic assessment to intervene with students who have yet to meet second grade standards.** **Each lesson, in the "lesson at a glance" section contains a "coherence" chart showing the concepts (and standards) from the previous grade, for this lesson, and the link to the after (4th grade). Example, p. 223 A (Lesson 4.6) shows:** **Standards before: 2.NBT.A.2** **Grade 3: 3.OA.B.5** **Grades After: 4.NBT.B.5**	(Reviewer only.) **Yes! ____Meets** **____Does Not Meet/** **Insufficient Evidence**
Metric NN2F: **Review of material from previous grades is clearly identified as such to the teacher, and teacher and students can see what their specific responsibility is for the current year.** **How to Find the Evidence:** Evaluate the table of contents, but do not stop there; also evaluate units, chapters, lessons, homework assignments and assessments. (Evaluate both student and teacher materials.) Identify any content from previous grades and check whether it is identified as such. For context, read Criterion #5a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** **Each unit begins with a "show what you know" check up that assesses skills from second grade. Teachers can use this diagnostic assessment to intervene with students who have yet to meet second grade standards.** **Each lesson, in the "lesson at a glance" section contains a "coherence" chart showing the concepts (and standards) from the previous grade, for this lesson, and the link to the after (4th grade). Example, p. 223 A (Lesson 4.6) shows:** **Standards before: 2.NBT.A.2** **Grade 3: 3.OA.B.5** **Grades After: 4.NBT.B.5**	(Reviewer only.) **Yes! ____Meets** **____Does Not Meet/** **Insufficient Evidence**
Metric NN2G: **Materials include learning objectives that are visibly shaped by CCSSM cluster headings.** **How to Find the Evidence:** Select several clusters from the Major Work in the grade being evaluated. Evaluate teacher and student materials in relation to these clusters. For context, read Criterion #6a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** **Each lesson has a "lesson at a glance" section that states the CCSSM as well as the learning objective. Nine units in the third grade curriculum focus on the major work clusters. For example, lesson 4.6 states that it meets the CCSS 3.OA.B.5. Apply properties of operations as strategies to multiply and divide. The learning objective is 'Use the Associative Property of Multiplication to multiply with three factors.'** **Each unit has a "critical area" section at the beginning**	(Reviewer only.) **Yes! ____Meets** **____Does Not Meet/** **Insufficient Evidence**

	of the chapter the s[illegible]s the major clusters met by each lesson. For example, Unit 4 states the critical area met by the unit is "Developing understanding of multiplication and division and strategies for multiplication and division within 100." It then breaks down Lessons 4.1-4.3 meet the major cluster "represent and solve problems involving multiplication and division." Lessons 4.4 and 4.6 meet the major cluster "Understand properties of multiplication and the relationship between multiplication and division.' Lessons 4.5, 4.8, 4.9 meet the major cluster "multiply and divide within 100." Lesson 4.7, 4.10 meet the major cluster "solve problems involving the four operations, and identify and explain patterns in arithmetic."	
Metric NN2H: **Materials include problems and activities that serve to connect two or more clusters in a domain, or two or more domains in a grade, in cases where these connections are natural and important.** **How to Find the Evidence:** In the grade being evaluated, choose two or more clusters or two or more domains for which connections are natural and important. Evaluate the units, chapters, and lessons that deal with the chosen topics, looking for problems and activities that serve to connect the chosen clusters or domains. NOTE: An example of evaluating this Criterion might include looking at whether problems in grade 4 sometimes or often involve students applying their developing computation skills (detailed in domain NBT) in the context of solving word problems (detailed in domain OA). For context, read Criterion #6b in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** **Example of a connection between clusters in a domain:** In chapter 3, understanding multiplication, students spend lessons 3.1-3.5 in the OA cluster "Represent and solve problems involving multiplication and division" by counting equals groups, using repeated addition, skip counting on a number line, and modeling with Arrays. Then it naturally moves students into the OA cluster "understand properties of multiplication" by having students use the multiplication strategies in lessons 3.1-3.5 to solve problems using the commutative property of multiplication in lesson 3.6. **Example of a connection between domains:** Student spend lesson 3.5 'modeling multiplication with arrays' and lesson 4.4 'breaking apart arrays' in the cluster "represent and solve problems involving multiplication and division" in the Operation and Algebraic Thinking Domain. Then, students use these array concepts to understand, measure, model, and problem solve with area in chapter 11, lessons 11.4-11.8 which is in the "Geometric measurement: understand concepts of area and relate area to multiplication and to addition" cluster of the Measurement and Data Domain.	**(Reviewer only.)** **Yes! ____Meets** **____Does Not Meet/** **Insufficient Evidence**
Non-Negotiable 2: **Focus and Coherence** **Materials must focus coherently on the Major Work of the grade in a way that is consistent with the progressions in the Standards.** **NN 2** If all Metrics 2A – 2H were rated as Meets, then rate Non-Negotiable 2 as Meets. If one or more Metric was rated Does Not Meet/Insufficient Evidence, then rate Non-Negotiable 2 as Does Not Meet. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)**		**(Reviewer only.)** **Yes! ____Meets** **____Does Not Meet** **Strengths/Weaknesses:**

Before moving to Alignment Criterion 1, record the final Meets or Does Not Meet rating in the Evaluation Summary.	**There is multiple evidence, as outlined above, that this programs is strong when it comes to focusing on the major work of third grade and the CCSS.**

Now continue by evaluating the Alignment Criterion 1 for Rigor and Balance.

Directions for Alignment Criterion 1

Rigor and Balance

Alignment Criterion 1: Rigor and Balance

Materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.

The Standards set expectations for attention to all three aspects of rigor: conceptual understanding, procedural skill and fluency, and applications. Thus, materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.

Required Materials

- Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf)
- Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)
- Focus by Grade Level for the grade being evaluated (achievethecore.org/focus)
- Situation Types for the Operations in Word Problems (achievethecore.org/situation-types)
- From the materials being evaluated: teacher guides, student texts and workbooks

Rating this Criterion:

Alignment Criterion 1 is rated as Meets or Does Not Meet.

To rate Alignment Criterion 1, first rate metrics 1A, 1B, and 1C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). For each metric, guiding questions are provided to aid in gathering evidence.

Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 1 if the materials rate 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as rigor and balance, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.

Metric AC1 **The materials support the development of students' conceptual understanding of key mathematical concepts, especially where called for in specific content Standards or cluster headings.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Major Work for the grade being evaluated that relate specifically conceptual understanding to use throughout the questions associated with this metric. NOTE: Some examples of clusters or Standards that call for conceptual understanding include: K.OA.A.1, (1.NBT.B, 1.NBT.C), (2.NBT.A, 2.NBT.B), (3.OA.A.1, 3.OA.A.2), 4.NF.A, (4.NBT.A, 4.NBT.B), 5.NF.B, (5.NBT.A, 5.NBT.B), 6.RP.A, 6.EE.A.3, 7.NS.A, 7.EE.A, 8.EE.B, 8.F.A, 8.G.A Clusters or Standards grouped by parentheses are closely connected and could be analyzed together. For context, read Criterion #4a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	-Choose a cluster/Stan rom the Major Work that is aligned to each aspect of rigor and use i evaluate these metrics. It is most helpful if the same clusters/Standards are chosen for all of the programs being evaluated. (Guidance in choosing clusters/Standards is included in "How to Find the Evidence".)	**Use the questions for AC Metric 1A valuate Metric 1A. Record evidence for eac estion and rate Metric 1A.** **Yes! ____Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Is conceptual understanding attended to thoroughly where the Standards set explicit expectations for understanding or interpreting? Evaluate lessons, chapter/unit assessments and homework assignments, paying attention to work aligned to Standards that explicitly call for understanding or interpreting. NOTE: Examples of evaluating this Criterion might include looking at how well the multi-digit addition and subtraction algorithms are developed and explained on the basis of place value and properties of operations; or how well the multi-digit multiplication and division algorithms are developed and explained on the basis of place value and properties of operations; or how well solving equations is presented and explained as a process of reasoning.	**Evidence-** **- 3.OA "Understand properties of multiplication and the relationship between multiplication and division."** Lesson 3.6 Commutative Property of Multiplication Lesson 4.4 Distributive Property Lesson 4.6 Associative Property of Multiplication Lesson 5.3 Problem Solving Use the Distributive Property Lesson 6.7 Relate Multiplication and Division Lesson 6.8 Write related multiplication and division facts **3.NBT "Use place value understanding and properties of operations to perform multi-digit arithmetic."** Unit 1 – all lessons meet fluently add and subtract within 1000 Lesson 1.3 Estimate Sums Lesson 1.7 Use Place Value to Add Lesson 1.8 Estimate Differences Lesson 1.10 Use Place Value to Subtract Lesson 1.11 Combine Place Values to Subtract Lesson 5.4multiplication strategies with multiples of 10	

	Lesson 5.5 Multiply digit numbers by multiples of 10 **3.NF "Develop <u>understanding</u> of fractions as numbers."** Unit 8 – all lessons Unit 9 – all lessons **3.MD "Geometric measurement: <u>understand</u> concepts of area and relate area to multiplication and to addition."** Lesson 11.4 Understand Area Lesson 11.5 Measure Area Lesson 11.6 Use Area Models Lesson 11.7 Problem Solving Areaa of Rectangles Lesson 11.8 Area of combined Rectangles	
Do the materials feature high-quality conceptual problems and conceptual discussion questions? Evaluate lessons, chapter/unit assessments, and homework assignments. NOTE: Example of conceptual problems might include such questions as "Find a number greater than 1/5 and less than 1/4," or "If the divisor does not change and the dividend increases, what happens to the quotient?"	**Evidence-** For example, lesson 5.5 from above, has a question that asks the student to find a 2-digit number that is a multiple of 10 and has 3 for one of its factors. There are three correct answers the students could find, and then students need to explain how they can solve the problem.	
Do the materials feature opportunities to identify correspondences across mathematical representations? Evaluate lessons, chapter/unit assessments and homework assignments. NOTE: Examples of evaluating this Criterion might include looking at whether students are supported in identifying correspondences among: the verbal description of a situation, the diagrams that distill its mathematical features, and the equations that model it; or equivalent forms of numbers (e.g., 3 and 6/2) and the number line; or rational number operations and representations of them via models such as the vector model; or the expression that defines a function and the graph that shows the relationship.	**Evidence-** For example, lesson 5.5 from above, has a question that asks students to use multiplying by 10 (the concept of the lesson) to answer questions from a table. Students will have to find a relationship between numbers in the table. This concept further stretches the relationships in numbers that they which they were taught to do in lesson 4.7 'patterns on the multiplication table' and in 1.1 number patterns.	
Metric AC1B: **The materials are designed so that students attain the fluencies and procedural skills required by the Standards.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Major Work for the grade being evaluated that relate specifically to fluency and procedural skill to use throughout the questions associated with this		**Use the questions for Metric 1B to evaluate Metric 1 B. Record evidence for each question and rate Metric 1B.** **(Reviewer only.)** **Yes ____Meets (2)**

metric. NOTE: Some examples of Standards that call for procedural skill and fluency include: K.OA.A.5, 1.OA.C.6, 2.OA.B.2, 2.NBT.B.5, 3.OA.C.7, 3.NBT.A.2, 4.NBT.B.4, 5.NBT.B.5, 6.NS.B.2, and 6.NS.B.3, 6.EE.A, 7.NS.A, 7.EE.A.1,7.EE.B.4a, 8.EE.C.7, 8.EE.C.8b For context, read Criterion #4b in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).		____Partially Meets (1) ____Does Not Meet (0)
Is progress toward fluency and procedural skill interwoven with students' developing conceptual understanding of the operations in question? Evaluate lessons, chapter/unit assessments, daily routines, and homework assignments for evidence that the development of fluency and procedural skill is supported by conceptual understanding.	**Evidence-** **3.OA.7 <u>Fluently</u> multiply and divide within 100** Unit 3, 4, 5, 6, 7 are all on multiplication and division. Specifically chapter 4 covers 'multiplication facts and strategies,' chapter 5 covers 'use multiplication facts,' and chapter 6 covers 'division facts and strategies,' all which focus on giving students strategies to fluently multiply and divide. **3.NBT.2 <u>Fluently</u> add and subtract within 1000** Chapter 1 covers addition and subtraction within 1,000 students use place value and properties to add. The "Fluency Builder section" at the beginning of certain lessons in each of these chapters is an additional bonus for students to practice fluency, but in my opinion, is not enough practice. I think students will need more practice. The online components have daily fluency practice worksheets in the teacher's section. The triangle cards that come in the manipulatives boxes are fluency practice as well.	
Are purely procedural problems and exercises present that include cases in which opportunistic strategies are valuable and generic cases that require efficient algorithms present? Evaluate lessons, chapter/unit assessments, daily routines, and homework assignments. NOTE: Examples of problems in which opportunistic strategies are valuable might include the sum 698 + 240 or the system $x + y = 1$, $2x + 2y = 3$. Examples of generic cases that require efficient algorithms might include the sum 8767+2286 or the system $6y + x = x + 3$, $-x = 1 + 2y$.	**Evidence-** Yes, I checked several of the lessons in the chapters listed above, and they all had plenty of purely procedural problems where students could use strategies to solve. For example, lesson 1.5 has students use strategies to solve 13+26+54 and 57+62+56+43.	

Do the materi[illegible] grades K–6 provide repeated practice toward attainment of [illegible]cy Standards? Evaluate lessons, daily routines, and homework assignments for evidence of repeated practice toward attainment of the following K–6 Standards that set an explicit expectation of fluent (accurate and reasonably fast) computation: K.OA.A.5, 1.OA.C.6, 2.OA.B.2, 2.NBT.B.5, 3.OA.C.7, 3.NBT.A.2, 4.NBT.B.4, 5.NBT.B.5, 6.NS.B.2, 6.NS.B.3.	**Evidence-** The lessons all appear to have plenty of repeated practice. For example, lesson1.5, as cited above has 13 problems for students to solve to practice that lesson's concept. Repeated practice is also present on the homework. *Note, there are several more resources (games, flashcards, practice sheets) that came in what appears a separate centers kit and on the online portion, so this is much stronger if these additions are purchased.	
Metric AC1C: **The materials are designed so that teachers and students spend sufficient time working with engaging applications, without losing focus on the Major Work of each grade.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Major Work for the grade being evaluated that relate specifically application to use throughout the questions associated with this metric. NOTE: Some examples of clusters or Standards that call for application include: K.OA.A.2, 1.OA.A, 2.OA.A, 3.OA.A.3, 3.OA.D.8, 4.OA.A.3, 4.NF.B.3d, 4.NF.B.4c, 5.NF.B.6, 5.NF.B.7c, 6.RP.A.3, 6.NS.A.1, 6.EE.B.7, 6.EE.C.9, 7.RP.A, 7.NS.A.3, 7.EE.B.3, 8.EE.C.8c, 8.F.B For context, read Criterion #4c in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).		**Use the questions for Metric 1C to evaluate Metric 1C. Record evidence for each question and rate Metric 1C.** **(Reviewer only.)** **Yes ____Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Are there are single- and multi-step contextual problems, including non-routine problems, that develop the mathematics of the grade, afford opportunities for practice, and engage students in problem solving? Do the problems attend thoroughly to those places in the content Standards where expectations for multi-step and real-world problems are explicit? Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** There are specific problem solving lessons in each chapter. Unit 1, lesson 12 Unit 2, lesson 1 Unit 3, lesson 4 Unit 4, lesson 10 Unit 5, lesson 3 Unit 6, lesson 1 Unit 7, lesson 10 Unit 8, lesson 9 Unit 9, lesson 1 Unit 10, lesson 5 Unit 11, lesson 7 Unit 12, lesson 8 In addition to this, each lesson starts with a single-step "Unlock the Problem" question for students to be guided through problem solving. Furthermore, each lesson contains "Go Deeper" questions which are often multi-step and "Think Smarter" questions where students must use what they are learning to solve a related problem.	

Do application problems particularly stress applying the Major Work of the grade? Evaluate lessons, chapter/unit assessments, and homework assignments. NOTE: Examples of evaluating this Criterion might include looking at: how well, by the end of grade 2, students using the materials as designed can represent and solve a full range of one-step addition and subtraction word problems; or how well, by the end of grade 3, students using the materials as designed can represent and solve a full range of one-step multiplication and division word problems; or how well these basic situation types for each operation are carried coherently across the grades, (e.g., with fractions and algebraic expressions); or, in all grades, whether the problems connect concepts, Standards, and domains in ways that are natural and important. For a list of situation types for one-step addition, subtraction, multiplication, and division problems, see Situation Types for the Operations in Word Problems	**Evidence-** Chapters 3, 4, 5, 6, 7 are all on multiplication and division, which is a major work of 3rd grade. Each lesson in each chapter contains several problems to solve via "Unlock the problem – Real World" and "Unlock the problem – Applications."	
Does modeling build slowly across K–8, with applications that are relatively simple in earlier grades and when students are encountering new content? In grades 6–8, do the problems begin to provide opportunities for students to make their own assumptions or simplifications in order to model a situation mathematically? Read Standard for Mathematical Practice 4, Model with Mathematics. Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** I viewed the progress of modeling in multiplication and division. In second grade, students use equal groups and repeated addition to begin modeling multiplication. They them repeat these two in third grade and build off of it to model multiplication with equal groups, repeated addition, skip counting, and arrays. They take it further into division by modeling division with equal groups, bar models, and arrays.	

Alignment Criterion 1: Rigor and Balance

Materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.

AC1 Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 out of 6 points, the Criterion has not been met. Check the final rating.
Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)**

Before moving to Alignment Criterion 2, record the final Meets or Does Not Meet rating in the Evaluation Summary.

(Reviewer only.)

Yes ____Meets

____Does Not Meet

Strengths/Weaknesses:

This program is full of real world problems, think smarter, and go deeper questions in order for students to meet the standards' rigorous expectations.

Directions for Alignment Criterion 2

Standards for Mathematical Practice

Alignment Criterion 2: Standards for Mathematical Practice **Materials must demonstrate authentic connections between content Standards and practice Standards.** The Standards require that designers of instructional materials connect the mathematical practices to mathematical content in instruction. Thus, materials must demonstrate authentic connections between content Standards and practice Standards.	**Required Materials:** • Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf) • Focus by Grade Level for the grade being evaluated (www.achievethecore.org/focus) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion** Alignment Criterion 2 is rated as Meets or Does Not Meet. To rate Alignment Criterion 2, first rate metrics 2A, 2B, and 2C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). For each metric, guiding questions are provided to aid in gathering evidence. Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 2 if the materials earn 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as mathematical practices, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.
Metric AC2A: **Materials address the practice Standards in such a way as to enrich the Major Work of the grade; practices strengthen the focus on Major Work instead of detracting from it, in both teacher and student materials.** **How to Find the Evidence:** Familiarize yourself with the Major Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate teacher and student materials for evidence that the mathematical practices support and connect to the focus of the grade. NOTE: Examples of evaluating this Criterion might include looking at whether, in grades K–5, students using the materials are supported to look for and express regularity in repeated reasoning about the addition table, the multiplication table, the properties of operations, the relationship between addition and subtraction or multiplication and division, and the place value system; or whether, in grades 6–8, students using the materials are supported to look for and express regularity in repeated reasoning about proportional relationships and linear functions. For context, read Criterion #8 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013).	**Evidence-** **addition table** (not found in third grade, but not a major work) **multiplication table** Lesson 4.7 patterns on the multiplication table **the properties of operations** Lesson 1.5 use properties to add Lesson 3.6 Commutative property of multiplication Lesson 4.4 Distributive property Lesson 4.6 Associative property of multiplication **the relationship between addition and subtraction** (not found in third grade, but not a major work) **The relationship between multiplication and division** Lesson 6.7 Relate Multiplication and division Lesson 6.8 Write Related Facts Another major work for third grade is area. Measurement should demonstrate the understanding of area and relate area to multiplication and division. Ten lessons in chapter 11 are solely devoted to area using array model,	**(Reviewer only.)** **Yes ____Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**

	tiling models, distri e property of multiplication.	
Metric AC2B: **Materials attend to the full meaning of each practice Standard.** **How to Find the Evidence:** For context, read Criterion #7 and Criterion #9 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).		**Use the questions for Metric 2B to evaluate Metric 2B. Record evidence for each question and rate Metric 2B.** **(Reviewer only.)** **Yes ____Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Over the course of any given year of instruction, is each mathematical practice Standard meaningfully present in the form of assignments, activities, or problems that stimulate students to develop the habits of mind described in the practice Standard? Evaluate lessons, chapter/ unit assessments, and homework assignments for evidence of each mathematical practice being meaningfully present in instruction.	**Evidence-** The full language of the standards is emphasized through the whole year and are specifically marked in the lessons with red 'mathematical practice' bubble and the number of the mathematical practice. For example, Lesson 6.2 #9 has 'mathematical practice 3' red bubble by it and students are asked to make arguments.	
Do the materials treat the practice Standards as developing across grades or grade bands? Are the practice Standards in early grades appropriately simple? Do they display an arc of growing sophistication across the grades?	**Evidence-** From what I can tell, yes, the practice standards are grade appropriate (this is hard to fully say yes, since I've only looked at two grade levels). For example, the make argument question listed above from lesson 6.2 asks students to explain the 28 seashells can be shared equally among the 6 people in her family. That is developmentally appropriate for a third grader to make that argument.	
Are there teacher-directed materials that explain the role of the practice Standards in the classroom and in students' mathematical development? Are alignments to practice Standards accurate?	**Evidence-** Pages PG20-PG22 fully explains the mathematical standards.	
Metric AC2C: **Materials support the Standards' emphasis on mathematical reasoning.** **How to Find the Evidence:** For context, read Criterion #10 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).		**Use the questions for Metric 2C to evaluate Metric 2C. Record evidence for each question and rate Metric 2C.** **(Reviewer only.)** **Yes ____Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Do the materials support students in constructing viable arguments and critiquing the arguments of others concerning grade-level mathematics that is detailed in the content Standards? Read Standard for Mathematical Practice 3. Evaluate teacher and student materials to ensure that students are given opportunities to reason with grade-level mathematics.	**Evidence-** Each lesson contains "Math talk" bubbles where it asks students to describe or explain a math concept. There are also problems called "Make Arguments" such as the one described in lesson 6.2 where students must explain (make an argument) for if sharing a certain number of seashells is possible. There are also "Think smarter" questions where a student's work is shown on the paper with an error and students must explain the mistake.	

Do the materi[illegible]pport students in producing not only answers and solutions, but [illegible] in a grade-appropriate way, arguments, explanations, diagrams, mathematical models, etc., especially in the Major Work of the grade? Familiarize yourself with the Major Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate teacher and student materials, to understand the types of work students are expected to produce.	**Evidence-** Yes, I have stated several times above where students are asked to make arguments, write explanations, and well as use models to solve problems.	
Do materials explicitly attend to the specialized language of mathematics? Is the language of argument, problem solving, and mathematical explanations taught rather than assumed? Evaluate teacher and student materials, paying attention to how mathematical language is taught. NOTE: Examples of evaluating this Criterion might include looking at whether students are supported in: basing arguments on definitions; using the method of providing a counterexample; or recognizing that examples alone do not establish a general statement.	**Evidence-** The language of mathematics via the vocabulary is taught at the beginning of each unit. There are plenty of times students are asked to make an argument or write an explanation. However, I did not find where students are specifically taught how to write an argument or explanation.	
Alignment Criterion 2: **Standards for Mathematical Practice** **Materials must demonstrate authentic connections between content Standards and practice Standards.** **AC2** Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 out of 6 points, the Criterion has not been met. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)** **Before moving to Alignment Criterion 3, record the final Meets or Does Not Meet rating in the Evaluation Summary.**		**(Reviewer only.)** **Yes ____Meets** **____Does Not Meet** **Strengths/Weaknesses:** **There are multiple times in each unit/chapter where students are asked to make connections in math via math talk, vocabulary, written explanations and so on.**
Alignment Criterion 3: **Access to the Standards for All Students** **Materials must provide supports for English Language Learners and other special populations.** Because Standards are for all students, alignment requires thoughtful support to ensure all students are	**Required Materials:** • Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion:** Alignment Criterion 3 is rated as Meets or Does Not Meet. To rate Alignment Criterion 3, first rate metrics 3A, 3B, and 3C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 3 if the materials earn 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as support for special population, while at the same time ensuring that

able to meet the Standards. Thus, aligned materials must provide supports for English Language Learners and other special populations.		no single metric can receive a rating of 0 and be aligned to the Shifts and major features of the CCSSM.
Metric AC3A: **Support for English Language Learners and other special populations is thoughtful and helps those students meet the same Standards as all other students. The language in which problems are posed is carefully considered.** **How to Find the Evidence:** Evaluate teacher and student materials, paying attention to supports offered for special populations.	**Evidence-** In each lesson there is a black and green 'ELL' bubble (in the teachers edition) with a strategy and an explanation of that strategy to develop vocabulary and understanding within the ELL population. The online resources had many items available in Spanish.	**Reviewer only.)** **Yes____Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Metric AC3B: **Materials provide appropriate level and type of scaffolding, differentiation, intervention, and support for a broad range of learners with gradual removal of supports, when needed, to allow students to demonstrate their mathematical understanding independently.** **How to Find the Evidence:** Evaluate teacher and student materials, paying attention to whether materials provide differentiation that will lead all learners to engage with on-grade-level content.	**Evidence-** In each lesson there is a reteach lesson (for scaffolding and intervention support) as well as an advanced learns and an enrich section (for differentiation of advanced students). In the teacher edition, there is also the ELL section described above, a common errors box, and also the show what you know check-up previously described to make sure students are ready for the third grade instruction. There is also a (separate) tier 2 and tier 3 intervention books. The online resource has an RtI resource with personalized learning paths.	**Reviewer only.)** **Yes ____Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Metric AC3C: **Design of lessons recommends and facilitates a mix of instructional approaches for a variety of learners such as using multiple representations (e.g., including models, using a range of questions, checking for understanding, flexible grouping, pair-share).** **How to Find the Evidence:** Evaluate teacher materials, noting instructional approaches suggested for whole class and differentiated lessons and activities.	**Evidence-** The multiplication, division, and fraction units that I focused my time on evaluating had multiple opportunities for vocabulary and hands-on lessons by modeling with counters, squares, fraction bars, and fraction circles. There is a wide range of questioning and math talk, but flexible group and pair-share could have been a bit stronger.	**Reviewer only.)** **Yes____Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Alignment Criterion 3: **Access to the Standards for All Students** **Materials must provide supports for English Language Learners and other special**		**(Reviewer only.)** **Yes ____Meets** **____Does Not Meet**

populati[illegible]. **AC3** Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 points, the Criterion has not been met. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion.**(Reviewer only.)** **Move to the Evaluation Summary and record the final Meets or Does Not Meet rating .**	**Strengths/Weaknesses:** In each lesson there is a black and green 'ELL' bubble (in the teachers' edition) with a strategy and an explanation of that strategy to develop vocabulary and understanding within the ELL population. In each lesson there is a reteach lesson (for scaffolding and intervention support) as well as an advanced learns and an enrich section (for differentiation of advanced students). In the teacher edition, there is also the ELL section described above, a common errors box, and also the show what you know check up previously described to make sure students are ready for the third grade instruction. There is also a (separate?) tier 2 and tier 3 intervention books.

Once an evaluation for alignment to the Shifts and major features of the CCSS has been conducted using Sections 1-3, it's important to evaluate for overall quality and best practices. A starting list of Indicators of Quality are suggested below. States, districts and others evaluating instructional materials are encouraged to add to this list to ensure materials reflect local contexts. For background information on some of the Indicators of Quality in this section, refer to pp.18–21 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).

Indicators of Quality	**Evidence- Give specific examples.**	**Rating: (Reviewers only.)**

1. Lessons are thoughtfully structured and support the teacher in leading the class through the learning paths at hand, with active participation by all students in their own learning and in the learning of their classmates.	Evidence- Each lesson is broken into five parts which instruct the teacher on how to guide and support his/her students through the learning paths. Lessons are clearly explained in easy to read and practical manners. Teacher Edition for each lesson included the lesson objective, teaching vocabulary, problem of the day, and hands-on investigations of the math concept along with modeling suggestions. Differentiated instruction is also available daily.	(Reviewer only.) Yes! _____ Yes _____ No
2. The underlying design of the materials includes both problems and exercises. (In solving problems, students learn new mathematics, whereas in working exercises, students apply what they have already learned to build mastery.) Each problem or exercise has a purpose. NOTE: This Criterion does not require that the problems and exercises be labeled as such.	Evidence- Each lesson has guided, as well as on your own section problems for students to solve based on new information learned. Additionally, there's an applications section at the end of the lessons where students have to apply what they have learned in order to solve an exercise. There is a comprehensive design which includes a variety of problem solving activities in a lesson, including algorithms, fluency practice, word problems, drawing, matching, tables, number lines base ten blocks, vocabulary cards ,and games.	(Reviewer only.) Yes! _____ Yes _____ No
3. Design of assignments is not haphazard: exercises are given in intentional sequences in order to strengthen students' mathematical understanding.	Evidence- The design of assignments is not haphazard, each lesson has a great flow of sequence and students are building knowledge in order to reach a high understanding of the concepts. Each unit is building on the previous one, such as addition and subtraction leading into multiplication and division, and then into fractions, measurement, and data. The end of the year resource also has a get ready for fourth grade unit.	(Reviewer only.) Yes! _____ Yes _____ No
4. There are separate teacher materials that support and reward teacher study including, but not limited to: discussion of the mathematics of the units and the mathematical point of each lesson as it relates to the organizing concepts of the unit, discussion on student ways of thinking and anticipating a variety of students responses, guidance on lesson flow, guidance on questions that prompt students thinking, and discussion of desired mathematical behaviors being elicited among students.	Evidence- Each chapter comes with a teacher book. The teacher book contains: - guidance on lesson flow (per lesson) - suggestions for ELL, reteaching, enrichment, and differentiated instruction - interventions - math talk prompts - common error alerts - developing math language (vocabulary) - teaching for depth	(Reviewer only.) Yes!_____ Yes _____ No

	- daily classroom management The online resource also includes interactive student and teacher resources.	
5. Manipulatives suggested in the materials are faithful representations of the mathematical objects they represent and are connected to written methods.	Evidence- Yes manipulatives are often suggested (without being too much) and are helping the students to visually understand the concepts they are writing. The manipulative are an integral part of the program and enhance learning.	(Reviewer only.) Yes!_____ Yes _____ No
6. Materials include a variety of curriculum-embedded assessments. Examples include pre-, formative, summative, and self-assessment resources.	Evidence- Each chapter contains a pre, mid, and post test summative assessment. The end of the unit also includes a chapter review before the post test. In addition, each lesson contains a formative quick-check assessment for daily intervention and enrichment. Each chapter also contains a performance task. There are also portfolio suggestions. There is also a SBAC testing guidebook.	(Reviewer only.) Yes!_____ Yes _____ No
7. Assessments contain aligned rubrics, answer keys, and scoring guidelines that provide sufficient guidance for interpreting student performance.	Evidence- The summative and formative assessments mentioned above each have a scoring guide that shows teachers where and how to intervene based on which questions were missed, in addition to how to accelerate for high achieving students. The performance task also includes a scoring rubric and samples of student work that received each score. The online resources includes assessments options for students.	(Reviewer only.) Yes! _____ Yes _____ No
8. Materials assess student proficiency using methods that are accessible and unbiased, including the use of course-level language in student prompts.	Evidence- Based on the tests I reviewed, the assessments in the chapters are accessible and unbiased and the student at this grade level should be able to understand the language used in student prompts.	(Reviewer only.) Yes! _____ Yes _____ No

9. Materials carefully evaluated by qualified individuals, whose names are listed, in an effort to ensure freedom from mathematical errors and course-level appropriateness.	**Evidence-** **The authors of this program are listed with their credentials in the students and teacher books. The reviewers and field test teachers are also listed with their titles. It appears that these are qualified teachers, professors, instructional coaches, interventionists, and principals.**	**(Reviewer only.)** **Yes! _____ Yes** **_____ No**
10. The visual design supports students in engaging thoughtfully with the subject. Navigation through the text is clear.	**Evidence-** **The students work is visually appealing and engaging with clear text and the sections labeled. There are age-level appropriate graphs, pictures, models, and so on used to support students learning. The online program is also engaging and supporting the subject.**	**(Reviewer only.)** **Yes! _____ Yes** **_____ No**
11. The materials engage parents in appropriate ways. For example, homework assignments in elementary grades, consist of routine problems, practice with getting answers, and fluency-building exercises that parents can easily support.	**Evidence-** **There is daily homework included in this program, each contains questions from the lesson, problem solving, and then spiral review questions. The homework pages do not include enough information for parents to be able to help their child with the homework (ex: how to do this). It also doesn't state the standard being addressed by the homework. It could also use more fluency practice on the homework. The online resource could help with this.**	**(Reviewer only.)** **Yes! _____ Yes** **_____ No**

Reviewer IMET Evaluation Summary **Title/Level: Third Grade**

Publisher: Houghton Mifflin Court **Copyright: 2015** **ISBN:_____**

Reviewer ID # VF and DD **Date Review Completed:2/15/2016**

Non-Negotiable Criteria- Each Non-Negotiable must be met in order for the Non-Negotiable Alignment Criteria to be met overall.

Non-Negotiable 1: Freedom from Obstacles to Focus	Non-Negotiable 2: Focus and Coherence
Yes!_____ Meets _____ Does Not Meet	Yes!_____ Meets _____ Does Not Meet

Non-Negotiable Overall:

Yes!_____ **Meets** _____ **Does Not Meet**

Alignment Criteria- Each Alignment Criterion must be met with a sufficient number of points in order for Alignment Criteria to be labeled as "Meets" overall. The more points the materials receive on the Alignment Criteria, the better they are aligned.

Alignment Criterion 1: Rigor and Balance	Alignment Criterion 2: Standards of Mathematical Practice	Alignment Criterion 3: Access to Standards for All Learners
Points: 6 of 6 possible. (Materials must receive at least 5 of 6 points to align.) Yes!_____ Meets _____ Does Not Meet	Points: 6 of 6 possible. (Materials must receive at least 5 of 6 points to align.) Yes!_____ Meets _____ Does Not Meet	Points: 6 of 6 possible. (Materials must receive at least 5 of 6 points to align.) Yes!_____ Meets _____ Does Not Meet

Alignment Criteria Overall:

Yes!_____ **Meets** _____ **Does Not Meet**

If the materials meet both Non-Negotiables and relevant Alignment Criterion, they are aligned to the Shifts and major features of Core Standards. **Do the materials meet every Non-Negotiable and Alignment Criterion? Yes! _____ Yes _____ No**

What are the specific areas of strength and weakness based on this evaluation? Publishers or others modifying or developing assessments can use this information to make improvements and/or to remedy gaps in the alignment of assessment materials.

This program meets all the major, supporting, and additional clusters of third grade. It has everything needed to be a core mathematics program.

2015-16 Mathematics Interim Review Recommendation & Summary

Publisher Name:	Houghton Mifflin Harcourt
Title:	GoMath! Premium Classroom Package with SBAC Gr. 4
ISBN #	9780544504493 / 2015
Grade Level(s) or Course:	Gr. 4
Reviewer ID:	LW, KT

RECOMMENDED AS:

__X__ **Core Mathematics Program-** a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials. Substantial evidence clearly supports the designation of this program as Core.

_____ **Other Mathematics Program-** a program that substantially, but partially, meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for supplemental materials. Substantial evidence clearly supports the designation of this program as Other.

_____ **Component Mathematics Program-** a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs. Substantial evidence clearly supports the designation of this program as Component.

_____ **Intervention Program-** a program designed and intended to target and support students' specific needs. Substantial evidence clearly supports the designation of this program as Intervention.

_____ **Does not meet criteria** for recommendation as a Curricular Material or Online Resource for Mathematics.

EVIDENCE SUMMARY:

FOCUS- This program aligns with CCSS. There are no topics/skills assessed that are not required by the grade level standards. Topics build upon prior knowledge from previous grade-levels.

COHERENCE- Program focuses coherently on the Major Works of the grade, in a way that is consistent with the progressions in the standards. Program meets the criteria of "Focus on the Major Work of the grade" 65-85% of the time.

RIGOR- Program meets the requirement for rigor in the areas of conceptual understanding, procedural skill, and fluency, and applications. However, it is noted that the program doesn't provide many opportunities for fluency building + practice throughout. In addition, the program is weak in providing multi-step contextual problems.

CONCEPTUAL UNDERSTANDING- This program thoroughly attends to conceptual understanding. Procedural skill is interwoven with the opportunity for students to build conceptual understanding with high-quality problems + discussion questions with opportunity to interpret mathematics through discussion questions throughout.

MATHEMATICAL PRACTICES- Mathematical Practices are woven throughout the entire program in Teacher's Edition as well as student edition. MP's are clearly marked everywhere they appear for teacher and student. MPs are also infused in the types of problems and discussion points in each lesson. However, completly missing is depth of mathematical reasoning. The language of argument, problem solving and explanation is assumed, not taught.

ACCESSIBILITY OF STANDARDS TO ALL STUDENTS- Variety of instructional approaches included throughout, to support special populations. Thoughtful support is given to make sure all students are able to meet the standards. Ample differentiation materials are included that will allow all learners to engage with on-grade-level content.

OTHER: This program fully supports the teacher to meet the Common Core Standards in a rigorous, conceptual manner, attending to special populations and differentiation, in a very clear, organized, easy to follow manner.

The only areas of weakness noted were lack of multi-step problems, not enough fluency and practice problems, and depth of mathematical reasoning in the areas of constructing arguments effectively and justifying mathematical claims.

2015-16 Interim Mathematics Review

Mathematics Evaluation Tool Grades K-8

Publisher: Houghton Mifflin Harcourt

Title of Material: Go Math! Grade 4

Author: _____

ISBN #: 9780544450493 **Copyright** 2015

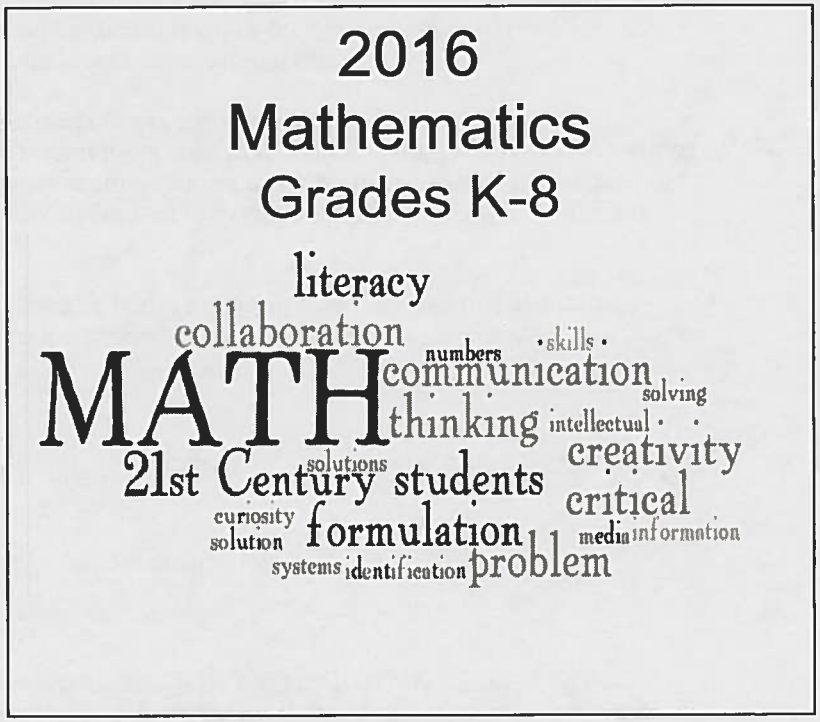
Reviewer ID: LW KT

Core Mathematics Program- a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Core.

Other Mathematics Program- a program that substantially, but partially, meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Other.

Component Mathematics Program- a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs.
Substantial evidence clearly supports the designation of this program as Component.

Intervention Program- a program designed and intended to target and support students' specific needs.
Substantial evidence clearly supports the designation of this program as Intervention.



- Evaluation Form adapted from Instructional Materials Evaluation Toolkit (IMET).

The IMET was developed by Student Achievement Partners. Educators may use or adapt. http://creativecommons.org/licenses/by/3.0/ Download this tool at http://achievethecore.org/IMET

Instructional Materials Evaluation Tool

Mathematics, Grades K-8

What Are the Purposes of the IMET?

This Math IMET is designed to help educators determine whether instructional materials are aligned to the Shifts and major features of the Common Core State Standards (CCSS). The substantial instructional Shifts (http://www.corestandards.org/other-resources/key-shifts-inmathematics/) at the heart of the Common Core State Standards are:

- **Focus** strongly where the Standards focus
- **Coherence**: Think across grades and link to major topics within the grade
- **Rigor**: In major topics, pursue conceptual understanding, procedural skill and fluency, and application with equal intensity.

The IMET draws directly from the following documents:

- Common Core State Standards for Mathematics (www.corestandards.org/Math)
- Publishers' Criteria for the Common Core State Standards in Mathematics grade K-8 (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)

When to use the IMET

1. Purchasing materials: Many factors go into local purchasing decisions. Alignment to the Standards is a critical factor to consider. This tool is designed to evaluate alignment of instructional materials to the Shifts and the major features of the CCSS. It also provides suggestions of additional indicators to consider in the materials evaluation and purchasing process.

2. Evaluating materials currently in use: The IMET can be used to analyze the degree of alignment of existing materials and help to highlight specific, concrete flaws in alignment. Even where materials and tools currently in use fail to meet one or more of these criteria, the pattern of failure is likely to be informative. States and districts can use the evaluation to create a thoughtful plan to modify or combine existing resources in such a way that students' actual learning experiences approach the focus, coherence, and rigor of the Standards.

3. Developing programs: Those developing new programs can use this tool as guidance for creating aligned curricula.
Please note this tool was designed for evaluating comprehensive curricula (including any supplemental or ancillary materials), but it was not designed for the evaluation of standalone supplemental materials.

Who Uses the IMET?

Evaluating instructional materials requires both subject-matter and pedagogical expertise. Evaluators should be well versed in the Standards (www.corestandards.org/Math) for all grades in which materials are being evaluated. This includes understanding the Major Work of the grade (www.achievethecore/focus), the Supporting and Additional work, how the content fits into the progressions in the Standards (www.achievethecore.org/progressions), and the expectations of the Standards with respect to conceptual understanding, procedural skill and fluency, and application. Evaluators also should be familiar with the substantial instructional Shifts (http:// www.corestandards.org/other-resources/key-shifts-in-mathematics/) of Focus, Coherence and Rigor that are listed above.

Getting Started

Prior to Evaluation

Assemble all of the materials necessary for the evaluation. It is essential for evaluators to have materials for all grades covered by the program, as some criteria cannot be rated without having access to each grade. In addition, each evaluator should have a reference copy of the Common Core State Standards for Mathematics (CCSSM) and the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013).

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Mathematics, Grades K-8

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When to use the IMET

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2. Evaluating materials currently in use: The IMET can be used to analyze the degree of alignment of existing materials and help to highlight specific, concrete flaws in alignment. Even where materials and tools currently in use fail to meet one or more of these criteria, the pattern of failure is likely to be informative. States and districts can use the evaluation to create a thoughtful plan to modify or combine existing resources in such a way that students' actual learning experiences approach the focus, coherence, and rigor of the Standards.

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Getting Started

Prior Evaluation

Assemble all of the materials necessary for the evaluation. It is essential for evaluators to have materials for all grades covered by the program, as some criteria cannot be rated without having access to each grade. In addition, each evaluator should have a reference copy of the Common Core State Standards for Mathematics (CCSSM) and the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013).

Before conducting the evaluation itself, it is important to develop a protocol for the evaluation process. The protocol should include having evaluators study the Publishers' Criteria and the IMET. It will also be helpful for evaluators to get a sense of each program overall before beginning the process. At a minimum, this would include reading the front matter of the text, looking at the table of contents and paging through multiple chapters.

Sections 1-3 below should be completed to produce a comprehensive picture of the strengths and weaknesses of the materials under evaluation. Information about areas in need of improvement or supplementation should be shared with internal and external stakeholders.

Navigating the Tool

Begin with Section 1: Non-Negotiable Alignment Criteria

- The Non-Negotiable Alignment Criteria must each be met in full for materials to be considered aligned to the Shifts and the major features of the Common Core State Standards. Each Non-Negotiable Alignment Criterion has one or more metrics associated with it; every one of these metrics must be met in order for the criterion as a whole to be met.
- Examine the relevant materials and use evidence to rate the materials against each criterion and its associated metric(s).
- Record and explain the evidence upon which the rating is based.

Continue to Section 2: Alignment Criteria

- The Alignment Criteria must each be met for materials to be considered aligned to the Shifts and the major features of the Common Core State Standards. Each Alignment Criterion has one or more metric associated with it; a specific number of these metrics must be met or partially met in order for the criterion as a whole to be met.
- Examine the materials in relation to these criteria, assigning each metric a point value. Rate the criterion as "Meets" or "Does Note Meet" based on the number of points assigned. The more points the materials receive on the alignment Criteria, the better they are aligned.
- Record and explain the evidence upon which the rating is based.

Proceed to Section 4: Indicators of Quality

- Indicators of Quality are important considerations that will help evaluators better understand the overall quality of instructional materials. These considerations are not criteria for alignment to the CCSS, but they provide valuable information about additional program characteristics. Evaluators may want to add their own indicators to the examples provided.

Directions for Non-Negotiable 1

Freedom from Obstacles to Focus

Criterion	Evidence- Give specific examples.	Rating: (Reviewer only.)
Non-Negotiable 1: **Freedom from Obstacles to Focus** **Materials must reflect the content architecture of the Standards by not assessing the topics named before the grade level where they first appear in the Standards.** The Standards foster students' progress to algebra by focusing strongly on arithmetic. Consistent with this focus, certain topics from outside of arithmetic appear only in later grades. Thus, to be aligned, materials must reflect the content architecture of the Standards by not assessing the topics named before the grade level where they first appear in the Standards. In this criterion, "topics named" means the topics that are explicitly named in Metric 1A. No other topics should be added to the list in Metric 1A. (Note that other topics in the standards are addressed in criterion NN2.)	**Required Materials** • Common Core State Standards for Mathematics (www.corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf) • From the materials being evaluated: teacher guides and all assessment components	**Rating this Criterion:** Non-Negotiable 1 is rated as Meets or Does Not Meet. To rate Non-Negotiable 1, begin by rating Metric 1A. Since Metric 1A is the only metric for Non-Negotiable 1, the rating for Non-Negotiable 1 is the same as the rating for Metric 1A. If Metric 1A is rated as Does Not Meet, include evidence of when the named topic(s) is/are assessed. If the metric is rated as Meets, list the grade(s) examined in the evaluation.
Metric NN1A: **Materials reflect the basic architecture of the Standards by not assessing the listed topics before the grade level indicated.** • Probability, including chance, likely outcomes, probability models. (Introduced in the CCSSM in grade 7) • Statistical distributions, including center, variation, clumping, outliers, mean, median, mode, range, quartiles; and statistical association or trends, including two-way tables, bivariate measurement data, scatter plots, trend line, line of best fit,	**Evidence-** **Materials Reviewed: Teacher Edition- Table of Contents,Chapter Tests, and Unit Tests.** **The curriculum aligns with the standards. It builds upon prior knowledge from previous grade levels**	**(Reviewer only.)** **__X_Meets** **____Does Not Meet**

correlation. (Introduced in the CCSSM in grade 6) • Similarity, congruence, or geometric transformations. (Introduced in the CCSSM in grade 8) • Symmetry of shapes, including line/ reflection symmetry, rotational symmetry. (Introduced in the CCSSM in grade 4) **How to Find the Evidence:** Evaluate the table of contents, all chapter tests, all unit tests, and other such assessment components (including rubrics). For context, read Criterion #2 from the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013). NOTE: Grade alignments of other topics are addressed in Non-Negotiable 2, Focus and Coherence.) In this criterion, "topics named" means the topics that are explicitly named in Metric 1A. No other topics should be added to the list in Metric 1A. (Note that other topics in the standards are addressed in criterion NN2.)	**in order to introduce topics required in the standards for 4th grade and assesses those skills only.** **No topics/standards/skills are assessed in this grade level that are not introduced and required by the standards of this grade level.**	
Non-Negotiable 1: Materials must reflect the content architecture of the Standards by not assessing the topics named* before the grade level where they first appear in the Standards. **NN 1** If Metric 1A was rated as Meets, then rate Non-Negotiable 1 as Meets. If Metric 1A was rated as Does Not Meet, then rate Non- Negotiable 1 as Does Not Meet. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion.**(Reviewer only.)** **Before moving to Non-Negotiable 2, record the final Meets or Does Not Meet rating in the Evaluation Summary.**	**(Reviewer only.)** **_X__Meets** **____Does Not Meet** **Strengths/Weaknesses:** **Strength: The curriculum does a good job of reviewing prior knowledge in order to build new concepts that this grade level requires. It doesn't go beyond the scope of the standards and distract the learner from what the standards require him to know at this grade level.**

Directions for Non-Negotiable 2

Focus and Coherence

Non-Negotiable 2:

Focus and Coherence

Materials must focus coherently on the Major Work of the grade in a way that is consistent with the progressions in the Standards.

Focus and coherence are the two major evidence-based design principles of the Common Core State Standards for Mathematics (CCSSM, p. 3). Focus is necessary in order to fulfill the ambitious promise the states have made to their students by adopting the Standards: greater achievement at the college and career ready level; greater depth of understanding of mathematics; and a rich classroom environment in which reasoning, sense-making, applications, and a range of mathematical practices flourish. In simpler terms, a mile-wide, inch-deep curriculum translates to less time per topic. Less time means less depth and moving on without many students. Thus, materials must focus coherently on the Major Work of the grade in a way that is consistent with the progressions in the Standards.

Required Materials

- Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf)
- Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)
- Focus by Grade Level for the grade being evaluated (www.achievethecore.org/focus)
- From the materials being evaluated: teacher guides, student texts and workbooks

Rating this Criterion:

Non-Negotiable 2 is rated as Meets or Does Not Meet.

To rate Non-Negotiable 2, first rate metrics 2A–2H. Each of these eight metrics must be rated as Meets in order for Non-Negotiable 2 to be rated as Meets. Rate each metric 2A-2H as Meets or Does Not Meet/Insufficient Evidence. If the evidence examined shows that the Criterion is met, then mark the Criterion Meets. If the evidence examined shows that the Criterion is not met—or if there is insufficient evidence to make a determination—then mark the Criterion as Does Not Meet/Insufficient Evidence. Support all ratings with evidence.

Metric NN2A.	Evidence-	(Reviewer only.)
In each grade K–8, students and teachers using the materials as designed devote the large majority of time to the Major Work of the grade. **How to Find the Evidence:** Familiarize yourself with the Major Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, lessons, homework assignments, and assessments. (Evaluate both student and teacher materials.) Consider time spent on the Major Work of the grade and judge qualitatively whether students and teachers using the materials as designed will devote the large majority of time to the Major Work of the grade. For context, read Criterion #1 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013)	**Materials Reviewed: Teacher Edition, Student Edition.** **Teacher Edition: Table of Contents - dedicates 58 pgs. (8 lessons) to place value, dedicates 83 pgs. (12 lessons) to OA mult./div., distr. property w/place value dedicates 50 pgs. (7 lessons) to multiplication, 72 pgs. (12 lessons) to division. Dedicates 6 lessons to factors/multiples/ prime/composite/ number patterns.** **Student and Teacher Edition devotes a large amount of time on the MAJOR Clusters:** **Chapter 1 spends a large amount of time on NBT 1-3 a MAJOR Cluster - multiple approaches and sufficient practice/exploration is included.** **Ch. 2 includes NBT 1&3 and OA 1-3 –– uses multiple methods for teaching and solving these problems. Introduction to the concept builds on prior knowledge. Practice and exploration of topics is adequate for a MAJOR Cluster.** **Ch. 3: OA & NBT are both MAJOR CLUSTERS and ch. 3 provides adequate practice/exploration.** **Ch. 4 (OA & NBT MAJOR CLUSTERS) gives adequate practice/exploration using multiple models for division.** **Ch. 5 (Supporting Cluster - factors/multiples) provides 33 pgs. in student guide dedicated to this - about half of what is provided for a major cluster.)** **CH. 6 (fractional equivalence and ordering/comparing MAJOR Cluster) provides 55 pgs. in student.guide dedicated to it.** **CH. 7 (add/subt. fractions) provides 70 pgs. in student guide dedicated to this Major Cluster.** **Ch. 8 multiplying fractions by a whole number is a MAJOR cluster and there are 30 pgs. in student guide dedicated to this.** **Decimal/Fractions is also a Major Cluster, and there are only 44 pgs. in student guide dedicated to the topic. This is a little light for a MAJOR Cluster.** ****The curriculum spends a large amount of time on Geometry/angle measurement. (Ch. 10-13) even though this is listed as an 'ADDITIONAL CLUSTER'** **-- - - -Whereas... - - - -** ****MD4 (represent and interpret data) is a 'Supporting**	**__X_Meets** **____Does Not Meet/** **Insufficient Evidence** **Strength:** **Based on the guideline that the MAJOR Clusters take up 65-85% of the content, this curriculum meets this criterion.** **Weakness: This curriculum focuses quite a large chunk of time on 'additional clusters' (i.e. geometric measurement/geometry MD 5-7 and G1-3)**

	Cluster' and only 5 [illegible]s. in the student guide are dedicated to it.	
Metric NN2B: **Supporting Work, where present, enhances focus and coherence simultaneously by also engaging students in the Major Work of the grade.** **How to Find the Evidence:** Familiarize yourself with the Major Work and Supporting Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate chapters and lessons that focus on Supporting Work. NOTE: Example of evaluating this Criterion might include looking at whether materials for K–5 generally treat data displays as an occasion for solving grade-level word problems using the four operations (e.g., see 3.MD.B.3); or whether materials for grade 7 take advantage of opportunities to use probability to support ratios, proportions, and percentages. For context, read Criterion #3 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** **Factors/Multiples is a supporting cluster. This curriculum uses the study of factors//multiples to strengthen array model study, multiplication fact practice, and simple long division re Ch. 5.** **Measurement and Data is also a supporting cluster. These topics are introduced and graphs and data displays are utilized to build on word problem fluency with the four operations, solve problems involving mixed-measures by converting measurements using the four operations, estimation skills, ratio tables as strategy/method for solving problems, and fractions. Ch. 12**	**(Reviewer only.)** **__X__Meets** **____Does Not Meet/** **Insufficient Evidence**
Metric NN2C: **Materials base content progressions on the grade-by-grade progressions in the Standards. Content from previous or future grades does not unduly interfere with or displace on-grade-level content.** **How to Find the Evidence:** Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, and lessons in both student and teacher materials. NOTE: In some cases it may be possible that aligned materials might address some aspects of a topic in a strategic way before or after the grade level in which the topic is central in the Standards' progressions; for example, a curriculum author might	**Evidence-** The content of this program follows the standards progressions for this grade level. Content from previous or future grade levels does not interfere with the grade-level content and focus here. Each teacher's edition clearly shows the standards progression from previous grade levels, this grade level, and future grade levels. Each chapter follows the table of contents' progression of Common Core learning	**(Reviewer only.)** **___X_Meets** **____Does Not Meet/** **Insufficient Evidence**

purposefully ch[illegible] to explore adding fractions with unlike denominators in a way appropriate to grade four, recognizing that this work is not really required until the next grade. However, any such purposeful discrepancies in content progressions should enhance the required learning in each grade; not unduly interfere with or displace grade-level content; and be clearly aimed at helping students meet the Standards as written rather than effectively rewriting the progressions in the Standards. And in all cases, note that Non-Negotiable 1 must be met for materials to be aligned. For context, read Criterion #5a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	progressions acr[illegible]s the grade.. The units, chapters, and lessons do not contain content that is out of progression of the standards for the grade level. The Planning Guide shows the learning progression.	
Metric NN2D: **Materials give all students extensive work with on-grade-level problems.** **How to Find the Evidence:** Evaluate both student and teacher materials. If the materials provide resources for differentiated learning, consider whether lower-performing students have opportunities to engage with grade-level problems. Also consider whether higher-performing students are given opportunities to learn current grade-level content in greater depth. For context, read Criterion #5b in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** The materials give students opportunity to practice skills with a great number of on grade-level problems. **The materials relate on-grade level concepts explicitly to prior knowledge from earlier grades.** Evidence: Each chapter includes a real-world 'project' where students can use the math skill in a real world situation. Within this project is an 'extension' to the project which allows high level learners to gain a greater depth of the concepts. Each lesson provides several reteach opportunities via resources within the lesson, online activities and 'personal math trainer' videos. The Teacher's Edition provides ways to differentiate - either enrich, reteach, work with advanced learners, or with tiered interventions. Enrichment opportunities are also available in each lesson. Grab-and-Go Centers kit allow for differentiation... deeper understanding and/or	**(Reviewer only.)** **__X__Meets** **____Does Not Meet/** **Insufficient Evidence**

	reteach opportunities. RTI materials are available. Reteach materials on-grade level with additional support.	
Metric NN2E: **Materials relate on-grade-level concepts explicitly to prior knowledge from earlier grades.** **How to Find the Evidence:** Evaluate both student and teacher materials. NOTE: Examples of evaluating this Criterion might include looking at the way the materials extend basic ideas of place value across the decimal point; or the role that properties of operations play when the materials extend arithmetic beyond whole numbers to fractions, variables, and expressions. More generally, cluster headings in the Standards sometimes signal key moments where reorganizing and extending previous knowledge is important in order to accommodate new knowledge (e.g., see cluster headings that use the phrase "Apply and extend previous understanding"). For context, read Criterion #5c in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Each chapter assesses prior knowledge in the first few pages in the section "Show What You Know and assesses knowledge from previous grade levels. Examples: Prior knowledge of place value extends into estimating and solving the four operations. Prior knowledge of 'developing an understanding of fractions as numbers' (3rd gr.) extends into understanding of fraction equivalence and ordering (4th gr.) The standard, "Build fractions from unit fractions by applying and extending previous understandings of operations on whole numbers' relies on previous knowledge and understanding of number sense and applying properties. Students extend these skills to fractions by using models and symbols. (Ch. 7) This curriculum includes many models students can use to construct and deconstruct fractions. Multiplication and division is built upon from 3rd grade.	**(Reviewer only.)** **__X__Meets** **____Does Not Meet/** **Insufficient Evidence**
Metric NN2F: **Review of material from previous grades is clearly identified as such to the teacher, and teacher and students can see what their specific responsibility is for the current year.** **How to Find the Evidence:** Evaluate the table of contents, but do not stop there; also evaluate units, chapters, lessons, homework assignments and assessments. (Evaluate	**Evidence-** The curriculum clearly shows at the beginning of each chapter a chart with the Core progressions from previous grade level to future grade level. Section at the beginning of each chapter called, 'Show what you Know' accesses prior	**(Reviewer only.)** **__X__Meets** **____Does Not Meet/**

both student and teacher materials.) Identify any content from previous grades and check whether it is identified as such. For context, read Criterion #5a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	knowledge. This section is clearly identified with, "Check your understanding of important skills" tag-line. In the student edition, it is NOT clearly identified as 'content from previous grades'. It IS clearly identified in the teacher's edition by stating: "Use the Show what you Know section to determine if students need intervention for the chapter's prerequisite skills."	**Insufficient Evidence**
Metric NN2G: **Materials include learning objectives that are visibly shaped by CCSSM cluster headings.** **How to Find the Evidence:** Select several clusters from the Major Work in the grade being evaluated. Evaluate teacher and student materials in relation to these clusters. For context, read Criterion #6a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** **This curriculum does a good job of listing and referring back to the standards in all of its learning objectives.** **Student Edition shows standards and mathematical practices at the beginning of each lesson.** **Mathematical practice is clearly indicated next to each problem in the student edition.** **The learning objectives for all chapters are listed in the teacher's edition at the beginning of each chapter labeled, "Chapter at a Glance" and each lesson begins with "Lesson at a Glance" which lists cluster standards that will be focused on in that lesson.** **The Learning Objective, Language Objective, and The Essential Question are also focused on the cluster standards.** **Teacher's Table of Contents lists the domain standards for each chapter.**	**(Reviewer only.)** **__X__Meets** **____Does Not Meet/** **Insufficient Evidence**
Metric NN2H: **Materials include problems and activities that serve to connect two or more clusters in a domain, or two or more domains in a grade, in cases where these connections are natural and important.** **How to Find the Evidence:** In the grade being evaluated, choose two or more clusters or two or more domains for which connections are natural and important. Evaluate the units, chapters, and lessons that deal with the chosen topics, looking for problems and activities that serve to connect the chosen clusters or domains. NOTE: An example of evaluating this	**Evidence-** **This curriculum DOES connect clusters in a domain, and domains in a grade.** **Factors and Multiples are connected to Equivalent and Simplified Fractions.** **Multiplication is connected to equivalent fractions. Ch. 6** **Base ten is connected to performing multi-digit operations Ch. 1, and in Ch. 3 for multiplication** **Factors and Multiples are connected to generating and**	**(Reviewer only.)** **__X__Meets** **____Does Not Meet/** **Insufficient Evidence**

Criterion might include looking at whether problems in grade 4 sometimes or often involve students applying their developing computation skills (detailed in domain NBT) in the context of solving word problems (detailed in domain OA). For context, read Criterion #6b in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**analyzing patterns C[illegible]** **Ch. 9 fractions are connected with decimals.** **Volume is connected with fractions (ch 12)** **Area model connected to multiplication and division (ch. 13)**	

Non-Negotiable 2:

Focus and Coherence

Materials must focus coherently on the Major Work of the grade in a way that is consistent with the progressions in the Standards.

NN 2 If all Metrics 2A – 2H were rated as Meets, then rate Non-Negotiable 2 as Meets. If one or more Metric was rated Does Not Meet/Insufficient Evidence, then rate Non-Negotiable 2 as Does Not Meet. Check the final rating.
Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)**

Before moving to Alignment Criterion 1, record the final Meets or Does Not Meet rating in the Evaluation Summary.

(Reviewer only.)

__X__Meets

____Does Not Meet

Strengths/Weaknesses:

Strength:
The curriculum builds upon prior knowledge by reviewing and accessing prior knowledge in each lesson before moving into the core topic.

Common Core Standards and practice standards are very clearly outlined in teacher's edition and student edition.

Now continue by evaluating the Alignment Criterion 1 for Rigor and Balance.

Directions for Alignment Criterion 1

Alignment Criterion 1: Rigor and Balance

Materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.

The Standards set expectations for attention to all three aspects of rigor: conceptual understanding, procedural skill and fluency, and applications. Thus, materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.

Required Materials

- Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf)
- Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)
- Focus by Grade Level for the grade being evaluated (achievethecore.org/focus)
- Situation Types for the Operations in Word Problems (achievethecore.org/situation-types)
- From the materials being evaluated: teacher guides, student texts and workbooks

Rating this Criterion:

Alignment Criterion 1 is rated as Meets or Does Not Meet.

To rate Alignment Criterion 1, first rate metrics 1A, 1B, and 1C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). For each metric, guiding questions are provided to aid in gathering evidence.

Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 1 if the materials rate 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as rigor and balance, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.

Metric AC1A:

The materials support the development of students' conceptual understanding of key mathematical concepts, especially where called for in specific content Standards or cluster headings.

How to Find the Evidence:

Select one or more cluster(s) or Standard(s) from the Major Work for the grade being evaluated that relate specifically conceptual understanding to use throughout the questions associated with this metric. NOTE: Some examples of clusters or Standards that call for conceptual understanding include: K.OA.A.1, (1.NBT.B, 1.NBT.C), (2.NBT.A, 2.NBT.B), (3.OA.A.1, 3.OA.A.2), 4.NF.A, (4.NBT.A, 4.NBT.B), 5.NF.B, (5.NBT.A, 5.NBT.B), 6.RP.A, 6.EE.A.3, 7.NS.A, 7.EE.A, 8.EE.B, 8.F.A, 8.G.A

Clusters or Standards grouped by parentheses are closely connected and could be analyzed together.

For context, read Criterion #4a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).

-Choose a cluster/Standard from the Major Work that is aligned to each aspect of rigor and use it to evaluate these metrics. It is most helpful if the same clusters/Standards are chosen for all of the programs being evaluated. (Guidance in choosing clusters/Standards is included in "How to Find the Evidence".)

Use the questions for AC Metric 1A to evaluate Metric 1A. Record evidence for each question and rate Metric 1A.

__X__Meets (2)

____Partially Meets (1)

____Does Not Meet (0)

Is conceptual understanding attended to thoroughly where the Standards set explicit expectations for understanding or interpreting? Evaluate lessons, chapter/unit assessments and homework assignments, paying attention to work aligned to Standards that explicitly call for understanding or interpreting. NOTE: Examples of evaluating this Criterion might include looking at how well the multi-digit addition and subtraction algorithms are developed and explained on the basis of place value and properties of operations; or how well the multi-digit multiplication and division algorithms are developed and explained on the basis of place value and properties of operations; or how well solving equations is presented and explained as a process of reasoning.	**Standard used for evaluation: NF.A "Why fraction a/b is equivalent to (nxa)/(nxb). Use a fraction model. How do number and size of parts differ?** **Does this curriculum support conceptual understanding of this standard? Yes, it does.** Evidence: The lesson on Fraction Equivalence and Comparison (Unit 6) begins with an "Unlock the Problem" task where students work to solve a problem related to the lesson concept. Students use models, drawings, and manipulatives, along with classroom discussion, ("Math Talk: in each lesson) to develop understanding of the mathematical concept. Conceptual understanding is also taught in the lesson by using number lines and fraction strips to compare and order fractions, students use fraction strips, circles, and pictures to model understanding of addition and subtraction of fractions. The Engage part of the lesson, 'Essential Question' (p.365 Unit 6) asks, "How can you compare fractions?" then asks students to make connections to what they understand about benchmarks to further examine the answer to the question. **Evidence- Conceptual understanding is THOROUGHLY attended to where the standard explicitly states, "Extend understanding of fraction equivalence and ordering", and explain why... justify the conclusions by using a visual fraction model.** Lessons: in the lessons, there are 2 sections called, "Draw Conclusions" and Make Connections where students are asked, "How does the number of the parts relate...", "explain how you know", How could you use a model to show that", "Explain using words how you know one fraction is = to another.", "Explain how you can determine..." All Math Talk sections ask students to explain their thinking. Homework: "Use a model to write an equivalent fraction", "Draw a model to show a fraction that is = to ⅓, and one that is not." Homework is not as strong on justifying student reasoning and clarifying conceptual understanding. It's more procedural and fluency building. Unit assessments: The mid-chapter check up has 50% of questions asking students to justify their thinking and explain their conceptual understanding. The Unit Assessment contains a good balance of procedural, fluency, and conceptual understanding types of questions.	
Do the materials feature high-quality conceptual problems and conceptual discussion questions? Evaluate lessons, chapter/unit assessments, and homework assignments. NOTE: Example of conceptual problems might include such questions as "Find a number greater than 1/5 and less than 1/4," or "If the divisor does not change and the dividend increases, what happens to the quotient?"	**Evidence-** Lessons, classroom discussion 'math talks', and Mid-unit Assessment and End-of-Unit Assessment have a great deal of high-quality conceptual problems and discussion questions. However, the types of questions might not lend themselves to higher level discussions and the curriculum doesn't provide a lot of support for the teacher to understand what type of discourse to	

	develop.	
Do the materials feature opportunities to identify correspondences across mathematical representations? Evaluate lessons, chapter/unit assessments and homework assignments. NOTE: Examples of evaluating this Criterion might include looking at whether students are supported in identifying correspondences among: the verbal description of a situation, the diagrams that distill its mathematical features, and the equations that model it; or equivalent forms of numbers (e.g., 3 and 6/2) and the number line; or rational number operations and representations of them via models such as the vector model; or the expression that defines a function and the graph that shows the relationship.	**Evidence-** The materials feature opportunities to identify correspondences across mathematical representations. Lessons: Students explain their understanding with diagrams/models, equations, and verbal/written descriptions. Homework: - The homework focuses mainly on equations, models and diagrams. Not as much reasoning behind understanding. Assessments: Assessments provide a great deal of opportunity for students to use diagrams/models, equations, and verbal/written descriptions to explain their conceptual understanding.	
Metric AC1B: **The materials are designed so that students attain the fluencies and procedural skills required by the Standards.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Major Work for the grade being evaluated that relate specifically to fluency and procedural skill to use throughout the questions associated with this metric. NOTE: Some examples of Standards that call for procedural skill and fluency include: K.OA.A.5, 1.OA.C.6, 2.OA.B.2, 2.NBT.B.5, 3.OA.C.7, 3.NBT.A.2, 4.NBT.B.4, 5.NBT.B.5, 6.NS.B.2, and 6.NS.B.3, 6.EE.A, 7.NS.A, 7.EE.A.1,7.EE.B.4a, 8.EE.C.7, 8.EE.C.8b For context, read Criterion #4b in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	Fluency and Procedural Skill are attended to thoroughly in the lessons, homework, and Assessments.	**Use the questions for Metric 1B to evaluate Metric 1 B. Record evidence for each question and rate Metric 1B.** **(Reviewer only.)** **__X__Meets (2)** **____Partially Meets** **__Does Not Meet**

Is progress towa[illegible]ency and procedural skill interwoven with students' developing conceptual understanding of the operations in question? Evaluate lessons, chapter/unit assessments, daily routines, and homework assignments for evidence that the development of fluency and procedural skill is supported by conceptual understanding.	**Evidence-** Progress toward fluency and procedural skill is interwoven with the development of conceptual understanding. Each lesson provides a good balance with opportunity to practice for fluency and to work with procedural skills. There is a 'fluency builder' section at the beginning of each lesson for the teacher to utilize. Homework provides a great opportunity for procedural skill and fluency. Assessments: Procedural skills are contained in the unit's assessments. Reteach and Enrich materials are available for the teacher to use in order to progress students toward fluency and procedural mastery. Practices frequently connected with manipulatives or diagrams to enhance conceptual understanding.	
Are purely procedural problems and exercises present that include cases in which opportunistic strategies are valuable and generic cases that require efficient algorithms present? Evaluate lessons, chapter/unit assessments, daily routines, and homework assignments. NOTE: Examples of problems in which opportunistic strategies are valuable might include the sum 698 + 240 or the system $x + y = 1$, $2x + 2y = 3$. Examples of generic cases that require efficient algorithms might include the sum 8767+2286 or the system $6y + x = x + 3$, $-x = 1 + 2y$.	**Evidence-** The lessons, homework, and assessments all provide an opportunity for both opportunistic strategies to be used by students as well as efficient algorithm strategies. Teacher edition contains the Think Smarter section which promotes proficient problem solving. Sufficient practice with the algorithm is present in the differentiated materials, the lessons, and the homework.	
Do the materials in grades K–6 provide repeated practice toward attainment of fluency Standards? Evaluate lessons, daily routines, and homework assignments for evidence of repeated practice toward attainment of the following K–6 Standards that set an explicit expectation of fluent (accurate and reasonably fast) computation: K.OA.A.5, 1.OA.C.6, 2.OA.B.2, 2.NBT.B.5, 3.OA.C.7, 3.NBT.A.2, 4.NBT.B.4, 5.NBT.B.5, 6.NS.B.2, 6.NS.B.3.	**There are not very many opportunities for fluency building and repeated practice.** **Evidence-** **The only place we found was in the teacher's edition, at the beginning of each lesson, under the Daily Routines section.** **The 10 question Fluency Builder part of each lesson supplies repeated practice toward attainment of fluency standards.** ****The following materials focus ONLY on the concept being taught in that lesson: reteach and enrich**	

	materials, homework and assessments. There is no opportunity in any of these for students to get repeated practice toward fluency of NBT.B.4**	
Metric AC1C: **The materials are designed so that teachers and students spend sufficient time working with engaging applications, without losing focus on the Major Work of each grade.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Major Work for the grade being evaluated that relate specifically application to use throughout the questions associated with this metric. NOTE: Some examples of clusters or Standards that call for application include: K.OA.A.2, 1.OA.A, 2.OA.A, 3.OA.A.3, 3.OA.D.8, 4.OA.A.3, 4.NF.B.3d, 4.NF.B.4c, 5.NF.B.6, 5.NF.B.7c, 6.RP.A.3, 6.NS.A.1, 6.EE.B.7, 6.EE.C.9, 7.RP.A, 7.NS.A.3, 7.EE.B.3, 8.EE.C.8c, 8.F.B For context, read Criterion #4c in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Standard used to evaluate this criterion: OA.A.3 Solving multi-step word problems using the 4 operations The first 5 chapters (out of 13) cover this standard. Ch. 1: addition and subtraction, Ch. 2&3: multiplication, Ch. 4: division, Ch. 5 factors/multiples	**Use the questions for Metric 1C to evaluate Metric 1C. Record evidence for each question and rate Metric 1C.** **(Reviewer only.)** **___Meets (2)** **_X__Partially Meets (1) ** see cell 1** **____Does Not Meet (0)**
Are there are single- and multi-step contextual problems, including non-routine problems, that develop the mathematics of the grade, afford opportunities for practice, and engage students in problem solving? Do the problems attend thoroughly to those places in the content Standards where expectations for multi-step and real-world problems are explicit? Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** Lesson: As the lessons progress through the chapter, more opportunities are given for students to engage in multi-step problems. (found in Lesson 2.9 & 2.12) Early in the chapter the focus is on single-step problems. There are ample opportunities for practice in each lesson, and the end of each lesson in the chapter gives a good deal of time to 'problem solving' situations. There should be more multi-step problems in each lesson. Assessment: Great deal of problem solving opportunities, few multi-step problems present** Homework: does develop the mathematics and gives opportunity for problem solving, but the focus is on single-step problems **** Lesson 2.9 has no homework problems that are multi-step, and Lesson 2.12 has only 2 homework problems that involve multi-step.**	
Do application problems particularly stress applying the Major Work of the grade? Evaluate lessons, chapter/unit assessments, and homework assignments. NOTE: Examples of evaluating this Criterion might include looking at: how well, by the end of grade 2, students using the materials as designed can represent and solve a full range of one-step addition and subtraction word problems; or how well, by the end of grade 3, students using the materials as designed can represent and solve a full range of one-step multiplication and division word problems; or how well these basic situation types for each operation are carried coherently across the grades, (e.g., with fractions and algebraic expressions); or, in all grades, whether the	**Evidence-** This curriculum does a great job applying the major work of the grade. Using the materials as designed, 4th graders will be able to use the problems provided to connect the concepts, standards, and domains. The situation types vary from result-unknown to change unknown, to start unknown. (see addition/subtraction situations by grade level handout.)	

problems connect concepts, Standards, and domains in ways that are natural and important. For a list of situation types for one-step addition, subtraction, multiplication, and division problems, see Situation Types for the Operations in Word Problems	The lessons provide ample structure and practice, homework provides ample practice, and assessments are a good gauge for mastery of content.	
Does modeling build slowly across K–8, with applications that are relatively simple in earlier grades and when students are encountering new content? In grades 6–8, do the problems begin to provide opportunities for students to make their own assumptions or simplifications in order to model a situation mathematically? Read Standard for Mathematical Practice 4, Model with Mathematics. Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** This curriculum provides a foundation for modeling that is grade-level appropriate. Models are built upon previous grade levels, and prepare students for grade levels beyond. Base Ten Blocks, fraction models, area model, number lines.	

Alignment Criterion 1: Rigor and Balance

Materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.

AC1 Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 out of 6 points, the Criterion has not been met. Check the final rating.
Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)**

Before moving to Alignment Criterion 2, record the final Meets or Does Not Meet rating in the Evaluation Summary.

(Reviewer only.)

__X__Meets

____Does Not Meet

Strengths/Weaknesses:
The strengths of this curriculum are its ability to thoroughly attend to conceptual understanding and its use of discussion questions to further student understanding. The weaknesses of this curriculum lie in the lack of fluency building throughout homework and assessment opportunities, as well as the lack of multi-step problems present in homework and assessments.

Directions for Alignment Criterion 2

Standards for Mathematical Practice

Alignment Criterion 2: Standards for Mathematical Practice **Materials must demonstrate authentic connections between content Standards and practice Standards.** The Standards require that designers of instructional materials connect the mathematical practices to mathematical content in instruction. Thus, materials must demonstrate authentic connections between content Standards and practice Standards.	**Required Materials:** • Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf) • Focus by Grade Level for the grade being evaluated (www.achievethecore.org/focus) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion** Alignment Criterion 2 is rated as Meets or Does Not Meet. To rate Alignment Criterion 2, first rate metrics 2A, 2B, and 2C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). For each metric, guiding questions are provided to aid in gathering evidence. Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 2 if the materials earn 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as mathematical practices, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.
Metric AC2A: **Materials address the practice Standards in such a way as to enrich the Major Work of the grade; practices strengthen the focus on Major Work instead of detracting from it, in both teacher and student materials.** **How to Find the Evidence:** Familiarize yourself with the Major Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate teacher and student materials for evidence that the mathematical practices support and connect to the focus of the grade. NOTE: Examples of evaluating this Criterion might include looking at whether, in grades K–5, students using the materials are supported to look for and express regularity in repeated reasoning about the addition table, the multiplication table, the properties of operations, the relationship between addition and subtraction or multiplication and division, and the place value system; or whether, in grades 6–8, students using the materials are supported to look for and express regularity in repeated reasoning about proportional relationships and linear functions. For context, read Criterion #8 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013).	**Evidence-** MP 1,2,3,4,6,and 7 are interwoven throughout the text (student and teacher edition) MP5 and 8 are used throughout the chapters just at less frequent intervals (Student and Teacher edition) Depth of understanding is promoted in lessons through the About the Math - Teaching for Depth MPs are also promoted in Unlock the Problem section in the lessons	**(Reviewer only.)** **__X __Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Metric AC2B: **Materials attend to the full meaning of each practice Standard.** **How to Find the Evidence:** For context, read Criterion #7 and Criterion #9 in the Publishers' Criteria for the Common Core State Standards for Mathematics,		**Use the questions for Metric 2B to evaluate Metric 2B. Record evidence for each question and rate Metric 2B.** **(Reviewer only.)**

Grades K–8 (Spring 2013).		
Over the course of any given year of instruction, is each mathematical practice Standard meaningfully present in the form of assignments, activities, or problems that stimulate students to develop the habits of mind described in the practice Standard? Evaluate lessons, chapter/ unit assessments, and homework assignments for evidence of each mathematical practice being meaningfully present in instruction.	**Evidence-** **Practice standards are meaningfully present in activities, assignments, and problems. Example: each standard that a lesson focuses on is outlined in the beginning of the lesson, and then focused upon through 'math talk' bubbles throughout the lesson, and the problems that focus on a practice standard are clearly marked in the lessons. Even though they are not clearly marked in the homework, the practices are still present in the types of problems students solve in the homework and assessments.** **The Share and Show section is a great opportunity to reinforce the MPs.** **Planning guide describes practice standards in detail for the teacher, giving specific examples.**	**___X_Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Do the materials treat the practice Standards as developing across grades or grade bands? Are the practice Standards in early grades appropriately simple? Do they display an arc of growing sophistication across the grades?	**Evidence-** **Practice standards expectations are grade-level appropriate and reasonable. Questioning is appropriate.** **Chapter At A Glance demonstrates the progression for each chapter.**	
Are there teacher-directed materials that explain the role of the practice Standards in the classroom and in students' mathematical development? Are alignments to practice Standards accurate?	**Evidence-** **Teacher directed materials are in the form of the Planning Guide. It explains the role of the practice standards. In each teacher manual the practice standards are listed in the table of contents for each unit and are explored in each lesson.**	
Metric AC2C: **Materials support the Standards' emphasis on mathematical reasoning.** **How to Find the Evidence:** For context, read Criterion #10 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).		**Use the questions for Metric 2C to evaluate Metric 2C. Record evidence for each question and rate Metric 2C.** **(Reviewer only.)** **___Meets (2)**

Do the materials support students in constructing viable arguments and critiquing the arguments of others concerning grade-level mathematics that is detailed in the content Standards? Read Standard for Mathematical Practice 3. Evaluate teacher and student materials to ensure that students are given opportunities to reason with grade-level mathematics.	**Evidence- There are a few chances for constructing arguments in each type of work:** **Assessments ask: explain how you got your answer, 'show your work', 'explain why the strategy you used works best'.** **In the lesson, it asks: 'What do you notice', 'Is the other student correct? explain'., 'Explain why these are both reasonable estimates'** **Homework: 'explain why it makes sense'** ******Although: the textbook doesn't really explain HOW to construct arguments ****** **The closest it comes is in the TE under 'professional development' in each unit, and math talk, some ELL strategies.** **While the text provides opportunities for students to reason mathematically and share their process through discussion, there is little teacher support on how to help students construct viable arguments.**	**__X__Partially Meets (1)** **see constructing arguments**** **____Does Not Meet (0)**
Do the materials support students in producing not only answers and solutions, but also, in a grade-appropriate way, arguments, explanations, diagrams, mathematical models, etc., especially in the Major Work of the grade? Familiarize yourself with the Major Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate teacher and student materials, to understand the types of work students are expected to produce.	**Evidence-** **Most of the work students are expected to produce is 'answer-based', not reasoning-based. There is not a lot of constructing arguments, or critiquing the reasoning of others. It does so a good amount of asking for explanations, or showing of work, and diagrams/models in Go Deeper, Think Smarter, Math Journal Prompt, Math Talk and Show and Share. What's missing is students defending WHY their math works, or how they know it works...justifying their claims.********	
Do materials explicitly attend to the specialized language of mathematics? Is the language of argument, problem solving, and mathematical explanations taught rather than assumed? Evaluate teacher and student materials, paying attention to how mathematical language is taught. NOTE: Examples of evaluating this Criterion might include looking at whether students are supported in: basing arguments on definitions; using the method of providing a counterexample; or recognizing that examples alone do not establish a general statement.	**Evidence-** **No. There is no language in the curriculum where students are supported in basing arguments on definitions, using the method of providing a counterexample, or recognizing that examples alone do not establish a general statement.**	
Alignment Criterion 2: **Standards for Mathematical Practice** **Materials must demonstrate authentic connections between content Standards and practice Standards.**		**(Reviewer only.)** **__X__Meets** **____Does Not Meet**

AC2 Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 out of 6 points, the Criterion has not been met. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)** **Before moving to Alignment Criterion 3, record the final Meets or Does Not Meet rating in the Evaluation Summary.**		**Strengths/Weaknesses:**
Alignment Criterion 3: **Access to the Standards for All Students** **Materials must provide supports for English Language Learners and other special populations.** Because Standards are for all students, alignment requires thoughtful support to ensure all students are able to meet the Standards. Thus, aligned materials must provide supports for English Language Learners and other special populations.	**Required Materials:** • Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion:** Alignment Criterion 3 is rated as Meets or Does Not Meet. To rate Alignment Criterion 3, first rate metrics 3A, 3B, and 3C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 3 if the materials earn 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as support for special population, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.
Metric AC3A: **Support for English Language Learners and other special populations is thoughtful and helps those students meet the same Standards as all other students. The language in which problems are posed is carefully considered.** **How to Find the Evidence:** Evaluate teacher and student materials, paying attention to supports offered for special populations.	**Evidence-** Every lesson in TE and in student materials offers help to special populations. The language is considered, as well as the strategies that may be helpful. Teacher can use the 'planning for instruction' for help as well. Chapter Resources -Letter home is also included in Spanish. At the beginning of each chapter is a PD section focused on ELL. Tiered interventions/differentiation strategies and activities are included in each lesson.	**Reviewer only.)** **__X__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**

Metric AC3B: **Materials provide appropriate level and type of scaffolding, differentiation, intervention, and support for a broad range of learners with gradual removal of supports, when needed, to allow students to demonstrate their mathematical understanding independently.** **How to Find the Evidence:** Evaluate teacher and student materials, paying attention to whether materials provide differentiation that will lead all learners to engage with on-grade-level content.	**Evidence-** Assessment of prior knowledge in beginning of each lesson, differentiation support for teacher in each lesson; activities, enrichment and tiered interventions in each lesson. common error alerts w/ suggestions for teacher. 'Quick checks' in each lesson/ Grab-n-Go differentiated centers kit: activities, games, literature for enrichment or more practice. TE has enrich, advanced learners, and reteach materials in each lesson. Go Deeper, Advanced Learner are also helpful resources.	**Reviewer only.)** **__X__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Metric AC3C: **Design of lessons recommends and facilitates a mix of instructional approaches for a variety of learners such as using multiple representations (e.g., including models, using a range of questions, checking for understanding, flexible grouping, pair-share).** **How to Find the Evidence:** Evaluate teacher materials, noting instructional approaches suggested for whole class and differentiated lessons and activities.	**Evidence-** This curriculum utilizes a variety of instructional approaches - models, questioning techniques, checks for understanding, grouping, pair/share in each lesson. Whole class, small group, pairings, are used. Manipulatives are used within some of the lessons.	**Reviewer only.)** **___X_Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Alignment Criterion 3: **Access to the Standards for All Students** **Materials must provide supports for English Language Learners and other special populations.** **AC3** Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 points, the Criterion has not been met. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion.**(Reviewer only.)** **Move to the Evaluation Summary and record the final Meets or Does Not Meet rating .**		**(Reviewer only.)** **__X__Meets** **____Does Not Meet** **Strengths/Weaknesses:** Variety of instructional approaches, ample differentiation materials.

Once an evaluation for alignment to the Shifts and major features of the CCSS has been conducted using Sections 1-3, it's important to evaluate for overall quality and best practices. A starting list of Indicators of Quality are suggested below. States, districts and others evaluating instructional materials are encouraged to add to this list to ensure materials reflect local contexts. For background information on some of the Indicators of Quality in this section, refer to pp.18–21 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).

Indicators of Quality	Evidence- Give specific examples.	Rating: (Reviewers only.)
1. Lessons are thoughtfully structured and support the teacher in leading the class through the learning paths at hand, with active participation by all students in their own learning and in the learning of their classmates.	**Evidence-** **The structure of this program is beneficial for leading students through the learning paths. 'Unlock the problem' and essential questions open up the concepts, then making connections and learning activity explore the concepts, 'share and show' and 'math talks' further explain and explore, quick checks enable teacher to differentiate, and 'elaborate' gives students applications of the concepts. Evaluate finishes it out.** **The 'engage' provides a digital activity.**	**(Reviewer only.)** **____X__ Yes** **_____ No**
2. The underlying design of the materials includes both problems and exercises. (In solving problems, students learn new mathematics, whereas in working exercises, students apply what they have already learned to build mastery.) Each problem or exercise has a purpose. **NOTE: This Criterion does not require that the problems and exercises be labeled as such.**	**Evidence-** **Each lesson, Homework assignment, and assessment offers a variety of problems and exercises, although there are more exercises than problems.**	**(Reviewer only.)** **____X__ Yes** **_____ No**
3. Design of assignments is not haphazard: exercises are given in intentional sequences in order to strengthen students' mathematical understanding.	**Evidence-** **Teacher Edition clearly shows the design of assignments that follows a logical grade-level sequence that builds from prior knowledge and strengthens student understanding.** **Use of the '5Es' provides a structured sequence for each lesson.**	**(Reviewer only.)** **____X__ Yes** **_____ No**
4. There are separate teacher materials that support and **reward teacher study including, but not limited to: discussion of the mathematics of the units and the mathematical point of each lesson as it relates to the organizing concepts of the unit, discussion on student ways of thinking and anticipating a variety of students responses, guidance on lesson flow,**	**Evidence-** **Teacher materials offer professional development blocks with videos, called, 'why teach this' to help build knowledge base, 'Try this' sections for additional materials, strategies for introducing a new lesson.** **Teacher materials discuss student thinking and anticipation of responses, guidance on the flow of the lesson and questions that prompt student**	**(Reviewer only.)** **_____X_ Yes** **_____ No**

guidance on questions that prompt students thinking, and discussion of desired mathematical behaviors being elicited among students.	thinking/discussion. The following areas support and guide the teacher: About the Math Think Smarter Common Error Math Talk in Action Teaching for Depth Developing Math Language	
5. Manipulatives suggested in the materials are faithful representations of the mathematical objects they represent and are connected to written methods.	Evidence- Manipulatives are faithful representations and are connected to the concepts students are learning, purposeful and meaningful to the learning process.	(Reviewer only.) ____X__ Yes _____ No
6. Materials include a variety of curriculum-embedded assessments. Examples include pre-, formative, summative, and self-assessment resources.	Evidence- TE and SE provide pre-assessments, formative and summative assessments clearly throughout the curriculum. Evidence: Quick Checks, rubrics, 'evaluate lesson' section.	(Reviewer only.) __X____ Yes _____ No
7. Assessments contain aligned rubrics, answer keys, and scoring guidelines that provide sufficient guidance for interpreting student performance.	Evidence- Yes, all of these are present in the teacher's edition. Chapter Resources contain answer keys, scoring guidelines, and performance task rubrics. TE gives answer keys and 'within chapter' assessments.	(Reviewer only.) ____X__ Yes _____ No
8. Materials assess student proficiency using methods that are accessible and unbiased, including the use of course-level language in student prompts.	Evidence- Yes, grade-level appropriate language is used in student prompts and appear to be accessible and unbiased.	(Reviewer only.) ___X___ Yes _____ No

9. Materials are carefully evaluated by qualified individuals, whose names are listed, in an effort to ensure freedom from mathematical errors and course-level appropriateness.	**Evidence-** **Yes, the planning guide identifies references for the professional development section, but is is unclear**	**(Reviewer only.)** **___X___ Yes** **_____ No**
10. The visual design supports students in engaging thoughtfully with the subject. Navigation through the text is clear.	**Evidence-** **The visual design breaks the text into manageable sections. Navigation is clear.** **While separate chapters may allow for easier adaptation of the instructional sequence, the student resources, such as a glossary of terms, etc. are in a separate book as well. The materials are colorful, engaging, easy to follow.**	**(Reviewer only.)** **___X___ Yes** **_____ No**
11. The materials engage parents in appropriate ways. For example, homework assignments in elementary grades, consist of routine problems, practice with getting answers, and fluency-building exercises that parents can easily support.	**Evidence-** **Yes, homework consists of routine practice problems that parents can easily support, and there is a school home letter with each chapter that includes vocabulary and models.**	**(Reviewer only.)** **_____X_ Yes** **_____ No**

Reviewer IMET Evaluation Summary

Title of Material: Go Math! Premium Classroom Package with SBAC (Multi-Volume SE) (5-year print/5-year Digital) Grade 4

Publisher: Houghton Mifflin Harcourt **Copyright:** 2015 **ISBN:** 9780544450493

Reviewer ID # LW KT **Date Review Completed:** March 8, 2016

Non-Negotiable Criteria- Each Non-Negotiable must be met in order for the Non-Negotiable Alignment Criteria to be met overall.	
Non-Negotiable 1: Freedom from Obstacles to Focus **____X___ Meets** **_____ Does Not Meet**	**Non- Negotiable 2: Focus and Coherence** **___X__ Meets** **_____ Does Not Meet**
Non-Negotiable Overall: **__X___ Meets _____ Does Not Meet**	
Alignment Criteria- Each Alignment Criterion must be met with a sufficient number of points in order for Alignment Criteria to be labeled as "Meets" overall. The more points the materials receive on the Alignment Criteria, the better they are aligned.	

Alignment Criterion 1: Rigor and Balance	Alignment Criterion 2: Standards of Mathematical Practice	Alignment Criterion 3: Access to Standards for All Learners
Points: __5___ of 6 possible. (Materials must receive at least 5 of 6 points to align.) ____X___ Meets _____ Does Not Meet	**Points: ___5__ of 6 possible.** (Materials must receive at least 5 of 6 points to align.) ___X____ Meets _____ Does Not Meet	**Points: __6___ of 6 possible.** (Materials must receive at least 5 of 6 points to align.) ___X____ Meets _____ Does Not Meet

Alignment Criteria Overall:

__X___ Meets **_____ Does Not Meet**

If the materials meet both Non-Negotiables and relevant Alignment Criterion, they are aligned to the Shifts and major features of the Core Standards. **Do the materials meet every Non-Negotiable and Alignment Criterion? ___X__ Yes _____ No**

What are the specific areas of strength and weakness based on this evaluation? Publishers or others modifying or developing assessments can use this information to make improvements and/or to remedy gaps in the alignment of assessment materials.

2015-16 Mathematics Interim Review Recommendation & Summary

Publisher Name:	Houghton Mifflin Harcourt
Title:	Go Math!
ISBN #	9780544452152
Grade Level(s) or Course:	5th Grade
Reviewer ID:	KT LW

RECOMMENDED AS:

__X__ **Core Mathematics Program-** a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials. Substantial evidence clearly supports the designation of this program as Core.

_____ **Other Mathematics Program-** a program that substantially, but partially, meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for supplemental materials. Substantial evidence clearly supports the designation of this program as Other.

_____ **Component Mathematics Program-** a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs. Substantial evidence clearly supports the designation of this program as Component.

_____ **Intervention Program-** a program designed and intended to target and support students' specific needs. Substantial evidence clearly supports the designation of this program as Intervention.

_____ **Does not meet criteria** for recommendation as a Curricular Material or Online Resource for Mathematics.

EVIDENCE SUMMARY:

FOCUS- The curriculum aligns with the standards. It builds upon prior knowledge from previous grade levels in order to introduce new concepts/topics required in the grade level standards. There is no indication of assessments for probability, statistical distributions, and Grade 8 geometry. A significant portion

COHERENCE- of the instruction focuses on the Major Work for the grade level In addition to the Major Work focus, supporting content within the text enhances the Major Work. The Grade-by-Grade progression for the standards is evident and clearly reinforced. There are discussion, thoughtful questions, and conceptual as well as procedural problems. All lessons and activities clearly identify domains, clusters, standards and learning objectives.

RIGOR- The materials support the development of students' conceptual understanding of key mathematical concepts as determined by the standards for the grade level. This is demonstrated throughout lessons, classroom discussions, and assessments.

CONCEPTUAL UNDERSTANDING- Conceptual understanding is developed by starting with student prior knowledge and creating connections to new grade level concepts/topics. Materials feature opportunities for both teachers and students to identify connection across the mathematical representations. There is sufficient opportunities for procedural practice as well as conceptual development. There is limited discussion support and minimal multi-step prob

MATHEMATICAL PRACTICES- The materials demonstrated authentic connections between the mathematical practices and the content of the instruction. The MPs support the focus on the Major Work for the grade and assist in promoting student development of mathematical habits of mind. The MPs are tailored for grade level appropriateness and are clearly apparent to both teachers and students.

ACCESSIBILITY OF STANDARDS TO ALL STUDENTS- The materials provide opportunities to reason mathematically and share their thought processes. The mathematical language within the TE and SE honors the mathematical concepts and language development. More support for teachers to guide and facilitate quality student discussion (ie evidence, claims) would be beneficial to the program. However, every

OTHER: lesson provides ample support for differentiation and meeting the needs of all the learners. Homework and letters home engage the parents in being able to successfully support student learning. There is also ample support through the use of manipulatives, diagrams, et

Note: The Engage activity at the start of each lesson is connected with digital resources.

Fact fluency to support the conceptual learning is focused on in the digital materials

The curriculum clearly builds upon prior knowledge

and earlier concepts and then continues the continuum of learning. Domains, standards, and MPs are clearly identified and used meaningfully.
A strength of the curriculum is its attention to the conceptual understanding and use of discussion.
Weaknesses lie in lack of basic fluency building and minimal use of multi-step problems.
Another strength focuses on the variety of instructional approaches and differentiation resources.

2015-16 Interim Mathematics Review

Mathematics Evaluation Tool Grades K-8

Publisher: Houghton Mifflin Harcourt

Title of Material: Go Math! Grade 5

Author: Burger et al

ISBN #: 9780544452152 **Copyright** 2015

Reviewer ID: LW KT

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Substantial evidence clearly supports the designation of this program as Core.

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Substantial evidence clearly supports the designation of this program as Other.

Component Mathematics Program- a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs.
Substantial evidence clearly supports the designation of this program as Component.

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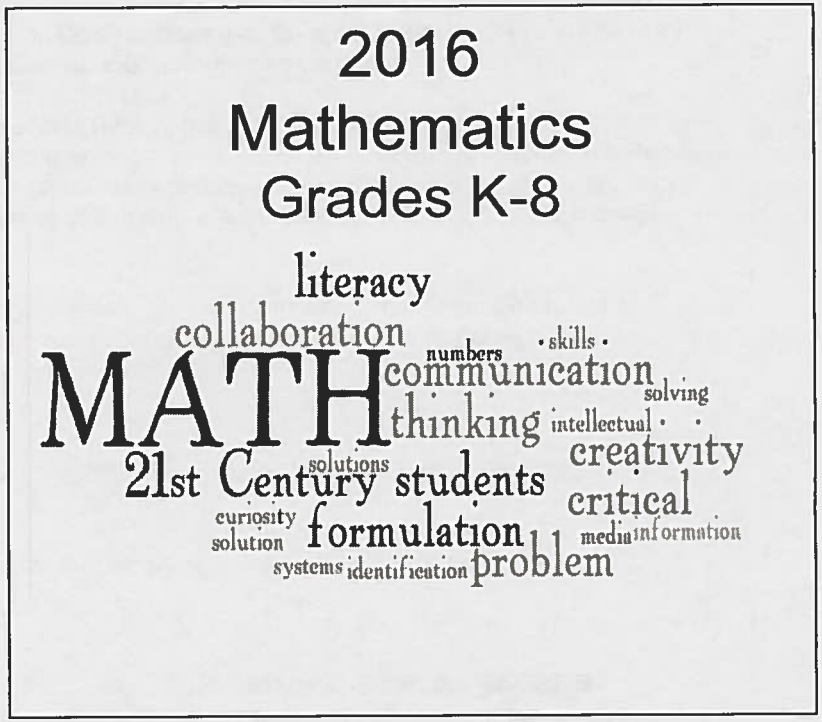
Substantial evidence clearly supports the designation of this program as Intervention.



- Evaluation Form adapted from Instructional Materials Evaluation Toolkit (IMET).

The IMET was developed by Student Achievement Partners. Educators may use or adapt. http://creativecommons.org/licenses/by/3.0/ Download this tool at http://achievethecore.org/IMET

Instructional Materials Evaluation Tool

Mathematics, Grades K-8

What Are the Purposes of the IMET?

This Math IMET is designed to help educators determine whether instructional materials are aligned to the Shifts and major features of the Common Core State Standards (CCSS). The substantial instructional Shifts (http://www.corestandards.org/other-resources/key-shifts-inmathematics/) at the heart of the Common Core State Standards are:

- **Focus** strongly where the Standards focus
- **Coherence**: Think across grades and link to major topics within the grade
- **Rigor**: In major topics, pursue conceptual understanding, procedural skill and fluency, and application with equal intensity.

The IMET draws directly from the following documents:

- Common Core State Standards for Mathematics (www.corestandards.org/Math)
- Publishers' Criteria for the Common Core State Standards in Mathematics grade K-8 (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)

When to use the IMET

1. Purchasing materials: Many factors go into local purchasing decisions. Alignment to the Standards is a critical factor to consider. This tool is designed to evaluate alignment of instructional materials to the Shifts and the major features of the CCSS. It also provides suggestions of additional indicators to consider in the materials evaluation and purchasing process.

2. Evaluating materials currently in use: The IMET can be used to analyze the degree of alignment of existing materials and help to highlight specific, concrete flaws in alignment. Even where materials and tools currently in use fail to meet one or more of these criteria, the pattern of failure is likely to be informative. States and districts can use the evaluation to create a thoughtful plan to modify or combine existing resources in such a way that students' actual learning experiences approach the focus, coherence, and rigor of the Standards.

3. Developing programs: Those developing new programs can use this tool as guidance for creating aligned curricula.
Please note this tool was designed for evaluating comprehensive curricula (including any supplemental or ancillary materials), but it was not designed for the evaluation of standalone supplemental materials.

Who Uses the IMET?

Evaluating instructional materials requires both subject-matter and pedagogical expertise. Evaluators should be well versed in the Standards (www.corestandards.org/Math) for all grades in which materials are being evaluated. This includes understanding the Major Work of the grade (www.achievethecore/focus), the Supporting and Additional work, how the content fits into the progressions in the Standards (www.achievethecore.org/progressions), and the expectations of the Standards with respect to conceptual understanding, procedural skill and fluency, and application. Evaluators also should be familiar with the substantial instructional Shifts (http:// www.corestandards.org/other-resources/key-shifts-in-mathematics/) of Focus, Coherence and Rigor that are listed above.

Getting Started

Prior to Evaluation

Assemble all of the materials necessary for the evaluation. It is essential for evaluators to have materials for all grades covered by the program, as some criteria cannot be rated without having access to each grade. In addition, each evaluator should have a reference copy of the Common Core State Standards for Mathematics (CCSSM) and the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013).

2015-16 Interim Mathematics Review

Mathematics Evaluation Tool Grades K-8

Publisher: Houghton Mifflin Harcourt

Title of Material: GO MATH! Grade 5

Author: Dr. Edward B. Burger, Dr. Matthew R. Larson, Dr. Juli K. Dixon, Steven J. Leinwand, Timothy D. Kanold, Martha E Sandoval-Martinez

ISBN #: 9780544452152 **Copyright:** 2015

Reviewer ID: KT LW

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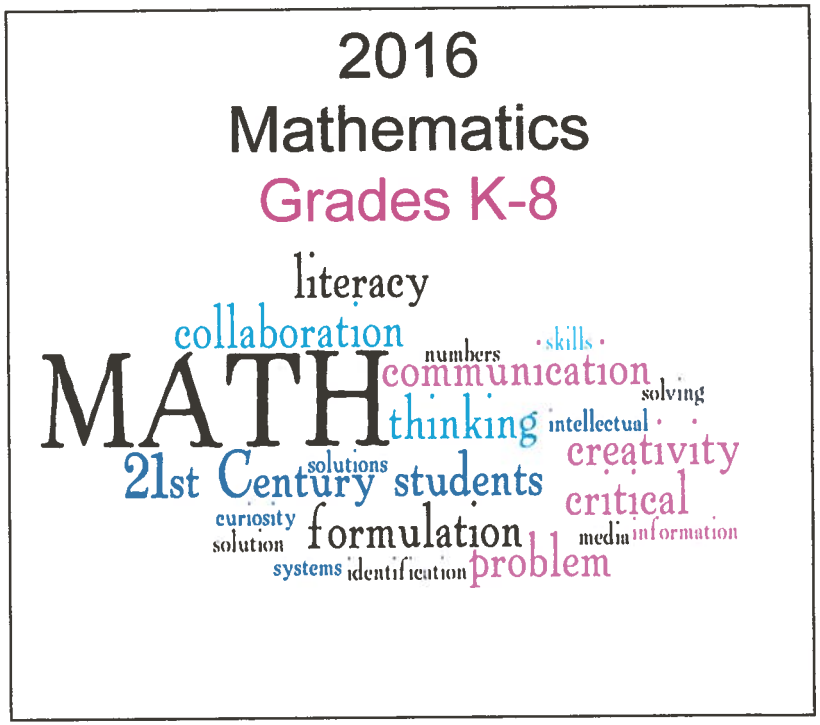

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Please note this tool was designed for evaluating comprehensive curricula (including any supplemental or ancillary materials), but it was not designed for the evaluation of standalone supplemental materials.

Who Uses the IMET?

Evaluating instructional materials requires both subject-matter and pedagogical expertise. Evaluators should be well versed in the Standards (www.corestandards.org/Math) for all grades in which materials are being evaluated. This includes understanding the Major Work of the grade (www.achievethecore/focus), the Supporting and Additional work, how the content fits into the progressions in the Standards (www.achievethecore.org/progressions), and the expectations of the Standards with respect to conceptual understanding, procedural skill and fluency, and application. Evaluators also should be familiar with the substantial instructional Shifts (http:// www.corestandards.org/other-resources/key-shifts-in-mathematics/) of Focus, Coherence and Rigor that are listed above.

Getting Started

Prior to Evaluation

Assemble all of the materials necessary for the evaluation. It is essential for evaluators to have materials for all grades covered by the program, as some criteria cannot be rated without having access to each grade. In addition, each evaluator should have a

reference copy of the Common Core State Standards for Mathematics (CCSSM) and the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013).

Before conducting the evaluation itself, it is important to develop a protocol for the evaluation process. The protocol should include having evaluators study the Publishers' Criteria and the IMET. It will also be helpful for evaluators to get a sense of each program overall before beginning the process. At a minimum, this would include reading the front matter of the text, looking at the table of contents and paging through multiple chapters.

Sections 1-3 below should be completed to produce a comprehensive picture of the strengths and weaknesses of the materials under evaluation. Information about areas in need of improvement or supplementation should be shared with internal and external stakeholders.

Navigating the Tool

Begin with Section 1: Non-Negotiable Alignment Criteria

- The Non-Negotiable Alignment Criteria must each be met in full for materials to be considered aligned to the Shifts and the major features of the Common Core State Standards. Each Non-Negotiable Alignment Criterion has one or more metrics associated with it; every one of these metrics must be met in order for the criterion as a whole to be met.

- Examine the relevant materials and use evidence to rate the materials against each criterion and its associated metric(s).

- Record and explain the evidence upon which the rating is based.

Continue to Section 2: Alignment Criteria

- The Alignment Criteria must each be met for materials to be considered aligned to the Shifts and the major features of the Common Core State Standards. Each Alignment Criterion has one or more metric associated with it; a specific number of these metrics must be met or partially met in order for the criterion as a whole to be met.

- Examine the materials in relation to these criteria, assigning each metric a point value. Rate the criterion as "Meets" or "Does Note Meet" based on the number of points assigned. The more points the materials receive on the alignment Criteria, the better they are aligned.

- Record and explain the evidence upon which the rating is based.

Proceed to Section 4: Indicators of Quality

- Indicators of Quality are important considerations that will help evaluators better understand the overall quality of instructional materials. These considerations are not criteria for alignment to the CCSS, but they provide valuable information about additional program characteristics. Evaluators may want to add their own indicators to the examples provided.

Directions for Non-Negotiable 1

Freedom from Obstacles to Focus

Criterion	Evidence- Give specific examples.	Rating: (Reviewer only.)
Non-Negotiable 1: **Freedom from Obstacles to Focus** **Materials must reflect the content architecture of the Standards by not assessing the topics named before the grade level where they first appear in the Standards.** The Standards foster students' progress to algebra by focusing strongly on arithmetic. Consistent with this focus, certain topics from outside of arithmetic appear only in later grades. Thus, to be aligned, materials must reflect the content architecture of the Standards by not assessing the topics named before the grade level where they first appear in the Standards. In this criterion, "topics named" means the topics that are explicitly named in Metric 1A. No other topics should be added to the list in Metric 1A. (Note that other topics in the standards are addressed in criterion NN2.)	**Required Materials** • Common Core State Standards for Mathematics (www.corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf) • From the materials being evaluated: teacher guides and all assessment components	**Rating this Criterion:** Non-Negotiable 1 is rated as Meets or Does Not Meet. To rate Non-Negotiable 1, begin by rating Metric 1A. Since Metric 1A is the only metric for Non-Negotiable 1, the rating for Non-Negotiable 1 is the same as the rating for Metric 1A. If Metric 1A is rated as Does Not Meet, include evidence of when the named topic(s) is/are assessed. If the metric is rated as Meets, list the grade(s) examined in the evaluation.

Metric NN2 **Materials include problems and activities that serve to connect two or more clusters in a domain, or two or more domains in a grade, in cases where these connections are natural and important.** **How to Find the Evidence:** In the grade being evaluated, choose two or more clusters or two or more domains for which connections are natural and important. Evaluate the units, chapters, and lessons that deal with the chosen topics, looking for problems and activities that serve to connect the chosen clusters or domains. NOTE: An example of evaluating this Criterion might include looking at whether problems in grade 4 sometimes or often involve students applying their developing computation skills (detailed in domain NBT) in the context of solving word problems (detailed in domain OA). For context, read Criterion #6b in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** **The text does connect clusters in a domain and domains in a grade.** **1) Ch. 3 and Ch. 4 connect Number an Operations in Base Ten and work with decimals** **2) Ch. 1 and Ch. 9 connect Operations and Algebraic Thinking with Geometry** **3) Making Connections Ch. 3 p. 152** **4) Ch. 3 connects place values of decimals with multiplying by fractions p. 157** **5) Ch. 5 use of decimals is connected with measurement (lesson 5.1 Engage and real world weight problem on p. 292)** **6) Decimals are connected with money (Ch. 5)** **7) Measurement reinforced in fractions (Ch. 6 p. 406)** **8) Use of operations for converting measurements (Ch. 10)**	(Reviewer only.) **_X___Meets** **____Does Not Meet/** **Insufficient Evidence**
Non-Negotiable 2: **Focus and Coherence** **Materials must focus coherently on the Major Work of the grade in a way that is consistent with the progressions in the Standards.** **NN 2** If all Metrics 2A – 2H were rated as Meets, then rate Non-Negotiable 2 as Meets. If one or more Metric was rated Does Not Meet/Insufficient Evidence, then rate Non-Negotiable 2 as Does Not Meet. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)** **Before moving to Alignment Criterion 1, record the final Meets or Does Not Meet rating in the Evaluation Summary.**		(Reviewer only.) **__X__Meets** **____Does Not Meet** **Strengths/Weaknesses:** **The curriculum clearly builds upon prior knowledge and earlier concepts by reviewing and accessing prior knowledge in each lesson prior to moving on to the core topic.** **The curriculum clearly identifies domains, standards, and mathematical practices throughout the teacher materials. This is also reinforced in the student edition with mathematical practices.**

Now continue by evaluating the Alignment Criterion 1 for Rigor and Balance.

Directions for Alignment Criterion 1

Rigor and Balance

Alignment Criterion 1: Rigor and Balance **Materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.** The Standards set expectations for attention to all three aspects of rigor: conceptual understanding, procedural skill and fluency, and applications. Thus, materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.	**Required Materials** • Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf) • Focus by Grade Level for the grade being evaluated (achievethecore.org/focus) • Situation Types for the Operations in Word Problems (achievethecore.org/situation-types) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion:** Alignment Criterion 1 is rated as Meets or Does Not Meet. To rate Alignment Criterion 1, first rate metrics 1A, 1B, and 1C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). For each metric, guiding questions are provided to aid in gathering evidence. Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 1 if the materials rate 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as rigor and balance, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.
Metric AC1A: **The materials support the development of students' conceptual understanding of key mathematical concepts, especially where called for in specific content Standards or cluster headings.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Major Work for the grade being evaluated that relate specifically conceptual understanding to use throughout the questions associated with this metric. NOTE: Some examples of clusters or Standards that call for conceptual understanding include: K.OA.A.1, (1.NBT.B, 1.NBT.C), (2.NBT.A, 2.NBT.B), (3.OA.A.1, 3.OA.A.2), 4.NF.A, (4.NBT.A, 4.NBT.B), 5.NF.B, (5.NBT.A, 5.NBT.B), 6.RP.A, 6.EE.A.3, 7.NS.A, 7.EE.A, 8.EE.B, 8.F.A, 8.G.A Clusters or Standards grouped by parentheses are closely connected and could be analyzed together. For context, read Criterion #4a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	-Choose a cluster/Standard from the Major Work that is aligned to each aspect of rigor and use it to evaluate these metrics. It is most helpful if the same clusters/Standards are chosen for all of the programs being evaluated. (Guidance in choosing clusters/Standards is included in "How to Find the Evidence".)	**Use the questions for AC Metric 1A to evaluate Metric 1A. Record evidence for each question and rate Metric 1A.** **_X___Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**

Is conceptual understanding attended to thoroughly where the Standards set explicit expectations for understanding or interpreting? Evaluate lessons, chapter/unit assessments and homework assignments, paying attention to work aligned to Standards that explicitly call for understanding or interpreting. NOTE: Examples of evaluating this Criterion might include looking at how well the multi-digit addition and subtraction algorithms are developed and explained on the basis of place value and properties of operations; or how well the multi-digit multiplication and division algorithms are developed and explained on the basis of place value and properties of operations; or how well solving equations is presented and explained as a process of reasoning.	**Evidence-** **5.NF.B – Apply and extend previous understandings of multiplication and division to multiply and divide in fractions.** **1) The chapter on dividing Fractions (Ch. 9) begins with a Teaching for Depth PD section for the teacher that helps make sense of fraction division and gives examples of how to draw diagrams and represent division** **2) Ch. 9 Unlock the Problem asks students to solve a problem related to the lesson concept** **3) Students use models, drawings, manipulatives, and classroom discussions (Math Talk, Share and Show) to develop understanding of the mathematical concept** **4) Conceptual understanding is also taught in the lesson by the use of fractions strips, diagrams, models, and pictures to develop understanding of dividing fractions** **5) Students are provided with the opportunity to see and practice multiple ways to solve problems (Ch. 2, SE pp. 99-100 and TE Ch. 2 99-100). Teacher connects base ten blocks with the area model in Math Talk section.**	
Do the materials feature high-quality conceptual problems and conceptual discussion questions? Evaluate lessons, chapter/unit assessments, and homework assignments. NOTE: Example of conceptual problems might include such questions as "Find a number greater than 1/5 and less than 1/4," or "If the divisor does not change and the dividend increases, what happens to the quotient?"	**Evidence-** **Lessons, classroom discussion, and Mid-Unit and End-of-Unit assessments have a great deal of high-quality conceptual problems and discussion questions. Problems and discussion questions promote conceptual understanding. However, additional support could be provided to assist teachers in generating quality student responses uses evidence and claims to justify their reasoning.** **1) Lesson at a Glance** **2) Chapter at a Glance** **3) Math Talk** **4) Show and Share** **While the problems are grade level appropriate many of the answers required typically do not generate higher level thinking.**	

Do the materials feature opportunities to identify correspondences across mathematical representations? Evaluate lessons, chapter/unit assessments and homework assignments. NOTE: Examples of evaluating this Criterion might include looking at whether students are supported in identifying correspondences among: the verbal description of a situation, the diagrams that distill its mathematical features, and the equations that model it; or equivalent forms of numbers (e.g., 3 and 6/2) and the number line; or rational number operations and representations of them via models such as the vector model; or the expression that defines a function and the graph that shows the relationship.	**Evidence-** **All materials feature opportunities to identify correspondences across the mathematical representations for teachers and students.** **1) Lessons – students explain their understanding with diagrams/models, equations, and verbal/written descriptions** **2) Homework – focuses more on equations, models, and diagrams, with less emphasis on the reasoning behind the conceptual understanding** **3) Assessments – provide a great deal of opportunity for students to use diagrams/models, equations, and verbal/written descriptions to demonstrate their conceptual understanding** **4) Students are encouraged through the teacher generated discussions in the TE to make connections between different models and problems.** **5) Lessons that use manipulatives assist the student in making connections across mathematical representations.**	
Metric AC1B: **The materials are designed so that students attain the fluencies and procedural skills required by the Standards.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Major Work for the grade being evaluated that relate specifically to fluency and procedural skill to use throughout the questions associated with this metric. NOTE: Some examples of Standards that call for procedural skill and fluency include: K.OA.A.5, 1.OA.C.6, 2.OA.B.2, 2.NBT.B.5, 3.OA.C.7, 3.NBT.A.2, 4.NBT.B.4, 5.NBT.B.5, 6.NS.B.2, and 6.NS.B.3, 6.EE.A, 7.NS.A, 7.EE.A.1,7.EE.B.4a, 8.EE.C.7, 8.EE.C.8b For context, read Criterion #4b in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).		**Use the questions for Metric 1B to evaluate Metric 1 B. Record evidence for each question and rate Metric 1B.** **(Reviewer only.)** **__X__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**

Is progress toward fluency and procedural skill interwoven with students' developing conceptual understanding of the operations in question? Evaluate lessons, chapter/unit assessments, daily routines, and homework assignments for evidence that the development of fluency and procedural skill is supported by conceptual understanding.	**Evidence-** **Progress towards fluency and procedural skills is interwoven with the development of conceptual understanding.** **1) Lessons – provide a good balance to practice for fluency and work with procedural skills.** **2) Fluency Builder section at the beginning of each lesson** **3) Spiral Review section in each lesson** **4) Homework – provides additional procedural and fluency practice** **5) Unit Assessments – contain procedural skills** **6) Reteach and Enrich materials for each lesson can provide additional opportunities for grade-level procedural and fluency practice** **7) The sequencing and progression is grade-level and CCSS appropriate. There is sufficient practice in each lesson to promote and develop fluency and procedural skills.** **8) The practice is frequently connected with manipulatives to enhance the conceptual understanding** **9) Additional resources provide further opportunities to develop fluency and conceptual understanding such as the Grab and Go, Strategies and Practices for Skills and Fact Fluency, and the Fluency Builder sections in the TE**	
Are purely procedural problems and exercises present that include cases in which opportunistic strategies are valuable and generic cases that require efficient algorithms present? Evaluate lessons, chapter/unit assessments, daily routines, and homework assignments. NOTE: Examples of problems in which opportunistic strategies are valuable might include the sum 698 + 240 or the system x + y = 1, 2x + 2y = 3. Examples of generic cases that require efficient algorithms might include the sum 8767+2286 or the system 6y + x = x + 3, – x = 1 + 2y.	**Evidence-** **The lessons, homework, and assessments all provide a nice balance with the opportunity for both opportunistic strategies to be used by students as well as efficient algorithm strategies.** **1) Promotion of efficient problem solving can be found in the TE Think Smarter sections** **2) Sufficient practice with the algorithm is included.**	
Do the materials in grades K–6 provide repeated practice toward attainment of fluency Standards? Evaluate lessons, daily routines, and homework assignments for evidence of repeated practice toward attainment of the following K–6 Standards that set an explicit expectation of fluent (accurate and reasonably fast) computation: K.OA.A.5, 1.OA.C.6, 2.OA.B.2, 2.NBT.B.5, 3.OA.C.7, 3.NBT.A.2, 4.NBT.B.4, 5.NBT.B.5, 6.NS.B.2, 6.NS.B.3.	**Evidence-** **The text contains practice with algebraic operations and connections are made between the mathematical concepts through the use of algebraic operations. The only fluency builder built into this program is a 10-question practice the teacher can use before each day's lesson (Fluency Builder). Additional opportunities within the text for repeated fluency building would be a welcomed addition.**	

Metric AC1C **The materials are designed so that teachers and students spend sufficient time working with engaging applications, without losing focus on the Major Work of each grade.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Major Work for the grade being evaluated that relate specifically application to use throughout the questions associated with this metric. NOTE: Some examples of clusters or Standards that call for application include: K.OA.A.2, 1.OA.A, 2.OA.A, 3.OA.A.3, 3.OA.D.8, 4.OA.A.3, 4.NF.B.3d, 4.NF.B.4c, 5.NF.B.6, 5.NF.B.7c, 6.RP.A.3, 6.NS.A.1, 6.EE.B.7, 6.EE.C.9, 7.RP.A, 7.NS.A.3, 7.EE.B.3, 8.EE.C.8c, 8.F.B For context, read Criterion #4c in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** **There is single-step and multi-step problems within the text. The connections to real-world situations are connected but seem to miss the opportunity to pursue depth and multi-step problem solving.** **5.NF.B.6 – there are only five pages tied to the standard according to the publishers Correlation to the Idaho Core Standards for Mathematics (pp. 471-476). This is not sufficient and only involved mixed fractions. However, there may be other multi-step problems within the text.**	**Use the questions for Metric 1C to evaluate Metric 1C. Record evidence for each question and rate Metric 1C.** **(Reviewer only.)** **__X__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Are there are single- and multi-step contextual problems, including non-routine problems, that develop the mathematics of the grade, afford opportunities for practice, and engage students in problem solving? Do the problems attend thoroughly to those places in the content Standards where expectations for multi-step and real-world problems are explicit? Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** **The use of multiple operations with a problem requires multiple steps.** **See notes above.** **1) Homework L8.1 has one multi-step problem** **2) L8.2 (7 and 8) are multi-step problems** **3) L8.3 has two multi-step problems (7 and 10)** **4) Assessment Ch. 8 contains 3 multi-step problems out of 20**	
Do application problems particularly stress applying the Major Work of the grade? Evaluate lessons, chapter/unit assessments, and homework assignments. NOTE: Examples of evaluating this Criterion might include looking at: how well, by the end of grade 2, students using the materials as designed can represent and solve a full range of one-step addition and subtraction word problems; or how well, by the end of grade 3, students using the materials as designed can represent and solve a full range of one-step multiplication and division word problems; or how well these basic situation types for each operation are carried coherently across the grades, (e.g., with fractions and algebraic expressions); or, in all grades, whether the problems connect concepts, Standards, and domains in ways that are natural and important. For a list of situation types for one-step addition, subtraction, multiplication, and division problems, see Situation Types for the Operations in Word Problems	**Evidence-** **Students use the CCSS content knowledge to problem solve with emphasis on the Major Work for the grade. In fact, many of the quality multi-step problems use multiple operations. Using the materials as designed, 5th graders will be able to use the problems provided to connect the concepts, standards, and domains.** **1) The situation types vary and the lessons provide ample structure and practice** **2) Homework provides ample practice** **3) Assessments are good gauges for mastery of the mathematical concepts and Major Work for the grade level**	

Does modeling slowly across K–8, with applications that are relatively simple in earlier grades and when students are encountering new content? In grades 6–8, do the problems begin to provide opportunities for students to make their own assumptions or simplifications in order to model a situation mathematically? Read Standard for Mathematical Practice 4, Model with Mathematics. Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** **Models are built upon previous grade levels and prepare students for existing grade level connections and beyond. Problems and activities are grade level appropriate. Base Ten blocks, fraction tiles, etc.**	
Alignment Criterion 1: **Rigor and Balance** **Materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.** AC1 Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 out of 6 points, the Criterion has not been met. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)** **Before moving to Alignment Criterion 2, record the final Meets or Does Not Meet rating in the Evaluation Summary.**		**(Reviewer only.)** **__X__Meets** **____Does Not Meet** **Strengths/Weaknesses:**

Directions for Alignment Criterion 2

Standards for Mathematical Practice

Alignment Criterion 2: **Standards for Mathematical Practice** **Materials must demonstrate authentic connections between content Standards and practice Standards.** The Standards require that designers of instructional materials connect the mathematical practices to mathematical content in instruction. Thus, materials must demonstrate authentic connections between content Standards and practice Standards.	**Required Materials:** • Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf) • Focus by Grade Level for the grade being evaluated (www.achievethecore.org/focus) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion** Alignment Criterion 2 is rated as Meets or Does Not Meet. To rate Alignment Criterion 2, first rate metrics 2A, 2B, and 2C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). For each metric, guiding questions are provided to aid in gathering evidence. Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 2 if the materials earn 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as mathematical practices, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.

Metric AC2A **Materials address the practice Standards in such a way as to enrich the Major Work of the grade; practices strengthen the focus on Major Work instead of detracting from it, in both teacher and student materials.** **How to Find the Evidence:** Familiarize yourself with the Major Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate teacher and student materials for evidence that the mathematical practices support and connect to the focus of the grade. NOTE: Examples of evaluating this Criterion might include looking at whether, in grades K–5, students using the materials are supported to look for and express regularity in repeated reasoning about the addition table, the multiplication table, the properties of operations, the relationship between addition and subtraction or multiplication and division, and the place value system; or whether, in grades 6–8, students using the materials are supported to look for and express regularity in repeated reasoning about proportional relationships and linear functions. For context, read Criterion #8 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013).	**Evidence-** **The use of the MPs support the focus on the Major Work for the grade level and provide coherence and connections in both TE and SE. The use of the MPs enhances the Major Work of the grade level** 1) **MP 1, 2, 3, 4, 6, and 7 are woven throughout the text (SE and TE)** 2) **MP 5 and 8 are used throughout the chapters just at less frequent intervals (SE and TE)** 3) **Depth of understanding is promoted in lessons through the About the Math – Teaching for Depth (Ch. 3 p. 181A)** 4) **MPs are also promoted in Unlock the Problem section in lessons (Ch. 3 p. 157)** 5) **The text uses real-world problems** 6) **Students evaluating the reasoning of others** 7) **Students use various strategies and explain their reasoning (Math Talk)** 8) **Each lesson encourages and models the use of manipulatives and diagram/model drawing** 9) **Students write their own word problems**	**(Reviewer only.)** **__X__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Metric AC2B: **Materials attend to the full meaning of each practice Standard.** **How to Find the Evidence:** For context, read Criterion #7 and Criterion #9 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).		**Use the questions for Metric 2B to evaluate Metric 2B. Record evidence for each question and rate Metric 2B.** **(Reviewer only.)** **_X___Meets (2)**

Over the course of any given year of instruction, is each mathematical practice Standard meaningfully present in the form of assignments, activities, or problems that stimulate students to develop the habits of mind described in the practice Standard? Evaluate lessons, chapter/ unit assessments, and homework assignments for evidence of each mathematical practice being meaningfully present in instruction.	**Evidence-** **The MPs are connected to the content in a meaningful way. The problems assist in promoting student development of mathematical habits of mind. Discussions within the lessons support the practice of the MPs in the problem solving process. The teacher has these listed throughout the Planning Guide. The MPs are also present in all assignments and lessons.** **1) Math Talk** **2) Share and Show** **3) Planning Guide** **4) Each lesson outlines a lesson focus which is reinforced throughout the lesson (Math Talk, etc.)** **5) Homework includes practice with the MPs even though they are not clearly marked**	**____Partially Meets (1)** **____Does Not Meet (0)**
Do the materials treat the practice Standards as developing across grades or grade bands? Are the practice Standards in early grades appropriately simple? Do they display an arc of growing sophistication across the grades?	**Evidence-** **The text provides material and suggestions for delivering the content in grade appropriate ways. The MPs are tailored for grade level appropriateness and inform teachers of the progression and appropriate grade level implantation.** **Planning Guide (pp. 20-29) provides more information for the teacher on the progression implemented into the lesson structure.**	
Are there teacher-directed materials that explain the role of the practice Standards in the classroom and in students' mathematical development? Are alignments to practice Standards accurate?	**Evidence-** **See above and Chapter at Glance demonstrates the progression for each chapter and TE Table of Contents**	
Metric AC2C: **Materials support the Standards' emphasis on mathematical reasoning.** **How to Find the Evidence:** For context, read Criterion #10 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).		**Use the questions for Metric 2C to evaluate Metric 2C. Record evidence for each question and rate Metric 2C.** **(Reviewer only.)** **____Meets (2)**

Do the materials support students in constructing viable arguments and critiquing the arguments of others concerning grade-level mathematics that is detailed in the content Standards? Read Standard for Mathematical Practice 3. Evaluate teacher and student materials to ensure that students are given opportunities to reason with grade-level mathematics.	**Evidence-** **The text provides opportunities for students to reason mathematically and share their process through discussions, and some of the written work.** **1) Math Talk and Share and Show activities support constructing viable arguments and critiquing the arguments of others; however, there is little teacher support on how to help students construct viable arguments, which can be difficult.** **2) Parts 2, 3, and 4 of each lesson give questioning prompts to help with Math Talk and provide opportunities for students to share their thinking and explain their methods.** **3) Sense of Nonsense allows students to critique the work of others' and explain others' reasoning**	**__X__Partially Meets (1)** **____Does Not Meet (0)**
Do the materials support students in producing not only answers and solutions, but also, in a grade-appropriate way, arguments, explanations, diagrams, mathematical models, etc., especially in the Major Work of the grade? Familiarize yourself with the Major Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate teacher and student materials, to understand the types of work students are expected to produce.	**Evidence-** **While the text has supports for students' explanations, justification, and demonstrating their problem solving process, more teacher materials could have supported the discussions and sharing of results to create better students results. Not all teachers have the knowledge or the skill to support such dialogue.** **1) The focus of the written materials is more on the answers, but there are opportunities to offer solutions in the problem solving application within each lesson and through the Math Talk and Show and Share components.** **2) While discussions and explanations are included within the TE, there is no reference in how to teach the students to explain and justify answers with evidence.** **3) See above**	

Do materials explicitly attend to the specialized language of mathematics? Is the language of argument, problem solving, and mathematical explanations taught rather than assumed? Evaluate teacher and student materials, paying attention to how mathematical language is taught. NOTE: Examples of evaluating this Criterion might include looking at whether students are supported in: basing arguments on definitions; using the method of providing a counterexample; or recognizing that examples alone do not establish a general statement.	**Evidence-** **There are no modifications to the mathematical language within the TE or SE that sacrifice mathematical concepts or language development. However, there is little support that the language or argument, problem solving, and mathematical explanations are taught and not just assumed. More teacher support through PD and in lesson supports would benefit teachers and students in developing evidence and claim style discussion strategies.** **1) Each chapter has vocabulary section to introduce and support the learning of the mathematical language which is then reinforced throughout the activities within the chapter**	
Alignment Criterion 2: **Standards for Mathematical Practice** **Materials must demonstrate authentic connections between content Standards and practice Standards.** **AC2** Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 out of 6 points, the Criterion has not been met. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)** **Before moving to Alignment Criterion 3, record the final Meets or Does Not Meet rating in the Evaluation Summary.**		**(Reviewer only.)** **_X___Meets** **____Does Not Meet** **Strengths/Weaknesses:**

Alignment Criterion 3: **Access to the Standards for All Students** **Materials must provide supports for English Language Learners and other special populations.** Because Standards are for all students, alignment requires thoughtful support to ensure all students are able to meet the Standards. Thus, aligned materials must provide supports for English Language Learners and other special populations.	**Required Materials:** • Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion:** Alignment Criterion 3 is rated as Meets or Does Not Meet. To rate Alignment Criterion 3, first rate metrics 3A, 3B, and 3C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 3 if the materials earn 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as support for special population, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.
Metric AC3A: **Support for English Language Learners and other special populations is thoughtful and helps those students meet the same Standards as all other students. The language in which problems are posed is carefully considered.** **How to Find the Evidence:** Evaluate teacher and student materials, paying attention to supports offered for special populations.	**Evidence-** **Every lesson in TE and in student materials offers help to special populations. The language is considered as well as the strategies that may be helpful.** **1) The School-Home Letter is in Spanish and English (Chapter Resources p. 1-17, etc.)** **2) ELL strategies on each Explore section in TE (p.7)** **3) Strategies or ELL at the beginning of each chapter in TE (p. 3G)** **4) Planning for Instruction** **5) Tiered interventions/differentiation strategies and activities within each lesson**	**Reviewer only.)** **__X__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**

Metric AC3B: **Materials provide appropriate level and type of scaffolding, differentiation, intervention, and support for a broad range of learners with gradual removal of supports, when needed, to allow students to demonstrate their mathematical understanding independently.** **How to Find the Evidence:** Evaluate teacher and student materials, paying attention to whether materials provide differentiation that will lead all learners to engage with on-grade-level content.	**Evidence-** **Assessment of prior knowledge in beginning of each lesson, differentiation support for teacher in each lesson (activities, enrichment and tiered interventions).** **1) Identify common misconceptions within TE in the Explore section (p. 18) Common Error** **2) TE contains Quick Check for formative assessments to identify students preparedness** **3) TE contains GoDeeper (p. 25) sections for expanding upon a subject** **4) TE references Chapter Resources pages for reteaching and enriching for each lesson and provides the answers.** **5) Advanced Learner section for each lesson in TE** **6) Tier intervention options are available in the TE (Ch. 5, p. 290)** **7) Grab and Go differentiated centers kist** **8) Enrich, Reteach, and advanced learner supports in each lesson**	**Reviewer only.)** **__X__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Metric AC3C: **Design of lessons recommends and facilitates a mix of instructional approaches for a variety of learners such as using multiple representations (e.g., including models, using a range of questions, checking for understanding, flexible grouping, pair-share).** **How to Find the Evidence:** Evaluate teacher materials, noting instructional approaches suggested for whole class and differentiated lessons and activities.	**Evidence-** **A variety of instructional approaches are utilized. Models, questioning techniques, checks for understanding, grouping, pair/share and other strategies are included in each lesson. Whole class, small group, pairings, and individual practice are included in each lesson.** **1) The five E's of the lesson structure includes class discussion, Math Talk, Share and Show** **2) Most of the lesson is whole group with the Explain portion of the five E's as small group (Ch. 1, p. 3F)** **3) Independent activities provided within the lessons** **4) Manipulatives are used within some of the lessons TE and SE (ex. Ch. 3 with base ten blocks and Ch. 6 with fraction tiles)**	**Reviewer only.)** **__X__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**

Alignment Criterion 3: **Access to the Standards for All Students** **Materials must provide supports for English Language Learners and other special populations.** **AC3** Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 points, the Criterion has not been met. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion.**(Reviewer only.)** **Move to the Evaluation Summary and record the final Meets or Does Not Meet rating .**	**(Reviewer only.)** **__X__Meets** **____Does Not Meet** **Strengths/Weaknesses:**

Once an evaluation for alignment to the Shifts and major features of the CCSS has been conducted using Sections 1-3, it's important to evaluate for overall quality and best practices. A starting list of Indicators of Quality are suggested below. States, districts and others evaluating instructional materials are encouraged to add to this list to ensure materials reflect local contexts. For background information on some of the Indicators of Quality in this section, refer to pp.18–21 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).

Indicators of Quality	**Evidence- Give specific examples.**	**Rating: (Reviewers only.)**

1. Lessons are thoughtfully structured and support the teacher in leading the class through the learning paths at hand, with active participation by all students in their own learning and in the learning of their classmates.	**Evidence-** **The structure of this program is beneficial for leading students through the learning paths. Unlock the Problem and Essential Questions open up the concepts and then make connections. Learning activities explore the concepts.** **1) Share and Show and Math Talk further explain and explore mathematical concepts** **2) Quick Checks enable teachers to differentiate** **3) Elaborate gives the students applications of the concepts** **4) Evaluate provides the opportunity to assess student understanding** **5) The use of the five E's for each lesson provides an opportunity for students a variety of participatory options.** **6) Engage provides discussion and a digital activity to interest the students (only digital)**	**(Reviewer only.)** **___X___ Yes** **_____ No**
2. The underlying design of the materials includes both problems and exercises. (In solving problems, students learn new mathematics, whereas in working exercises, students apply what they have already learned to build mastery.) Each problem or exercise has a purpose. **NOTE: This Criterion does not require that the problems and exercises be labeled as such.**	**Evidence-** **1) TE includes both exercises and problems, but the problems are weak in their application. They seem more like an exercise in word form.**	**(Reviewer only.)** **___X___ Yes** **_____ No**
3. Design of assignments is not haphazard: exercises are given in intentional sequences in order to strengthen students' mathematical understanding.	**Evidence-** **Each lesson, Homework assignment, and assessment offers a variety of problems and exercises that provide an intentional sequence to develop and strengthen students' mathematical understanding.** **1) Each lesson follows the five Es.** **2) Following the five Es for each lesson provides a structure and sequence for each lesson and across the chapters that promotes and strengthens student understanding**	**(Reviewer only.)** **___X___ Yes** **_____ No**

4. There are separate teacher materials that support and reward teacher study including, but not limited to: discussion of the mathematics of the units and the mathematical point of each lesson as it relates to the organizing concepts of the unit, discussion on student ways of thinking and anticipating a variety of students responses, guidance on lesson flow, guidance on questions that prompt students thinking, and discussion of desired mathematical behaviors being elicited among students.	**Evidence-** **Design of assignments follows a logical grade-level sequence that builds from prior knowledge and strengthens mathematical behaviors and conceptual understanding** **1) Various PD sections in TE** **2) Videos – Why Teach This develop teacher knowledge base** **3) Try This sections for additional materials and strategies for introducing a new lesson** **4) TE discuss student thinking and provides possible student responses, guidance on the flow of the lesson and questions that prompt student thinking/discussion** **5) About the Math section in the TE (p. 29A) discusses why the math in that lesson is important** **6) Think Smarter suggestions in TE (p. 39) provides ideas with assisting students with developing successful problem solving strategies** **7) Common Error section (p. 50) identifies potential student misconceptions to watch for.** **8) Math Talk in Action (p. 53) example dialogue** **9) Teaching for Depth and Classroom Management (pp. 3E-3F) for each chapter in the TE** **10) Developing Math Language (p. 3H) for math vocabulary instruction** **11) Mathematical Practices in our Classroom (p. 361)** **12) Most of these type of sections are labeled Professional Development** **13) Did not like the separate chapter books for the TE**	**(Reviewer only.)** **__X____ Yes** **_____ No**
5. Manipulatives suggested in the materials are faithful representations of the mathematical objects they represent and are connected to written methods.	**Evidence-** **Manipulatives are faithful representations of the mathematical objects within the lessons and are connected to the written problem solving methods.** **1) Fraction Tiles in Ch. 6, Ch. 7** **2) Base Ten blocks in Ch. 3** **3) Counters in Ch. 7** **4) Fraction circles in Ch. 7** **5) Number lines Ch. 7**	**(Reviewer only.)** **___X___ Yes** **_____ No**

6. Materials include a variety of curriculum-embedded assessments. Examples include pre-, formative, summative, and self-assessment resources.	**Evidence-** **Curriculum provides a variety of assessments including pre-assessments, formative and summative assessments, and suggestions for using portions of the lessons for checks for understanding** **1) Chapter Resources identifies the different types of assessments available within the text** **2) TE contains additional formative assessments through Quick Check** **3) Additional resources are available for preparing of the SBAC and intervention**	**(Reviewer only.)** **__X____ Yes** **_____ No**
7. Assessments contain aligned rubrics, answer keys, and scoring guidelines that provide sufficient guidance for interpreting student performance.	**Evidence-** **Aligned rubrics, answer keys, and scoring guidelines are present in TE and supplemental teacher materials.** **1) Chapter Resources contains answer keys, scoring guidelines, and performance task rubric (pp. 1-47 – 1-62).** **2) TE answer keys for student pages, and within chapter assessments** **3) Project scoring rubric in chapter 1 TE (p. 2)**	**(Reviewer only.)** **__X____ Yes** **_____ No**
8. Materials assess student proficiency using methods that are accessible and unbiased, including the use of course-level language in student prompts.	**Evidence-** **Grade level appropriate language is used in student prompts and appear to be accessible and unbiased.**	**(Reviewer only.)** **___X___ Yes** **_____ No**
9. Materials are carefully evaluated by qualified individuals, whose names are listed, in an effort to ensure freedom from mathematical errors and course-level appropriateness.	**Evidence-** **Planning Guide identifies references for the Professional Development section. Authors and editors have vetted the materials in an effort to ensure freedom from mathematical errors and grade-level appropriateness.**	**(Reviewer only.)** **__X____ Yes** **_____ No**
10. The visual design supports students in engaging thoughtfully with the subject. Navigation through the text is clear.	**Evidence-** **The visual design breaks the text into manageable sections. Navigation is clear. While the separate chapters may allow for easier adaptation of the instructional sequence, the student resources, such as a glossary of terms, etc. are in a separate book as well.** **1) Colorful, engaging, and easy to follow** **2) Interactive Student Edition is slightly childish for the grade level**	**(Reviewer only.)** **___X___ Yes** **_____ No**

11. The materials engage parents in appropriate ways. For example, homework assignments in elementary grades, consist of routine problems, practice with getting answers, and fluency-building exercises that parents can easily support.	**Evidence-** **The home materials engage parents in appropriate ways with information for each chapter provided in a School-Home letter for parents followed by appropriate homework assignments for each lesson. The homework consists of routine practice and problems allow parents to easily support their student's learning at home.** **1) School-Home Letter for each chapter with vocabulary and models** **2) Homework**	**(Reviewer only.)** **___X___ Yes** **_____ No**

Notes:

Reviewer IMET Evaluation Summary Title/Level: GO MATH! / Grade 5_____

Publisher: Houghton Mifflin Harcourt _____ Copyright: 2015_____
ISBN:9780544452152_____

Reviewer ID # ___KT_____LW_____ Date Review Completed: __3-8-16_____

Non-Negotiable Criteria- Each Non-Negotiable must be met in order for the Non-Negotiable Alignment Criteria to be met overall.

Non-Negotiable 1: Freedom from Obstacles to Focus	Non- Negotiable 2: Focus and Coherence
____X___ Meets _____ Does Not Meet	___X__ Meets _____ Does Not Meet

Non-Negotiable Overall:

___X__ Meets **_____ Does Not Meet**

Alignment Criteria- Each Alignment Criterion must be met with a sufficient number of points in order for Alignment Criteria to be labeled as "Meets" overall. The more points the materials receive on the Alignment Criteria, the better they are aligned.

Alignment Criterion 1: Rigor and Balance	Alignment Criterion 2: Standards of Mathematical Practice	Alignment Criterion 3: Access to Standards for All Learners
Points: __6___ of 6 possible. (Materials must receive at least 5 of 6 points to align.) ____X___ Meets _____ Does Not Meet	Points: __5___ of 6 possible. (Materials must receive at least 5 of 6 points to align.) ___X____ Meets _____ Does Not Meet	Points: __6___ of 6 possible. (Materials must receive at least 5 of 6 points to align.) ___X____ Meets _____ Does Not Meet

Alignment Criteria Overall:

__X___ Meets **_____ Does Not Meet**

If the materials meet both Non-Negotiables and relevant Alignment criterion, they are aligned to the Shifts and major features of the Core Standards. **Do the materials meet every Non-Negotiable and Alignment Criterion? __X___ Yes _____ No**

What are the specific areas of strength and weakness based on this evaluation? Publishers or others modifying or developing assessments can use this information to make improvements and/or to remedy gaps in the alignment of assessment materials.

2015-16 Mathematics Interim Review Recommendation & Summary

Publisher Name:	Houghton-Mifflin
Title:	Go Math! 6th grade
ISBN #	9780544295544-5
Grade Level(s) or Course:	6th grade
Reviewer ID:	AS, PL, EW

RECOMMENDED AS:

__X__ **Core Mathematics Program-** a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials. Substantial evidence clearly supports the designation of this program as Core.

_____ **Other Mathematics Program-** a program that substantially, but partially, meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for supplemental materials. Substantial evidence clearly supports the designation of this program as Other.

_____ **Component Mathematics Program-** a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs. Substantial evidence clearly supports the designation of this program as Component.

_____ **Intervention Program-** a program designed and intended to target and support students' specific needs. Substantial evidence clearly supports the designation of this program as Intervention.

__X__ **Does not meet criteria** for recommendation as a Curricular Material or Online Resource for Mathematics.

EVIDENCE SUMMARY:

NN1, NN2
FOCUS-
The materials address each of the 6th grade standards. Future grade level concepts are not assessed. The materials do not devote enough time to the Major Works of the grade.

NN2
COHERENCE-
The supporting works enhance and support the Major Works of the grade. All students work on grade-level concepts. Previous grade-level content is not explicitly stated for students. Learning objectives are clear. However, not enough time is devoted to the Major Works of the Grade.

AC1
RIGOR-
The materials are weak in providing attainment of division fluency in 6th grade. The use of multi-step problems is weak, with few problem types presented.

AC1
CONCEPTUAL UNDERSTANDING-
Materials support conceptual understanding, but lack the use of modeling mathematics The materials provide infrequent opportunities for conceptual discussions.

AC2
MATHEMATICAL PRACTICES-
The materials include the mathematical practices, however, time is not spent teaching students what the mathematical practices are. Students are required to reason and produce arguments, but ~~it is~~ done so infrequently.

AC3
ACCESSIBILITY OF STANDARDS TO ALL STUDENTS-
Although the materials provide resources for students at all levels. The ELL supports are present in all lessons and appropriate strategies are provided. Scaffolding supports are weak and often absent in lessons for below level learners. Instructional strategies used become routine as they do not vary throughout lessons.
OTHER:

2[illegible]5-16 Interim Mathematics Review

Mathematics Evaluation Tool Grades K-8

Publisher: Houghton-Mifflin

Title of Material: Go Math! 6th

Author: _____

ISBN #: 9780544295445 **Copyright** 2015

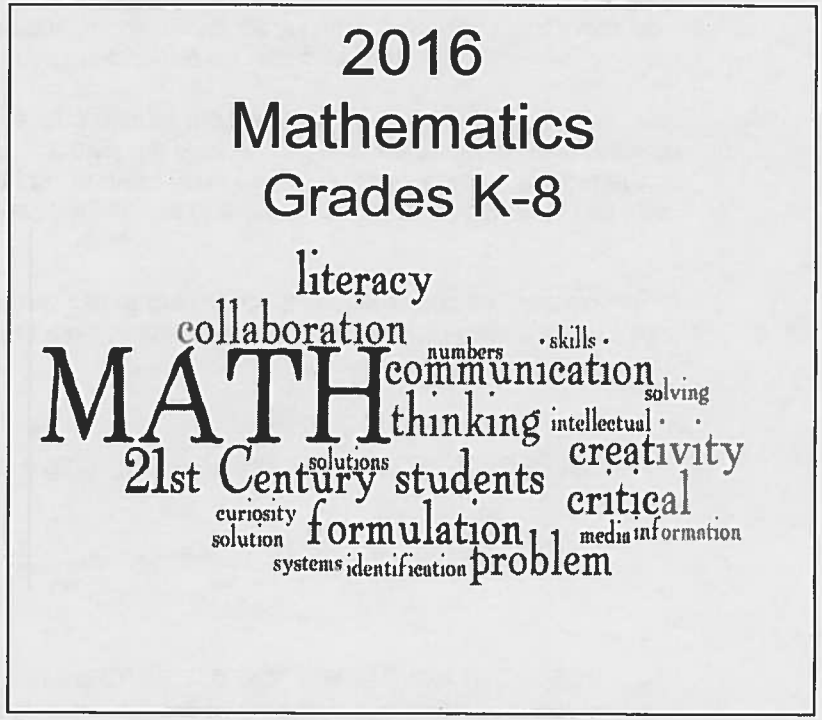
Reviewer ID: AJ, PL

Core Mathematics Program- a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Core.

Other Mathematics Program- a program that substantially, but partially, meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Other.

Component Mathematics Program- a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs.
Substantial evidence clearly supports the designation of this program as Component.

Intervention Program- a program designed and intended to target and support students' specific needs.
Substantial evidence clearly supports the designation of this program as Intervention.



- Evaluation Form adapted from Instructional Materials Evaluation Toolkit (IMET).

The IMET was developed by Student Achievement Partners. Educators may use or adapt. http://creativecommons.org/licenses/by/3.0/ Download this tool at http://achievethecore.org/IMET

Instructional Materials Evaluation Tool

Mathematics, Grades K-8

What Are the Purposes of the IMET?

This Math IMET is designed to help educators determine whether instructional materials are aligned to the Shifts and major features of the Common Core State Standards (CCSS). The substantial instructional Shifts (http://www.corestandards.org/other-resources/key-shifts-inmathematics/) at the heart of the Common Core State Standards are:

- **Focus** strongly where the Standards focus
- **Coherence**: Think across grades and link to major topics within the grade
- **Rigor**: In major topics, pursue conceptual understanding, procedural skill and fluency, and application with equal intensity.

The IMET draws directly from the following documents:

- Common Core State Standards for Mathematics (www.corestandards.org/Math)
- Publishers' Criteria for the Common Core State Standards in Mathematics grade K-8 (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)

When to use the IMET

1. Purchasing materials: Many factors go into local purchasing decisions. Alignment to the Standards is a critical factor to consider. This tool is designed to evaluate alignment of instructional materials to the Shifts and the major features of the CCSS. It also provides suggestions of additional indicators to consider in the materials evaluation and purchasing process.

2. Evaluating materials currently in use: The IMET can be used to analyze the degree of alignment of existing materials and help to highlight specific, concrete flaws in alignment. Even where materials and tools currently in use fail to meet one or more of these criteria, the pattern of failure is likely to be informative. States and districts can use the evaluation to create a thoughtful plan to modify or combine existing resources in such a way that students' actual learning experiences approach the focus, coherence, and rigor of the Standards.

3. Developing programs: Those developing new programs can use this tool as guidance for creating aligned curricula.
Please note this tool was designed for evaluating comprehensive curricula (including any supplemental or ancillary materials), but it was not designed for the evaluation of standalone supplemental materials.

Who Uses the IMET?

Evaluating instructional materials requires both subject-matter and pedagogical expertise. Evaluators should be well versed in the Standards (www.corestandards.org/Math) for all grades in which materials are being evaluated. This includes understanding the Major Work of the grade (www.achievethecore/focus), the Supporting and Additional work, how the content fits into the progressions in the Standards (www.achievethecore.org/progressions), and the expectations of the Standards with respect to conceptual understanding, procedural skill and fluency, and application. Evaluators also should be familiar with the substantial instructional Shifts (http:// www.corestandards.org/other-resources/key-shifts-in-mathematics/) of Focus, Coherence and Rigor that are listed above.

Getting Started

Prior to Evaluation

Assemble all of the materials necessary for the evaluation. It is essential for evaluators to have materials for all grades covered by the program, as some criteria cannot be rated without having access to each grade. In addition, each evaluator should have a reference copy of the Common Core State Standards for Mathematics (CCSSM) and the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013).

Instructional Materials Evaluation Tool
Mathematics, Grades K-8

What Are the Purposes of the IMET?

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- Common Core State Standards for Mathematics (www.corestandards.org/Math)
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Getting Started
Prior to Evaluation

Assemble all of the materials necessary for the evaluation. It is essential for evaluators to have materials for all grades covered by the program, as some criteria cannot be rated without having access to each grade. In addition, each evaluator should have a reference copy of the Common Core State Standards for Mathematics (CCSSM) and the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013).

Before conducting the evaluation itself, it is important to develop a protocol for the evaluation process. The protocol should include having evaluators study the Publishers' Criteria and the IMET. It will also be helpful for evaluators to get a sense of each program overall before beginning the process. At a minimum, this would include reading the front matter of the text, looking at the table of contents and paging through multiple chapters.

Sections 1-3 below should be completed to produce a comprehensive picture of the strengths and weaknesses of the materials under evaluation. Information about areas in need of improvement or supplementation should be shared with internal and external stakeholders.

Navigating the Tool

Begin with Section 1: Non-Negotiable Alignment Criteria

- The Non-Negotiable Alignment Criteria must each be met in full for materials to be considered aligned to the Shifts and the major features of the Common Core State Standards. Each Non-Negotiable Alignment Criterion has one or more metrics associated with it; every one of these metrics must be met in order for the criterion as a whole to be met.

- Examine the relevant materials and use evidence to rate the materials against each criterion and its associated metric(s).

- Record and explain the evidence upon which the rating is based.

Continue to Section 2: Alignment Criteria

- The Alignment Criteria must each be met for materials to be considered aligned to the Shifts and the major features of the Common Core State Standards. Each Alignment Criterion has one or more metric associated with it; a specific number of these metrics must be met or partially met in order for the criterion as a whole to be met.

- Examine the materials in relation to these criteria, assigning each metric a point value. Rate the criterion as "Meets" or "Does Note Meet" based on the number of points assigned. The more points the materials receive on the alignment Criteria, the better they are aligned.

- Record and explain the evidence upon which the rating is based.

Proceed to Section 4: Indicators of Quality

- Indicators of Quality are important considerations that will help evaluators better understand the overall quality of instructional materials. These considerations are not criteria for alignment to the CCSS, but they provide valuable information about additional program characteristics. Evaluators may want to add their own indicators to the examples provided.

Directions for Non-Negotiable 1

Freedom from Obstacles to Focus

Criterion	Evidence- Give specific examples.	Rating: (Reviewer only.)
Non-Negotiable 1: **Freedom from Obstacles to Focus** **Materials must reflect the content architecture of the Standards by not assessing the topics named before the grade level where they first appear in the Standards.** The Standards foster students' progress to algebra by focusing strongly on arithmetic. Consistent with this focus, certain topics from outside of arithmetic appear only in later grades. Thus, to be aligned, materials must reflect the content architecture of the Standards by not assessing the topics named before the grade level where they first appear in the Standards. In this criterion, "topics named" means the topics that are explicitly named in Metric 1A. No other topics should be added to the list in Metric 1A. (Note that other topics in the standards are addressed in criterion NN2.)	**Required Materials** • Common Core State Standards for Mathematics (www.corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf) • From the materials being evaluated: teacher guides and all assessment components	**Rating this Criterion:** Non-Negotiable 1 is rated as Meets or Does Not Meet. To rate Non-Negotiable 1, begin by rating Metric 1A. Since Metric 1A is the only metric for Non-Negotiable 1, the rating for Non-Negotiable 1 is the same as the rating for Metric 1A. If Metric 1A is rated as Does Not Meet, include evidence of when the named topic(s) is/are assessed. If the metric is rated as Meets, list the grade(s) examined in the evaluation.

Metric NN1A: **Materials re[illegible] the basic architecture of the Standards by not assessing the listed topics before the grade level indicated.** • Probability, including chance, likely outcomes, probability models. (Introduced in the CCSSM in grade 7) • Statistical distributions, including center, variation, clumping, outliers, mean, median, mode, range, quartiles; and statistical association or trends, including two-way tables, bivariate measurement data, scatter plots, trend line, line of best fit, correlation. (Introduced in the CCSSM in grade 6) • Similarity, congruence, or geometric transformations. (Introduced in the CCSSM in grade 8) • Symmetry of shapes, including line/ reflection symmetry, rotational symmetry. (Introduced in the CCSSM in grade 4) **How to Find the Evidence:** Evaluate the table of contents, all chapter tests, all unit tests, and other such assessment components (including rubrics). For context, read Criterion #2 from the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013). NOTE: Grade alignments of other topics are addressed in Non-Negotiable 2, Focus and Coherence.) In this criterion, "topics named" means the topics that are explicitly named in Metric 1A. No other topics should be added to the list in Metric 1A. (Note that other topics in the standards are addressed in criterion NN2.)	All materials included in [illegible] Math! are aligned to the standards for 6th grade. Future g[illegible]level concepts may be alluded to, but are not assessed. The materials stick to the concepts, skills, and strategies stated in the standards. Each Lesson includes a learning progression for the teacher, which provides connections to previous grade level skills, the current grade level, and then extends to the following grade level. However, these topics are for teacher information only, they are not included in the lesson. The materials address all grade 6 clusters and focus areas. Evidence: • Table of Contents • Standards Correlations in Table of Contents • Teacher Resources • Interim Assessments • Chapter and Lesson Assessments • Planning Guide	**(Reviewer only.)** **_X___Meets** **____Does Not Meet**
Non-Negotiable 1: Materials must reflect the content architecture of the Standards by not assessing the topics named* before the grade level where they first appear in the Standards. **NN 1** If Metric 1A was rated as Meets, then rate Non-Negotiable 1 as Meets. If Metric 1A was rated as Does Not Meet, then rate Non- Negotiable 1 as Does Not Meet. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion.**(Reviewer only.)** **Before moving to Non-Negotiable 2, record the final Meets or Does Not Meet rating in the Evaluation Summary.**		**(Reviewer only.)** **__X__Meets** **____Does Not Meet** **Strengths/Weaknesses:**

Directions for Non-Negotiable 2

Focus and Coherence

Non-Negotiable 2: **Focus and Coherence** **Materials must focus coherently on the Major Work of the grade in a way that is consistent with the progressions in the Standards.** Focus and coherence are the two major evidence-based design principles of the Common Core State Standards for Mathematics (CCSSM, p. 3). Focus is necessary in order to fulfill the ambitious promise the states have made to their students by adopting the Standards: greater achievement at the college and career ready level; greater depth of understanding of mathematics; and a rich classroom environment in which reasoning, sense-making, applications, and a range of mathematical practices flourish. In simpler terms, a mile-wide, inch-deep curriculum translates to less time per topic. Less time means less depth and moving on without many students. Thus, materials must focus coherently on the Major Work of the grade in a way that is consistent with the progressions in the Standards.	**Required Materials** • Common Core Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf) • Focus by Grade Level for the grade being evaluated (www.achievethecore.org/focus) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion:** Non-Negotiable 2 is rated as Meets or Does Not Meet. To rate Non-Negotiable 2, first rate metrics 2A–2H. Each of these eight metrics must be rated as Meets in order for Non-Negotiable 2 to be rated as Meets. Rate each metric 2A-2H as Meets or Does Not Meet/Insufficient Evidence. If the evidence examined shows that the Criterion is met, then mark the Criterion Meets. If the evidence examined shows that the Criterion is not met—or if there is insufficient evidence to make a determination—then mark the Criterion as Does Not Meet/Insufficient Evidence. Support all ratings with evidence.
Metric NN2A: **In each grade K–8, students and teachers using the materials as designed devote the large majority of time to the Major Work of the grade.** **How to Find the Evidence:** Familiarize yourself with the Major Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, lessons, homework assignments, and assessments. (Evaluate both student and teacher materials.) Consider time spent on the Major Work of the grade and judge qualitatively whether students and teachers using the materials as designed will devote the large majority of time to the Major Work of the grade. For context, read Criterion #1 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013)	Materials for 6th grade, Go Math! devote the majority of lessons and activities to the major works of the grade. With 13 chapters in the text, 8 are devoted to major works, equaling 62%. With a total of 104 lessons days, 43 are devoted to the major work of the grade, equaling 41%. Some lessons are created to last more than one day. • Table of Contents, Correlation to Standards (TE) A42-A43 • Chapter At A Glance **Evidence-** **51 (54%) of the lessons are focal points and 43 (46%) of the lessons are additional and supporting clusters.**	**(Reviewer only.)** **____Meets** **__X__Does Not Meet/ Insufficient Evidence**

Metric NN2B: **Supporting work, where present, enhances focus and coherence simultaneously by also engaging students in the Major Work of the grade.** **How to Find the Evidence:** Familiarize yourself with the Major Work and Supporting Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate chapters and lessons that focus on Supporting Work. NOTE: Example of evaluating this Criterion might include looking at whether materials for K–5 generally treat data displays as an occasion for solving grade-level word problems using the four operations (e.g., see 3.MD.B.3); or whether materials for grade 7 take advantage of opportunities to use probability to support ratios, proportions, and percentages. For context, read Criterion #3 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	Materials provide coherence throughout each lesson in grade 6. The supporting works of the grade are not isolated from the major works. For example, in **Geometry** (a supporting work), connections to using **applying and extending understandings of arithmetic to algebraic expressions** (a major work) are made in most lessons. Connections to **Number and Operations-Fractions** (a major work) are also made within **Measurement and Data** (a supporting work). **Evidence:** • Lesson 10.3: Connects finding the area of a triangle with evaluating expressions with variables as students have to find the missing height of the triangle. SE pg.545-550. The study of equivalent expressions builds toward Grade 7 slope. • Lesson 10.6: Connects finding the areas of polygons with computing fluently with multi-digit numbers. SE pg. 566 • Graphing supports the bridge of positive and negative numbers and area.	**(Reviewer only.)** **_X___Meets** **____Does Not Meet/ Insufficient Evidence**

Metric NN2C: **Materials b[illegible]content progressions on the grade-by-grade progressions in the Standards. Content from previous or future grades does not unduly interfere with or displace on-grade-level content.** **How to Find the Evidence:** Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, and lessons in both student and teacher materials. NOTE: In some cases it may be possible that aligned materials might address some aspects of a topic in a strategic way before or after the grade level in which the topic is central in the Standards' progressions; for example, a curriculum author might purposefully choose to explore adding fractions with unlike denominators in a way appropriate to grade four, recognizing that this work is not really required until the next grade. However, any such purposeful discrepancies in content progressions should enhance the required learning in each grade; not unduly interfere with or displace grade-level content; and be clearly aimed at helping students meet the Standards as written rather than effectively rewriting the progressions in the Standards. And in all cases, note that Non-Negotiable 1 must be met for materials to be aligned. For context, read Criterion #5a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** The progressions in th[illegible]terials match those in the Standards. Discrepancies in the content progressions were minimal and used to enhance learning. Each chapter includes a Common Core Learning Progressions Across the Grades (for teacher reference), which provides a connection to the previous grade and subsequent grade. Future grade concepts are not mentioned in the teacher manual, student manual, or online resources. The Planning Guide includes a section on Getting Ready for Grade 7. The content from 5th grade is identified in the prerequisite skills inventory. Chapter 1 is an additional standard and is an extension or review of previous grade level materials (example: common factors and multiples grade 4). Chapter also works on the required fluency of multi-digit division for sixth grade) **Evidence:** • Common Core Learning Progressions Across Grades TE pg. 209J In grade 6, students will... in Grade 5 students.... In Grade 7 students will... • Common Core State Standards Across the Grades TE531J Grade 6 (standards listed) Before (standards listed) After (standards listed).	(Reviewer only.) **_X___Meets** **____Does Not Meet/** **Insufficient Evidence**
Metric NN2D: **Materials give all students extensive work with on-grade-level problems.** **How to Find the Evidence:** Evaluate both student and teacher materials. If the materials provide resources for differentiated learning, consider whether lower-performing students have opportunities to engage with grade-level problems. Also consider whether higher-performing students are given opportunities to learn current grade-level content in greater depth. For context, read Criterion #5b in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	The materials give all students the opportunity to work with on grade level problems. Although materials are provided for intervention and remediation, the program does not focus on these sources as a replacement of the core curriculum. Chapters include a review of prerequisite skills with a Show What you Know diagnostic assessment tool. Suggestions for remediation are given based on students' responses in the assessment. These suggestions are in addition to the student's regular grade level work. **Evidence:** • TE: Chapter 10 p. 531 Show What you Know • TE: Chapter 10 p. 531 Show What You Know Diagnostic Assessment Rubric. P. 532 Intervention Options • TE: Lesson 5.1 Advanced Learners Activity for extension of the lesson content	(Reviewer only.) **__X__Meets** **____Does Not Meet/** **Insufficient Evidence**

Metric NN2E: **Materials re[illegible]on-grade-level concepts explicitly to prior knowledge from earlier grades.** **How to Find the Evidence:** Evaluate both student and teacher materials. NOTE: Examples of evaluating this Criterion might include looking at the way the materials extend basic ideas of place value across the decimal point; or the role that properties of operations play when the materials extend arithmetic beyond whole numbers to fractions, variables, and expressions. More generally, cluster headings in the Standards sometimes signal key moments where reorganizing and extending previous knowledge is important in order to accommodate new knowledge (e.g., see cluster headings that use the phrase "Apply and extend previous understanding"). For context, read Criterion #5c in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	The materials explicitly [illegible]te connections to prior knowledge from previous grades. [illegible]eacher edition includes a chart for each lesson, which states what students learned before this lesson, what they will learn in the current lesson, and what will be learned after that lesson. **Evidence:** • Lesson 2.1 SE pg. 69 A place value chart showing decimal place values. • Lesson 1.1 TE 5B Making Connections • Mixed review on the assessment refers back to concepts from previous modules in the course. (EG p. 168) • 6.NS.A,--5th grade students are expected to divide fractions by fractions and whole numbers. There is some review/practice so but not teaching the concept so students are expected to already know how but the text does not explicitly state this to the teacher or the student. • 6.NS.C—The connections to 5th grade are there because students are expected to already have knowledge of connecting fractions to decimals. Neither the teacher nor the student are explicitly told this. • 6.EE.A—Connections to 5th grade are there. Students are expected to know order of operations but the text does not explicitly state that.	**(Reviewer only.)** **__X__Meets** **____Does Not Meet/ Insufficient Evidence**

Metric NN2F: **Review of material from previous grades is clearly identified as such to the teacher, and teacher and students can see what their specific responsibility is for the current year.** **How to Find the Evidence:** Evaluate the table of contents, but do not stop there; also evaluate units, chapters, lessons, homework assignments and assessments. (Evaluate both student and teacher materials.) Identify any content from previous grades and check whether it is identified as such. For context, read Criterion #5a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	There is a prerequisite skills inventory designed to assess whether or not students have the skills needed for success in sixth grade. The assessment then directs teacher to the skill that is a struggle and tasks/activities for the student.—It only assesses 5th grade standards so if you have a student who is unable to pass any of the prerequisite inventory the teacher may need to bring out the RTI materials and maybe go to a lower grade level to use their skills inventory. Students and teacher can see the specific responsibility but review of materials is not identified for either. Teachers can identify the previous grade content by identifying 5th grade content through review of the standards. **Evidence:** • Personal Math Trainer videos (online) clearly state the standard they correlate to.	**(Reviewer only.)** **____Meets** **__x__Does Not Meet/ Insufficient Evidence**
Metric NN2G: **Materials include learning objectives that are visibly shaped by CCSSM cluster headings.** **How to Find the Evidence:** Select several clusters from the Major Work in the grade being evaluated. Evaluate teacher and student materials in relation to these clusters. For context, read Criterion #6a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	A correlation between learning objectives and cluster headings is explicit in the materials. The table of contents explicitly states the standards being taught in each lesson. Each lesson identifies the cluster, which the lesson correlates to. **Evidence:** For example, in sixth grade, a cluster is **applying and extending previous understandings of multiplication and division to divide fractions by fractions.** Lesson 2 2.5-2.10 and 14 (pg TE p. 95A to TE p.128) support the learning of this cluster. Pg 95A states the learning objective as "Use a model to show division of fractions."	**(Reviewer only.)** **__X__Meets** **____Does Not Meet/ Insufficient Evidence**

Metric NN2H: **Materials include problems and activities that serve to connect two or more clusters in a domain, or two or more domains in a grade, in cases where these connections are natural and important.** **How to Find the Evidence:** In the grade being evaluated, choose two or more clusters or two or more domains for which connections are natural and important. Evaluate the units, chapters, and lessons that deal with the chosen topics, looking for problems and activities that serve to connect the chosen clusters or domains. NOTE: An example of evaluating this Criterion might include looking at whether problems in grade 4 sometimes or often involve students applying their developing computation skills (detailed in domain NBT) in the context of solving word problems (detailed in domain OA). For context, read Criterion #6b in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	The materials are weak in connecting clusters in a domain as well as the domains. In chapter overview, it states the cluster, and then in the lesson overview, it states the standard the lesson focuses on. However, connections to other standards and/or clusters are rarely made. Student work does involve work, which combines multiple domains, but is not explicitly stated in teacher or student materials. Student materials include a spiral review, which include multiple standards. **Evidence:** • Lesson 13.4 Focus: 6.SP.B.5.c (states the standard) Also 6.SP.A.s, 6.SP.A.3 • Spiral Review SE p. 286 • Instead of having a separate chapter for area, surface area and volume, students could use manipulatives, graph paper, drawing, discussion,... to discover the formula instead of the separation of unit. • (Surface connection rather than deep connection)	**(Reviewer only.)** **____Meets** **__X__Does Not Meet/** **Insufficient Evidence**

Non-Negotiable 2: **Focus and Coherence** **Materials must focus coherently on the Major Work of the grade in a way that is consistent with the progressions in the Standards.** NN 2 If all Metrics 2A – 2H were rated as Meets, then rate Non-Negotiable 2 as Meets. If one or more Metric was rated Does Not Meet/Insufficient Evidence, then rate Non-Negotiable 2 as Does Not Meet. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)** **Before moving to Alignment Criterion 1, record the final Meets or Does Not Meet rating in the Evaluation Summary.**	**(Reviewer only.)** **____Meets** **__X__Does Not Meet** **Strengths/Weaknesses:**

Now continue by evaluating the Alignment Criterion 1 for Rigor and Balance.

Directions for Alignment Criterion 1

Rigor and Balance

Alignment Criterion 1: Rigor and Balance **Materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.** The Standards set expectations for attention to all three aspects of rigor: conceptual understanding, procedural skill and fluency, and applications. Thus, materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.	**Required Materials** • Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf) • Focus by Grade Level for the grade being evaluated (achievethecore.org/focus) • Situation Types for the Operations in Word Problems (achievethecore.org/situation-types) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion:** Alignment Criterion 1 is rated as Meets or Does Not Meet. To rate Alignment Criterion 1, first rate metrics 1A, 1B, and 1C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). For each metric, guiding questions are provided to aid in gathering evidence. Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 1 if the materials rate 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as rigor and balance, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.
Metric AC1A: **The materials support the development of students' conceptual understanding of key mathematical concepts, especially where called for in specific content Standards or cluster headings.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Major Work for the grade being evaluated that relate specifically conceptual understanding to use throughout the questions associated with this metric. NOTE: Some examples of clusters or Standards that call for conceptual understanding include: K.OA.A.1, (1.NBT.B, 1.NBT.C), (2.NBT.A, 2.NBT.B), (3.OA.A.1, 3.OA.A.2), 4.NF.A, (4.NBT.A, 4.NBT.B), 5.NF.B, (5.NBT.A, 5.NBT.B), 6.RP.A, 6.EE.A.3, 7.NS.A, 7.EE.A, 8.EE.B, 8.F.A, 8.G.A Clusters or Standards grouped by parentheses are closely connected and could be analyzed together. For context, read Criterion #4a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	-Choose a cluster/Standard from the Major Work that is aligned to each aspect of rigor and use it to evaluate these metrics. It is most helpful if the same clusters/Standards are chosen for all of the programs being evaluated. (Guidance in choosing clusters/Standards is included in "How to Find the Evidence".)	**Use the questions for AC Metric 1A to evaluate Metric 1A. Record evidence for each question and rate Metric 1A.** **____Meets (2)** **__X__Partially Meets (1)** **____Does Not Meet (0)**

Is conceptual understanding attended to thoroughly where the Standards set explicit expectations for understanding or interpreting? Evaluate lessons, chapter/unit assessments and homework assignments, paying attention to work aligned to Standards that explicitly call for understanding or interpreting. NOTE: Examples of evaluating this Criterion might include looking at how well the multi-digit addition and subtraction algorithms are developed and explained on the basis of place value and properties of operations; or how well the multi-digit multiplication and division algorithms are developed and explained on the basis of place value and properties of operations; or how well solving equations is presented and explained as a process of reasoning.	The materials support conceptual understanding of mathematical concepts through varied conceptual problems and questions. Questions range from low difficulty to requiring students make connections between concepts appropriate for the grade level. **Evidence:** • Connections to previous learning of creating models to combine like terms. Students must also connect their prior knowledge of algebraic expressions. TE 395B • Lesson 1.1 Dividing Multi-Digit Numbers, connections to models, and place value are absent. • Lesson 1.1 Reteach materials focus only on traditional algorithm. Connections to models and place value are absent. • 6.NS.8 Solve real world problems by graphing points in all four quadrants of the coordinate plane Lessons 3.7-3.10. Solving is dependent on reading and using the coordinate plane. The big problem is that once these lessons are finished the coordinate plane is no longer used as a tool for solving. • Division of fractions is taught through use of a number line, drawing pictures, and pattern blocks.	
Do the materials feature high-quality conceptual problems and conceptual discussion questions? Evaluate lessons, chapter/unit assessments, and homework assignments. NOTE: Example of conceptual problems might include such questions as "Find a number greater than 1/5 and less than 1/4," or "If the divisor does not change and the dividend increases, what happens to the quotient?"	6.EE.3 Apply the properties of operations to generate equivalent expressions. • Draw a bar model to add 9n and 4n SE pg. 395 • Explain how you bar model shows that your answer is correct. SE pg. 395 • Why is the term 8 not shown in the bar model? TE p. 395 • First, draw a bar model to combine the like terms. Next, use the bar model to simplify the expression. SE pg. 397	
Do the materials feature opportunities to identify correspondences across mathematical representations? Evaluate lessons, chapter/unit assessments and homework assignments. NOTE: Examples of evaluating this Criterion might include looking at whether students are supported in identifying correspondences among: the verbal description of a situation, the diagrams that distill its mathematical features, and the equations that model it; or equivalent forms of numbers (e.g., 3 and 6/2) and the number line; or rational number operations and representations of them via models such as the vector model; or the expression that defines a function and the graph that shows the relationship.	The materials provide correspondence across mathematical representations. However, the connections are weak and sporadic. Evidence: • Models are used in lesson 7.7: Combining Like Terms SE pg. 395 • Graph the number 3.75 on a number line SE pg. 94 • Lesson 2.5 Use fractions strips to model division SE pg. 95-99 • Using multiplication tables to write equivalent ratios SE pg. 225 • Students relate fractions to decimals on the number line. Lesson 2.1 and 2.2.	

Metric AC1B: **The materials are designed so that students attain the fluencies and procedural skills required by the Standards.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Major Work for the grade being evaluated that relate specifically to fluency and procedural skill to use throughout the questions associated with this metric. NOTE: Some examples of Standards that call for procedural skill and fluency include: K.OA.A.5, 1.OA.C.6, 2.OA.B.2, 2.NBT.B.5, 3.OA.C.7, 3.NBT.A.2, 4.NBT.B.4, 5.NBT.B.5, 6.NS.B.2, and 6.NS.B.3, 6.EE.A, 7.NS.A, 7.EE.A.1,7.EE.B.4a, 8.EE.C.7, 8.EE.C.8b For context, read Criterion #4b in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).		**Use the questions for Metric 1B to evaluate Metric 1 B. Record evidence for each question and rate Metric 1B.** **(Reviewer only.)** **____Meets (2)** **____Partially Meets (1)** **__X__Does Not Meet (0)**
Is progress toward fluency and procedural skill interwoven with students' developing conceptual understanding of the operations in question? Evaluate lessons, chapter/unit assessments, daily routines, and homework assignments for evidence that the development of fluency and procedural skill is supported by conceptual understanding.	Student's progression toward fluency is balanced with procedural skills. Practice, and time devoted to fluency of the skill is sufficient. Multiplication and division of fractions is applied throughout the materials. • Lesson checks SE pg. 386 • Spiral Review in homework and practice reviews skills throughout the year. SE pg. 332	
Are purely procedural problems and exercises present that include cases in which opportunistic strategies are valuable and generic cases that require efficient algorithms present? Evaluate lessons, chapter/unit assessments, daily routines, and homework assignments. NOTE: Examples of problems in which opportunistic strategies are valuable might include the sum 698 + 240 or the system x + y = 1, 2x + 2y = 3. Examples of generic cases that require efficient algorithms might include the sum 8767+2286 or the system 6y + x = x + 3, – x = 1 + 2y.	Purely procedural problems, which encourage the use of strategies, as well as algorithms are present in the materials. At this grade level, the need for efficient algorithms is also apparent in the materials. Evidence: • SE pg 425 Solution of Equations involves using algorithms. • Share and Who SE pg. 109 requires students to use a number line to find the quotient • SE pg 237 Use equivalent ratios to find the unknown value	
Do the materials in grades K–6 provide repeated practice toward attainment of fluency Standards? Evaluate lessons, daily routines, and homework assignments for evidence of repeated practice toward attainment of the following K–6 Standards that set an explicit expectation of fluent (accurate and reasonably fast) computation: K.OA.A.5, 1.OA.C.6, 2.OA.B.2, 2.NBT.B.5, 3.OA.C.7, 3.NBT.A.2, 4.NBT.B.4, 5.NBT.B.5, 6.NS.B.2, 6.NS.B.3.	The materials do not provide repeated practice toward the attainment of fluency of NS 2, fluently divide multi-digit numbers using the standard algorithm. Work towards this fluency is limited to Lesson 1.1. Additional practice could be found in Lesson 1.8 & 1.9 of dividing with decimals. Additional practice for fluency toward this standard is found in the Chapter Resources and online materials, but are re-teaching and enrichment activities.	

Metric AC1C: **The materials are designed so that teachers and students spend sufficient time working with engaging applications, without losing focus on the Major Work of each grade.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Major Work for the grade being evaluated that relate specifically application to use throughout the questions associated with this metric. NOTE: Some examples of clusters or Standards that call for application include: K.OA.A.2, 1.OA.A, 2.OA.A, 3.OA.A.3, 3.OA.D.8, 4.OA.A.3, 4.NF.B.3d, 4.NF.B.4c, 5.NF.B.6, 5.NF.B.7c, 6.RP.A.3, 6.NS.A.1, 6.EE.B.7, 6.EE.C.9, 7.RP.A, 7.NS.A.3, 7.EE.B.3, 8.EE.C.8c, 8.F.B For context, read Criterion #4c in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).		**Use the questions for Metric 1C to evaluate Metric 1C. Record evidence for each question and rate Metric 1C.** **(Reviewer only.)** **____Meets (2)** **_X___Partially Meets (1)** **____Does Not Meet (0)**
Are there are single- and multi-step contextual problems, including non-routine problems, that develop the mathematics of the grade, afford opportunities for practice, and engage students in problem solving? Do the problems attend thoroughly to those places in the content Standards where expectations for multi-step and real-world problems are explicit? Evaluate lessons, chapter/unit assessments, and homework assignments.	Single and multi-step problems are used throughout the materials. The majority of lessons include either single or multi-step word problems in class work, independent practice, and homework. Evidence: • Lesson 8.2 75 is 18 ½ more than a number. SE pg. 429 • Lesson 8.2 Write an equation that could be used to find how many miles a hybrid SUB can travel in the city on 20 gallons of gas. SE pg. 430 • Lesson 8.3 Carlos walked 2 miles on Monday and 5 miles on Saturday. The number of miles he walked on those two days is 3 more than the number of miles he walked on Friday. Write and solve and equation to find the number of miles Carlos walked on Friday. • Lesson 8.7 Carole ordered 4 dresses for $80 each, a $25 sweater, and a coat. The cost of the items without sales tax was $430. What was the cost of the coat. SE pg. 460	

Do application problems particularly stress applying the Major Work of the grade? Evaluate lessons, chapter/unit assessments, and homework assignments. NOTE: Examples of evaluating this Criterion might include looking at: how well, by the end of grade 2, students using the materials as designed can represent and solve a full range of one-step addition and subtraction word problems; or how well, by the end of grade 3, students using the materials as designed can represent and solve a full range of one-step multiplication and division word problems; or how well these basic situation types for each operation are carried coherently across the grades, (e.g., with fractions and algebraic expressions); or, in all grades, whether the problems connect concepts, Standards, and domains in ways that are natural and important. For a list of situation types for one-step addition, subtraction, multiplication, and division problems, see Situation Types for the Operations in Word Problems	The major works of the grade are supported through application problems. Varied situation-type problems are used throughout the materials. More variety of situation-type problems need to be represented in the materials. **Evidence:** • Compare Products: Problem Solving SE pg 455 #11 • Unknown Product: SE pg. 460 #2	
Does modeling build slowly across K–8, with applications that are relatively simple in earlier grades and when students are encountering new content? In grades 6–8, do the problems begin to provide opportunities for students to make their own assumptions or simplifications in order to model a situation mathematically? Read Standard for Mathematical Practice 4, Model with Mathematics. Evaluate lessons, chapter/unit assessments, and homework assignments.	The materials inconsistently and rarely use modeling in lessons. Connections to models from previous grade levels are made sporadically. Examples: • Lack of evidence	

Alignment Criterion 1: Rigor and Balance

Materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.

AC1 Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 out of 6 points, the Criterion has not been met. Check the final rating.
Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)**

Before moving to Alignment Criterion 2, record the final Meets or Does Not Meet rating in the Evaluation Summary.

(Reviewer only.)

____Meets

__X__Does Not Meet

Strengths/Weaknesses:

Directions for Alignment Criterion 2

Standards for Mathematical Practice

Alignment Criterion 2: Standards for Mathematical Practice **Materials must demonstrate authentic connections between content Standards and practice Standards.** The Standards require that designers of instructional materials connect the mathematical practices to mathematical content in instruction. Thus, materials must demonstrate authentic connections between content Standards and practice Standards.	**Required Materials:** • Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf) • Focus by Grade Level for the grade being evaluated (www.achievethecore.org/focus) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion** Alignment Criterion 2 is rated as Meets or Does Not Meet. To rate Alignment Criterion 2, first rate metrics 2A, 2B, and 2C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). For each metric, guiding questions are provided to aid in gathering evidence. Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 2 if the materials earn 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as mathematical practices, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM. **(Reviewer only.)** **____Meets (2)** **_X___Partially Meets (1)** **____Does Not Meet (0)**
Metric AC2A: **Materials address the practice Standards in such a way as to enrich the Major Work of the grade; practices strengthen the focus on Major Work instead of detracting from it, in both teacher and student materials.** **How to Find the Evidence:** Familiarize yourself with the Major Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate teacher and student materials for evidence that the mathematical practices support and connect to the focus of the grade. NOTE: Examples of evaluating this Criterion might include looking at whether, in grades K–5, students using the materials are supported to look for and express regularity in repeated reasoning about the addition table, the multiplication table, the properties of operations, the relationship between addition and subtraction or multiplication and division, and the place value system; or whether, in grades 6–8, students using the materials are supported to look for and express regularity in repeated reasoning about proportional relationships and linear functions. For context, read Criterion #8 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013).	The curriculum uses the practice standards to strengthen the focus of the major works as they integrate the practices into all lessons and daily work. The teacher Planning Guide includes extensive resources, connections, and explanation for teachers about the Standards for Mathematical Practices. Evidence: • The mathematical practices are stated at the beginning of the Teacher Planning Guide with explanations (TE pg PG20-22) • Correlations to lessons and explanations of what students will be able to because of each standard. • Mathematical Practices are identified in each lesson at a glance (TE pg 491A) • Mathematical Practice Connections are identified in the student edition with extended explanation in the teacher edition. TE pg 491 Math Talk • MP8 Look for and express regularity in repeated reasoning Lesson 2.2: How does 6/7 compare to 1/2 ? (Could be a good question but the teachers edition suggests an answer of 6/7 > ½ with no reasoning behind it. • Lesson 2.2, 4.3, 5.4, 6.2, both teacher and student are directed to the Mathematical Practices 4 different times, not that each time fit the practice.	

Metric AC2B: **Materials attend to the full meaning of each practice Standard.** **How to Find the Evidence:** For context, read Criterion #7 and Criterion #9 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).		**Use the questions for Metric 2B to evaluate Metric 2B. Record evidence for each question and rate Metric 2B.** **(Reviewer only.)** **____Meets (2)** **_X___Partially Meets (1)** **____Does Not Meet (0)**
Over the course of any given year of instruction, is each mathematical practice Standard meaningfully present in the form of assignments, activities, or problems that stimulate students to develop the habits of mind described in the practice Standard? Evaluate lessons, chapter/ unit assessments, and homework assignments for evidence of each mathematical practice being meaningfully present in instruction.	The mathematical practice standards are present in each lesson through assignments, activities, and problems. **Evidence:** • SMP are built into the instruction and problems throughout the student book. • Mathematical Practice 1: Describe (SE pg 600) • Math Talk SE pg 657	
Do the materials treat the practice Standards as developing across grades or grade bands? Are the practice Standards in early grades appropriately simple? Do they display an arc of growing sophistication across the grades?	The materials are developed throughout the year. • Teacher Edition • Student Edition	
Are there teacher-directed materials that explain the role of the practice Standards in the classroom and in students' mathematical development? Are alignments to practice Standards accurate?	The materials provide numerous resources for teachers to strengthen their knowledge and application of the standards for mathematical practice. **Evidence:** • The Lesson at a Glance (TE pg 681A) states the embedded standards for mathematical practice for each lesson. • Chapter Professional Development includes a section on Mathematical Practices as it applies to that chapter TE pg 647E. • Planning Guide-Supporting Mathematical Practices Through Questioning Strategies PG23 • Planning Guide-explanation of each SMP, as well as examples	
Metric AC2C: **Materials support the Standards' emphasis on mathematical reasoning.** **How to Find the Evidence:** For context, read Criterion #10 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).		**Use the questions for Metric 2C to evaluate Metric 2C. Record evidence for each question and rate Metric 2C.** **(Reviewer only.)** **____Meets (2)**

Do the materials support students in constructing viable arguments and critiquing the arguments of others concerning grade-level mathematics that is detailed in the content Standards? Read Standard for Mathematical Practice 3. Evaluate teacher and student materials to ensure that students are given opportunities to reason with grade-level mathematics.	The materials emphasize a student's ability to reason and provides numerous opportunities to practice their reasoning skills. Students must explain, justify, show, or prove their thinking daily. However, the connection is weak and often students are not required to justify their thinking and reasons are supported at a surface level. Evidence: • Lesson 13.1 SE pg. 707 Students must summarize information. Draw conclusions from the data. Analyze a histogram. • Each chapter has a performance task, which requires student to reasoning mathematically. Chapter Resources.	**_X___Partially Meets (1)** **_____Does Not Meet (0)**
Do the materials support students in producing not only answers and solutions, but also, in a grade-appropriate way, arguments, explanations, diagrams, mathematical models, etc., especially in the Major Work of the grade? Familiarize yourself with the Major Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate teacher and student materials, to understand the types of work students are expected to produce.	The materials require students to produce not only answers but arguments, models, diagrams, and explanations where appropriate. However, the materials do not consistently require students to support their reasoning. Evidence: • SE pg. 364. Explain why the order of operations in necessary. • Most Practice and Homework include a Write about Math question. SE pg. 607 Explain in your own words how the find the surface area of a rectangular prism. • Draw a model to solve Lesson 2.5 SE pg 97	
Do materials explicitly attend to the specialized language of mathematics? Is the language of argument, problem solving, and mathematical explanations taught rather than assumed? Evaluate teacher and student materials, paying attention to how mathematical language is taught. NOTE: Examples of evaluating this Criterion might include looking at whether students are supported in: basing arguments on definitions; using the method of providing a counterexample; or recognizing that examples alone do not establish a general statement.	The materials are strong in their use and teaching of the language of mathematics. Vocabulary is introduced at the beginning of the chapter and includes activities to practice and apply vocabulary and apply it. **Evidence:** • TE pg 167H Developing Math Language • SE pg. 420 Vocabulary Builder • Individual Student Vocabulary cards	

Alignment Criterion 2: Standards for Mathematical Practice

Materials must demonstrate authentic connections between content Standards and practice Standards.

AC2 Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 out of 6 points, the Criterion has not been met. Check the final rating.
Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion.
(Reviewer only.)

Before moving to Alignment Criterion 3, record the final Meets or Does Not Meet rating in the Evaluation Summary.

(Reviewer only.)

____Meets

__X__Does Not Meet

Strengths/Weaknesses:

Alignment Criterion 3: Access to the Standards for All Students

Materials must provide supports for English Language Learners and other special populations.

Because Standards are for all students, alignment requires thoughtful support to ensure all students are able to meet the Standards. Thus, aligned materials must provide supports for English Language Learners and other special populations.

Required Materials:

- Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf)
- Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)
- From the materials being evaluated: teacher guides, student texts and workbooks

Rating this Criterion:
Alignment Criterion 3 is rated as Meets or Does Not Meet.

To rate Alignment Criterion 3, first rate metrics 3A, 3B, and 3C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points).

Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 3 if the materials earn 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as support for special population, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.

Metric AC3A:
Support for English Language Learners and other special populations is thoughtful and helps those students meet the same Standards as all other students. The language in which problems are posed is carefully considered.

How to Find the Evidence:
Evaluate teacher and student materials, paying attention to supports offered for special populations.

Support for ELLs is provided in the materials through notes in the TE, as well as suggestions for visual models, and visual models in the SE. Each chapter includes a "Strategies for English Language Learners" which includes research as well as suggestions for planning for instruction.
Evidence:

- TE pg 313E Strategies for English Language Learners:
- TE pg. 313F ELL Vocabulary Activity
- ELL Strategy TE pg 719: Rephrase
- Go Math ELL Activity Guide

Reviewer only.)

_X___Meets (2)

____Partially Meets (1)

____Does Not Meet (0)

Metric AC3B: **Materials provide appropriate level and type of scaffolding, differentiation, intervention, and support for a broad range of learners with gradual removal of supports, when needed, to allow students to demonstrate their mathematical understanding independently.** **How to Find the Evidence:** Evaluate teacher and student materials, paying attention to whether materials provide differentiation that will lead all learners to engage with on-grade-level content.	Through the use of all materials, scaffolding, differentiation and support of diverse learners should be met. Each lesson has a Small Group Differentiation column in the teacher's edition, which guides teachers to supports available in the Teacher Toolbox (online). In the Independent Practice portion of the lesson, teachers are given a quick check and remediation, which provides teachers with a diagnostic chart for remediation, based on a student's answer. Evidence: • Learning Progressions provided in each lesson creates an awareness of what skills students should already have. This can help provide scaffolding for students below grade-level. (TE p. 112a) • Small Group Differentiation (TE p. 112b). • Personalized learning available on iready.com • Quick Check and Remediation (Independent Practice) TE p. 184 • Differentiated Instruction ideas for 3 levels TE pg 165b	Reviewer only.) **____Meets (2)** **__X__Partially Meets (1)** **____Does Not Meet (0)**
Metric AC3C: **Design of lessons recommends and facilitates a mix of instructional approaches for a variety of learners such as using multiple representations (e.g., including models, using a range of questions, checking for understanding, flexible grouping, pair-share).** **How to Find the Evidence:** Evaluate teacher materials, noting instructional approaches suggested for whole class and differentiated lessons and activities.	Numerous instructional approaches are included in the materials. Models, pictures, activities, questions, and pair/share are a few of the strategies used throughout a lesson. However, differentiated instructional strategies are used randomly and inconsistently. Evidence: The following are found in Lesson 16, which is 5 days. • Hands-On Activity (TE p. 167) • Picture It SE p. 168 Use a picture to help understand the problem • Model It SE p. 168 Use a number line to help understand the problem • Visual Model TE p.170 connect the picture and the number line • Pair/Share SE p. 172-173	Reviewer only.) **____Meets (2)** **__X__Partially Meets (1)** **____Does Not Meet (0)**

Alignment Criterion 3: Access to the Standards for All Students **Materials must provide supports for English Language Learners and other special populations.** AC3 Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 points, the Criterion has not been met. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion.**(Reviewer only.)** **Move to the Evaluation Summary and record the final Meets or Does Not Meet rating .**	**(Reviewer only.)** **____Meets** **__X__Does Not Meet** **Strengths/Weaknesses:**

Once an evaluation for alignment to the Shifts and major features of the CCSS has been conducted using Sections 1-3, it's important to evaluate for overall quality and best practices. A starting list of Indicators of Quality are suggested below. States, districts and others evaluating instructional materials are encouraged to add to this list to ensure materials reflect local contexts. For background information on some of the Indicators of Quality in this section, refer to pp.18–21 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).

Indicators of Quality	Evidence- Give specific examples.	Rating: (Reviewers only.)
1. Lessons are thoughtfully structured and support the teacher in leading the class through the learning paths at hand, with active participation by all students in their own learning and in the learning of their classmates.	The lessons are set up in a way that begins with an engagement activity, including an essential question, making connections, and learning activity. The Unlock the Problem" begins the lesson making a connection between the real world and the mathematical concept to be learned through exploration. The lesson then transitions to the explanation of the concept through guided practice. Followed up with a formative assessment and independent practice and homework. All lessons are structured in this manner providing students with support and time to become independent. **Evidence:** Lesson at a Glance, Engage, Explore, Digital resources, Explain, Assessments, practice and homework.	**(Reviewer only.)** **__X____ Yes** **_____ No**

2. The underlying design of the materials includes both problems and exercises. (In solving problems, students learn new mathematics, whereas in working exercises, students apply what they have already learned to build mastery.) Each problem or exercise has a purpose. **NOTE: This Criterion does not require that the problems and exercises be labeled as such.**	In the Engage, Explore, and Explain sections of the lesson, students participate in solving problems. As students gain experience and practice with the concept, they transition to solving exercises in the practice and homework portion of the lesson.	**(Reviewer only.)** **__X____ Yes** **_____ No**
3. Design of assignments is not haphazard: exercises are given in intentional sequences in order to strengthen students' mathematical understanding.	The materials are designed in a coherent, logical sense, providing connections to previous knowledge. **Evidence:** Lessons begin with making connections and learning activity to provide connections to student's prior knowledge and then transitions to "Explore," which adds to the student's knowledge base and leads to deeper learning (TE pg. 375B-375) Problems increase in difficulty throughout the assignment.	**(Reviewer only.)** **__X____ Yes** **_____ No**
4. There are separate teacher materials that support and reward teacher study including, but not limited to: discussion of the mathematics of the units and the mathematical point of each lesson as it relates to the organizing concepts of the unit, discussion on student ways of thinking and anticipating a variety of students responses, guidance on lesson flow, guidance on questions that prompt students thinking, and discussion of desired mathematical behaviors being elicited among students.	The materials provide teachers support in teaching the lesson as well as providing a deeper understanding of the concepts themselves. **Evidence:** • Common Core Learning Progressions (beginning of each chapter) shows what student are building on and what the lesson is preparing students for (TE pg. 705J) • Teaching for Depth at the beginning of each unit provides teachers with research and background information on the concepts taught throughout the unit. • About the Math at the beginning of each lesson provides specific information about the lesson for. • Professional Development Videos are found in the online materials • Common Errors- provides professional development for teachers regarding errors students typically make. An example is provided, as well as a Springboard to Learning. TE pg. 708 • Math Talk in Action-provides a sample conversation between teacher and student	**(Reviewer only.)** **___X___ Yes** **_____ No**
5. Manipulatives suggested in the materials are faithful representations of the mathematical objects they represent and are connected to written methods.	When suggested, materials are appropriate to the grade and content. However, opportunities for manipulatives are often missed.	**(Reviewer only.)** **___X___ Yes** **_____ No**

6. Materials include a variety of curriculum-embedded assessments. Examples include pre-, formative, summative, and self-assessment resources.	Many opportunities for assessment are provided throughout the materials. The assessments are varied. **Evidence:** • Show what you know, at the beginning of a chapter assess student's knowledge and determines the need for intervention. TE 419 • Quick Check TE pg 423 • Section 5 of each lesson is Evaluate through a formative assessment. Assessments vary. TE pg. 430 • Mid-Chapter Checkpoints • Chapter Tests • Chapter Performance Tasks • Benchmark Tests	**(Reviewer only.)** **___X___ Yes** **_____ No**
7. Assessments contain aligned rubrics, answer keys, and scoring guidelines that provide sufficient guidance for interpreting student performance.	All assessments for the materials contain rubrics, answer keys, and score guides. **Evidence:** • Chapter Test Answer Keys • Mid-Chapter Checkpoints • Chapter Performance Tasks Rubrics	**(Reviewer only.)** **___X___ Yes** **_____ No**
8. Materials assess student proficiency using methods that are accessible and unbiased, including the use of course-level language in student prompts.	Materials used to assess for proficiency are appropriate to the grade level, and are not biased. All students receive the same opportunities to display proficiency.	**(Reviewer only.)** **__X____ Yes** **_____ No**
9. Materials are carefully evaluated by qualified individuals, whose names are listed, in an effort to ensure freedom from mathematical errors and course-level appropriateness.	Juli K. Dixon Martha E. Sandoval-Martinez Edward B. Burger Matthew R. Larson Steven J. Leinwand	**(Reviewer only.)** **__X____ Yes** **_____ No**
10. The visual design supports students in engaging thoughtfully with the subject. Navigation through the text is clear.	The materials are designed in a manner which are easy to follow. Some pictures are included, with many tables, graphs, and charts. These items do to distract from the math.	**(Reviewer only.)** **__X____ Yes** **_____ No**

11. The materials engage parents in appropriate ways. For example, homework assignments in elementary grades, consist of routine problems, practice with getting answers, and fluency-building exercises that parents can easily support.	The materials are created to engage parents and support parents and students with math work at home. **Evidence:** The Teacher Resources book includes a School-Home Letter for each chapter which provides an explanation of the methods being used for the chapter skills, as well as an activity to complete at hoe. .	**(Reviewer only.)** **___X___ Yes** **_____ No**

Reviewer IMET Evaluation Summary Title/Level: _Go Math 6th Grade_____

Publisher: _Houghton Mifflin_ Copyright: ___2015_____ ISBN: 978054429544-5

Reviewer ID # __AJ, PL, PW_____ Date Review Completed: March 8, 2016

Non-Negotiable Criteria- Each Non-Negotiable must be met in order for the Non-Negotiable Alignment Criteria to be met overall.

Non-Negotiable 1: Freedom from Obstacles to Focus	**Non- Negotiable 2: Focus and Coherence**
___X____ Meets **_____ Does Not Meet**	**_____ Meets** **_____ Does Not Meet**

Non-Negotiable Overall:

_____ Meets _____ Does Not Meet

Alignment Criteria- Each Alignment Criterion must be met with a sufficient number of points in order for Alignment Criteria to be labeled as "Meets" overall. The more points the materials receive on the Alignment Criteria, the better they are aligned.

Alignment Criterion 1: Rigor and Balance	**Alignment Criterion 2: Standards of Mathematical Practice**	**Alignment Criterion 3: Access to Standards for All Learners**
Points: __2___ of 6 possible. **(Materials must receive at least 5 of 6 points to align.)** **_____ Meets** **____X___ Does Not Meet**	**Points: _3____ of 6 possible.** **(Materials must receive at least 5 of 6 points to align.)** **_____ Meets** **____X___ Does Not Meet**	**Points: __4___ of 6 possible.** **(Materials must receive at least 5 of 6 points to align.)** **_____ Meets** **___X____ Does Not Meet**

Alignment Criteria Overall:

_____ Meets **__X___ Does Not Meet**

If the materials meet both Non-Negotiables and relevant Alignment Criterion, they are aligned to the Shifts and major features of the Core Standards. **Do the materials meet every Non-Negotiable and Alignment Criterion? _____ Yes __X___ No**

What are the specific areas of strength and weakness based on this evaluation? Publishers or others modifying or developing assessments can use this information to make improvements and/or to remedy gaps in the alignment of assessment materials.

Strengths:

Go Math! 6th grade covers all Common Core Standards. The Fluency Builder in each lesson provides students practice with the fluencies and/or previous grade-level fluencies and concepts. The materials provided to support RTI in the classroom provide teachers with materials for intervention and enrichment. The Spiral Review included in each lesson provides students with opportunities to practice previous concepts.

Weaknesses:

Go Math! 6th grade does not spend sufficient time on the Major Works of the grade level. Clear connections between standards are absent. The use of Mathematical Practices in the student materials are not authentic in nature. The materials lack multi-step real world problems and lacks student to student interaction.

2015-16 Mathematics Interim Review Recommendation & Summary

Publisher Name:	Houghton Mifflin Harcourt
Title:	GO Math Middle School Grade 6
ISBN #	978-0-544-06571-0
Grade Level(s) or Course:	MS Grade 6
Reviewer ID:	JHPLW

RECOMMENDED AS:

_____**Core Mathematics Program-** a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials. Substantial evidence clearly supports the designation of this program as Core.

__X__**Other Mathematics Program-** a program that substantially, but partially, meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for supplemental materials. Substantial evidence clearly supports the designation of this program as Other.

_____**Component Mathematics Program-** a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs. Substantial evidence clearly supports the designation of this program as Component.

_____**Intervention Program-** a program designed and intended to target and support students' specific needs. Substantial evidence clearly supports the designation of this program as Intervention.

_____ **Does not meet criteria** for recommendation as a Curricular Material or Online Resource for Mathematics.

EVIDENCE SUMMARY:

FOCUS- The course materials reflect content architecture by assessing topics at the appropriate grade levels In addition, all Grade 6 materials are organized around the 4 major clusters of major Work. Supplemental work supports use of essential topics to tie content together.

COHERENCE- The 6th grade CCSS progressions are a clear hallmark of this program. Clusters are identified at the beginning of each unit. A middle school progression is summarized as well, although ties to K-5 not present

RIGOR- This program is very strong in procedural modeling and practice, as well as extension. Students have multiple opportunities to practice procedures, with fewer activities that promote conceptual understanding through student exploration.

CONCEPTUAL UNDERSTANDING- Lessons include Explore Activities to prompt discussion that promotes conceptual understanding. However, students do not have to rely on own reasoning. Most problems provide direction for appropriate procedure to use.

MATHEMATICAL PRACTICES- The text does provide authentic connections between Content Standards and most MP Practice Standards. It does not require students to "make sense" of problems of a non-routine nature. Students are not required to develop or rely on their own mathematical reasoning when learning new concepts.

ACCESSIBILITY OF STANDARDS TO ALL STUDENTS- The Student text is somewhat reading dense. Problems require significant reading skills. Some differentiated Reading Strategies and TED: Instruction included, ELL students will require significant support for success.

OTHER:

* Address why AL 2 (Standards of Mathematical Practice) received 4 of 6 points

2015-16 Interim Mathematics Review

Mathematics Evaluation Tool Grades K-8

Publisher: Houghton Mifflin Harcourt

Title of Material: GO MATH Middle School Grade 6

Author: Burger; Dixon et. al.

ISBN #: 978-0-544-06571-0 **Copyright** 2014

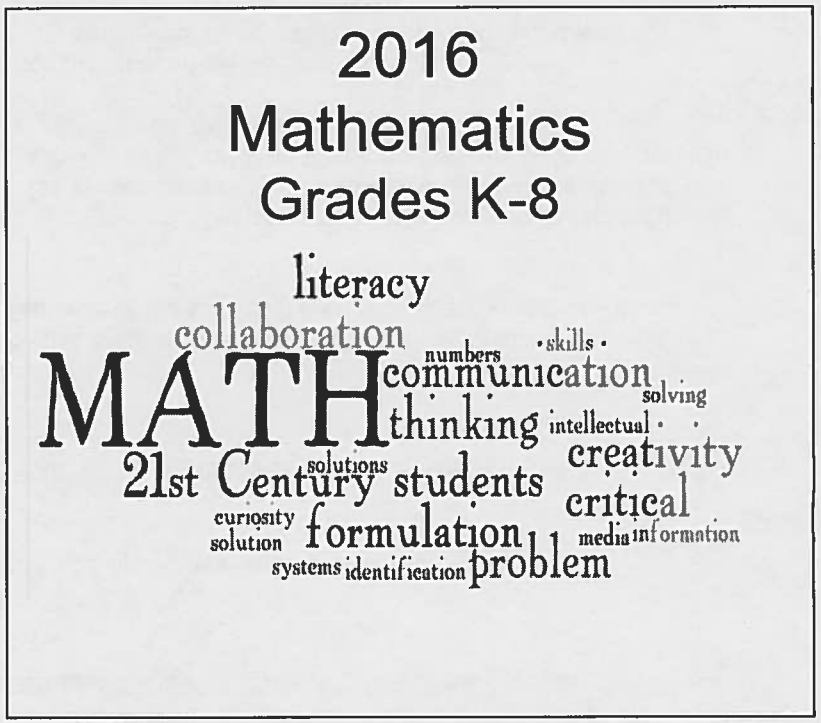
Reviewer ID: JHPLW

Core Mathematics Program- a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Core.

Other Mathematics Program- a program that substantially, but partially, meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Other.

Component Mathematics Program- a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs.
Substantial evidence clearly supports the designation of this program as Component.

Intervention Program- a program designed and intended to target and support students' specific needs.
Substantial evidence clearly supports the designation of this program as Intervention.



- Evaluation Form adapted from Instructional Materials Evaluation Toolkit (IMET).

The IMET was developed by Student Achievement Partners. Educators may use or adapt. http://creativecommons.org/licenses/by/3.0/ Download this tool at http://achievethecore.org/IMET

Instructional Materials Evaluation Tool

Mathematics, Grades K-8

What Are the Purposes of the IMET?

This Math IMET is designed to help educators determine whether instructional materials are aligned to the Shifts and major features of the Common Core State Standards (CCSS). The substantial instructional Shifts (http://www.corestandards.org/other-resources/key-shifts-inmathematics/) at the heart of the Common Core State Standards are:

- **Focus** strongly where the Standards focus
- **Coherence**: Think across grades and link to major topics within the grade
- **Rigor**: In major topics, pursue conceptual understanding, procedural skill and fluency, and application with equal intensity.

The IMET draws directly from the following documents:

- Common Core State Standards for Mathematics (www.corestandards.org/Math)
- Publishers' Criteria for the Common Core State Standards in Mathematics grade K-8 (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)

When to use the IMET

1. Purchasing materials: Many factors go into local purchasing decisions. Alignment to the Standards is a critical factor to consider. This tool is designed to evaluate alignment of instructional materials to the Shifts and the major features of the CCSS. It also provides suggestions of additional indicators to consider in the materials evaluation and purchasing process.

2. Evaluating materials currently in use: The IMET can be used to analyze the degree of alignment of existing materials and help to highlight specific, concrete flaws in alignment. Even where materials and tools currently in use fail to meet one or more of these criteria, the pattern of failure is likely to be informative. States and districts can use the evaluation to create a thoughtful plan to modify or combine existing resources in such a way that students' actual learning experiences approach the focus, coherence, and rigor of the Standards.

3. Developing programs: Those developing new programs can use this tool as guidance for creating aligned curricula.
Please note this tool was designed for evaluating comprehensive curricula (including any supplemental or ancillary materials), but it was not designed for the evaluation of standalone supplemental materials.

Who Uses the IMET?

Evaluating instructional materials requires both subject-matter and pedagogical expertise. Evaluators should be well versed in the Standards (www.corestandards.org/Math) for all grades in which materials are being evaluated. This includes understanding the Major Work of the grade (www.achievethecore/focus), the Supporting and Additional work, how the content fits into the progressions in the Standards (www.achievethecore.org/progressions), and the expectations of the Standards with respect to conceptual understanding, procedural skill and fluency, and application. Evaluators also should be familiar with the substantial instructional Shifts (http:// www.corestandards.org/other-resources/key-shifts-in-mathematics/) of Focus, Coherence and Rigor that are listed above.

Getting Started

Prior to Evaluation

Assemble all of the materials necessary for the evaluation. It is essential for evaluators to have materials for all grades covered by the program, as some criteria cannot be rated without having access to each grade. In addition, each evaluator should have a reference copy of the Common Core State Standards for Mathematics (CCSSM) and the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013).

Instructional Materials Evaluation Tool
Mathematics, Grades K-8

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Getting Started
Prior to Evaluation

Assemble all of the materials necessary for the evaluation. It is essential for evaluators to have materials for all grades covered by the program, as some criteria cannot be rated without having access to each grade. In addition, each evaluator should have a reference copy of the Common Core State Standards for Mathematics (CCSSM) and the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013).

Before conducting the evaluation itself, it is important to develop a protocol for the evaluation process. The protocol should include having evaluators study the Publishers' Criteria and the IMET. It will also be helpful for evaluators to get a sense of each program overall before beginning the process. At a minimum, this would include reading the front matter of the text, looking at the table of contents and paging through multiple chapters.

Sections 1-3 below should be completed to produce a comprehensive picture of the strengths and weaknesses of the materials under evaluation. Information about areas in need of improvement or supplementation should be shared with internal and external stakeholders.

Navigating the Tool

Begin with Section 1: Non-Negotiable Alignment Criteria

- The Non-Negotiable Alignment Criteria must each be met in full for materials to be considered aligned to the Shifts and the major features of the Common Core State Standards. Each Non-Negotiable Alignment Criterion has one or more metrics associated with it; every one of these metrics must be met in order for the criterion as a whole to be met.

- Examine the relevant materials and use evidence to rate the materials against each criterion and its associated metric(s).

- Record and explain the evidence upon which the rating is based.

Continue to Section 2: Alignment Criteria

- The Alignment Criteria must each be met for materials to be considered aligned to the Shifts and the major features of the Common Core State Standards. Each Alignment Criterion has one or more metric associated with it; a specific number of these metrics must be met or partially met in order for the criterion as a whole to be met.

- Examine the materials in relation to these criteria, assigning each metric a point value. Rate the criterion as "Meets" or "Does Note Meet" based on the number of points assigned. The more points the materials receive on the alignment Criteria, the better they are aligned.

Record and explain the evidence upon which the rating is based.

Proceed to Section 4: Indicators of Quality

- Indicators of Quality are important considerations that will help evaluators better understand the overall quality of instructional materials. These considerations are not criteria for alignment to the CCSS, but they provide valuable information about additional program characteristics. Evaluators may want to add their own indicators to the examples provided.

Directions for Non-Negotiable 1

Freedom from Obstacles to Focus

Criterion	Evidence- Give specific examples.	Rating: (Reviewer only.)
Non-Negotiable 1: **Freedom from Obstacles to Focus** **Materials must reflect the content architecture of the Standards by not assessing the topics named before the grade level where they first appear in the Standards.** The Standards foster students' progress to algebra by focusing strongly on arithmetic. Consistent with this focus, certain topics from outside of arithmetic appear only in later grades. Thus, to be aligned, materials must reflect the content architecture of the Standards by not assessing the topics named before the grade level where they first appear in the Standards. In this criterion, "topics named" means the topics that are explicitly named in Metric 1A. No other topics should be added to the list in Metric 1A. (Note that other topics in the standards are addressed in criterion NN2.)	**Required Materials** • Common Core State Standards for Mathematics (www.corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf) • From the materials being evaluated: teacher guides and all assessment components	**Rating this Criterion:** Non-Negotiable 1 is rated as Meets or Does Not Meet. To rate Non-Negotiable 1, begin by rating Metric 1A. Since Metric 1A is the only metric for Non-Negotiable 1, the rating for Non-Negotiable 1 is the same as the rating for Metric 1A. If Metric 1A is rated as Does Not Meet, include evidence of when the named topic(s) is/are assessed. If the metric is rated as Meets, list the grade(s) examined in the evaluation.

Metric NN1A: **Materials re[illegible] the basic architecture of the Standards by not assessing the listed topics before the grade level indicated.** • Probability, including chance, likely outcomes, probability models. (Introduced in the CCSSM in grade 7) • Statistical distributions, including center, variation, clumping, outliers, mean, median, mode, range, quartiles; and statistical association or trends, including two-way tables, bivariate measurement data, scatter plots, trend line, line of best fit, correlation. (Introduced in the CCSSM in grade 6) • Similarity, congruence, or geometric transformations. (Introduced in the CCSSM in grade 8) • Symmetry of shapes, including line/ reflection symmetry, rotational symmetry. (Introduced in the CCSSM in grade 4) **How to Find the Evidence:** Evaluate the table of contents, all chapter tests, all unit tests, and other such assessment components (including rubrics). For context, read Criterion #2 from the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013). NOTE: Grade alignments of other topics are addressed in Non-Negotiable 2, Focus and Coherence.) In this criterion, "topics named" means the topics that are explicitly named in Metric 1A. No other topics should be added to the list in Metric 1A. (Note that other topics in the standards are addressed in criterion NN2.)	**Evidence-** **Neither probability, similarity, geometric transformations, nor congruence are assessed at this level in this series.** **Materials tied to major work of grade 6, statistical distributions and descriptors are assessed within the grade 6 material.**	**(Reviewer only.)** **__X__Meets** **____Does Not Meet**

Non-Negotiable 1: Materials must reflect the content architecture of the Standards by not assessing the topics named* before the grade level where they first appear in the Standards.

NN 1 If Metric 1A was rated as Meets, then rate Non-Negotiable 1 as Meets. If Metric 1A was rated as Does Not Meet, then rate Non- Negotiable 1 as Does Not Meet. Check the final rating.

Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion.**(Reviewer only.)**

Before moving to Non-Negotiable 2, record the final Meets or Does Not Meet rating in the Evaluation Summary.

(Reviewer only.)

__X__Meets

____Does Not Meet

Strengths/Weaknesses:

Neither probability, similarity, geometric transformations, nor congruence are assessed in this level in this series.
Assessment items reflect the content identified for 6th grade CCSS.

Directions for Non-Negotiable 2

Focus and Coherence

Non-Negotiable 2:

Focus and Coherence

Materials must focus coherently on the Major Work of the grade in a way that is consistent with the progressions in the Standards.

Focus and coherence are the two major evidence-based design principles of the Common Core State Standards for Mathematics (CCSSM, p. 3). Focus is necessary in order to fulfill the ambitious promise the states have made to their students by adopting the Standards: greater achievement at the college and career ready level; greater depth of understanding of mathematics; and a rich classroom environment in which reasoning, sense-making, applications, and a range of mathematical practices flourish. In simpler terms, a mile-wide, inch-deep curriculum translates to less time per topic. Less time means less depth and moving on without many students. Thus, materials must focus coherently on the Major Work of the grade in a way that is consistent with the progressions in the Standards.

Required Materials

- Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf)
- Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)
- Focus by Grade Level for the grade being evaluated (www.achievethecore.org/focus)
- From the materials being evaluated: teacher guides, student texts and workbooks

Rating this Criterion:

Non-Negotiable 2 is rated as Meets or Not Meet.

To rate Non-Negotiable 2, first rate metrics 2A–2H. Each of these eight metrics must be rated as Meets in order for Non-Negotiable 2 to be rated as Meets. Rate each metric 2A-2H as Meets or Does Not Meet/Insufficient Evidence. If the evidence examined shows that the Criterion is met, then mark the Criterion Meets. If the evidence examined shows that the Criterion is not met—or if there is insufficient evidence to make a determination—then mark the Criterion as Does Not Meet/Insufficient Evidence. Support all ratings with evidence.

Metric NN2A:

In each grade K–8, students and teachers using the materials as designed devote the large majority of time to the Major Work of the grade.

How to Find the Evidence:

Familiarize yourself with the Major Work of the grade being evaluated (see the Focus by Grade Level documents.)

Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, lessons, homework assignments, and assessments. (Evaluate both student and teacher materials.)

Consider time spent on the Major Work of the grade and judge qualitatively whether students and teachers using the materials as designed will devote the large majority of time to the Major Work of the grade.

For context, read Criterion #1 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013)

Evidence-

The content is organized around the four critical areas identified in the Standards document. Of the 16 modules, two are related to Supporting or Additional topics of study. Even in those areas, the numbers associated with the geometry and statistics reflect the numbers (whole numbers, decimals, and fractions) studied at the 6th grade level.

(Reviewer only.)

_X_ Meets

____Does Not Meet/

Insufficient Evidence

Metric NN2B: **Supporting Work, where present, enhances focus and coherence simultaneously by also engaging students in the Major Work of the grade.** **How to Find the Evidence:** Familiarize yourself with the Major Work and Supporting Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate chapters and lessons that focus on Supporting Work. NOTE: Example of evaluating this Criterion might include looking at whether materials for K–5 generally treat data displays as an occasion for solving grade-level word problems using the four operations (e.g., see 3.MD.B.3); or whether materials for grade 7 take advantage of opportunities to use probability to support ratios, proportions, and percentages. For context, read Criterion #3 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** **Extensive work with common factors and multiples supports the multiplication and division of fractions.** **Area and volume supports work with expressions.** **Operations with rational numbers are supported with problems involving area, surface area, and volume.** **Work in the Coordinate Plane includes signed numbers, distance and area. Work in this area supports principles associated with integers and area concepts.**	**(Reviewer only.)** **_X_ Meets** **____Does Not Meet/ Insufficient Evidence**
Metric NN2C: **Materials base content progressions on the grade-by-grade progressions in the Standards. Content from previous or future grades does not unduly interfere with or displace on-grade-level content.** **How to Find the Evidence:** Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, and lessons in both student and teacher materials. NOTE: In some cases it may be possible that aligned materials might address some aspects of a topic in a strategic way before or after the grade level in which the topic is central in the Standards' progressions; for example, a curriculum author might purposefully choose to explore adding fractions with unlike denominators in a way appropriate to grade four, recognizing that this work is not really required until the next grade. However, any such purposeful discrepancies in content progressions should enhance the required learning in each grade; not unduly interfere with or displace grade-level content; and be clearly aimed at helping students meet the Standards as written rather than effectively rewriting the progressions in the Standards. And in all cases, note that Non-Negotiable 1 must be met for materials to be aligned. For context, read Criterion #5a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** The textbook is clearly organized around the 6th grade CCSS progressions. The cluster or standards progression underlying each unit are identified at the beginning of the unit. Each module outlines what students will understand, will learn, will learn after (ex. Pg 295) A summary of the middle school progression in each domain is provided. How the 6th grade progressions link to the 5th grade progressions is not provided. There is an assumption made that students do not need to review conceptual basis for fluencies supposedly achieved in the fifth grade. For example, the students immediately begin working with the traditional algorithm for multiplying fractions without any mention of a model.	**(Reviewer only.)** **_X_ Meets** **____Does Not Meet/ Insufficient Evidence**

Metric NN2D: **Materials gi[illegible]ll students extensive work with on-grade-level problems.** **How to Find the Evidence:** Evaluate both student and teacher materials. If the materials provide resources for differentiated learning, consider whether lower-performing students have opportunities to engage with grade-level problems. Also consider whether higher-performing students are given opportunities to learn current grade-level content in greater depth. For context, read Criterion #5b in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** All students are p[illegible]ided extensive work with on grade level problems within each lesson. Each unit begins with a pre-assessment (Are You Ready), and also provides for differentiation through Skill Intervention WS and a supplemental Personal Math Trainer which models problems. Differentiated problems for three levels are provided for each lesson- on grade level; above level; and considerably below. Literacy support is provided. The differentiated support for all three levels is related to the focus of 6th grade.	**(Reviewer only.)** **__X__Meets** **____Does Not Meet/** **Insufficient Evidence**
Metric NN2E: **Materials relate on-grade-level concepts explicitly to prior knowledge from earlier grades.** **How to Find the Evidence:** Evaluate both student and teacher materials. NOTE: Examples of evaluating this Criterion might include looking at the way the materials extend basic ideas of place value across the decimal point; or the role that properties of operations play when the materials extend arithmetic beyond whole numbers to fractions, variables, and expressions. More generally, cluster headings in the Standards sometimes signal key moments where reorganizing and extending previous knowledge is important in order to accommodate new knowledge (e.g., see cluster headings that use the phrase "Apply and extend previous understanding"). For context, read Criterion #5c in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Each module begins with a quick review of skills from the fifth grade level that are foundational to work in the module. An online Personal Trainer provides tutorials for students without pre-requisite skills. For example, whole number multiplication and division skills practice precedes the work related to division of fractions. Arithmetic and expressions are purposefully linked in the Generating Equivalent Numerical Expressions module. TG has a chart at the beginning of each module (before, in this, after). A mixed review Assessment is included (TG p. 168) which refers back to concept from previous module.	**(Reviewer only.)** **__X__Meets** **____Does Not Meet/** **Insufficient Evidence**
Metric NN2F: **Review of material from previous grades is clearly identified as such to the teacher, and teacher and students can see what their specific responsibility is for the current year.** **How to Find the Evidence:** Evaluate the table of contents, but do not stop there; also evaluate units, chapters, lessons, homework assignments and assessments. (Evaluate both student and teacher materials.) Identify any content from previous grades and check whether it is identified as such. For context, read Criterion #5a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** The Teachers Edition provides mathematics background for each standard addressed in a lesson. The background includes links to work from the fifth grade. Each module also provides a chart of what came before, what is in the module, and what comes later. In the student edition, each module begins with "Unpacking the Standard" and an explanation of what it means to the student. In addition;;, Common Core goals are listed in the SE and TE ex. Pg 75), with more expansion on following pages (TE pg. 78).	**(Reviewer only.)** **__X__Meets** **____Does Not Meet/** **Insufficient Evidence**

Metric NN2G: **Materials in[illegible]e learning objectives that are visibly shaped by CCSSM cluster headings.** **How to Find the Evidence:** Select several clusters from the Major Work in the grade being evaluated. Evaluate teacher and student materials in relation to these clusters. For context, read Criterion #6a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** **Evidence is clearly seen in the Representing Ratios and Rates module that includes three lessons directly linked to the three standards in this cluster. The module on Applying Ratios and Rates provides further evidence.** **The Essential Question guiding each lesson relates to the cluster heading or directly to the standard.(Ex. "Understand the concept of ratio; use ratio language."**	**(Reviewer only.)** **__X__Meets** **____Does Not Meet/** **Insufficient Evidence**
Metric NN2H: **Materials include problems and activities that serve to connect two or more clusters in a domain, or two or more domains in a grade, in cases where these connections are natural and important.** **How to Find the Evidence:** In the grade being evaluated, choose two or more clusters or two or more domains for which connections are natural and important. Evaluate the units, chapters, and lessons that deal with the chosen topics, looking for problems and activities that serve to connect the chosen clusters or domains. NOTE: An example of evaluating this Criterion might include looking at whether problems in grade 4 sometimes or often involve students applying their developing computation skills (detailed in domain NBT) in the context of solving word problems (detailed in domain OA). For context, read Criterion #6b in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** **Connections across domains are not a particular strength of this program. However, the book does provide cross-cluster problems identified with a symbol in the teacher's manual. A Number System standard is related with Expressions and Equations in the module focused on relationships in two variables. Many exercises within assignments often combine CCclusters (ex. Extending arithmetic to algebraic expressions). A Number System standard is related with a geometry standard in the module focused on distance and area in the coordinate plane.**	**(Reviewer only.)** **__X__Meets** **____Does Not Meet/** **Insufficient Evidence**

Non-Negotiable 2:

Focus and Coherence

Materials must focus coherently on the Major Work of the grade in a way that is consistent with the progressions in the Standards.

NN 2 If all Metrics 2A – 2H were rated as Meets, then rate Non-Negotiable 2 as Meets. If one or more Metric was rated Does Not Meet/Insufficient Evidence, then rate Non-Negotiable 2 as Does Not Meet. Check the final rating.
Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)**

Before moving to Alignment Criterion 1, record the final Meets or Does Not Meet rating in the Evaluation Summary.

(Reviewer only.)

_X_ Meets

____Does Not Meet

Strengths/Weaknesses:
The content in this series is organized around the four critical areas identified in the CCSS. The clusters are used to provide structure throughout the lessons and modules.

Now continue by evaluating the Alignment Criterion 1 for Rigor and Balance.

Directions for Alignment Criterion 1

Rigor and Balance

Alignment Criterion 1: Rigor and Balance

Materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.

The Standards set expectations for attention to all three aspects of rigor: conceptual understanding, procedural skill and fluency, and applications. Thus, materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.

Required Materials

- Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf)
- Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)
- Focus by Grade Level for the grade being evaluated (achievethecore.org/focus)
- Situation Types for the Operations in Word Problems (achievethecore.org/situation-types)
- From the materials being evaluated: teacher guides, student texts and workbooks

Rating this Criterion:
Alignment Criterion 1 is rated as Meets or Does Not Meet.

To rate Alignment Criterion 1, first rate metrics 1A, 1B, and 1C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). For each metric, guiding questions are provided to aid in gathering evidence.
Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 1 if the materials rate 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as rigor and balance, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.

Metric AC1A: **The materials support the development of students' conceptual understanding of key mathematical concepts, especially where called for in specific content Standards or cluster headings.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Major Work for the grade being evaluated that relate specifically conceptual understanding to use throughout the questions associated with this metric. NOTE: Some examples of clusters or Standards that call for conceptual understanding include: K.OA.A.1, (1.NBT.B, 1.NBT.C), (2.NBT.A, 2.NBT.B), (3.OA.A.1, 3.OA.A.2), 4.NF.A, (4.NBT.A, 4.NBT.B), 5.NF.B, (5.NBT.A, 5.NBT.B), 6.RP.A, 6.EE.A.3, 7.NS.A, 7.EE.A, 8.EE.B, 8.F.A, 8.G.A Clusters or Standards grouped by parentheses are closely connected and could be analyzed together. For context, read Criterion #4a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	-Choose a cluster/Standard from the Major Work that is aligned to each aspect of rigor and use to evaluate these metrics. It is most helpful if the same clusters/Standards are chosen for all of the programs being evaluated. (Guidance in choosing clusters/Standards is included in "How to Find the Evidence".)	**Use the questions for AC Metric 1A to evaluate Metric 1A. Record evidence for each question and rate Metric 1A.** **____Meets (2)** **__X__Partially Meets (1)** **____Does Not Meet (0)**
Is conceptual understanding attended to thoroughly where the Standards set explicit expectations for understanding or interpreting? Evaluate lessons, chapter/unit assessments and homework assignments, paying attention to work aligned to Standards that explicitly call for understanding or interpreting. NOTE: Examples of evaluating this Criterion might include looking at how well the multi-digit addition and subtraction algorithms are developed and explained on the basis of place value and properties of operations; or how well the multi-digit multiplication and division algorithms are developed and explained on the basis of place value and properties of operations; or how well solving equations is presented and explained as a process of reasoning.	**Evidence-** **6.RP.3** **Use ratio and rate reasoning to solve real world and mathematical problems.** **The standard specifically mentions reasoning about tables, tape diagrams, double number lines, diagrams, and equations. The students are "stepped" through two methods for finding equivalent ratios and then given multiple contexts to replicate the demonstrated methods. This is an example of the lack of development of conceptual understanding to a set of procedures to be followed. The same kind of sequence is followed with unit rates.** **Each module begins with "Unpacking the Standard" component, followed by examples, practice, real life application, ending with a revisiting of the essential question.**	
Do the materials feature high-quality conceptual problems and conceptual discussion questions? Evaluate lessons, chapter/unit assessments, and homework assignments. NOTE: Example of conceptual problems might include such questions as "Find a number greater than 1/5 and less than 1/4," or "If the divisor does not change and the dividend increases, what happens to the quotient?"	**Evidence-** There are instances where students are asked conceptual questions- Explain how you could use a diagram like the one below to find the unit rate. Explore activities prompt discussion. Revisiting of the essential question continues development of conceptual mastery; Communicate Mathematical Ideas (pg 3-4-305 example) provide reflection with extends conceptual understanding.	

Do the materials feature opportunities to identify correspondences across mathem[illegible]representations? Evaluate lessons, chapter/unit assessments and homework assignments. NOTE: Examples of evaluating this Criterion might include looking at whether students are supported in identifying correspondences among: the verbal description of a situation, the diagrams that distill its mathematical features, and the equations that model it; or equivalent forms of numbers (e.g., 3 and 6/2) and the number line; or rational number operations and representations of them via models such as the vector model; or the expression that defines a function and the graph that shows the relationship.	**Evidence- Evidence for this criteria can be found in the lessons related to re[illegible]enting independent and dependent variables. Evidence can also be found in the Explore Activity Using Rates to Make Predictions.**	
Metric AC1B: **The materials are designed so that students attain the fluencies and procedural skills required by the Standards.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Major Work for the grade being evaluated that relate specifically to fluency and procedural skill to use throughout the questions associated with this metric. NOTE: Some examples of Standards that call for procedural skill and fluency include: K.OA.A.5, 1.OA.C.6, 2.OA.B.2, 2.NBT.B.5, 3.OA.C.7, 3.NBT.A.2, 4.NBT.B.4, 5.NBT.B.5, 6.NS.B.2, and 6.NS.B.3, 6.EE.A, 7.NS.A, 7.EE.A.1,7.EE.B.4a, 8.EE.C.7, 8.EE.C.8b For context, read Criterion #4b in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).		**Use the questions for Metric 1B to evaluate Metric 1 B. Record evidence for each question and rate Metric 1B.** **(Reviewer only.)** **__X__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Is progress toward fluency and procedural skill interwoven with students' developing conceptual understanding of the operations in question? Evaluate lessons, chapter/unit assessments, daily routines, and homework assignments for evidence that the development of fluency and procedural skill is supported by conceptual understanding.	**Evidence-** **While there are fewer examples of conceptual understanding, the textbook is procedurally driven. Each lesson begins with an explore activity, followed by guided examples, guided practice, and independent practice. Students are given multiple opportunities to practice all procedures. Reasoning is provided in conjunction with all procedures.**	
Are purely procedural problems and exercises present that include cases in which opportunistic strategies are valuable and generic cases that require efficient algorithms present? Evaluate lessons, chapter/unit assessments, daily routines, and homework assignments. NOTE: Examples of problems in which opportunistic strategies are valuable might include the sum 698 + 240 or the system x + y = 1, 2x + 2y = 3. Examples of generic cases that require efficient algorithms might include the sum 8767+2286 or the system 6y + x = x + 3, – x = 1 + 2y.	**Evidence-** Evidence of this can be found in the development of the algorithm for division of fractions. Students are quickly provided a rationale for multiplying by the reciprocal. The same is true for decimal by decimal division as well as the long division algorithm.	

Do the materials in grades K–6 provide repeated practice toward attainment of fluency Standards? Evaluate lessons, daily routines, and homework assignments for evidence of repeated practice toward attainment of the following K–6 Standards that set an explicit expectation of fluent (accurate and reasonably fast) computation: K.OA.A.5, 1.OA.C.6, 2.OA.B.2, 2.NBT.B.5, 3.OA.C.7, 3.NBT.A.2, 4.NBT.B.4, 5.NBT.B.5, 6.NS.B.2, 6.NS.B.3.	**Evidence-** **The Online Math Tutor provides more practice to build fluency. Practice Book includes extra practice opportunities. A range of strategies is provided for practice.**	
Metric AC1C: **The materials are designed so that teachers and students spend sufficient time working with engaging applications, without losing focus on the Major Work of each grade.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Major Work for the grade being evaluated that relate specifically application to use throughout the questions associated with this metric. NOTE: Some examples of clusters or Standards that call for application include: K.OA.A.2, 1.OA.A, 2.OA.A, 3.OA.A.3, 3.OA.D.8, 4.OA.A.3, 4.NF.B.3d, 4.NF.B.4c, 5.NF.B.6, 5.NF.B.7c, 6.RP.A.3, 6.NS.A.1, 6.EE.B.7, 6.EE.C.9, 7.RP.A, 7.NS.A.3, 7.EE.B.3, 8.EE.C.8c, 8.F.B For context, read Criterion #4c in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Applications are focused on the major work of the 6th grade. Volume problems require multiplication of fractions or decimals. Exponents are introduced using whole number bases as well as rational number bases.	**Use the questions for Metric 1C to evaluate Metric 1C. Record evidence for each question and rate Metric 1C.** **(Reviewer only.)** **__X__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Are there are single- and multi-step contextual problems, including non-routine problems, that develop the mathematics of the grade, afford opportunities for practice, and engage students in problem solving? Do the problems attend thoroughly to those places in the content Standards where expectations for multi-step and real-world problems are explicit? Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** Multiple step problems are clearly labeled as such for students and are provided in most application lessons. Almost all modules begin with a real life application. There are few non-routine problems and most problems are somewhat formulaic as they reflect the examples provided in the teacher directed part of the lesson. All lessons provide a range if single-step, milti-step and HOT Problems.	

Do application problems particularly stress applying the Major Work of the grade? Evaluate lessons, chapter/unit assessments, and homework assignments. NOTE: Examples of evaluating this Criterion might include looking at: how well, by the end of grade 2, students using the materials as designed can represent and solve a full range of one-step addition and subtraction word problems; or how well, by the end of grade 3, students using the materials as designed can represent and solve a full range of one-step multiplication and division word problems; or how well these basic situation types for each operation are carried coherently across the grades, (e.g., with fractions and algebraic expressions); or, in all grades, whether the problems connect concepts, Standards, and domains in ways that are natural and important. For a list of situation types for one-step addition, subtraction, multiplication, and division problems, see Situation Types for the Operations in Word Problems	**Evidence-** The numbers in the applications reflect the number classes studied in the 6th grade (integers, fractions, decimals, whole numbers). Algebraic equations and expressions also reflect the use of these numbers.	
Does modeling build slowly across K–8, with applications that are relatively simple in earlier grades and when students are encountering new content? In grades 6–8, do the problems begin to provide opportunities for students to make their own assumptions or simplifications in order to model a situation mathematically? Read Standard for Mathematical Practice 4, Model with Mathematics. Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** Models are directly provided for students or students are directed to make a specific model.	

Alignment Criterion 1: Rigor and Balance

Materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.

(Reviewer only.)

__X__ Meets

____Does Not Meet

AC1 Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 out of 6 points, the Criterion has not been met. Check the final rating.
Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)**

Strengths/Weaknesses:
Procedures and applications are strengths for this textbook. The development of conceptual understanding is a weakness.

Before moving to Alignment Criterion 2, record the final Meets or Does Not Meet rating in the Evaluation Summary.

Directions for Alignment Criterion 2

Standards for Mathematical Practice

Alignment Criterion 2: Standards for Mathematical Practice

Materials must demonstrate authentic connections between content Standards and practice Standards.

The Standards require that designers of instructional materials connect the mathematical practices to mathematical content in instruction. Thus, materials must demonstrate authentic connections between content Standards and practice Standards.

Required Materials:

- Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf)
- Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)
- Focus by Grade Level for the grade being evaluated (www.achievethecore.org/focus)
- From the materials being evaluated: teacher guides, student texts and workbooks

Rating this Criterion

Alignment Criterion 2 is rated as Meets or Does Not Meet.

To rate Alignment Criterion 2, first rate metrics 2A, 2B, and 2C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). For each metric, guiding questions are provided to aid in gathering evidence.

Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 2 if the materials earn 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as mathematical practices, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.

Metric AC2A:

Materials address the practice Standards in such a way as to enrich the Major Work of the grade; practices strengthen the focus on Major Work instead of detracting from it, in both teacher and student materials.

How to Find the Evidence:

Familiarize yourself with the Major Work of the grade being evaluated (see the Focus by Grade Level documents.)

Evaluate teacher and student materials for evidence that the mathematical practices support and connect to the focus of the grade.

NOTE: Examples of evaluating this Criterion might include looking at whether, in grades K–5, students using the materials are supported to look for and express regularity in repeated reasoning about the addition table, the multiplication table, the properties of operations, the relationship between addition and subtraction or multiplication and division, and the place value system; or whether, in grades 6–8, students using the materials are supported to look for and express regularity in repeated reasoning about proportional relationships and linear functions.

For context, read Criterion #8 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013).

Evidence-

The textbook is focused on the major work of this grade level, and the Mathematical Practices are woven throughout. The teacher edition identifies the specific instances where the mathematical practices play a role. A problem solving heuristic is reinforced throughout the modules. The one weakness noted is that there are few, if any, opportunities for student developed models of the mathematics. The textbook provides bar models, number lines, and pictures of algebra tiles and explains exactly how the model should be used to solve specific problems. Student reasoning is not a driver of instruction. There are multiple opportunities in each lesson for students to represent problems with equations. MP7 and MP8 are also represented throughout. There is a significant emphasis on the development of mathematics vocabulary. Repeated reference to Essential Questions and Math Talk" reinforce MPractice standards.

(Reviewer only.)

__X__Meets (2)

____Partially Meets (1)

____Does Not Meet (0)

Metric AC2B: **Materials attend to the full meaning of each practice Standard.** **How to Find the Evidence:** For context, read Criterion #7 and Criterion #9 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).		**Use the questions for Metric 2B to evaluate Metric 2B. Record evidence for each question and rate Metric 2B.** **(Reviewer only.)** **____Meets (2)** **__X__Partially Meets (1)** **____Does Not Meet (0)**
Over the course of any given year of instruction, is each mathematical practice Standard meaningfully present in the form of assignments, activities, or problems that stimulate students to develop the habits of mind described in the practice Standard? Evaluate lessons, chapter/ unit assessments, and homework assignments for evidence of each mathematical practice being meaningfully present in instruction.	**Evidence-** **See the evidence above with one exception. While a problem solving heuristic is practiced throughout, student sense making of the mathematics is not a significant focus. Throughout the lessons, students are provided procedures for solving problems, both contextualized and decontextualized, but students do not need to rely on their own reasoning. For example, the students are directed to use subtraction when solving addition equations. The standard directs students to use reasoning to find equivalent ratios, but the textbook simply directs the student to "Multiply both terms of the original ratio by the same number to find an equivalent ratio." Very little time is given for students to "discover" the power of a ratio table and to develop proportional reasoning.**	
Do the materials treat the practice Standards as developing across grades or grade bands? Are the practice Standards in early grades appropriately simple? Do they display an arc of growing sophistication across the grades?	**Evidence-** **Little evidence is provided to determine if this metric meets or does not meet. The Mathematical Practices are appropriately used to meet the expectations for a sixth grade student. The only reference found was publisher statement "Earlier grades develop concepts at a simpler level, while later grades further develop these concepts at more complex level:.**	
Are there teacher-directed materials that explain the role of the practice Standards in the classroom and in students' mathematical development? Are alignments to practice Standards accurate?	**Evidence-** **The teacher edition provides Professional Development in the form of an informational box strategically placed in lessons so that the role of the practice Standards is explained in the context of the 6th grade focus.**	
Metric AC2C: **Materials support the Standards' emphasis on mathematical reasoning.** **How to Find the Evidence:** For context, read Criterion #10 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).		**Use the questions for Metric 2C to evaluate Metric 2C. Record evidence for each question and rate Metric 2C.** **(Reviewer only.)** **____Meets (2)**

Do the materials support students in constructing viable arguments and critiquing the arguments of others concerning grade-level mathematics that is detailed in the content Standards? Read Standard for Mathematical Practice 3. Evaluate teacher and student materials to ensure that students are given opportunities to reason with grade-level mathematics.	**Evidence-** **The Higher Order Thinking Questions at the end of each lesson give students an opportunity to reason with grade level mathematics.**	**__X__Partially Meets (1)** **____Does Not Meet (0)**
Do the materials support students in producing not only answers and solutions, but also, in a grade-appropriate way, arguments, explanations, diagrams, mathematical models, etc., especially in the Major Work of the grade? Familiarize yourself with the Major Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate teacher and student materials, to understand the types of work students are expected to produce.	**Evidence-** **Perhaps the best description for the weakness of this textbook with regard to student reasoning is found in the introductory lesson for finding the area of a parallelogram. The students are directed, step by step, to cut out a parallelogram with a dashed line helpfully identifying the triangle to be cut and attached to the opposite side. Student reasoning is hijacked in this manner. The textbook does give students multiple opportunities to provide explanations (Analyze, explain the error), but these explanations are often nothing more than regurgitation of textbook provided explanations.**	
Do materials explicitly attend to the specialized language of mathematics? Is the language of argument, problem solving, and mathematical explanations taught rather than assumed? Evaluate teacher and student materials, paying attention to how mathematical language is taught. NOTE: Examples of evaluating this Criterion might include looking at whether students are supported in: basing arguments on definitions; using the method of providing a counterexample; or recognizing that examples alone do not establish a general statement.	**Evidence-** **The textbook makes particular effort to reinforce mathematical language. Mathematical vocabulary is introduced at the beginning of a module and reinforced throughout. All vocabulary is highlighted. A Reading Math segment begins each lesson. TGuide has Connect Vocabulary activities. Students are asked to explain errors in the thinking of fictitious students. Opportunities for Math Talk are identified as well as for the development of mathematical conjectures.**	

Alignment Criterion 2:
Standards for Mathematical Practice

Materials must demonstrate authentic connections between content Standards and practice Standards.

AC2 Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 out of 6 points, the Criterion has not been met. Check the final rating.
Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion.
(Reviewer only.)

Before moving to Alignment Criterion 3, record the final Meets or Does Not Meet rating in the Evaluation Summary.

(Reviewer only.)

____Meets

_X___Does Not Meet

Strengths/Weaknesses:
While the textbook provides authentic connections between content Standards and most Practice Standards, it does not require students to "make sense" of non-routine problems nor to rely on their own mathematical reasoning when learning new mathematics.

Alignment Criterion 3:
Access to the Standards for All Students

Materials must provide supports for English Language Learners and other special populations.

Because Standards are for all students, alignment requires thoughtful support to ensure all students are able to meet the Standards. Thus, aligned materials must provide supports for English Language Learners and other special populations.

Required Materials:

- Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf)
- Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)
- From the materials being evaluated: teacher guides, student texts and workbooks

Rating this Criterion:
Alignment Criterion 3 is rated as Meets or Does Not Meet.

To rate Alignment Criterion 3, first rate metrics 3A, 3B, and 3C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points).

Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 3 if the materials earn 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as support for special population, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.

Metric AC3A: **Support for English Language Learners and other special populations is thoughtful and helps those students meet the same Standards as all other students. The language in which problems are posed is carefully considered.** **How to Find the Evidence:** Evaluate teacher and student materials, paying attention to supports offered for special populations.	**Evidence-** A practice page for each lesson is tailored to meet the needs of English Language Learners through pictures. However, the textbook itself is text dense. For example, the actual CCSS is lifted from the original document and students are expected to "unpack" the standard through a story problem. ELL reading strategies are provided. There is an English/Spanish glossary at the end of the book and an e-glossary includes voiced vocabulary definitions. Unfortunately, our ELL are primarily Arabic speakers.	**Reviewer only.)** **____Meets (2)** **_X___Partially Meets (1)** **_ ___Does Not Meet (0)**
Metric AC3B: **Materials provide appropriate level and type of scaffolding, differentiation, intervention, and support for a broad range of learners with gradual removal of supports, when needed, to allow students to demonstrate their mathematical understanding independently.** **How to Find the Evidence:** Evaluate teacher and student materials, paying attention to whether materials provide differentiation that will lead all learners to engage with on-grade-level content.	**Evidence-** The materials provided include differentiated practice pages and an online tutorial in the guise of a Personal Math Trainer. The Personal Math Trainer can also be used for Intervention. Each module assesses readiness and the online software provides enrichment as well as intervention. In the textbook, the students are guided through a procedure and then given an opportunity to perform the same procedure through "Your Turn" problems or prompts. Teacher Edition provides a number sense scaffolded section, a Critical Thinking Challenge,an avoid common error tip, as well as practice supplementation at a variety of levels (A/B, C,D).	**Reviewer only.)** **_X___Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Metric AC3C: **Design of lessons recommends and facilitates a mix of instructional approaches for a variety of learners such as using multiple representations (e.g., including models, using a range of questions, checking for understanding, flexible grouping, pair-share).** **How to Find the Evidence:** Evaluate teacher materials, noting instructional approaches suggested for whole class and differentiated lessons and activities.	**Evidence-** Models and a range of questions are provided. Collaborative learning opportunities are provided as well as opportunities for math talk. Opportunities to Check for Understanding through teacher questioning are provided.	**Reviewer only.)** **__X__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**

Alignment Criterion 3: Access to the Standards for All Students **Materials must provide supports for English Language Learners and other special populations.** AC3 Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 points, the Criterion has not been met. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion.**(Reviewer only.)** **Move to the Evaluation Summary and record the final Meets or Does Not Meet rating .**	**(Reviewer only.)** **__X__ Meets** **____ Does Not Meet** **Strengths/Weaknesses:** The textbook requires significant reading skills. While notetaking and reading strategies are suggested, a struggling reader or an ELL will need significant support to be successful

Once an evaluation for alignment to the Shifts and major features of the CCSS has been conducted using Sections 1-3, it's important to evaluate for overall quality and best practices. A starting list of Indicators of Quality are suggested below. States, districts and others evaluating instructional materials are encouraged to add to this list to ensure materials reflect local contexts. For background information on some of the Indicators of Quality in this section, refer to pp.18–21 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).

Indicators of Quality	Evidence- Give specific examples.	Rating: (Reviewers only.)
1. Lessons are thoughtfully structured and support the teacher in leading the class through the learning paths at hand, with active participation by all students in their own learning and in the learning of their classmates.	**Evidence-** **The series is very teacher or textbook directed as procedures related to the mathematics are provided immediately after the introduction of the topic. There are opportunities for Math Talk and students are asked to self-reflect on the Essential Question. The answers to the Essential Questions are often a description of a procedure. This sequence does not promote active participation.**	**(Reviewer only.)** **_____ Yes** **__X__ No**
2. The underlying design of the materials includes both problems and exercises. (In solving problems, students learn new mathematics, whereas in working exercises, students apply what they have already learned to build mastery.) Each problem or exercise has a purpose. **NOTE: This Criterion does not require that the problems and exercises be labeled as such.**	**Evidence-** **The material provides both problems and exercises. Unfortunately, problem solving comes at the end of the lesson so there is little opportunity for the students to learn new mathematics through productive struggle with a problem. Procedures are emphasized throughout.**	**(Reviewer only.)** **_____ Yes** **__X__ No**

3. Design of assignments is not haphazard: exercises are given in intentional sequences in order to strengthen students' mathematical understanding.	Evidence- Assignments go from Guided Practice, with directions to specific examples from the body of the lesson, to Independent Practice. The assignment ends with higher order thinking questions and applications.	(Reviewer only.) __X__ Yes _____ No
4. There are separate teacher materials that support and reward teacher study including, but not limited to: discussion of the mathematics of the units and the mathematical point of each lesson as it relates to the organizing concepts of the unit, discussion on student ways of thinking and anticipating a variety of students responses, guidance on lesson flow, guidance on questions that prompt students thinking, and discussion of desired mathematical behaviors being elicited among students.	Evidence- Each module includes material to support the teacher. Mathematical content is discussed for each lesson. Common errors are identified, with some direction for the teacher as to how to address the common error. Questioning strategies are provided in the margins and the questions are related to the Math Practices. The textbook provides procedures and there is little opportunity for student developed procedures. Consequently, student ways of thinking do not play a role.	(Reviewer only.) __X__ Yes _____ No
5. Manipulatives suggested in the materials are faithful representations of the mathematical objects they represent and are connected to written methods.	Evidence- Specific manipulatives are suggested and used pictorially (algebra tiles). Graph paper and drawings are also suggested. Students are directed as to how to use the tool to solve a given problem. Students may or may not attach the same meaning to the manipulative.	(Reviewer only.) __X__ Yes _____ No
6. Materials include a variety of curriculum-embedded assessments. Examples include pre-, formative, summative, and self-assessment resources.	Evidence- All forms of assessment are present, including self-reflection related to the essential question. An Assessment Readiness and Module Quiz is included for each module.	(Reviewer only.) _____ Yes _____ No
7. Assessments contain aligned rubrics, answer keys, and scoring guidelines that provide sufficient guidance for interpreting student performance.	Evidence- Answer Keys are provided. Performance tasks are identified, but these are essentially a problem with multiple extensions. These are right/wrong answers without the need for a rubric.	(Reviewer only.) _____ Yes _____ No

8. Materials assess student proficiency using methods that are accessible and unbiased, including the use of course-level language in student prompts.	**Evidence-** **Assessment methods are aligned with the instructional methods.**	**(Reviewer only.)** **__X__ Yes** **_____ No**
9. Materials are carefully evaluated by qualified individuals, whose names are listed, in an effort to ensure freedom from mathematical errors and course-level appropriateness.	**Evidence-** **Names of Program Reviewers are listed on the page right after the page of authors.**	**(Reviewer only.)** **__X__ Yes** **_____ No**
10. The visual design supports students in engaging thoughtfully with the subject. Navigation through the text is clear.	**Evidence-** **The student edition is colorful with graphics that engage students. The lesson body is easily separated from Guided and Independent Practice. Tips and additional help are provided in the margins. This makes the book a little "busy." If the student text is a consumable format, there is insufficient working space provided on the page.**	**(Reviewer only.)** **__X__ Yes** **_____ No**
11. The materials engage parents in appropriate ways. For example, homework assignments in elementary grades, consist of routine problems, practice with getting answers, and fluency-building exercises that parents can easily support.	**Evidence-** **The online Personal Math Trainer provides an excellent resource for parents as it is essentially a step by step tutor. It also includes guided practice that provides immediate feedback. There were not specific letters provided for parents.**	**(Reviewer only.)** **__X__ Yes** **_____ No**

Reviewer IMET Evaluation Summary **Title/Level:** Go Math Middle School Grade 6

Publisher: Houghton Mifflin Harcourt **Copyright:** 2014

ISBN: 978-0-544-06571-0

Reviewer ID # JH **Date Review Completed:** March 5, 2016

Non-Negotiable Criteria- Each Non-Negotiable must be met in order for the Non-Negotiable Alignment Criteria to be met overall.

Non-Negotiable 1: Freedom from Obstacles to Focus	Non- Negotiable 2: Focus and Coherence
X Meets	X Meets
_____ Does Not Meet	_____ Does Not Meet

Non-Negotiable Overall:

X Meets **_____ Does Not Meet**

Alignment Criteria- Each Alignment Criterion must be met with a sufficient number of points in order for Alignment Criteria to be labeled as "Meets" overall. The more points the materials receive on the Alignment Criteria, the better they are aligned.

Alignment Criterion 1: Rigor and Balance	Alignment Criterion 2: Standards of Mathematical Practice	Alignment Criterion 3: Access to Standards for All Learners
Points: 5 of 6 possible. (Materials must receive at least 5 of 6 points to align.)	Points: 4 of 6 possible. (Materials must receive at least 5 of 6 points to align.)	Points: 5 of 6 possible. (Materials must receive at least 5 of 6 points to align.)
X Meets	_____ Meets	X Meets
_____ Does Not Meet	X Does Not Meet	_____ Does Not Meet

Alignment Criteria Overall:

_____ Meets __X___ Does Not Meet

If the materials meet both Non-Negotiables and relevant Alignment Criterion, they are aligned to the Shifts and major features of the Core Standards. **the materials meet every Non-Negotiable and Alignment Criterion? _____ Yes ___X___ No**

What are the specific areas of strength and weakness based on this evaluation? Publishers or others modifying or developing assessments can use this information to make improvements and/or to remedy gaps in the alignment of assessment materials.

The connections between clusters and the extensive modeling are strengths for this textbook. There seems to be little conceptual development before moving to procedures. Opportunities for student reasoning come after direct instruction on procedures rather than before procedural instruction. This seems to violate the idea that procedural fluency flows from conceptual understanding.

2015-16 Mathematics Interim Review Recommendation & Summary

Publisher Name:	Houghton Mifflin Harcourt
Title:	Algebra 1
ISBN #	**9780544381964**
Grade Level(s) or Course:	Algebra 1
Reviewer ID:	T.T. RW

RECOMMENDED AS:

___X___**Core Mathematics Program-** a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials. Substantial evidence clearly supports the designation of this program as Core.

_____**Other Mathematics Program-** a program that substantially, but partially, meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for supplemental materials. Substantial evidence clearly supports the designation of this program as Other.

_____**Component Mathematics Program-** a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs. Substantial evidence clearly supports the designation of this program as Component.

_____**Intervention Program-** a program designed and intended to target and support students' specific needs. Substantial evidence clearly supports the designation of this program as Intervention.

_____ **Does not meet criteria** for recommendation as a Curricular Material or Online Resource for Mathematics.

EVIDENCE SUMMARY:

FOCUS-
The textbook was definitely designed around the CCSS and aligns very well.

COHERENCE-
Practices and standards are noted and followed appropriately as noted by standards and Appendix A.

RIGOR-
Problems and lessons apply themselves with a focus to the standards and practices and provide strong structure for the students to follow.

CONCEPTUAL UNDERSTANDING-
The practice problems are written more as story problems and less the traditional way. There is a task performance problem in each homework section, however, the task performance problem is just an extension of a story problem.
Most problems are written to a conceptual understanding and contain many opportunities to develop their learning.

MATHEMATICAL PRACTICES-
The online resources really provide a lot of support when found. This requires extensive researching of the online resources. A lot of diverse lesson approaches.

ACCESSIBILITY OF STANDARDS TO ALL STUDENTS-
Materials are provided online for extensive ELL and vocabulary work.

OTHER:
This curriculum meets all the requirements, however it is not necessarily visually appealing to young adults.
Teacher's edition has ideas to promote collaborative learning in the classroom as well as incorporation STEM activities throughout the text.

2015-1 nterim Mathematics Review

Mathematics Evaluation Tool – High School

Publisher: Houghton Mifflin Harcourt

Title of Material: Algebra 1

Author: Timothy Kanold et al.

ISBN #: 9780544381964 **Copyright** 2015

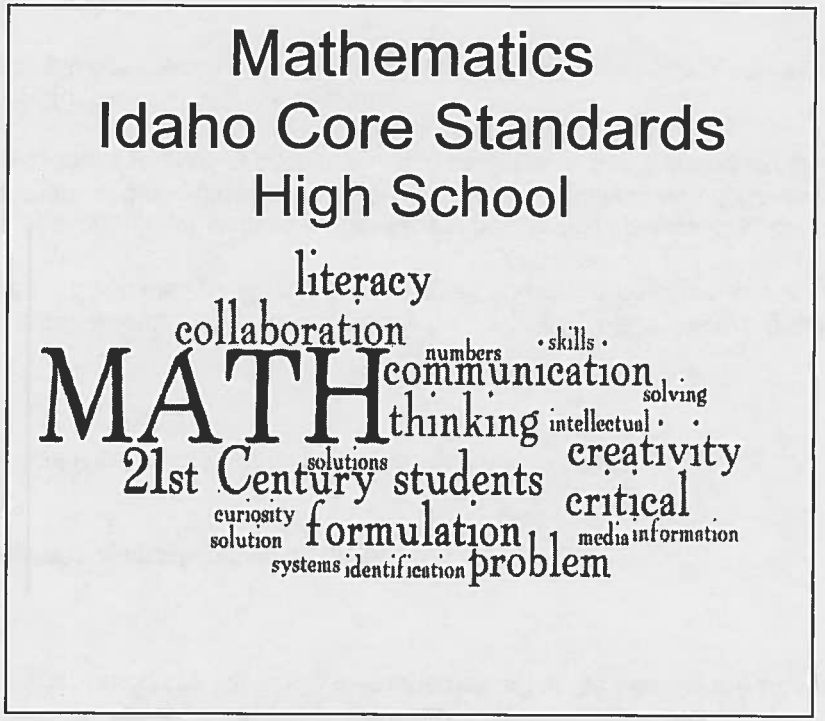
Reviewer ID: RW and TT

Core Mathematics Program- a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Core.

Other Mathematics Program- a program that substantially, but partially, meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Other.

Component Mathematics Program- a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs.
Substantial evidence clearly supports the designation of this program as Component.

Intervention Program- a program designed and intended to target and support students' specific needs.
Substantial evidence clearly supports the designation of this program as Intervention.



- Evaluation Form adapted from Instructional Materials Evaluation Toolkit (IMET).

The IMET was developed by Student Achievement Partners. Educators may use or adapt. http://creativecommons.org/licenses/by/3.0/ Download this tool at http://achievethecore.org/IMET

2015-1 nterim Mathematics Review

Mathematics Evaluation Tool – High School

Publisher: Houghton Mifflin Harcourt

Title of Material: Algebra 1

Author: Timothy Kanold et al.

ISBN #: 9780544381964 **Copyright** 2015

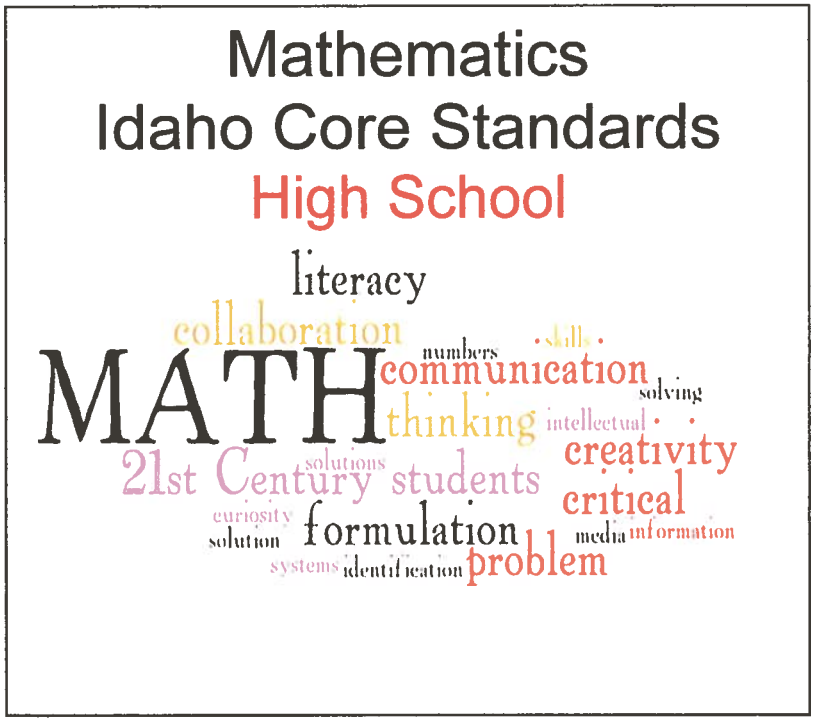
Reviewer ID: _____

Core Mathematics Program- a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Core.

Other Mathematics Program- a program that substantially, but partially, meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Other.

Component Mathematics Program- a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs.
Substantial evidence clearly supports the designation of this program as Component.

Intervention Program- a program designed and intended to target and support students' specific needs.
Substantial evidence clearly supports the designation of this program as Intervention.



- Evaluation Form adapted from Instructional Materials Evaluation Toolkit (IMET).

The IMET was developed by Student Achievement Partners. Educators may use or adapt. http://creativecommons.org/licenses/by/3.0/ Download this tool at http://achievethecore.org/IMET

Instructional Materials Evaluation Tool

Mathematics, High School

What Are the Purposes of the IMET?

This Math IMET is designed to help educators determine whether instructional materials are aligned to the Shifts and major features of the Common Core State Standards (CCSS). The substantial instructional Shifts (http://www.corestandards.org/other-resources/key-shifts-in-mathematics/) at the heart of the Common Core State Standards are:

- **Focus** strongly where the Standards focus
- **Coherence**: Think across grades and link to major topics within the grade
- **Rigor**: In major topics, pursue conceptual understanding, procedural skill and fluency, and application with equal intensity.

The IMET draws directly from the following documents:

- Common Core State Standards for Mathematics (www.corestandards.org/Math)
- Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013) (http://www. corestandards.org/wp-content/uploads/Math_Publishers_Criteria_ HS_Spring_2013_FINAL1.pdf)

When to use the IMET

1. Purchasing materials: Many factors go into local purchasing decisions. Alignment to the Standards is a critical factor to consider. This tool is designed to evaluate alignment of instructional materials to the Shifts and the major features of the CCSS. It also provides suggestions of additional indicators to consider in the materials evaluation and purchasing process
2. Evaluating materials currently in use: The IMET can be used to analyze the degree of alignment of existing materials and help to highlight specific, concrete flaws in alignment. Even where materials and tools currently in use fail to meet one or more of these criteria, the pattern of failure is likely to be informative. States and districts can use the evaluation to create a thoughtful plan to modify or combine existing resources in such a way that students' actual learning experiences approach the focus, coherence, and rigor of the Standards.
3. Developing programs: Those developing new programs can use this tool as guidance for creating aligned curricula.

Please note this tool was designed for evaluating comprehensive curricula (including any supplemental or ancillary materials), but it was not designed for the evaluation of standalone supplemental materials.

Who Uses the IMET?

Evaluating instructional materials requires both subject-matter and pedagogical expertise. Evaluators should be well versed in the Standards (www.corestandards.org/Math) for all grades in which materials are being evaluated. This includes understanding the Widely Applicable Prerequisites (www.achievethecore.org/prerequisites), how the content fits into the progressions in the Standards (www. achievethecore.org/progressions), and the expectations of the Standards with respect to conceptual understanding, procedural skill and fluency, and application. Evaluators also should be familiar with the substantial instructional Shifts (http://www.corestandards.org/other-resources/key-shifts-in-mathematics/) of Focus, Coherence and Rigor that are listed above.

Getting Started

Prior to Evaluation

Assemble all of the materials necessary for the evaluation. It is essential for evaluators to have materials for all grades covered by the program, as some criteria cannot be rated without having access to each grade. In addition, each evaluator should have a reference copy of the Common Core State Standards for Mathematics (CCSSM) and the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).

Before conducting the evaluation itself, it is important to develop a protocol for the evaluation process. The protocol should include having evaluators study the Publishers' Criteria and the IMET. It will also be helpful for evaluators to get a sense of each program overall before beginning the process. At a minimum, this would include reading the front matter of the text, looking at the table of contents and paging through multiple chapters.

Sections 1-3 below should be completed to produce a comprehensive picture of the strengths and weaknesses of the materials under evaluation. Information about areas in need of improvement or supplementation should be shared with internal and external stakeholders.

Navigating the Tool

Begin with Section 1: Non-Negotiable Alignment Criteria

- The Non-Negotiable Alignment Criteria must each be met in full for materials to be considered aligned to the Shifts and the major features of the Common Core State Standards. Each Non-Negotiable Alignment Criterion has one or more metrics associated with it; every one of these metrics must be met in order for the criterion as a whole to be met.

- Examine the relevant materials and use evidence to rate the materials against each criterion and its associated metric(s).

- Record and explain the evidence upon which the rating is based.

Continue to Section 2: Alignment Criteria

- The Alignment Criteria must each be met for materials to be considered aligned to the Shifts and the major features of the Common Core State Standards. Each Alignment Criterion has one or more metric associated with it; a specific number of these metrics must be met or partially met in order for the criterion as a whole to be met.

- Examine the materials in relation to these criteria, assigning each metric a point value. Rate the criterion as "Meets" or "Does Note Meet" based on the number of points assigned. The more points the materials receive on the alignment Criteria, the better they are aligned.

- Record and explain the evidence upon which the rating is based.

Proceed to Section 4: Indicators of Quality

- Indicators of Quality are important considerations that will help evaluators better understand the overall quality of instructional materials. These considerations are not criteria for alignment to the CCSS, but they provide valuable information about additional program characteristics. Evaluators may want to add their own indicators to the examples provided.

Directions for Non-Negotiable 1

Focus and Coherence

Criterion	Evidence- Give specific examples.	Rating: (Reviewer only.)
Non-Negotiable 1: Focus and Coherence- Materials must focus coherently on the Widely Applicable Prerequisites in a way that is consistent with the progressions in the Standards. Focus and coherence are the two major evidence-based design principles of the Common Core State Standards for Mathematics (CCSSM, p. 3). Focus is necessary in order to fulfill the ambitious promise the states have made to their students by adopting the Standards: greater achievement at the college and career-ready level; greater depth of understanding of mathematics; and a rich classroom environment in which reasoning, sense-making, applications, and a range of mathematical practices flourish. In high school courses, narrowing and deepening the curriculum creates a structure that ties topics together. Thus, materials must focus coherently on the Widely Applicable Prerequisites in a way that is consistent with the progressions in the Standards.	Focus and coherence are the two major evidence-based design principles of the Common Core State Standards for Mathematics (CCSSM, p. 3). Focus is necessary in order to fulfill the ambitious promise the states have made to their students by adopting the Standards: greater achievement at the college and career-ready level; greater depth of understanding of mathematics; and a rich classroom environment in which reasoning, sense-making, applications, and a range of mathematical practices flourish. In high school courses, narrowing and deepening the curriculum creates a structure that ties topics together. Thus, materials must focus coherently on the Widely Applicable Prerequisites in a way that is consistent with the progressions in the Standards. **Required Materials:** • Common Core State Standards for Mathematics (www.corestandards.org/wpcontent/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_HS_Spring_2013_FINAL1.pdf) • Widely Applicable Prerequisites for College and Careers (http://achievethecore.org/prerequisites) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion:** Non-Negotiable 1 is rated as Meets or Does Not Meet. To rate Non-Negotiable 1, first rate Metrics 1A–1H. Each of these eight metrics must be rated as Meets in order for Non-Negotiable 1 to be rated as Meets. Rate each metric 1A–1H as Meets or Does Not Meet/Insufficient Evidence. If the evidence examined shows that the Criterion is met, then mark the Criterion as Meets. If the evidence examined shows that the Criterion is not met—or if there is insufficient evidence to make a determination—then mark the Criterion as Does Not Meet/Insufficient Evidence. Support all ratings with evidence.

Metric NN1A: **In any [illegible]e course, students spend at least 50% of their time on Widely Applicable Prerequisites.** **How to Find the Evidence:** Familiarize yourself with the Widely Applicable Prerequisites. Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, lessons, homework assignments, and assessments. (Evaluate both student and teacher materials.) Consider time spent on the Widely Applicable Prerequisites and judge qualitatively whether students and teachers using the materials as designed will devote the majority of time to the Widely Applicable Prerequisites For context, read Criterion #1 in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** **67/81 approxi[illegible]ly which is over 50%** **Reviewing tabl[illegible]f contents, units and criterion 1.** **Further clarification can be found in each chapter.**	**__X__Meets** **____Does Not Meet Insufficient Evidence**
Metric NN1B: **Student work in Geometry involves significant work with applications/modeling and problems that use algebra skills.** **How to Find the Evidence:** Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, lessons, homework assignments, and assessments. (Evaluate both student and teacher materials. NOTE: Since Geometry contains relatively fewer Widely Applicable Prerequisites, this Criterion is important to help foster students' college and career readiness. Problems that use algebra skills might include, for example, algebraic geometry problems in a coordinate setting, or problems of measurement involving unknown quantities.	**Evidence-** In the traditional pathway, none of the Geometry standards are covered in the Algebra 1 course. Therefore, this metric would not apply to this course. Those items involving geometric principles require algebra skills.	**__X__Meets** **____Does Not Meet Insufficient Evidence**

Metric NN1C: **There are problems at a level of sophistication appropriate to high school (beyond mere review of middle school topics) that involve the application of knowledge and skills from grades 6-8.** **How to Find the Evidence:** Evaluate lessons, chapter/unit assessments, and homework assignments. NOTE: Problems should include application of the following topics from grades 6-8: • Ratios and proportional relationships. • Percentage and unit conversions, e.g., in the context of complex measurement problems involving quantities with derived or compound units (such as mg/mL, kg/ m3, acre-feet, etc.). • Basic function concepts, e.g., by interpreting the features of a graph in the context of an applied problem. • Concepts and skills of geometric measurement e.g., when analyzing a diagram or schematic. • Concepts and skills of basic statistics and probability (see grades 6–8.SP) • Performing rational number arithmetic fluently. For context, read Table 1 on Page 8 of the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** Each module begins with an "Are You Ready" section in which they review mathematical skills from grades 6-8, along with previously taught skills from this course to prepare the students for the upcoming content. The problems are at a level of sophistication appropriate to high school. Modules 3,5,8,and 10 seemed to best exemplify this evidence.	**__X__Meets** **____Does Not Meet Insufficient Evidence**
Metric NN1D: **Materials base courses on the content specified in the Standards.** **How to Find the Evidence:** Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, and lessons in both student and teacher materials. For context, read Criterion #3a in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** Text is aligned to the Idaho Core Standards. Using table of contents, and links, found all the standards represented.	**__X__Meets** **____Does Not Meet Insufficient Evidence**

Metric NN1E: **Materials give all students extensive work with course-level problems.** **How to Find the Evidence:** Evaluate both student and teacher materials. If the materials provide resources for differentiated learning, consider whether lower-performing students have opportunities to engage with course-level problems. Also consider whether higher-performing students are given opportunities to learn current course-level content in greater depth. For context, read Criterion #3b in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** The practice problems are designed in a way in which at first, they are easy to solve and they gradually get more difficult. There is a "H.O.T" section (higher order thinking) that can be used to challenge the students. There is also a "Lesson Performance Task" problem that requires a little bit more knowledge and understanding to complete, but it isn't very difficult. In the margins of the teacher edition, there are notes on "scaffolding support" to help teachers set up the lesson in a way that will help the students understand the material.	**__X__Meets** **____Does Not Meet Insufficient Evidence**
Metric NN1F: **Materials relate course-level concepts explicitly to prior knowledge from earlier grades or courses. The materials are designed so that prior knowledge becomes reorganized and extended to accommodate the new knowledge.** **How to Find the Evidence:** Evaluate student and teacher materials, looking for problems that involve extending the knowledge learned in earlier grades and courses. NOTE: An example of evaluating this Criterion might be to look at whether materials connect the equation of a circle with the distance formula and the Pythagorean theorem. For context, read Criterion #3c in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** The "Are You Ready" section is designed to review skills and knowledge needed to successfully complete the upcoming content.	**__X__Meets** **____Does Not Meet Insufficient Evidence**
Metric NN1G: **Materials include learning objectives that are visibly shaped by CCSSM cluster and domain headings.** **How to Find the Evidence:** Select several clusters from the course being evaluated. Evaluate teacher and student materials in relation to these clusters. For context, read Criterion #4a in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** At the beginning of each lesson, the teachers edition of the text book notes which CCSS is being covered in that section and has objectives written that mirror the CCSS noted. The text book also notes other strands that are covered and utilized in that section.	**__X__Meets** **____Does Not Meet Insufficient Evidence**

Metric NN1H: **Materials include problems and activities that serve to connect two or more clusters in a domain, or two or more domains in a category, or two or more categories, in cases where these connections are natural and important.** **How to Find the Evidence:** In the course being evaluated, choose two or more clusters, two or more domains, or two or more categories for which connections are natural and important. Evaluate the units, chapters, and lessons that deal with the chosen topics, looking for problems and activities that serve to connect the chosen clusters or domains. NOTE: An example of evaluating this Criterion might be to look at whether materials include problems in which students analyze a situation by building a function, graphing it, and using it to create and solve an equation. For context, read Criterion #4b in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** Often times throughout the book, clusters in a domain are connected. These might be noted in the beginning of each lesson throughout the whole text, which connects different clusters within the same section in the "teaching" portion of the lesson. The performance questions at the end of the sections utilize this idea. There are also opportunities to do more of these activities in the handouts.	**__X__Meets** **____Does Not Meet Insufficient Evidence**
Non-Negotiable 1: Focus and Coherence- Materials must focus coherently on the Widely Applicable Prerequisites in a way that is consistent with the progressions in the Standards. **Metric NN 1:** If all metrics 1A–1H were rated as Meets, then rate Non-Negotiable 1 as Meets. If one or more metrics were rated as Does Not Meet/Insufficient Evidence, then rate Non-Negotiable 1 as Does Not Meet. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)** **Before moving to Alignment Criterion 1, record the final Meets or Does Not Meet rating in the Evaluation Summary.**		**__X__Meets** **____Does Not Meet** **Strengths/Weaknesses** The textbook was definitely designed around the CCSS and aligns very well.

Now continue by evaluating Alignment Criterion 1 for Rigor and Balance.

Directions for Alignment Criterion 1

Rigor and Balance

Alignment Criterion 1: **Rigor and Balance- Materials must reflect the balance in the Standards and help students meet the Standards' rigorous expectations.** The Standards set expectations for attention to all three aspects of rigor: conceptual understanding, procedural skill and fluency, and applications. Thus, materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.	The Standards set expectations for attention to all three aspects of rigor: conceptual understanding, procedural skill and fluency, and applications. Thus, materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations. • Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_HS_Spring_2013_FINAL1.pdf) • Widely Applicable Prerequisites for College and Careers (http://achievethecore.org/prerequisites) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion:** Alignment Criterion 1 is rated as Meets or Does Not Meet. To rate Alignment Criterion 1, first rate metrics 1A, 1B, and 1C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). For each metric, guiding questions are provided to aid in gathering evidence. Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 1 if the materials rate 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as rigor and balance, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.
AC Metric 1A: **The materials support the development of students' conceptual understanding of key mathematical concepts, especially where called for in specific content Standards or cluster headings.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Widely Applicable Prerequisites that relate specifically to conceptual understanding to use throughout the questions associated with this metric. NOTE: Some examples of clusters or Standards that call for conceptual understanding include: N-RN.A.1, A-APR.B, A-REI.A.1, A-REI.D.10, A.REI.D.11, F.IF.A.1, F-LE.A.1, G.SRT.A.2, G-SRT.C.6, S-ID.C.7 For context, read Criterion #2a in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	• Choose a cluster/Standard from the Widely Applicable Prerequisites that is aligned to each aspect of rigor and use it to evaluate these metrics. It is most helpful if the same clusters and Standards are chosen for all of the programs being evaluated. (Guidance in choosing clusters/Standards is included in "How to Find the Evidence" below.)	**Use the questions for AC Metric 1A to evaluate Metric 1A. Record evidence for each question and rate Metric 1A.** **__X__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Is conceptual understanding attended to thoroughly where the Standards set explicit expectations for understanding or interpreting? Evaluate lessons, chapter/unit assessments and homework assignments, paying attention to work aligned to Standards that explicitly call for understanding or interpreting.	**Evidence-** The homework problems are written more like story problems, which require more of a conceptual understanding than traditional books. However, the problems are not very challenging. Example: 3.2-4 p.136, performance tasks.	

Do the materials feature high-quality conceptual problems and conceptu[illegible]cussion questions? Evaluate lessons, chapter/unit assessments, and homework assignments. NOTE: Examples of conceptual problems might include such questions as "What is the maximum value of the function f(t) = 5 – t2 ?" or "Is √2 a polynomial? How about ½(x + √2)+ ½ (-x + √2)?"	**Evidence-** There is a "H.[illegible]" section in the textbook with high order thinking questions that can be used to challenge students. There are performance tasks. Example: 3.2-4 p.136, performance tasks. Limited number, but handouts may contain deeper questions. This may need supplementation	
Do the materials feature opportunities to identify correspondences across mathematical representations? Evaluate lessons, chapter/unit assessments and homework assignments. NOTE: An example of evaluating this metric might include looking at whether materials support students in identifying correspondences among the expression that defines a function, the graph that shows the relationship, and the behavior of the phenomenon being modeled (if any).	**Evidence-** There is a mixture of tables, graphs, equations, pictures and stories throughout the textbook. Example ch 11 shows linear relationships and how their intersections demonstrate an occurrence and how solving linear systems and graphs go together.	
AC Metric 1B: **The materials are designed so that students attain the fluencies and procedural skills required by the Standards.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Widely Applicable Prerequisites that relate specifically to fluency and procedural skill to use throughout the questions associated with this metric. NOTE: Some examples of Standards that call for procedural skill and fluency include: A-SSE.A.1b, A-SSE.2, A-APR.A.1, A-APR.C.6, F-BF.B.3, G-GPE.B.4, G-GPE.B.5, G-GPE.B.7, G-CO.A.1, G-SRT.B.5 For context, read Criterion #2b in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).		**Use the questions for AC Metric 1B to evaluate Metric 1B. Record evidence for each question and rate Metric 1B.** **__X__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Is progress toward fluency and procedural skill interwoven with the student's developing conceptual understanding of the skills in question? Evaluate lessons, chapter/unit assessments, daily routines, and homework assignments for evidence that the development of fluency and procedural skill is supported by conceptual understanding.	**Evidence-** **Many of the problems are written in a way that require students to have a conceptual understanding of the material being taught. Fluency and procedural skills for developing conceptual understanding are definitely interwoven throughout the textbook. For example, ch 20 shows factors, zeros, graphs and leads to ch 21 showing solving the various quadratics**	
Are purely procedural problems and exercises present that include cases in which opportunistic strategies are valuable and generic cases that require efficient and general procedures present? Evaluate lessons, chapter/unit assessments, daily routines, and homework assignments. NOTE: Problems in which opportunistic strategies are valuable might include such examples as solving x2 + 5 = 49 + 5 or (3x − 2)2 = 6x − 4. Generic cases that require efficient and general procedures might include such problems as solving c + 8 – c2 = 3(c – 1)2 − 5).	**Evidence-** Problems are present and provide for generic cases to apply to higher learning. For example, in ch 17, polynomials are added with generics and specifics and also in context.	

AC Metric 1C: **The materials are designed so that teachers and students spend sufficient time working with engaging applications, without losing focus on the Widely Applicable Prerequisites.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Widely Applicable Prerequisites that relate specifically to application to use throughout the questions associated with this metric. NOTE: Some examples of clusters or Standards that call for application include: N-Q.A, A-SSE.B.3, A-REI.D.11, F-IF.B, F-IF.C.7, F-BF.A.1, G-SRT.C.8, S-ID.A.2, S-IC.A.1 For context, read Criterion #2c in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).		**Use the questions for AC Metric 1C to evaluate Metric 1C. Record evidence for each question and rate Metric 1C.** **__X__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Are there single- and multi-step contextual problems, including non-routine problems, that develop the mathematics of the course, afford opportunities for practice, and engage students in problem solving? Do the problems attend thoroughly to those places in the content Standards where expectations for multi-step and real-world problems are explicit? Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** There is a great mixture of single- and multi-step problems throughout the textbook. Students require problem solving strategies to complete many of the problems. Every lesson has this.	
Do application problems particularly stress applying the Widely Applicable Prerequisites? Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** There are many application problems throughout the textbook and the WAP are apparent throughout the entire textbook. Ex: module 6 lesson 4 275- Problems address application, especially the performance tasks	
Are there ample opportunities for students to engage with modeling problems? Do materials require students to use both individual parts of the modeling cycle as well as the full modeling cycle? Read the pages on High School—Modeling in the Standards for Mathematics (pp. 72 and 73). Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** Students work with tables, graphs, equations, pictures and story problems throughout the textbook, giving them different strategies for modeling the same content. Ex: module 20 has modeling problems and application of how the development continues	

Alignment Criterion 1: Materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.

AC 1: Materials must earn at least 5 of 6 points to meet this Alignment Criterion. If materials earn less than 5 points, the Criterion has not been met. Check the final rating.
Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)**

Before moving to Alignment Criterion 2, record the final Meets or Does Not Meet rating in the Evaluation Summary.

__X__Meets

____Does Not Meet

Strengths/Weaknesses:
The practice problems are written more as story problems and less the traditional way. There is a task performance problem in each homework section, however, the task performance problem is just an extension of a story problem.

Alignment Criterion 2:
Standards for Mathematical Practice- Materials must demonstrate authentic connections between content Standards and practice Standards.

The Standards require that designers of instructional materials connect the mathematical practices to mathematical content in instruction. Thus, materials must demonstrate authentic connections between content Standards and practice Standards.

The Standards require that designers of instructional materials connect the mathematical practices to mathematical content in instruction. Thus, materials must demonstrate authentic connections between content Standards and practice Standards.

Required Materials:

- Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf)
- Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_HS_Spring_2013_FINAL1.pdf)
- Widely Applicable Prerequisites for College and Careers (http://achievethecore.org/prerequisites)
- From the materials being evaluated: teacher guides, student texts and workbooks

Rating this Criterion:
Alignment Criterion 2 is rated as Meets or Does Not Meet.
To rate Alignment Criterion 2, first rate metrics 2A, 2B, and 2C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). For each metric, guiding questions are provided to aid in gathering evidence.
Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 2 if the materials rate 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as mathematical practices, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.

AC Metric 2A: **Materials address the practice Standards in such a way as to enrich the Widely Applicable Prerequisites; practices strengthen the focus of the course instead of detracting from it, in both teacher and student materials.** **How to Find the Evidence:** Familiarize yourself with the Widely Applicable Prerequisites. Evaluate teacher and student materials for evidence that the mathematical practices support and connect to the focus of the course. NOTE: An example of evaluating this Criterion might include looking at whether materials use regularity in repeated reasoning to illuminate formal algebra as well as functions, particularly recursive definitions of functions. For context, read Criterion #6 in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** **The practice standards are listed throughout the textbook. The MPs are constantly embedded throughout the book and well represented. Example p155 4.1, standard, practice are all there. Notes in TE show where lesson is going and the connections as well as practices and strategies, work shows integration and where skills are as well as connections, see p.162**	**__X__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
AC Metric 2B: **Materials attend to the full meaning of each practice Standard.** **How to Find the Evidence:** For context, read Criterion #7 in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).		**Use the questions for AC Metric 2B to evaluate Metric 2B. Record evidence for each question and rate Metric 2B.** **__X__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Over the course of any given year of instruction, is each mathematical practice Standard meaningfully present in the form of assignments, activities, or problems that stimulate students to develop the habits of mind described in the practice Standard? Evaluate lessons, chapter/ unit assessments, and homework assignments for evidence of each mathematical practice being meaningfully present in instruction.	**Evidence-** The 8 MPs are present throughout the textbook, both in the lessons and in the homework problems. For example, see end of sections. And beginning. MP are there and listed. All are present and listed in front as well.	
Are teacher-directed materials that explain the role of the practice Standards in the classroom and in students' mathematical development included? Are alignments to practice Standards accurate? Evaluate teacher materials, paying attention to explanations of the role of the practice Standards in the classroom and in students' mathematical development. Evaluate documents aligning lessons to practice Standards for accuracy. NOTE: Examples to look for when evaluating this metric might include the following: a highly scaffolded problem should not be aligned to MP.1; or a problem that directs a student to use a calculator should not be aligned to MP.5; or a problem about merely extending a pattern should not be aligned to MP.8.	**Evidence-** The teacher's edition state the standards being addressed in each unit as well as the mathematical practices being used throughout the unit. Not only are MPs listed, but there is a scaffolding sections. See p. 170 and p.187	

AC Metric 2C: **Materials support the Standards' emphasis on mathematical reasoning.** **How to Find the Evidence:** For context, read Criterion #8 in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).		**Use the questions for AC Metric 2C to evaluate Metric 2C. Record evidence for each question and rate Metric 2C.** **__X__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Do the materials support students in constructing viable arguments and critiquing the arguments of others concerning course-level mathematics that is detailed in the content Standards? Read Standard for Mathematical Practice 3. Evaluate teacher and student materials to ensure that students are given opportunities to reason with grade-level mathematics.	**Evidence-** The textbook requires students to explain their thinking. Using the extra questions in the TE, the strategies and the tasks do this. TE does a good job of providing support for possible directions. See p. 188, supporting students reasoning.	
Do the materials support students in producing not only answers and solutions, but also, in a course-appropriate way, arguments, explanations, diagrams, mathematical models, etc., especially in the Widely Applicable Prerequisites? Familiarize yourself with the Widely Applicable Prerequisites. Evaluate teacher and student materials to understand the types of work students are expected to produce.	**Evidence-** In the "Reflect" and "Elaborate" portion of the textbook, the students are required to form an argument or give an example as to why something is true or false. Essential questions, (p. 189, 469) and ready to go on, provide for this also.	
Do materials explicitly attend to the specialized language of mathematics? Is the language of argument, problem solving, and mathematical explanations taught rather than assumed? Evaluate teacher and student materials, paying attention to how mathematical language is taught. NOTE: An example of evaluating this Criterion might include looking at whether students are supported in: basing arguments on definitions; using the method of providing a counter example; or recognizing that examples alone do not establish a general statement.	**Evidence-** Reading start ups (see p.476 for ex.) and vocabulary are laid out to provide this. This continues with strategies for connecting vocabulary and reflections type questions, summarizing and evaluating material in the lesson.	
Alignment Criterion 2: Materials must demonstrate authentic connections between content Standards and practice Standards. **AC 2:** Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 points, the Criterion has not been met. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewers only.)** **Before moving to Alignment Criterion 3, record the final Meets or Does Not Meet rating in the Evaluation Summary.**		**__X__Meets** **____Does Not Meet** **Strengths/Weaknesses:** The 8 MPs are very apparent throughout the textbook.

Alignment Criterion 3: **Access to the Standards for All Students- Materials must provide supports for English Language Learners and other special populations.** Because Standards are for all students, alignment requires thoughtful support to ensure all students are able to meet the Standards. Thus, aligned materials must provide supports for English Language Learners and other special populations.	Because Standards are for all students, alignment requires thoughtful support to ensure all students are able to meet the Standards. Thus, aligned materials must provide supports for English Language Learners and other special populations. **Required Materials:** • Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math Publishers_Criteria_HS_Spring_2013_FINAL1.pdf) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion:** Alignment Criterion 3 is rated Meets or Does Not Meet. To rate Alignment Criterion 3, first rate metrics 3A, 3B, and 3C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 3 if the materials rate 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as support for special population, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.
AC Metric 3A: **Support for English Language Learners and other special populations is thoughtful and helps those students meet the same Standards as all other students. The language in which problems are posed is carefully considered.** **How to Find the Evidence:** Evaluate teacher and student materials, paying attention to supports offered for special populations.	**Evidence-** **The teachers edition of the textbook lists "Additional Resources" as to help provide more practice to struggling students. The online differentiation for English Learners is available.**	**_X___Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
AC Metric 3B: **Materials provide appropriate level and type of scaffolding, differentiation, intervention, and support for a broad range of learners with gradual removal of supports, when needed, to allow students to demonstrate their mathematical understanding independently.** **How to Find the Evidence:** Evaluate teacher and student materials, paying attention to whether materials provide differentiation that will lead all learners to engage with on-grade-level content.	**Evidence-** **The teachers edition of the textbook has a lot of helpful strategies to help teachers successfully scaffold the content in a way that will help the students learn and understand the material being taught. As mentioned before, the book lists several resources to help in the scaffolding and differentiation of the. Personal math trainer and scaffolding provided. See p. 196,396 etc., tier intervention, Online version has differentiation and language support**	**__X__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**

AC Metric 3C: **Design lessons recommends and facilitates a mix of instructional approaches for a variety of learners such as using multiple representations (e.g., including models, using a range of questions, checking for understanding, flexible grouping, pair-share).** **How to Find the Evidence:** Evaluate teacher materials, noting instructional approaches suggested for whole class and differentiated lessons and activities.	**Evidence-** Multiple representations is used often throughout the book. Students are required to use all type of representations and they are required to form viable arguments for why the math works the way it does and when it is necessary to use certain types of representations. The material is presented in a way in which the students can be learning the information independently, in pairs or in groups. There are peer activities, group activities, individual activities and extra assignments and questions in the handouts. Also, intervention strategies available. p. 403-4 for ex.	**__X__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Alignment Criterion 3: Materials must provide supports for English Language Learners and other special populations. **AC 3** Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 points, the Criterion has not been met. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewers only.)** **Move to the Evaluation Summary and record the final Meets or Does Not Meet rating .**		**__X__Meets** **____Does Not Meet** **Strengths/Weaknesses:** **The online resources really provide a lot of support when found. This requires extensive researching of the online resources.**

Once an evaluation for alignment to the Shifts and major features of the CCSS has been conducted using Sections 1-3, it's important to evaluate for overall quality and best practices. A starting list of Indicators of Quality are suggested below. States, districts and others evaluating instructional materials are encouraged to add to this list to ensure materials reflect local contexts. For background information on some of the Indicators of Quality in this section, refer to pp.16–18 in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).

Indicators of Quality	Evidence- Give specific examples.	Rating: (Reviewer only.)

1. Lessons are thoughtfully structured and support the teacher in guiding the class through the learning paths at hand, with active participation by all students in their own learning and in the learning of their classmates.	Evidence- Lessons have multiple parts and types. Extensively laid out in the margin. See p. 403-4, p. 545, 546	(Reviewer only.) ___X___ Yes _____ No
2. The underlying design of the materials includes both problems and exercises. (In solving problems, students learn new mathematics, whereas in working exercises, students apply what they have already learned to build mastery.) Each problem or exercise has a purpose. NOTE: This Criterion does not require that the problems and exercises be labeled as such.	Evidence- Both types exist and are in varied forms, ex 326-329 on inequalities, it begins with fill in blanks, goes to computation, then to evaluation and explanation.	(Reviewer only.) ___X___ Yes _____ No
3. Design of assignments is not haphazard: exercises are given in intentional sequences in order to strengthen students' mathematical understanding.	Evidence- Order is certain and leads to a performance task. See 326-334 on inequalities as example.	(Reviewer only.) __X___ Yes _____ No
4. There are separate teacher materials that support and reward teacher study including, but not limited to: discussion of the mathematics of the units and the mathematical point of each lesson as it relates to the organizing concepts of the unit, discussion on student ways of thinking and anticipating a variety of students responses, guidance on lesson flow, guidance on questions that prompt students thinking, and discussion of desired mathematical behaviors being elicited among students.	Evidence- Digital version offers extras including evaluation, objectives, and differentiation. In fact, digital appears more readily available and easier to access. Videos of some lessons available also.	(Reviewer only.) __X____ Yes _____ No
5. Manipulatives suggested in the materials are faithful representations of the mathematical objects they represent and are connected to written methods.	Evidence- They are drawn and displayed as they would be in class. Ex. Algebra tiles on p.867, not many more besides tiles.	(Reviewer only.) ____X__ Yes _____ No
6. Materials include a variety of curriculum-embedded assessments. Examples include pre-, formative, summative, and self-assessment resources.	Evidence- There is opportunities in the explore sections (i.e. section 3 p.137) More questions and a class activity, then practice and assessment. Pre assessment is weak and only at beginning of chapter.	(Reviewer only.) ___X___ Yes _____ No

7. Assessments contain aligned rubrics, answer keys, and scoring guidelines that provide sufficient guidance for interpreting student performance.	**Evidence-** **Rubrics are provided. This seems fine. Tough to find, but online is easy. Very deep.**	**(Reviewer only.)** **___X___ Yes** **_____ No**
8. Materials assess student proficiency using methods that are accessible and unbiased, including the use of course-level language in student prompts.	**Evidence-** **Language appears clean and unbiased.**	**(Reviewer only.)** **___X___ Yes** **_____ No**
9. Materials are carefully evaluated by qualified individuals, whose names are listed, in an effort to ensure freedom from mathematical errors and course-level appropriateness.	**Evidence-** **9 reviewers. 2 math related and all school related.**	**(Reviewer only.)** **___X___ Yes** **_____ No**
10. The visual design supports students in engaging thoughtfully with the subject. Navigation through the text is clear.	**Evidence-** **Fairly bland, but text is clear and easy to follow.**	**(Reviewer only.)** **_____ Yes** **____X__ No**

Reviewer IMET Evaluation Summary **Title/Level: __Algebra 1_____**

Publisher: ___Houghton Mifflin Harcourt_____ Copyright: ___2015____ ISBN:__ 9780544381964____

Reviewer ID # _____ Date Review Completed:_____

Non-Negotiable Criteria-The Non-Negotiable must be met in order for the Non-Negotiable Alignment Criteria to be met overall.

Non- Negotiable 1: Focus and Coherence

___X__ Meets

_____ Does Not Meet

Non-Negotiable Overall:

___X__ Meets **_____ Does Not Meet**

Alignment Criteria- Each Alignment Criterion must be met with a sufficient number of points in order for Alignment Criteria to be labeled as "Meets" overall. The more points the materials receive on the Alignment Criteria, the better they are aligned.

Alignment Criterion 1: Rigor and Balance	Alignment Criterion 2: Standards of Mathematical Practice	Alignment Criterion 3: Access to Standards for All Learners
Points: ___6__ of 6 possible. (Materials must receive at least 5 of 6 points to align.)	**Points: __6__ of 6 possible.** (Materials must receive at least 5 of 6 points to align.)	**Points: ___6__ of 6 possible.** (Materials must receive at least 5 of 6 points to align.)
___X____ Meets	**____X___ Meets**	**____X___ Meets**
_____ Does Not Meet	**_____ Does Not Meet**	**_____ Does Not Meet**

Alignment Criteria Overall:

___X__ Meets **_____ Does Not Meet**

If the materials meet the Non-Negotiable Criterion and each Alignment Criterion, they are aligned to the Shifts and major features of the Co tandards. **Do the materials meet every Non-Negoti and Alignment Criterion? ___X__ Yes _____**

What are the specific areas of strength and weakness based on this evaluation? Publishers or others modifying or developing assessments can use this information to make improvements and/or to remedy gaps in the alignment of assessment materials.

This curriculum meets all the requirements, however it is not necessarily visually appealing to young adults.
Teacher's edition has ideas to promote collaborative learning in the classroom as well as incorporation STEM activities throughout the text.

The textbook was definitely designed around the CCSS and aligns very well.

The practice problems are written more as story problems and less the traditional way. There is a task performance problem in each homework section, however, the task performance problem is just an extension of a story problem.

The 8 MPs are very apparent throughout the textbook.

The online resources really provide a lot of support when found. This requires extensive researching of the online resources.

2015-16 Mathematics Interim Review Recommendation & Summary

Publisher Name:	HMH
Title:	Algebra 2
ISBN #	978 0544 385924
Grade Level(s) or Course:	9th - 12th grade.
Reviewer ID:	PP, DG.

RECOMMENDED AS:

__X__ **Core Mathematics Program-** a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials. Substantial evidence clearly supports the designation of this program as Core.

_____ **Other Mathematics Program-** a program that substantially, but partially, meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for supplemental materials. Substantial evidence clearly supports the designation of this program as Other.

_____ **Component Mathematics Program-** a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs. Substantial evidence clearly supports the designation of this program as Component.

_____ **Intervention Program-** a program designed and intended to target and support students' specific needs. Substantial evidence clearly supports the designation of this program as Intervention.

_____ **Does not meet criteria** for recommendation as a Curricular Material or Online Resource for Mathematics.

EVIDENCE SUMMARY:

FOCUS-

NN1 - Over 50% spent on W.A.P.
Functions, Real Numbers, Algebra, Geometry, Probability found throughout.

COHERENCE-

NN1 - Standards are listed in T.E.
Problems are appropriate and uses Depth of Knowledge.
Modules build the units, scaffolding from low skills, based to nigher thinking problems.

RIGOR-

AC1 - F.I.F.B.4- Functions.

CONCEPTUAL UNDERSTANDING-

AC1 - Concepts are built with examples, then practice, then evaluations.

MATHEMATICAL PRACTICES-

AC2 - Homework is aligned as seen throughout.
Examples include p341-342, Finding Out about Polynomials.

ACCESSIBILITY OF STANDARDS TO ALL STUDENTS-

AC3. - Glossary is both in English and Spanish with problems also done in English and Spanish.
Peer to Peer activities.

OTHER:

Video's on P.D for each module
Digital TE
Personal Math Tutor.

Strengths:

1. Glossary in both English and Spanish along with problems worked out in English and Spanish alongside each other.
2. RTI support is helpful.
3. Offering of proffessional development.
4. Student Edition is consummable with space for note taking within pages.

Weaknesses:

1. Index is limited; it doesn't include everything in the book. For example: the word to conjugate is not listed in the index so a person would have to look through each pg.
2. Student Edition is consumable which means that districts would have to purchase Student Editions each year.

2015-1 nterim Mathematics Review

Mathematics Evaluation Tool – High School

Publisher: HMH

Title of Material: Algebra 2

Author: Kanold, Burger, Dixon, Larson, Leinward

ISBN #: TE 978-0-544-38592-4 **Copyright** 2015

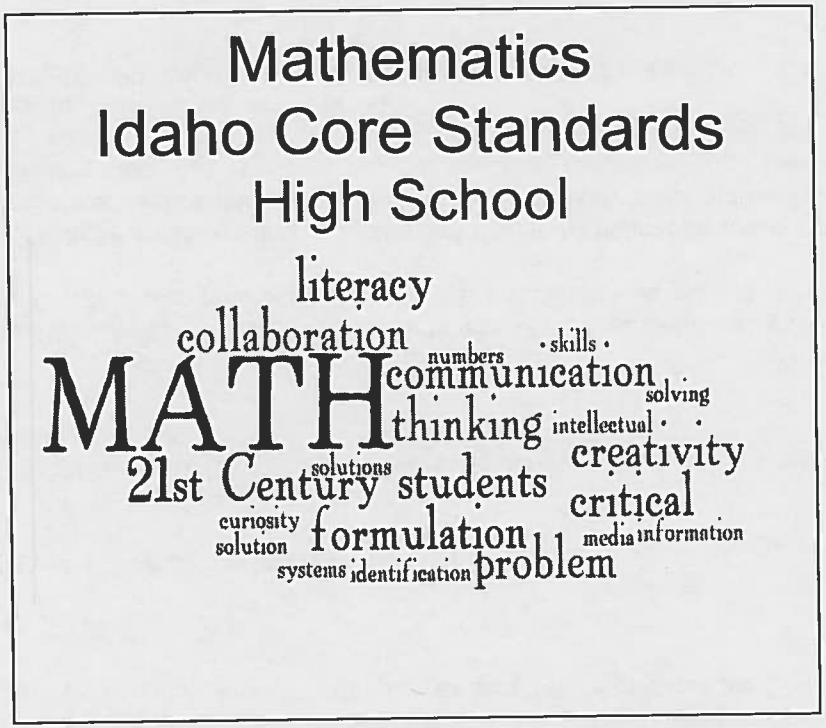
Reviewer ID: DG, PP

Core Mathematics Program- a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Core.

Other Mathematics Program- a program that substantially, but partially, meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Other.

Component Mathematics Program- a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs.
Substantial evidence clearly supports the designation of this program as Component.

Intervention Program- a program designed and intended to target and support students' specific needs.
Substantial evidence clearly supports the designation of this program as Intervention.



- Evaluation Form adapted from Instructional Materials Evaluation Toolkit (IMET).

The IMET was developed by Student Achievement Partners. Educators may use or adapt. http://creativecommons.org/licenses/by/3.0/ Download this tool at http://achievethecore.org/IMET

Instructional Materials Evaluation Tool

Mathematics, High School

What Are the Purposes of the IMET?

This Math IMET is designed to help educators determine whether instructional materials are aligned to the Shifts and major features of the Common Core State Standards (CCSS). The substantial instructional Shifts (http://www.corestandards.org/other-resources/key-shifts-in-mathematics/) at the heart of the Common Core State Standards are:

- **Focus** strongly where the Standards focus
- **Coherence**: Think across grades and link to major topics within the grade
- **Rigor**: In major topics, pursue conceptual understanding, procedural skill and fluency, and application with equal intensity.

The IMET draws directly from the following documents:

- Common Core State Standards for Mathematics (www.corestandards.org/Math)
- Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013) (http://www. corestandards.org/wp-content/uploads/Math_Publishers_Criteria_ HS_Spring_2013_FINAL1.pdf)

When to use the IMET

1. Purchasing materials: Many factors go into local purchasing decisions. Alignment to the Standards is a critical factor to consider. This tool is designed to evaluate alignment of instructional materials to the Shifts and the major features of the CCSS. It also provides suggestions of additional indicators to consider in the materials evaluation and purchasing process
2. Evaluating materials currently in use: The IMET can be used to analyze the degree of alignment of existing materials and help to highlight specific, concrete flaws in alignment. Even where materials and tools currently in use fail to meet one or more of these criteria, the pattern of failure is likely to be informative. States and districts can use the evaluation to create a thoughtful plan to modify or combine existing resources in such a way that students' actual learning experiences approach the focus, coherence, and rigor of the Standards.
3. Developing programs: Those developing new programs can use this tool as guidance for creating aligned curricula.

Please note this tool was designed for evaluating comprehensive curricula (including any supplemental or ancillary materials), but it was not designed for the evaluation of standalone supplemental materials.

Who Uses the IMET?

Evaluating instructional materials requires both subject-matter and pedagogical expertise. Evaluators should be well versed in the Standards (www.corestandards.org/Math) for all grades in which materials are being evaluated. This includes understanding the Widely Applicable Prerequisites (www.achievethecore.org/prerequisites), how the content fits into the progressions in the Standards (www. achievethecore.org/progressions), and the expectations of the Standards with respect to conceptual understanding, procedural skill and fluency, and application. Evaluators also should be familiar with the substantial instructional Shifts (http://www.corestandards.org/other-resources/key-shifts-in-mathematics/) of Focus, Coherence and Rigor that are listed above.

Getting Started

Prior to Evaluation

Assemble all of the materials necessary for the evaluation. It is essential for evaluators to have materials for all grades covered by the program, as some criteria cannot be rated without having access to each grade. In addition, each evaluator should have a reference copy of the Common Core State Standards for Mathematics (CCSSM) and the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).

Before conducting the evaluation itself, it is important to develop a protocol for the evaluation process. The protocol should include having evaluators study the Publishers' Criteria and the IMET. It will also be helpful for evaluators to get a sense of each program overall before beginning the process. At a minimum, this would include reading the front matter of the text, looking at the table of contents and paging through multiple chapters.

Sections 1-3 below should be completed to produce a comprehensive picture of the strengths and weaknesses of the materials under evaluation. Information about areas in need of improvement or supplementation should be shared with internal and external stakeholders.

Navigating the Tool

Begin with Section 1: Non-Negotiable Alignment Criteria

- The Non-Negotiable Alignment Criteria must each be met in full for materials to be considered aligned to the Shifts and the major features of the Common Core State Standards. Each Non-Negotiable Alignment Criterion has one or more metrics associated with it; every one of these metrics must be met in order for the criterion as a whole to be met.

- Examine the relevant materials and use evidence to rate the materials against each criterion and its associated metric(s).

- Record and explain the evidence upon which the rating is based.

Continue to Section 2: Alignment Criteria

- The Alignment Criteria must each be met for materials to be considered aligned to the Shifts and the major features of the Common Core State Standards. Each Alignment Criterion has one or more metric associated with it; a specific number of these metrics must be met or partially met in order for the criterion as a whole to be met.

- Examine the materials in relation to these criteria, assigning each metric a point value. Rate the criterion as "Meets" or "Does Note Meet" based on the number of points assigned. The more points the materials receive on the alignment Criteria, the better they are aligned.

- Record and explain the evidence upon which the rating is based.

Proceed to Section 4: Indicators of Quality

- Indicators of Quality are important considerations that will help evaluators better understand the overall quality of instructional materials. These considerations are not criteria for alignment to the CCSS, but they provide valuable information about additional program characteristics. Evaluators may want to add their own indicators to the examples provided.

Directions for Non-Negotiable 1 **Focus and Coherence**		
Criterion	**Evidence- Give specific examples.**	**Rating: (Reviewer only.)**
Non-Negotiable 1: Focus and Coherence- Materials must focus coherently on the Widely Applicable Prerequisites in a way that is consistent with the progressions in the Standards. Focus and coherence are the two major evidence-based design principles of the Common Core State Standards for Mathematics (CCSSM, p. 3). Focus is necessary in order to fulfill the ambitious promise the states have made to their students by adopting the Standards: greater achievement at the college and career-ready level; greater depth of understanding of mathematics; and a rich classroom environment in which reasoning, sense-making, applications, and a range of mathematical practices flourish. In high school courses, narrowing and deepening the curriculum creates a structure that ties topics together. Thus, materials must focus coherently on the Widely Applicable Prerequisites in a way that is consistent with the progressions in the Standards.	Focus and coherence are the two major evidence-based design principles of the Common Core State Standards for Mathematics (CCSSM, p. 3). Focus is necessary in order to fulfill the ambitious promise the states have made to their students by adopting the Standards: greater achievement at the college and career-ready level; greater depth of understanding of mathematics; and a rich classroom environment in which reasoning, sense-making, applications, and a range of mathematical practices flourish. In high school courses, narrowing and deepening the curriculum creates a structure that ties topics together. Thus, materials must focus coherently on the Widely Applicable Prerequisites in a way that is consistent with the progressions in the Standards. **Required Materials:** • Common Core State Standards for Mathematics (www.corestandards.org/wpcontent/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_HS_Spring_2013_FINAL1.pdf) • Widely Applicable Prerequisites for College and Careers (http://achievethecore.org/prerequisites) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion:** Non-Negotiable 1 is rated as Meets or Does Not Meet. To rate Non-Negotiable 1, first rate Metrics 1A–1H. Each of these eight metrics must be rated as Meets in order for Non-Negotiable 1 to be rated as Meets. Rate each metric 1A–1H as Meets or Does Not Meet/Insufficient Evidence. If the evidence examined shows that the Criterion is met, then mark the Criterion as Meets. If the evidence examined shows that the Criterion is not met—or if there is insufficient evidence to make a determination—then mark the Criterion as Does Not Meet/Insufficient Evidence. Support all ratings with evidence.

Metric NN1A: **In any single course, students spend at least 50% of their time on Widely Applicable Prerequisites.** **How to Find the Evidence:** Familiarize yourself with the Widely Applicable Prerequisites. Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, lessons, homework assignments, and assessments. (Evaluate both student and teacher materials.) Consider time spent on the Widely Applicable Prerequisites and judge qualitatively whether students and teachers using the materials as designed will devote the majority of time to the Widely Applicable Prerequisites For context, read Criterion #1 in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** Functions Mod #1, 2, 8, 10 Real #, Mod 11 Algebra, # 2.2, 2.3, Mod 4, Mod 6, Mod 7, Mod 9.	X **Meets** ____ **Does Not Meet Insufficient Evidence**
Metric NN1B: **Student work in Geometry involves significant work with applications/modeling and problems that use algebra skills.** **How to Find the Evidence:** Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, lessons, homework assignments, and assessments. (Evaluate both student and teacher materials. NOTE: Since Geometry contains relatively fewer Widely Applicable Prerequisites, this Criterion is important to help foster students' college and career readiness. Problems that use algebra skills might include, for example, algebraic geometry problems in a coordinate setting, or problems of measurement involving unknown quantities.	**Evidence-** SE pg 175-188 Exercises throughout Chapters involve areas, perimeters, volumes etc. Trig Functions Circles	X **Meets** ____ **Does Not Meet Insufficient Evidence**

Metric NN1C: **There are problems at a level of sophistication appropriate to high school (beyond mere review of middle school topics) that involve the application of knowledge and skills from grades 6-8.** **How to Find the Evidence:** Evaluate lessons, chapter/unit assessments, and homework assignments. NOTE: Problems should include application of the following topics from grades 6-8: • Ratios and proportional relationships. • Percentage and unit conversions, e.g., in the context of complex measurement problems involving quantities with derived or compound units (such as mg/mL, kg/ m3, acre-feet, etc.). • Basic function concepts, e.g., by interpreting the features of a graph in the context of an applied problem. • Concepts and skills of geometric measurement e.g., when analyzing a diagram or schematic. • Concepts and skills of basic statistics and probability (see grades 6–8.SP) • Performing rational number arithmetic fluently. For context, read Table 1 on Page 8 of the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** "Are You Ready?" to review located before every Mod. Lesson's throughout are thoughtful ex: 18.1/18.2 stretching graphs→ sin/cos Probability in SE# 1049-1070	X Meets ___Does Not Meet Insufficient Evidence
Metric NN1D: **Materials base courses on the content specified in the Standards.** **How to Find the Evidence:** Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, and lessons in both student and teacher materials. For context, read Criterion #3a in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** Standards listed in TE edition	X Meets ___Does Not Meet Insufficient Evidence
Metric NN1E: **Materials give all students extensive work with course-level problems.** **How to Find the Evidence:** Evaluate both student and teacher materials. If the materials provide resources for differentiated learning, consider whether lower-performing students have opportunities to engage with course-level problems. Also consider whether higher-performing students are given opportunities to learn current course-level content in greater depth. For context, read Criterion #3b in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** Problems are appropriate and have depth of knowledge. Ex: Elaborate and H.O.T. problems.	X Meets ___Does Not Meet Insufficient Evidence

Metric NN1F: **Materials relate course-level concepts explicitly to prior knowledge from earlier grades or courses. The materials are designed so that prior knowledge becomes reorganized and extended to accommodate the new knowledge.** **How to Find the Evidence:** Evaluate student and teacher materials, looking for problems that involve extending the knowledge learned in earlier grades and courses. NOTE: An example of evaluating this Criterion might be to look at whether materials connect the equation of a circle with the distance formula and the Pythagorean theorem. For context, read Criterion #3c in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** Are you Ready? Pg 64 Ready to go on? pg. 61.	X Meets ___Does Not Meet Insufficient Evidence
Metric NN1G: **Materials include learning objectives that are visibly shaped by CCSSM cluster and domain headings.** **How to Find the Evidence:** Select several clusters from the course being evaluated. Evaluate teacher and student materials in relation to these clusters. For context, read Criterion #4a in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** A.CED.A Solving equations and iequalities throughout. Unit 7-Trig Unit 9-Statistics Unit 8-Probability	X Meets ___Does Not Meet Insufficient Evidence
Metric NN1H: **Materials include problems and activities that serve to connect two or more clusters in a domain, or two or more domains in a category, or two or more categories, in cases where these connections are natural and important.** **How to Find the Evidence:** In the course being evaluated, choose two or more clusters, two or more domains, or two or more categories for which connections are natural and important. Evaluate the units, chapters, and lessons that deal with the chosen topics, looking for problems and activities that serve to connect the chosen clusters or domains. NOTE: An example of evaluating this Criterion might be to look at whether materials include problems in which students analyze a situation by building a function, graphing it, and using it to create and solve an equation. For context, read Criterion #4b in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** Modules build the units Scaffolds from low (one idea) to high (many ideas).	X Meets ___Does Not Meet Insufficient Evidence

Non-Negotiable 1: Focus and Coherence- Materials must focus coherently on the Widely Applicable Prerequisites in a way that is consistent with the progressions in the Standards.

Metric NN 1: If all metrics 1A–1H were rated as Meets, then rate Non-Negotiable 1 as Meets. If one or more metrics were rated as Does Not Meet/Insufficient Evidence, then rate Non-Negotiable 1 as Does Not Meet. Check the final rating.
Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)**

Before moving to Alignment Criterion 1, record the final Meets or Does Not Meet rating in the Evaluation Summary.

✓ **Meets**

____ **Does Not Meet**

Strengths/Weaknesses
- Building from basic skill questions to high thinking skills.
- Elaborate
- Are You Ready Sections.

Now continue by evaluating Alignment Criterion 1 for Rigor and Balance.

Directions for Alignment Criterion 1

Rigor and Balance

Alignment Criterion 1:
Rigor and Balance- Materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.

The Standards set expectations for attention to all three aspects of rigor: conceptual understanding, procedural skill and fluency, and applications. Thus, materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.

The Standards set expectations for attention to all three aspects of rigor: conceptual understanding, procedural skill and fluency, and applications. Thus, materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.

- Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf)
- Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_HS_Spring_2013_FINAL1.pdf)
- Widely Applicable Prerequisites for College and Careers (http://achievethecore.org/prerequisites)
- From the materials being evaluated: teacher guides, student texts and workbooks

Rating this Criterion:

Alignment Criterion 1 is rated as Meets or Does Not Meet.

To rate Alignment Criterion 1, first rate metrics 1A, 1B, and 1C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). For each metric, guiding questions are provided to aid in gathering evidence.
Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 1 if the materials rate 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as rigor and balance, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.

AC Metric 1A: **The materials support the development of students' conceptual understanding of key mathematical concepts, especially where called for in specific content Standards or cluster headings.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Widely Applicable Prerequisites that relate specifically to conceptual understanding to use throughout the questions associated with this metric. NOTE: Some examples of clusters or Standards that call for conceptual understanding include: N-RN.A.1, A-APR.B, A-REI.A.1, A-REI.D.10, A.REI.D.11, F.IF.A.1, F-LE.A.1, G.SRT.A.2, G-SRT.C.6, S-ID.C.7 For context, read Criterion #2a in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	• Choose a cluster/Standard from the Widely Applicable Prerequisites that is aligned to each aspect of rigor and use it to evaluate these metrics. It is most helpful if the same clusters and Standards are chosen for all of the programs being evaluated. (Guidance in choosing clusters/Standards is included in "How to Find the Evidence" below.)	**Use the questions for AC Metric 1A to evaluate Metric 1A. Record evidence for each question and rate Metric.** **X Meets (2)** **____ Partially Meets (1)** **____ Does Not Meet (0)**
Is conceptual understanding attended to thoroughly where the Standards set explicit expectations for understanding or interpreting? Evaluate lessons, chapter/unit assessments and homework assignments, paying attention to work aligned to Standards that explicitly call for understanding or interpreting.	**Evidence-** Found throughout F.IF.B.4 Functions	
Do the materials feature high-quality conceptual problems and conceptual discussion questions? Evaluate lessons, chapter/unit assessments, and homework assignments. NOTE: Examples of conceptual problems might include such questions as "What is the maximum value of the function f(t) = 5 – t2 ?" or "Is √2 a polynomial? How about ½(x + √2)+ ½ (-x + √2)?"	**Evidence-** See above	
Do the materials feature opportunities to identify correspondences across mathematical representations? Evaluate lessons, chapter/unit assessments and homework assignments. NOTE: An example of evaluating this metric might include looking at whether materials support students in identifying correspondences among the expression that defines a function, the graph that shows the relationship, and the behavior of the phenomenon being modeled (if any).	**Evidence-** See above.	

AC Metric 1B: **The materials are designed so that students attain the fluencies and procedural skills required by the Standards.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Widely Applicable Prerequisites that relate specifically to fluency and procedural skill to use throughout the questions associated with this metric. NOTE: Some examples of Standards that call for procedural skill and fluency include: A-SSE.A.1b, A-SSE.2, A-APR.A.1, A-APR.C.6, F-BF.B.3, G-GPE.B.4, G-GPE.B.5, G-GPE.B.7, G-CO.A.1, G-SRT.B.5 For context, read Criterion #2b in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).		**Use the questions for AC Metric 1B to evaluate Metric 1B. Record evidence for each question and rate Metric 1B.** __X__ **Meets (2)** ____ **Partially Meets (1)** ____ **Does Not Meet (0)**
Is progress toward fluency and procedural skill interwoven with the student's developing conceptual understanding of the skills in question? Evaluate lessons, chapter/unit assessments, daily routines, and homework assignments for evidence that the development of fluency and procedural skill is supported by conceptual understanding.	**Evidence-** "YourTurn" pg 8,9,11 Engage, Explore, Explain, Elaborate, Evaluate.	
Are purely procedural problems and exercises present that include cases in which opportunistic strategies are valuable and generic cases that require efficient and general procedures present? Evaluate lessons, chapter/unit assessments, daily routines, and homework assignments. NOTE: Problems in which opportunistic strategies are valuable might include such examples as solving $x2 + 5 = 49 + 5$ or $(3x - 2)2 = 6x - 4$. Generic cases that require efficient and general procedures might include such problems as solving $c + 8 - c2 = 3(c - 1)2 - 5$.	**Evidence-** Concepts are built w/examples, then practice, then evaluation.	
AC Metric 1C: **The materials are designed so that teachers and students spend sufficient time working with engaging applications, without losing focus on the Widely Applicable Prerequisites.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Widely Applicable Prerequisites that relate specifically to application to use throughout the questions associated with this metric. NOTE: Some examples of clusters or Standards that call for application include: N-Q.A, A-SSE.B.3, A-REI.D.11, F-IF.B, F-IF.C.7, F-BF.A.1, G-SRT.C.8, S-ID.A.2, S-IC.A.1 For context, read Criterion #2c in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).		**Use the questions for AC Metric 1C to evaluate Metric 1C. Record evidence for each question and rate Metric 1C.** __X__ **Meets (2)** ____ **Partially Meets (1)** ____ **Does Not Meet (0)**
Are there single- and multi-step contextual problems, including non-routine problems, that develop the mathematics of the course, afford opportunities for practice, and engage students in problem solving? Do the problems attend thoroughly to those places in the content Standards where expectations for multi-step and real-world problems are explicit? Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** Throughout ex: 3.1	

Do application problems particularly stress applying the Widely Applicable Prerequisites? Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** Yes, ex 4 Rational Functions	
Are there ample opportunities for students to engage with modeling problems? Do materials require students to use both individual parts of the modeling cycle as well as the full modeling cycle? Read the pages on High School—Modeling in the Standards for Mathematics (pp. 72 and 73). Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** Yes, pg 225, p 267 "Ready to go on."	
Alignment Criterion 1: Materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations. **AC 1:** Materials must earn at least 5 of 6 points to meet this Alignment Criterion. If materials earn less than 5 points, the Criterion has not been met. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)** **Before moving to Alignment Criterion 2, record the final Meets or Does Not Meet rating in the Evaluation Summary.**		X **Meets** ____ **Does Not Meet** **Strengths/Weaknesses:** •Assessments are appropriate. •Apply learning to higher level problems.
Alignment Criterion 2: **Standards for Mathematical Practice- Materials must demonstrate authentic connections between content Standards and practice Standards.** The Standards require that designers of instructional materials connect the mathematical practices to mathematical content in instruction. Thus, materials must demonstrate authentic connections between content Standards and practice Standards.	The Standards require that designers of instructional materials connect the mathematical practices to mathematical content in instruction. Thus, materials must demonstrate authentic connections between content Standards and practice Standards. **Required Materials**: • Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_HS_Spring_2013_FINAL1.pdf) • Widely Applicable Prerequisites for College and Careers (http://achievethecore.org/prerequisites) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion:** Alignment Criterion 2 is rated as Meets or Does Not Meet. To rate Alignment Criterion 2, first rate metrics 2A, 2B, and 2C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). For each metric, guiding questions are provided to aid in gathering evidence. Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 2 if the materials rate 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as mathematical practices, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.

AC Metric 2A: **Materials address the practice Standards in such a way as to enrich the Widely Applicable Prerequisites; practices strengthen the focus of the course instead of detracting from it, in both teacher and student materials.** **How to Find the Evidence:** Familiarize yourself with the Widely Applicable Prerequisites. Evaluate teacher and student materials for evidence that the mathematical practices support and connect to the focus of the course. NOTE: An example of evaluating this Criterion might include looking at whether materials use regularity in repeated reasoning to illuminate formal algebra as well as functions, particularly recursive definitions of functions. For context, read Criterion #6 in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** Homework is aligned, seen throughout. Examples p341-352 Finding out about polynomials.	X **Meets (2)** ___ **Partially Meets (1)** ___ **Does Not Meet (0)**
AC Metric 2B: **Materials attend to the full meaning of each practice Standard.** **How to Find the Evidence:** For context, read Criterion #7 in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).		**Use the questions for AC Metric 2B to evaluate Metric 2B. Record evidence for each question and rate Metric 2B.** X **Meets (2)** ___ **Partially Meets (1)** ___ **Does Not Meet (0)**
Over the course of any given year of instruction, is each mathematical practice Standard meaningfully present in the form of assignments, activities, or problems that stimulate students to develop the habits of mind described in the practice Standard? Evaluate lessons, chapter/ unit assessments, and homework assignments for evidence of each mathematical practice being meaningfully present in instruction.	**Evidence-** Problems are well-related to the standards.	
Are teacher-directed materials that explain the role of the practice Standards in the classroom and in students' mathematical development included? Are alignments to practice Standards accurate? Evaluate teacher materials, paying attention to explanations of the role of the practice Standards in the classroom and in students' mathematical development. Evaluate documents aligning lessons to practice Standards for accuracy. NOTE: Examples to look for when evaluating this metric might include the following: a highly scaffolded problem should not be aligned to MP.1; or a problem that directs a student to use a calculator should not be aligned to MP.5; or a problem about merely extending a pattern should not be aligned to MP.8.	**Evidence-** 1. Pg 204 2. Pg 128 3. Pg 454 4. P 66 5. P 704 6. P 78 7. P 176 8.310	

AC Metric 2C: **Materials support the Standards' emphasis on mathematical reasoning.** **How to Find the Evidence:** For context, read Criterion #8 in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).		**Use the questions for AC Metric 2C to evaluate Metric 2C. Record evidence for each question and rate Metric.** X **Meets (2)** ____ **Partially Meets (1)** ____ **Does Not Meet (0)**
Do the materials support students in constructing viable arguments and critiquing the arguments of others concerning course-level mathematics that is detailed in the content Standards? Read Standard for Mathematical Practice 3. Evaluate teacher and student materials to ensure that students are given opportunities to reason with grade-level mathematics.	**Evidence-** Essential Q's Are You Ready? Questioning strats Reflect/Elaborate	
Do the materials support students in producing not only answers and solutions, but also, in a course-appropriate way, arguments, explanations, diagrams, mathematical models, etc., especially in the Widely Applicable Prerequisites? Familiarize yourself with the Widely Applicable Prerequisites. Evaluate teacher and student materials to understand the types of work students are expected to produce.	**Evidence-** Analyze, Formulate, Solve, Justify & Evaluate, Your Turn pg 345-346	
Do materials explicitly attend to the specialized language of mathematics? Is the language of argument, problem solving, and mathematical explanations taught rather than assumed? Evaluate teacher and student materials, paying attention to how mathematical language is taught. NOTE: An example of evaluating this Criterion might include looking at whether students are supported in: basing arguments on definitions; using the method of providing a counter example; or recognizing that examples alone do not establish a general statement.	**Evidence-** Vocabulary ex. p. 419	

Alignment Criterion 2: Materials must demonstrate authentic connections between content Standards and practice Standards.

AC 2: Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 points, the Criterion has not been met. Check the final rating.
Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewers only.)**

Before moving to Alignment Criterion 3, record the final Meets or Does Not Meet rating in the Evaluation Summary.

X **Meets**

____ **Does Not Meet**

Strengths/Weaknesses:
Students justify Concepts learned.
Models "How to"....
Use of Language.

Alignment Criterion 3: **Access to the Standards for All Students- Materials must provide supports for English Language Learners and other special populations.** Because Standards are for all students, alignment requires thoughtful support to ensure all students are able to meet the Standards. Thus, aligned materials must provide supports for English Language Learners and other special populations.	Because Standards are for all students, alignment requires thoughtful support to ensure all students are able to meet the Standards. Thus, aligned materials must provide supports for English Language Learners and other special populations. **Required Materials:** • Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math Publishers_Criteria_HS_Spring_2013_FINAL1.pdf) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion:** Alignment Criterion 3 is rated as Meets or Does Not Meet. To rate Alignment Criterion 3, first rate metrics 3A, 3B, and 3C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 3 if the materials rate 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as support for special population, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.
AC Metric 3A: **Support for English Language Learners and other special populations is thoughtful and helps those students meet the same Standards as all other students. The language in which problems are posed is carefully considered.** **How to Find the Evidence:** Evaluate teacher and student materials, paying attention to supports offered for special populations.	**Evidence-** Spanish vocab, glossary eng/spanish RTI p. 424	X **Meets (2)** ___ **Partially Meets (1)** ___ **Does Not Meet (0)**
AC Metric 3B: **Materials provide appropriate level and type of scaffolding, differentiation, intervention, and support for a broad range of learners with gradual removal of supports, when needed, to allow students to demonstrate their mathematical understanding independently.** **How to Find the Evidence:** Evaluate teacher and student materials, paying attention to whether materials provide differentiation that will lead all learners to engage with on-grade-level content.	**Evidence-** Questioning Strats Communicate Math ex 430	X **Meets (2)** ___ **Partially Meets (1)** ___ **Does Not Meet (0)**
AC Metric 3C: **Design of lessons recommends and facilitates a mix of instructional approaches for a variety of learners such as using multiple representations (e.g., including models, using a range of questions, checking for understanding, flexible grouping, pair-share).** **How to Find the Evidence:** Evaluate teacher materials, noting instructional approaches suggested for whole class and differentiated lessons and activities.	**Evidence-** Peer to Peer Activities Avoid Common errors found in TE pg 440-441	X **Meets (2)** ___ **Partially Meets (1)** ___ **Does Not Meet (0)**

Alignment Criterion 3: Materials must provide supports for English Language Learners and other special populations. **AC 3** Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 points, the Criterion has not been met. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewers only.)** **Move to the Evaluation Summary and record the final Meets or Does Not Meet rating .**	X **Meets** ____ **Does Not Meet** **Strengths/Weaknesses:**

Once an evaluation for alignment to the Shifts and major features of the CCSS has been conducted using Sections 1-3, it's important to evaluate for overall quality and best practices. A starting list of Indicators of Quality are suggested below. States, districts and others evaluating instructional materials are encouraged to add to this list to ensure materials reflect local contexts. For background information on some of the Indicators of Quality in this section, refer to pp.16–18 in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).

Indicators of Quality	**Evidence- Give specific examples.**	**Rating: (Reviewer only.)**
1. Lessons are thoughtfully structured and support the teacher in leading the class through the learning paths at hand, with active participation by all students in their own learning and in the learning of their classmates.	**Evidence-** through out SE: · engage, preview, integrate tech, questioning strats, avoid common errors Pg 440.	**(Reviewer only.)** _X_ **Yes** ____ **No**
2. The underlying design of the materials includes both problems and exercises. (In solving problems, students learn new mathematics, whereas in working exercises, students apply what they have already learned to build mastery.) Each problem or exercise has a purpose. **NOTE: This Criterion does not require that the problems and exercises be labeled as such.**	**Evidence-** Clearly Evident.	**(Reviewer only.)** _X_ **Yes** ____ **No**

3. Design of assignments is not haphazard: exercises are given in intentional sequences in order to strengthen students' mathematical understanding.	**Evidence-** Yes, see assessment documents	**(Reviewer only.)** X Yes ____ No
4. There are separate teacher materials that support and reward teacher study including, but not limited to: discussion of the mathematics of the units and the mathematical point of each lesson as it relates to the organizing concepts of the unit, discussion on student ways of thinking and anticipating a variety of students responses, guidance on lesson flow, guidance on questions that prompt students thinking, and discussion of desired mathematical behaviors being elicited among students.	**Evidence-** Video's on P.D. pg 339 for each Module. Digital Teacher's Edition. Personal Math Trainer	**(Reviewer only.)** X Yes ____ No
5. Manipulatives suggested in the materials are faithful representations of the mathematical objects they represent and are connected to written methods.	**Evidence-** Algebra tiles/graphing calc. Pg 210	**(Reviewer only.)** X Yes ____ No
6. Materials include a variety of curriculum-embedded assessments. Examples include pre-, formative, summative, and self-assessment resources.	**Evidence-** embedded throughout.	**(Reviewer only.)** X Yes ____ No
7. Assessments contain aligned rubrics, answer keys, and scoring guidelines that provide sufficient guidance for interpreting student performance.	**Evidence-** ex: p 228-230	**(Reviewer only.)** X Yes ____ No
8. Materials assess student proficiency using methods that are accessible and unbiased, including the use of course-level language in student prompts.	**Evidence-** Yes, see performance task, p. 228	**(Reviewer only.)** X Yes ____ No

9. Materials are carefully evaluated by qualified individuals whose names are listed, in an effort to ensure freedom from mathematical errors and course-level appropriateness.	**Evidence-** inside 1st pages	**(Reviewer only.)** X Yes ____ No
10. The visual design supports students in engaging thoughtfully with the subject. Navigation through the text is clear.	**Evidence-** Yes:... boxes or blanks to help Students	**(Reviewer only.)** X Yes ____ No

Reviewer IMET Evaluation Summary **Title/Level:** Algebra 2 9th-12th grade.

Publisher: HMH. **Copyright:** 2015 **ISBN:** TE 978 0 544-38592-4
SE 978 0 544-67076-1

Reviewer ID # PD, DG **Date Review Completed:** 3/8/2016

Non-Negotiable Criteria-The Non-Negotiable must be met in order for the Non-Negotiable Alignment Criteria to be met overall.

Non- Negotiable 1: Focus and Coherence

X **Meets**

____ **Does Not Meet**

Non-Negotiable Overall:

__X__ **Meets** _____ **Does Not Meet**

Alignment Criteria- Each Alignment Criterion must be met with a sufficient number of points in order for Alignment Criteria to be labeled as "Meets" overall. The more points the materials receive on the Alignment Criteria, the better they are aligned.

Alignment Criterion 1: Rigor and Balance	Alignment Criterion 2: Standards of Mathematical Practice	Alignment Criterion 3: Access to Standards for All Learners
Points: __6__ **of 6 possible.** **(Materials must receive at least 5 of 6 points to align.)**	**Points:** __6__ **of 6 possible.** **(Materials must receive at least 5 of 6 points to align.)**	**Points:** __6__ **of 6 possible.** **(Materials must receive at least 5 of 6 points to align.)**
__X__ **Meets**	__X__ **Meets**	__X__ **Meets**
_____ **Does Not Meet**	_____ **Does Not Meet**	_____ **Does Not Meet**

Alignment Criteria Overall:

__X__ **Meets** _____ **Does Not Meet**

If the materials meet the Non-Negotiable Criterion and each Alignment Criterion, they are aligned to the Shifts and major features of the Co[illegible]tandards. **Do the materials meet every Non-Negotia[illegible] and Alignment Criterion?** _X_ **Yes** _____ **No**

What are the specific areas of strength and weakness based on this evaluation? Publishers or others modifying or developing assessments can use this information to make improvements and/or to remedy gaps in the alignment of assessment materials.

Strengths:

1. Glossary in both English and Spanish with problems workout side by side in both English and Spanish.
2. RTI support is helpful.
3. Offering of professional developent.
4. Student Edition is consumable, with blanks to help with Note writing.

Weakness:

1. Index is limited. For example Conjugate is not listed.
2. Student edition is softbound (is it consumable?), so districts would have to purchase each year.

2015-16 Mathematics Interim Review Recommendation & Summary

Publisher Name:	HMH
Title:	Geometry
ISBN #	978 0 544 38582 5
Grade Level(s) or Course:	9-12th
Reviewer ID:	PPTT

RECOMMENDED AS:

X. **Core Mathematics Program-** a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials. Substantial evidence clearly supports the designation of this program as Core.

_____ **Other Mathematics Program-** a program that substantially, but partially, meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for supplemental materials. Substantial evidence clearly supports the designation of this program as Other.

_____ **Component Mathematics Program-** a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs. Substantial evidence clearly supports the designation of this program as Component.

_____ **Intervention Program-** a program designed and intended to target and support students' specific needs. Substantial evidence clearly supports the designation of this program as Intervention.

_____ **Does not meet criteria** for recommendation as a Curricular Material or Online Resource for Mathematics.

EVIDENCE SUMMARY:

FOCUS- The textbook was definately designed around around the CCSS and aligns very well.

COHERENCE-
Practices and standards are noted and followed appropriately as noted by standards and Appendix A.

RIGOR-
Problems and lessons apply themselves with a focus to the Standards and practices and provide strong structure for the students to follow.

CONCEPTUAL UNDERSTANDING-
The practice problems are written more as story problems and less the tradional way. There is a task performance problem is just an extension of a story problem.

MATHEMATICAL PRACTICES-
The online resources really provide a lot of support when found. This requires extensive researching of online resources. A lot of diverse lesson approaches.

ACCESSIBILITY OF STANDARDS TO ALL STUDENTS-
Materials are provided online for extensive ELL and vocabulary work.

OTHER:
The curriculum meets all requirements, however it is not necessarily appealing to young adults.
Teacher's edition has ideas to promote collaborative learning in the classroom as well as incorporate STEM activities throughout text.

Strengths:

- Completely immersed with CCSS.
- Incrediable online resources.

Weakness:

- Not appealing to young adults.

2015-1 nterim Mathematics Review

Mathematics Evaluation Tool – High School

Publisher: HMH

Title of Material: Geometry.

Author: Timothy Kanold et al.

ISBN #: 978-0-544-38582-5 **Copyright** 2015

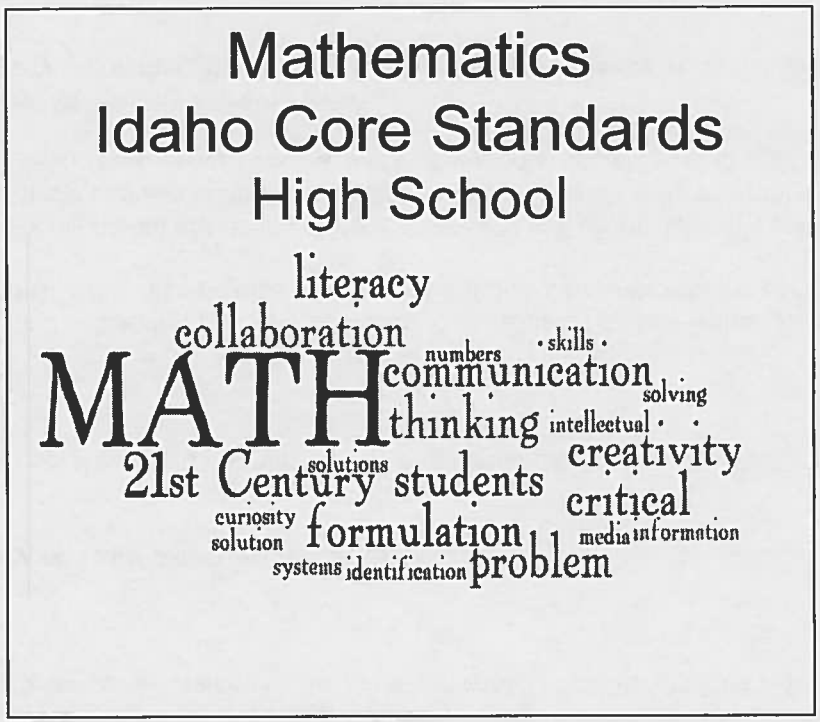
Reviewer ID: TT PP

Core Mathematics Program- a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Core.

Other Mathematics Program- a program that substantially, but partially, meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Other.

Component Mathematics Program- a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs.
Substantial evidence clearly supports the designation of this program as Component.

Intervention Program- a program designed and intended to target and support students' specific needs.
Substantial evidence clearly supports the designation of this program as Intervention.



- Evaluation Form adapted from Instructional Materials Evaluation Toolkit (IMET).

The IMET was developed by Student Achievement Partners. Educators may use or adapt. http://creativecommons.org/licenses/by/3.0/ Download this tool at http://achievethecore.org/IMET

Non-Negotiable 1: Focus and Coherence- Materials must focus coherently on the Widely Applicable Prerequisites in a way that is consistent with the progressions in the Standards.

Metric NN 1: If all metrics 1A–1H were rated as Meets, then rate Non-Negotiable 1 as Meets. If one or more metrics were rated as Does Not Meet/Insufficient Evidence, then rate Non-Negotiable 1 as Does Not Meet. Check the final rating.
Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)**

Before moving to Alignment Criterion 1, record the final Meets or Does Not Meet rating in the Evaluation Summary.

X **Meets**

____ **Does Not Meet**

Strengths/Weaknesses
· ~~Examples~~ Standards are listed at the beginning of each section.

Now continue by evaluating Alignment Criterion 1 for Rigor and Balance.

Directions for Alignment Criterion 1

Rigor and Balance

Alignment Criterion 1:
Rigor and Balance- Materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.

The Standards set expectations for attention to all three aspects of rigor: conceptual understanding, procedural skill and fluency, and applications. Thus, materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.

The Standards set expectations for attention to all three aspects of rigor: conceptual understanding, procedural skill and fluency, and applications. Thus, materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.

- Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf)
- Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_HS_Spring_2013_FINAL1.pdf)
- Widely Applicable Prerequisites for College and Careers (http://achievethecore.org/prerequisites)
- From the materials being evaluated: teacher guides, student texts and workbooks

Rating this Criterion:

Alignment Criterion 1 is rated as Meets or Does Not Meet.

To rate Alignment Criterion 1, first rate metrics 1A, 1B, and 1C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). For each metric, guiding questions are provided to aid in gathering evidence.
Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 1 if the materials rate 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as rigor and balance, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.

AC Metric 1A: **The materials support the development of students' conceptual understanding of key mathematical concepts, especially where called for in specific content Standards or cluster headings.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Widely Applicable Prerequisites that relate specifically to conceptual understanding to use throughout the questions associated with this metric. NOTE: Some examples of clusters or Standards that call for conceptual understanding include: N-RN.A.1, A-APR.B, A-REI.A.1, A-REI.D.10, A.REI.D.11, F.IF.A.1, F-LE.A.1, G.SRT.A.2, G-SRT.C.6, S-ID.C.7 For context, read Criterion #2a in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	• Choose a cluster/Standard from the Widely Applicable Prerequisites that is aligned to each aspect of rigor and use it to evaluate these metrics. It is most helpful if the same clusters and Standards are chosen for all of the programs being evaluated. (Guidance in choosing clusters/Standards is included in "How to Find the Evidence" below.)	**Use the questions for AC Metric 1A to evaluate Metric 1A. Record evidence for each question and rate Metric.** X **Meets (2)** ____ **Partially Meets (1)** ____ **Does Not Meet (0)**
Is conceptual understanding attended to thoroughly where the Standards set explicit expectations for understanding or interpreting? Evaluate lessons, chapter/unit assessments and homework assignments, paying attention to work aligned to Standards that explicitly call for understanding or interpreting.	**Evidence-** Yes, Ex. 3 unit 3, lesson 9. Standards are laid out, questions prepped and learning developed. Proofs develope p. 426.	
Do the materials feature high-quality conceptual problems and conceptual discussion questions? Evaluate lessons, chapter/unit assessments, and homework assignments. NOTE: Examples of conceptual problems might include such questions as "What is the maximum value of the function $f(t) = 5 - t2$?" or "Is $\sqrt{2}$ a polynomial? How about $\frac{1}{2}(x + \sqrt{2}) + \frac{1}{2}(-x + \sqrt{2})$?"	**Evidence-** Yes, see above and Higher Order Questions and performance tasks listed.	
Do the materials feature opportunities to identify correspondences across mathematical representations? Evaluate lessons, chapter/unit assessments and homework assignments. NOTE: An example of evaluating this metric might include looking at whether materials support students in identifying correspondences among the expression that defines a function, the graph that shows the relationship, and the behavior of the phenomenon being modeled (if any).	**Evidence-** Yes, Example 11.1, pg 577. Students do measurement, complete constructions then continue to applications.	

AC Metric 1B: **The materials are designed so that students attain the fluencies and procedural skills required by the Standards.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Widely Applicable Prerequisites that relate specifically to fluency and procedural skill to use throughout the questions associated with this metric. NOTE: Some examples of Standards that call for procedural skill and fluency include: A-SSE.A.1b, A-SSE.2, A-APR.A.1, A-APR.C.6, F-BF.B.3, G-GPE.B.4, G-GPE.B.5, G-GPE.B.7, G-CO.A.1, G-SRT.B.5 For context, read Criterion #2b in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).		**Use the questions for AC Metric 1B to evaluate Metric 1B. Record evidence for each question and rate Metric 1B.** **_X_ Meets (2)** **____ Partially Meets (1)** **____ Does Not Meet (0)**
Is progress toward fluency and procedural skill interwoven with the student's developing conceptual understanding of the skills in question? Evaluate lessons, chapter/unit assessments, daily routines, and homework assignments for evidence that the development of fluency and procedural skill is supported by conceptual understanding.	**Evidence-** Yes. There are opportunities in each Chapter to practice working problems. See Lesson 4.5	
Are purely procedural problems and exercises present that include cases in which opportunistic strategies are valuable and generic cases that require efficient and general procedures present? Evaluate lessons, chapter/unit assessments, daily routines, and homework assignments. NOTE: Problems in which opportunistic strategies are valuable might include such examples as solving $x2 + 5 = 49 + 5$ or $(3x - 2)2 = 6x - 4$. Generic cases that require efficient and general procedures might include such problems as solving $c + 8 - c2 = 3(c - 1)2 - 5)$.	**Evidence-** Yes. See Lesson 4.5.	
AC Metric 1C: **The materials are designed so that teachers and students spend sufficient time working with engaging applications, without losing focus on the Widely Applicable Prerequisites.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Widely Applicable Prerequisites that relate specifically to application to use throughout the questions associated with this metric. NOTE: Some examples of clusters or Standards that call for application include: N-Q.A, A-SSE.B.3, A-REI.D.11, F-IF.B, F-IF.C.7, F-BF.A.1, G-SRT.C.8, S-ID.A.2, S-IC.A.1 For context, read Criterion #2c in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).		**Use the questions for AC Metric 1C to evaluate Metric 1C. Record evidence for each question and rate Metric 1C.** **_X_ Meets (2)** **____ Partially Meets (1)** **____ Does Not Meet (0)**
Are there single- and multi-step contextual problems, including non-routine problems, that develop the mathematics of the course, afford opportunities for practice, and engage students in problem solving? Do the problems attend thoroughly to those places in the content Standards where expectations for multi-step and real-world problems are explicit? Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** Yes, every module has simple questions, multi-step and even performance tasks.	

Do application problems particularly stress applying the Widely Applicable Prerequisites? Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** Yes, Example 123-126. Transformance Transformations are specifically addressed to the standard.	
Are there ample opportunities for students to engage with modeling problems? Do materials require students to use both individual parts of the modeling cycle as well as the full modeling cycle? Read the pages on High School—Modeling in the Standards for Mathematics (pp. 72 and 73). Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** Performance tasks and multistep problems do this. Ex: p 268 where a bridge is ~~built~~ used, p 266 where benches are used.	
Alignment Criterion 1: Materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations. **AC 1:** Materials must earn at least 5 of 6 points to meet this Alignment Criterion. If materials earn less than 5 points, the Criterion has not been met. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)** **Before moving to Alignment Criterion 2, record the final Meets or Does Not Meet rating in the Evaluation Summary.**		X **Meets** ____ **Does Not Meet** **Strengths/Weaknesses:** • Performance Tasks.
Alignment Criterion 2: **Standards for Mathematical Practice- Materials must demonstrate authentic connections between content Standards and practice Standards.** The Standards require that designers of instructional materials connect the mathematical practices to mathematical content in instruction. Thus, materials must demonstrate authentic connections between content Standards and practice Standards.	The Standards require that designers of instructional materials connect the mathematical practices to mathematical content in instruction. Thus, materials must demonstrate authentic connections between content Standards and practice Standards. **Required Materials**: • Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_HS_Spring_2013_FINAL1.pdf) • Widely Applicable Prerequisites for College and Careers (http://achievethecore.org/prerequisites) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion:** Alignment Criterion 2 is rated as Meets or Does Not Meet. To rate Alignment Criterion 2, first rate metrics 2A, 2B, and 2C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). For each metric, guiding questions are provided to aid in gathering evidence. Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 2 if the materials rate 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as mathematical practices, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.

AC Metric 2A: **Materials address the practice Standards in such a way as to enrich the Widely Applicable Prerequisites; practices strengthen the focus of the course instead of detracting from it, in both teacher and student materials.** **How to Find the Evidence:** Familiarize yourself with the Widely Applicable Prerequisites. Evaluate teacher and student materials for evidence that the mathematical practices support and connect to the focus of the course. NOTE: An example of evaluating this Criterion might include looking at whether materials use regularity in repeated reasoning to illuminate formal algebra as well as functions, particularly recursive definitions of functions. For context, read Criterion #6 in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** Yes. Examples include p 245, 5.3 Standard, practices are there. Notes in TE show where lesson is going and the connections as well as practices and strategies.	X **Meets (2)** ____ **Partially Meets (1)** ____ **Does Not Meet (0)**
AC Metric 2B: **Materials attend to the full meaning of each practice Standard.** **How to Find the Evidence:** For context, read Criterion #7 in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).		**Use the questions for AC Metric 2B to evaluate Metric 2B. Record evidence for each question and rate Metric 2B.** X **Meets (2)** ____ **Partially Meets (1)** ____ **Does Not Meet (0)**
Over the course of any given year of instruction, is each mathematical practice Standard meaningfully present in the form of assignments, activities, or problems that stimulate students to develop the habits of mind described in the practice Standard? Evaluate lessons, chapter/ unit assessments, and homework assignments for evidence of each mathematical practice being meaningfully present in instruction.	**Evidence-** Using p. cc9 and tracking down Practices.	
Are teacher-directed materials that explain the role of the practice Standards in the classroom and in students' mathematical development included? Are alignments to practice Standards accurate? Evaluate teacher materials, paying attention to explanations of the role of the practice Standards in the classroom and in students' mathematical development. Evaluate documents aligning lessons to practice Standards for accuracy. NOTE: Examples to look for when evaluating this metric might include the following: a highly scaffolded problem should not be aligned to MP.1; or a problem that directs a student to use a calculator should not be aligned to MP.5; or a problem about merely extending a pattern should not be aligned to MP.8.	**Evidence-** Yes for example, lesson 3.1, Practices are specifically addressed.	

AC Metric 2C: **Materials support the Standards' emphasis on mathematical reasoning.** **How to Find the Evidence:** For context, read Criterion #8 in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).		**Use the questions for AC Metric 2C to evaluate Metric 2C. Record evidence for each question and rate Metric.** X **Meets (2)** ____ **Partially Meets (1)** ____ **Does Not Meet (0)**
Do the materials support students in constructing viable arguments and critiquing the arguments of others concerning course-level mathematics that is detailed in the content Standards? Read Standard for Mathematical Practice 3. Evaluate teacher and student materials to ensure that students are given opportunities to reason with grade-level mathematics.	**Evidence-** Using the extra questions in the TE, the strategies and tasks, yes. E See p145, mp.3, p148, Peer, p151, supporting student reasoning.	
Do the materials support students in producing not only answers and solutions, but also, in a course-appropriate way, arguments, explanations, diagrams, mathematical models, etc., especially in the Widely Applicable Prerequisites? Familiarize yourself with the Widely Applicable Prerequisites. Evaluate teacher and student materials to understand the types of work students are expected to produce.	**Evidence-** p 151, scaffolding performance tasks.	
Do materials explicitly attend to the specialized language of mathematics? Is the language of argument, problem solving, and mathematical explanations taught rather than assumed? Evaluate teacher and student materials, paying attention to how mathematical language is taught. NOTE: An example of evaluating this Criterion might include looking at whether students are supported in: basing arguments on definitions; using the method of providing a counter example; or recognizing that examples alone do not establish a general statement.	**Evidence-** Reading start ups (see p160 forex) and Vocab words are laid out.	

Alignment Criterion 2: Materials must demonstrate authentic connections between content Standards and practice Standards.

AC 2: Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 points, the Criterion has not been met. Check the final rating.
Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewers only.)**

Before moving to Alignment Criterion 3, record the final Meets or Does Not Meet rating in the Evaluation Summary.

X **Meets**

____ **Does Not Meet**

Strengths/Weaknesses:
- Scaffolding in Performance tasks.
- MPIs are fairly strong.

Alignment Criterion 3: **Access to the Standards for All Students- Materials must provide supports for English Language Learners and other special populations.** Because Standards are for all students, alignment requires thoughtful support to ensure all students are able to meet the Standards. Thus, aligned materials must provide supports for English Language Learners and other special populations.	Because Standards are for all students, alignment requires thoughtful support to ensure all students are able to meet the Standards. Thus, aligned materials must provide supports for English Language Learners and other special populations. **Required Materials:** • Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math Publishers_Criteria_HS_Spring_2013_FINAL1.pdf) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion:** Alignment Criterion 3 is rated as Meets or Does Not Meet. To rate Alignment Criterion 3, first rate metrics 3A, 3B, and 3C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 3 if the materials rate 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as support for special population, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.
AC Metric 3A: **Support for English Language Learners and other special populations is thoughtful and helps those students meet the same Standards as all other students. The language in which problems are posed is carefully considered.** **How to Find the Evidence:** Evaluate teacher and student materials, paying attention to supports offered for special populations.	**Evidence-** Yes. Language is broken down and reviewed. Spanish available for parts and other ~~[illegible]~~ resources available online for other ELL.	X **Meets (2)** ____**Partially Meets (1)** ____**Does Not Meet (0)**
AC Metric 3B: **Materials provide appropriate level and type of scaffolding, differentiation, intervention, and support for a broad range of learners with gradual removal of supports, when needed, to allow students to demonstrate their mathematical understanding independently.** **How to Find the Evidence:** Evaluate teacher and student materials, paying attention to whether materials provide differentiation that will lead all learners to engage with on-grade-level content.	**Evidence-** Yes: Personal math trainer and scaffolding provided. See p180	X **Meets (2)** ____**Partially Meets (1)** ____**Does Not Meet (0)**
AC Metric 3C: **Design of lessons recommends and facilitates a mix of instructional approaches for a variety of learners such as using multiple representations (e.g., including models, using a range of questions, checking for understanding, flexible grouping, pair-share).** **How to Find the Evidence:** Evaluate teacher materials, noting instructional approaches suggested for whole class and differentiated lessons and activities.	**Evidence-** Peer activities, group activities, individual actives address this	X **Meets (2)** ____**Partially Meets (1)** ____**Does Not Meet (0)**

Alignment Criterion 3: Materials must provide supports for English Language Learners and other special populations. AC 3 Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 points, the Criterion has not been met. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewers only.)** **Move to the Evaluation Summary and record the final Meets or Does Not Meet rating .**	X **Meets** ___ **Does Not Meet** **Strengths/Weaknesses:** • Online resources for ELL students.

Once an evaluation for alignment to the Shifts and major features of the CCSS has been conducted using Sections 1-3, it's important to evaluate for overall quality and best practices. A starting list of Indicators of Quality are suggested below. States, districts and others evaluating instructional materials are encouraged to add to this list to ensure materials reflect local contexts. For background information on some of the Indicators of Quality in this section, refer to pp.16–18 in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).

Indicators of Quality	**Evidence- Give specific examples.**	**Rating: (Reviewer only.)**
1. Lessons are thoughtfully structured and support the teacher in leading the class through the learning paths at hand, with active participation by all students in their own learning and in the learning of their classmates.	**Evidence-** Lessons have multiple parts and types. See p 259, 260, & 277, 278.	**(Reviewer only.)** X **Yes** ___ **No**
2. The underlying design of the materials includes both problems and exercises. (In solving problems, students learn new mathematics, whereas in working exercises, students apply what they have already learned to build mastery.) Each problem or exercise has a purpose. **NOTE: This Criterion does not require that the problems and exercises be labeled as such.**	**Evidence-** Yes. Exercises start out with procedural skills and work into conceptual understanding	**(Reviewer only.)** X **Yes** ___ **No**

3. Design of assignments is not haphazard: exercises are given in intentional sequences in order to strengthen students' mathematical understanding.	Evidence- Yes. Exercisesets.	(Reviewer only.) X Yes ____ No
4. There are separate teacher materials that support and reward teacher study including, but not limited to: discussion of the mathematics of the units and the mathematical point of each lesson as it relates to the organizing concepts of the unit, discussion on student ways of thinking and anticipating a variety of students responses, guidance on lesson flow, guidance on questions that prompt students thinking, and discussion of desired mathematical behaviors being elicited among students.	Evidence- There are videos available to demonstrate, also PD video's. TE has extensive prompts and points. to make. Stem is easily incorporated throughout	(Reviewer only.) X Yes ____ No
5. Manipulatives suggested in the materials are faithful representations of the mathematical objects they represent and are connected to written methods.	Evidence- Yes. Graphics deplict accurate concepts and pictures	(Reviewer only.) X Yes ____ No
6. Materials include a variety of curriculum-embedded assessments. Examples include pre-, formative, summative, and self-assessment resources.	Evidence- Yes, Chapter reviews, practice tests, midChapter quizzes	(Reviewer only.) X Yes ____ No
7. Assessments contain aligned rubrics, answer keys, and scoring guidelines that provide sufficient guidance for interpreting student performance.	Evidence- Yes. The TE gives instructions. interpreting assessments.	(Reviewer only.) X Yes ____ No
8. Materials assess student proficiency using methods that are accessible and unbiased, including the use of course-level language in student prompts.	Evidence- Yes.	(Reviewer only.) X Yes ____ No

9. Materials are carefully evaluated by qualified individuals whose names are listed, in an effort to ensure freedom from mathematical errors and course-level appropriateness.	**Evidence-** 9 reviewers and 2 math related.	**(Reviewer only.)** X **Yes** ____ **No**
10. The visual design supports students in engaging thoughtfully with the subject. Navigation through the text is clear.	**Evidence-** Yes. Text is clear, graphics are clear.	**(Reviewer only.)** X **Yes** ____ **No**

Reviewer IMET Evaluation Summary **Title/Level:** Geometry 9-12th grade.

Publisher: HMH **Copyright:** 2015 **ISBN:** 978-0-544 38582-5

Reviewer ID # TTPP **Date Review Completed:** 3/8/2016

Non-Negotiable Criteria-The Non-Negotiable must be met in order for the Non-Negotiable Alignment Criteria to be met overall.

Non- Negotiable 1: Focus and Coherence

X **Meets**

____ **Does Not Meet**

Non-Negotiable Overall:

_____ **Meets** _____ **Does Not Meet**

Alignment Criteria- Each Alignment Criterion must be met with a sufficient number of points in order for Alignment Criteria to be labeled as "Meets" overall. The more points the materials receive on the Alignment Criteria, the better they are aligned.

Alignment Criterion 1: Rigor and Balance	Alignment Criterion 2: Standards of Mathematical Practice	Alignment Criterion 3: Access to Standards for All Learners
Points: 6 **of 6 possible.** (Materials must receive at least 5 of 6 points to align.)	**Points:** 6 **of 6 possible.** (Materials must receive at least 5 of 6 points to align.)	**Points:** 6 **of 6 possible.** (Materials must receive at least 5 of 6 points to align.)
X **Meets**	X **Meets**	✓ **Meets**
_____ **Does Not Meet**	_____ **Does Not Meet**	_____ **Does Not Meet**

Alignment Criteria Overall:

X **Meets** _____ **Does Not Meet**

If the materials meet the Non-Negotiable Criterion and each Alignment Criterion, they are aligned to the Shifts and major features of the Co[illegible]standards. **Do the materials meet every Non-Negotia[illegible] and Alignment Criterion?** ___X___ **Yes** _____ **No**

What are the specific areas of strength and weakness based on this evaluation? Publishers or others modifying or developing assessments can use this information to make improvements and/or to remedy gaps in the alignment of assessment materials.

Strengths:

1. This curriculum meets all requirements.
2. The textbook covers CCSS and aligns well
3. The 8 MP's are apparent throughout the textbook.
4. Online resources are fantastic.

Weakness:

1. Might not be visually appealing to young adults.

2015-16 Mathematics Interim Review Recommendation & Summary

Publisher Name:	Houghton Mifflin Harcourt
Title:	Integrated Mathematics 1
ISBN #	978-0-544-38978-6
Grade Level(s) or Course:	Integrated Mathematics 1
Reviewer ID:	JB & TG

RECOMMENDED AS:

__X__ **Core Mathematics Program-** a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials. Substantial evidence clearly supports the designation of this program as Core.

_____ **Other Mathematics Program-** a program that substantially, but partially, meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for supplemental materials. Substantial evidence clearly supports the designation of this program as Other.

_____ **Component Mathematics Program-** a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs. Substantial evidence clearly supports the designation of this program as Component.

_____ **Intervention Program-** a program designed and intended to target and support students' specific needs. Substantial evidence clearly supports the designation of this program as Intervention.

_____ **Does not meet criteria** for recommendation as a Curricular Material or Online Resource for Mathematics.

EVIDENCE SUMMARY:

FOCUS- The materials focus on the Widely Applicable Prerequisites in a way that is consistent with the progressions in the CCSS. Each lesson addresses at least one CCSS and 63.8% cover at least one WAP.

COHERENCE- The materials creates a structure that ties topics together, in a meaningful way. The standards are interwoven as this is an integrated course.

RIGOR- The focus of this text is building procedural skill and fluency and application. The materials address some conceptual understanding.

CONCEPTUAL UNDERSTANDING- Conceptual understanding is required in order for students to do application problems. However, the materials do not specifically address conceptual understanding.

MATHEMATICAL PRACTICES- All eight mathematical practices are addressed throughout the entire text and specifically stated in the text.

ACCESSIBILITY OF STANDARDS TO ALL STUDENTS- ~~Materials~~ Supports are included in the material to make content accessible to all students.

OTHER:

Strengths

- Teacher resources that are included in the Teacher Edition
- Support materials for special populations
- Task-based learning

- Online resources for teachers & students
- Variety of assessments, including pre-, post, formative & summative

Weakness
- Lacking focus on conceptual understanding

2015-1 nterim Mathematics Review

Mathematics Evaluation Tool – High School

Publisher: HMH

Title of Material: Integrated Math 1

Author: Timothy D. Kanold etal.

ISBN #: 978-0-544-38978-6 **Copyright** 2015

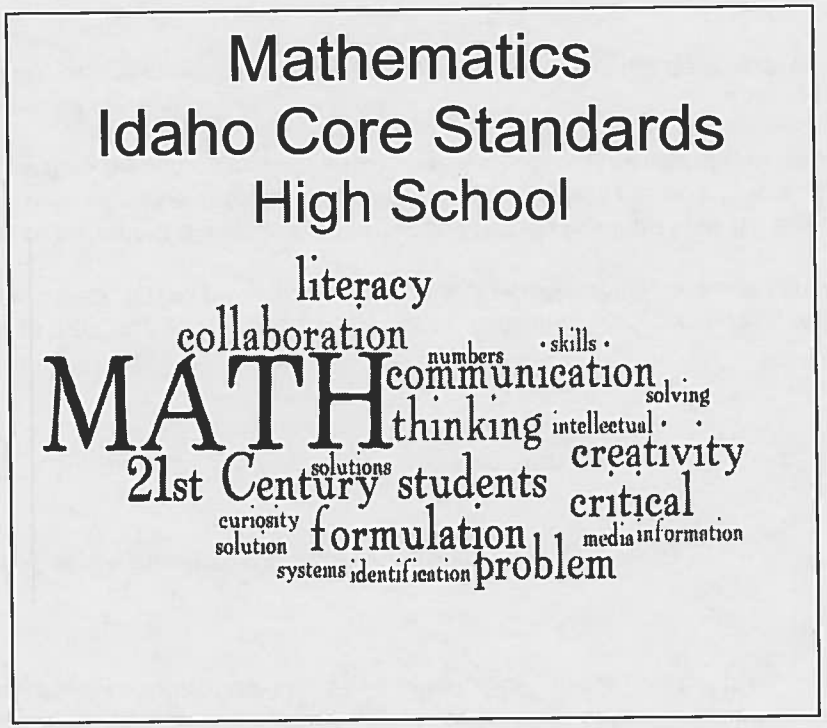
Reviewer ID: JB * TG

Core Mathematics Program- a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Core.

Other Mathematics Program- a program that substantially, but partially, meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Other.

Component Mathematics Program- a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs.
Substantial evidence clearly supports the designation of this program as Component.

Intervention Program- a program designed and intended to target and support students' specific needs.
Substantial evidence clearly supports the designation of this program as Intervention.



- Evaluation Form adapted from Instructional Materials Evaluation Toolkit (IMET).

The IMET was developed by Student Achievement Partners. Educators may use or adapt. http://creativecommons.org/licenses/by/3.0/ Download this tool at http://achievethecore.org/IMET

Metric NN1A: **In any single course, students spend at least 50% of their time on Widely Applicable Prerequisites.** **How to Find the Evidence:** Familiarize yourself with the Widely Applicable Prerequisites. Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, lessons, homework assignments, and assessments. (Evaluate both student and teacher materials.) Consider time spent on the Widely Applicable Prerequisites and judge qualitatively whether students and teachers using the materials as designed will devote the majority of time to the Widely Applicable Prerequisites For context, read Criterion #1 in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** In course 1 the HMH Integrated Math program students spend 63.8% of the time on the Widely Applicable Prerequisites of the 94 lessons 60 cover the Widely Applicable Prerequisites. Examples: Unit 1 covers the Widely Applicable Prerequisites in the Number and Quantity conceptual category. Units 2, 3, 5, and 6 cover the Widely Applicable Prerequisites in the Algebra and Function conceptual categories.	**_X___Meets** **____Does Not Meet Insufficient Evidence**
Metric NN1B: **Student work in Geometry involves significant work with applications/modeling and problems that use algebra skills.** **How to Find the Evidence:** Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, lessons, homework assignments, and assessments. (Evaluate both student and teacher materials. NOTE: Since Geometry contains relatively fewer Widely Applicable Prerequisites, this Criterion is important to help foster students' college and career readiness. Problems that use algebra skills might include, for example, algebraic geometry problems in a coordinate setting, or problems of measurement involving unknown quantities.	**Evidence-** The textbook covers a large amount of geometry standards in Unit 7, Unit 8, and Unit 9. There are opportunities to apply these concepts with contextual and modeling exercises. Example: In lesson 17.4 almost 80% of the homework exercises are modeling problems. Most of the performance tasks in these three units involve application problems with real world situations.	**__X__Meets** **____Does Not Meet Insufficient Evidence**

Metric NN1C: **There a[illegible]roblems at a level of sophistication appropriate to high school (beyond mere review of middle school topics) that involve the application of knowledge and skills from grades 6-8.** **How to Find the Evidence:** Evaluate lessons, chapter/unit assessments, and homework assignments. NOTE: Problems should include application of the following topics from grades 6-8: • Ratios and proportional relationships. • Percentage and unit conversions, e.g., in the context of complex measurement problems involving quantities with derived or compound units (such as mg/mL, kg/ m3, acre-feet, etc.). • Basic function concepts, e.g., by interpreting the features of a graph in the context of an applied problem. • Concepts and skills of geometric measurement e.g., when analyzing a diagram or schematic. • Concepts and skills of basic statistics and probability (see grades 6–8.SP) • Performing rational number arithmetic fluently. For context, read Table 1 on Page 8 of the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** In course 1 [illegible]e HMH Integrated Math program the section called "Are You Ready?" offers problems that require students to apply knowledge and skills from grades 6-8 and the problems are of the high school level. The textbook covers application problems of each of the following as described: • Ratios and proportional relationships. - solving similar triangles (1.2) • Percentage and unit conversions - using dimensional analysis to determine which is great (1.2) • Basic function concepts - linear functions (Unit 2), exponential functions (Unit 6) • Concepts and skills of geometric measurement - finding perimeter and area on the coordinate plane (25.5) • * Concepts and skills of basic statistics and probability - normal distribution (9.4)	**__X__Meets** **____Does Not Meet Insufficient Evidence**

Metric NN1D: **Materials base courses on the content specified in the Standards.** **How to Find the Evidence:** Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, and lessons in both student and teacher materials. For context, read Criterion #3a in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** Course 1 of HMH Integrated Math program is based on the content outlined in the standards for the integrated pathway. This textbook consists of 9 units, each unit has 2 - 3 modules, for total of 25 modules, and each module has 2 - 5 lessons. Every lesson is aligned to at least one common core state standard. For example: Module 14 - Geometric Sequences and Exponential Functions • 14.1 covers F - LE.A.2 and F - LE.A.3 • 14.2 covers F-BF.A.1a, F - LE.A.2, and F-BF.A.2 • 14.3 covers F-BF.A.1, F-IF.A.2, and F-IF.C.7e • 14.4 covers F-IF.C7e and F-IF.C.8b • * 14.5 covers F-BF.B.3, F-IF.C.9, and F-BF.A.1b	**__X__Meets** **____Does Not Meet Insufficient Evidence**
Metric NN1E: **Materials give all students extensive work with course-level problems.** **How to Find the Evidence:** Evaluate both student and teacher materials. If the materials provide resources for differentiated learning, consider whether lower-performing students have opportunities to engage with course-level problems. Also consider whether higher-performing students are given opportunities to learn current course-level content in greater depth. For context, read Criterion #3b in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** Course 1 of the HMH Integrated Math program is designed to help all students access the mathematics. There are response to intervention materials for students that struggle with the mathematics. There is no Honors book but there is a section in the homework called "Focus on Higher Order Thinking". The textbook provides ample opportunities to practice the course-level material through the lesson, assignments, performance tasks, and assessments. Example: Lesson 19.2 has 3 problems in the lesson with 3 "your turn" problems. The homework assignment has 23 problems for more practice. Finally the lesson ends with a performance task.	**_X___Meets** **____Does Not Meet Insufficient Evidence**

Metric NM1F: **Materials relate course-level concepts explicitly to prior knowledge from earlier grades or courses. The materials are designed so that prior knowledge becomes reorganized and extended to accommodate the new knowledge.** **How to Find the Evidence:** Evaluate student and teacher materials, looking for problems that involve extending the knowledge learned in earlier grades and courses. NOTE: An example of evaluating this Criterion might be to look at whether materials connect the equation of a circle with the distance formula and the Pythagorean theorem. For context, read Criterion #3c in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** Course 1 of HMH Integrated Math program there are two sections called "Are You Ready?" which offers problems that require students to apply knowledge as well as skills from grades 6-8 and the problems are of the high school level. The other is "Real World Video" which helps students relate real world and prior knowledge to the lesson. The Teacher's Edition also offers a section called "Math Background" which notifies the teacher of prior skills needed for the concepts covered in the lesson. Example: Module 16 assesses angle relationships and distance and midpoints. Then the lessons in module 16 covers constructing a line and a bisector. The next lesson covers constructing an angle and an angle bisector, then students represent and describe transformations.	**_X___Meets** **____Does Not Meet Insufficient Evidence**

Metric NM1G: **Materials include learning objectives that are visibly shaped by CCSSM cluster and domain headings.** **How to Find the Evidence:** Select several clusters from the course being evaluated. Evaluate teacher and student materials in relation to these clusters. For context, read Criterion #4a in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** In course 1 of the HMH Integrated Math program each lesson is designed to meet one of more of the CCSSM. The units are aligned with the standards listed in the integrated pathways. Each lesson begins with common core math standards, mathematical practices, and language objectives. Then each lesson has essential questions that states the goal for that lesson. Example: Lesson 22.3 Triangle Inequalities covers: • CCMS: G-SRT.B.5 • MP: 5 Using Tools • Language Objective: explain how to show the three inequalities generated for a triangle • * Essential Questions: How can you use inequalities to describe the relationships among side lengths and angle measures in a triangle?	**_X___Meets** **____Does Not Meet Insufficient Evidence**
Metric NN1H: **Materials include problems and activities that serve to connect two or more clusters in a domain, or two or more domains in a category, or two or more categories, in cases where these connections are natural and important.** **How to Find the Evidence:** In the course being evaluated, choose two or more clusters, two or more domains, or two or more categories for which connections are natural and important. Evaluate the units, chapters, and lessons that deal with the chosen topics, looking for problems and activities that serve to connect the chosen clusters or domains. NOTE: An example of evaluating this Criterion might be to look at whether materials include problems in which students analyze a situation by building a function, graphing it, and using it to create and solve an equation. For context, read Criterion #4b in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** Many of the lesson cover one more than one standard. Sometimes these standards are in the same domain and other times they are in different domains. In course 1 of the HMH Integrated Math program the "Assessment Readiness" section is designed to help students make connections between the clusters, domains, and categories. Example: Lesson 5.1 - Understanding Linear Functions covers 5 different standards: F-LE.A.1b, F-LE.A.1a, F-LE.A.2, A-REI.D.10, and F-IF.C.7a. These standards are all related to linear functions and characteristics a linear graph.	**__X__Meets** **____Does Not Meet Insufficient Evidence**

Non-Negotiable 1: Focus and Coherence- Materials must focus coherently on the Widely Applicable Prerequisites in a way that is consistent with the progressions in the Standards. **Metric NN 1:** If all metrics 1A–1H were rated as Meets, then rate Non-Negotiable 1 as Meets. If one or more metrics were rated as Does Not Meet/Insufficient Evidence, then rate Non-Negotiable 1 as Does Not Meet. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)** **Before moving to Alignment Criterion 1, record the final Meets or Does Not Meet rating in the Evaluation Summary.**	**__X__Meets** **____Does Not Meet** **Strengths/Weaknesses** The focus and coherence on the Widely Applicable Prerequisites is met. Alignment to the standards is clear. The sequencing of the lessons make sense to build student understanding. The textbook gives multiple opportunities for students to practice and apply their knowledge. No program or extra work is available for high performing students (honors).

Now continue by evaluating Alignment Criterion 1 for Rigor and Balance.

Directions for Alignment Criterion 1

Rigor and Balance

Alignment Criterion 1: **Rigor and Balance- Materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.** The Standards set expectations for attention to all three aspects of rigor: conceptual understanding, procedural skill and fluency, and applications. Thus, materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.	The Standards set expectations for attention to all three aspects of rigor: conceptual understanding, procedural skill and fluency, and applications. Thus, materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations. • Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_HS_Spring_2013_FINAL1.pdf) • Widely Applicable Prerequisites for College and Careers (http://achievethecore.org/prerequisites) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion:** Alignment Criterion 1 is rated Meets or Does Not Meet. To rate Alignment Criterion 1, first rate metrics 1A, 1B, and 1C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). For each metric, guiding questions are provided to aid in gathering evidence. Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 1 if the materials rate 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as rigor and balance, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.
AC Metric 1A: **The materials support the development of students' conceptual understanding of key mathematical concepts, especially where called for in specific content Standards or cluster headings.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Widely Applicable Prerequisites that relate specifically to conceptual understanding to use throughout the questions associated with this metric. NOTE: Some examples of clusters or Standards that call for conceptual understanding include: N-RN.A.1, A-APR.B, A-REI.A.1, A-REI.D.10, A.REI.D.11, F.IF.A.1, F-LE.A.1, G.SRT.A.2, G-SRT.C.6, S-ID.C.7 For context, read Criterion #2a in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	• Choose a cluster/Standard from the Widely Applicable Prerequisites that is aligned to each aspect of rigor and use it to evaluate these metrics. It is most helpful if the same clusters and Standards are chosen for all of the programs being evaluated. (Guidance in choosing clusters/Standards is included in "How to Find the Evidence" below.)	**Use the questions for AC Metric 1A to evaluate Metric 1A. Record evidence for each question and rate Metric 1A.** **__X__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**

Is conceptual understanding attended to thoroughly where the Standards set explicit expectations for understanding or interpreting? Evaluate lessons, chapter/unit assessments and homework assignments, paying attention to work aligned to Standards that explicitly call for understanding or interpreting.	**Evidence-** Procedural understanding is attended to more than the conceptual understanding. Each lesson walks students through the procedure of solving the problems through examples rather than the use of task based learning. Example: According to the text A-REI.A.1 is addressed in two different lessons. The first is Lesson 1.1 - Solving Equations. This lesson involves solving simple one variable equation. Students are given the 4 properties of equality. The first example gives the property and students have do the operation with the equation. After that students are just asked to solve equations by using the properties of equality. However, it does not explicitly state to show each step or justify each step using a property. On a few of the homework questions students are asked to write the property used in each step of an equation that is already solved. The second lesson is 16.4 - Reasoning and Proof which is in the tools of geometry module. In this lesson students are asked to prove theorems. The topic of geometry proofs is introduced by solving one variable equations and justifying each step with properties of equality.	

Do the materials feature high-quality conceptual problems and conceptual discussion questions? Evaluate lessons, chapter/unit assessments, and homework assignments. NOTE: Examples of conceptual problems might include such questions as "What is the maximum value of the function f(t) = 5 – t2 ?" or "Is √2 a polynomial? How about ½(x + √2)+ ½ (-x + √2)?"	**Evidence-** The "Performance Tasks" do offer conceptual problems. The Teacher's Edition offers questions to aid in discussions. Example: Lesson 5.1 - Understanding Linear Functions has a Performance Task where students are given a table and have to determine if the function is linear, graph the function, then explain why the function should not be used to predict profit for a long term future.	
Do the materials feature opportunities to identify correspondences across mathematical representations? Evaluate lessons, chapter/unit assessments and homework assignments. NOTE: An example of evaluating this metric might include looking at whether materials support students in identifying correspondences among the expression that defines a function, the graph that shows the relationship, and the behavior of the phenomenon being modeled (if any).	**Evidence-** Minimal use of multiple representations are used. Negative Example: Lesson 1.2 students could have been asked to not only graph the function but also create a table and an equation. Positive Example: Lesson 16.4 - Reasoning and Proof students are asked to prove theorems. The topic of geometry proofs is introduced by solving one variable equations and justifying each step with properties of equality.	
AC Metric 1B: **The materials are designed so that students attain the fluencies and procedural skills required by the Standards.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Widely Applicable Prerequisites that relate specifically to fluency and procedural skill to use throughout the questions associated with this metric. NOTE: Some examples of Standards that call for procedural skill and fluency include: A-SSE.A.1b, A-SSE.2, A-APR.A.1, A-APR.C.6, F-BF.B.3, G-GPE.B.4, G-GPE.B.5, G-GPE.B.7, G-CO.A.1, G-SRT.B.5 For context, read Criterion #2b in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).		**Use the questions for AC Metric 1B to evaluate Metric 1B. Record evidence for each question and rate Metric 1B.** **__X__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**

Is progress toward fluency and procedural skill interwoven with the student's developing conceptual understanding of the skills in question? Evaluate lessons, chapter/unit assessments, daily routines, and homework assignments for evidence that the development of fluency and procedural skill is supported by conceptual understanding.	**Evidence-** Fluency and procedural skills are the main focus of the HMH Integrated Math program. Conceptual understanding is not the main focus. The lessons are structured similar to traditional textbooks where there are examples that explain the procedure and at the end of the lesson there are practice problems on the same topic. Example: Module 5 - three lessons in this module introduce the characteristics of a function such as intercepts and slope. It also shows the relationship between a table and the graph. The next units introduces equations of a line and the relationship with the graph.	
Are purely procedural problems and exercises present that include cases in which opportunistic strategies are valuable and generic cases that require efficient and general procedures present? Evaluate lessons, chapter/unit assessments, daily routines, and homework assignments. NOTE: Problems in which opportunistic strategies are valuable might include such examples as solving x2 + 5 = 49 + 5 or (3x − 2)2 = 6x − 4. Generic cases that require efficient and general procedures might include such problems as solving c + 8 – c2 = 3(c – 1)2 − 5).	**Evidence-** Fluency and procedural skills are the main focus of the HMH Integrated Math program. Example: Students are asked to graph linear functions with procedural exercises. There are also real-life problems where students have to identify the slope and y-intercepts using the situation and/or graph.	
AC Metric 1C: **The materials are designed so that teachers and students spend sufficient time working with engaging applications, without losing focus on the Widely Applicable Prerequisites.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Widely Applicable Prerequisites that relate specifically to application to use throughout the questions associated with this metric. NOTE: Some examples of clusters or Standards that call for application include: N-Q.A, A-SSE.B.3, A-REI.D.11, F-IF.B, F-IF.C.7, F-BF.A.1, G-SRT.C.8, S-ID.A.2, S-IC.A.1 For context, read Criterion #2c in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).		**Use the questions for AC Metric 1C to evaluate Metric 1C. Record evidence for each question and rate Metric 1C.** **__X__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**

Are there single- and multi-step contextual problems, including non-routine problems, that develop the mathematics of the course, afford opportunities for practice, and engage students in problem solving? Do the problems attend thoroughly to those places in the content Standards where expectations for multi-step and real-world problems are explicit? Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** Yes, HMH Integrated Math program has both single and multi step contextual problems. See the "Performance Tasks" at the end of each lesson. Example: 9.3 performance task gives students batting averages for two teams. Then students are asked to create a box plot for each team then compare the distribution, then decide which team has a better starting lineup.	
Do application problems particularly stress applying the Widely Applicable Prerequisites? Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** Yes, the application problems stress the Widely Applicable Prerequisites. The application problems consist of the "Performance Task".	
Are there ample opportunities for students to engage with modeling problems? Do materials require students to use both individual parts of the modeling cycle as well as the full modeling cycle? Read the pages on High School—Modeling in the Standards for Mathematics (pp. 72 and 73). Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** Yes, modeling problems can be found in the "Ready to Go On" section. Example: Students have the opportunity to model data sets using box plots, histograms, dot plots. Students can visually understand the distribution of the data by making these models.	

Alignment Criterion 1: Materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.	_X___Meets ____Does Not Meet
AC 1: Materials must earn at least 5 of 6 points to meet this Alignment Criterion. If materials earn less than 5 points, the Criterion has not been met. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)** **Before moving to Alignment Criterion 2, record the final Meets or Does Not Meet rating in the Evaluation Summary.**	**Strengths/Weaknesses:** This textbook emphasizes the widely applicable prerequisites in many ways. Student have amply opportunities to practice their skills with procedural problems as well as apply their knowledge on contextual problems. There is rigor and balance but the rigor could be increased which would help to support high performing students. However, the text lacks in conceptual understanding opportunities.

Alignment Criterion 2: **Standards for Mathematical Practice- Materials must demonstrate authentic connections between content Standards and practice Standards.** The Standards require that designers of instructional materials connect the mathematical practices to mathematical content in instruction. Thus, materials must demonstrate authentic connections between content Standards and practice Standards.	The Standards require that designers of instructional materials connect the mathematical practices to mathematical content in instruction. Thus, materials must demonstrate authentic connections between content Standards and practice Standards. **Required Materials**: • Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_HS_Spring_2013_FINAL1.pdf) • Widely Applicable Prerequisites for College and Careers (http://achievethecore.org/prerequisites) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion:** Alignment Criterion 2 is rated Meets or Does Not Meet. To rate Alignment Criterion 2, first rate metrics 2A, 2B, and 2C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). For each metric, guiding questions are provided to aid in gathering evidence. Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 2 if the materials rate 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as mathematical practices, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.

AC Metric 2A: **Materials address the practice Standards in such a way as to enrich the Widely Applicable Prerequisites; practices strengthen the focus of the course instead of detracting from it, in both teacher and student materials.** **How to Find the Evidence:** Familiarize yourself with the Widely Applicable Prerequisites. Evaluate teacher and student materials for evidence that the mathematical practices support and connect to the focus of the course. NOTE: An example of evaluating this Criterion might include looking at whether materials use regularity in repeated reasoning to illuminate formal algebra as well as functions, particularly recursive definitions of functions. For context, read Criterion #6 in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** There is a cl flow to the program and the units are aligned to the standards. The Widely Applicable Prerequisites are addressed in the practice standards. Each lesson states the common core math standard as well as the mathematical practices that are used during the lesson. The homework is categorized into different mathematical practices. In most lessons there are suggestions on how to incorporate more mathematical practice. To address focus and coherence, sometimes the text strengths the focus but other times it detracts. For example, Module 6 addresses forms of linear equations. First students are taught about slope-intercept form then point-slope form, but a connection is not made on how the two equations relate. In the third lesson students are taught about general form and how to get to general form using slope-intercept form and point-slope form. This is an example teaching different ideas instead of developing ideas. On the other hand, in lesson 6.4 students are taught how to vertically transform linear functions compared to the parent function. This same concept is shown in lesson 17.1 when translating a figure. This is an example of making use of structure.	_X___Meets (2) ____Partially Meets (1) ____Does Not Meet (0)
AC Metric 2B: **Materials attend to the full meaning of each practice Standard.** **How to Find the Evidence:** For context, read Criterion #7 in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).		**Use the questions for AC Metric 2B to evaluate Metric 2B. Record evidence for each question and rate Metric 2B.** _X___Meets (2) ____Partially Meets (1) ____Does Not Meet (0)

Over the course of any given year of instruction, is each mathematical practice Standard meaningfully present in the form of assignments, activities, or problems that stimulate students to develop the habits of mind described in the practice Standard? Evaluate lessons, chapter/ unit assessments, and homework assignments for evidence of each mathematical practice being meaningfully present in instruction.	**Evidence-** Yes. Practice Standards are listed in each lesson and addressed throughout the course. The performance tasks focus on the effective development of the Mathematical Practices. However, each task does not specifically state the practice standard being addressed.	
Are teacher-directed materials that explain the role of the practice Standards in the classroom and in students' mathematical development included? Are alignments to practice Standards accurate? Evaluate teacher materials, paying attention to explanations of the role of the practice Standards in the classroom and in students' mathematical development. Evaluate documents aligning lessons to practice Standards for accuracy. NOTE: Examples to look for when evaluating this metric might include the following: a highly scaffolded problem should not be aligned to MP.1; or a problem that directs a student to use a calculator should not be aligned to MP.5; or a problem about merely extending a pattern should not be aligned to MP.8.	**Evidence-** Yes, the Practice Standards are listed in each lesson. Alignment is accurate. There is a professional development paragraph that explicitly states how to integrate the practice standard into the lesson. Example: Lesson 17.2 states that students will be using tools (MP. 5). The professional development explains that students should use tracing paper, rulers, and protractors to explore reflections.	
AC Metric 2C: **Materials support the Standards' emphasis on mathematical reasoning.** **How to Find the Evidence:** For context, read Criterion #8 in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).		**Use the questions for AC Metric 2C to evaluate Metric 2C. Record evidence for each question and rate Metric 2C.** **_X___Meets (2)** **____Partially Meets (1)**

Do the materials support students in constructing viable arguments and critiquing the arguments of others concerning course-level mathematics that is detailed in the content Standards? Read Standard for Mathematical Practice 3. Evaluate teacher and student materials to ensure that students are given opportunities to reason with grade-level mathematics.	**Evidence-** Yes. The Performance Tasks, Journal prompts, and Questioning Strategies require students to construct viable arguments and critique the work of others. Throughout the lesson there are opportunities to reflect on their learning. This provides a guide to students to construct viable arguments. In the homework there is usually an exercise that asks students to communicate mathematical ideas. The performance tasks at the end of each lesson ask for students to explain their reasoning and this is part of the rubric. There are also journal prompts to just students to use mathematical reasoning.	____**Does Not Meet (0)**
Do the materials support students in producing not only answers and solutions, but also, in a course-appropriate way, arguments, explanations, diagrams, mathematical models, etc., especially in the Widely Applicable Prerequisites? Familiarize yourself with the Widely Applicable Prerequisites. Evaluate teacher and student materials to understand the types of work students are expected to produce.	**Evidence-** There are ample opportunities for students to reason with the mathematics. Application and contextual problems require students to use: arguments, explanations, diagrams, and models. The book scaffolds the concept of creating a course-appropriate argument, explanations, diagrams, mathematical models. Students do not always generate these on their own. Performance tasks not only ask students to solve problems but explain their reasoning. On occasion students are asked to model the mathematics without actually solving the problem. For example: In lesson 12.1 students are asked to write a system of equations that corresponds to the situation but do not solve.	

Do materials explicitly attend to the specialized language of mathemati[illegible] the language of argument, problem solving, and mathematical explanations taught rather than assumed? Evaluate teacher and student materials, paying attention to how mathematical language is taught. NOTE: An example of evaluating this Criterion might include looking at whether students are supported in: basing arguments on definitions; using the method of providing a counter example; or recognizing that examples alone do not establish a general statement.	**Evidence-** Yes, the text[illegible]k and additional resources all use appropriate mathematical language. Each lesson has a "Language Objective", each unit has a "Reading Startup" both of which help students learn the vocabulary. Each lesson has students using the vocabulary in the "Reflect" and "Elaborate" sections. A glossary can be found in the back of the book, multi lingual. There are also suggestions on how to help students visualize and understand the vocabulary. There are also reading strategies for EL students. The vocabulary terms are explained in a way that is mathematically correct and examples are given to help students understand. There are often suggestions on how to connect the vocabulary to student's prior knowledge as well as language support ideas.	

Alignment Criterion 2: Materials must demonstrate authentic connections between content Standards and practice Standards.

AC 2: Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 points, the Criterion has not been met. Check the final rating.
Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewers only.)**

Before moving to Alignment Criterion 3, record the final Meets or Does Not Meet rating in the Evaluation Summary.

_X__Meets

____Does Not Meet

Strengths/Weaknesses:

Students have ample opportunities students have to write about their understanding. The mathematical practices are incorporated into every lesson, assignment, and task.

The materials do connect the content standards with the practice standards.

Alignment Criterion 3:
Access to the Standards for All Students- Materials must provide supports for English Language Learners and other special populations.

Because Standards are for all students, alignment requires thoughtful support to ensure all students are able to meet the Standards. Thus, aligned materials must provide supports for English Language Learners and other special populations.

Because Standards are for all students, alignment requires thoughtful support to ensure all students are able to meet the Standards. Thus, aligned materials must provide supports for English Language Learners and other special populations.

Required Materials:

- Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf)
- Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math Publishers_Criteria_HS_Spring_2013_FINAL1.pdf)
- From the materials being evaluated: teacher guides, student texts and workbooks

Rating this Criterion:

Alignment Criterion 3 is rated as Meets or Does Not Meet.

To rate Alignment Criterion 3, first rate metrics 3A, 3B, and 3C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 3 if the materials rate 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as support for special population, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.

AC Metric 3A: **Support for English Language Learners and other special populations is thoughtful and helps those students meet the same Standards as all other students. The language in which problems are posed is carefully considered.** **How to Find the Evidence:** Evaluate teacher and student materials, paying attention to supports offered for special populations.	**Evidence-** HMH Integrated Math 1 offers "Response to Intervention" to help with struggling students. Online there is a section in the Teacher's Resources called "Differentiated Instruction Resources" to help reach all levels. No separate honors program. There is a lot of support for ELL students in this textbook. The dictionary include English, Spanish, and a visual representation for each term. The online resource includes a Spanish edition of the textbook. There are language support ideas in the teacher edition to ensure that all students understand the context of different ideas. There are Spanish editions of the assessments and performance tasks that can be found in the online resources. The textbook also supports other special populations. The response to intervention book provides intervention material for tier 1, tier 2 and tier 3 students. There are modified versions of assessments that have limited multiple choice answers. There are suggestions in the teacher textbook to help all students such as visual cues collaborative learning, and differentiated instruction.	**__X__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**

AC Metric 3B: **Materials provide appropriate level and type of scaffolding, differentiation, intervention, and support for a broad range of learners with gradual removal of supports, when needed, to allow students to demonstrate their mathematical understanding independently.** **How to Find the Evidence:** Evaluate teacher and student materials, paying attention to whether materials provide differentiation that will lead all learners to engage with on-grade-level content.	**Evidence-** Online there is a section in the Teacher's Resources called "Differentiated Instruction Resources" to help reach all levels. The "Personal Math Trainer" allows for a personalized instruction for individual students. There are interventions strategies for Tier 1, Tier 2, and Tier 3 students. Each lesson usually includes differentiated instructional strategies typically using manipulatives, cognitive strategies, technology, visual cues, or graphic organizers. There are also challenge problems for students that are ready to move on. Each module begins with a pre-assessment that test to see if students have the skills needed to be successful in the module. There is a guide for teachers to know what to reteach if needed. During the lessons students are given examples then a chance to reflect on their learning then a chance to try it on their own. The assignments start with simple examples then move into more complex. Each lessons ends with a performance task for students to demonstrate their knowledge in a new way.	**_X___Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**

AC Metric 3C: **Design lessons recommends and facilitates a mix of instructional approaches for a variety of learners such as using multiple representations (e.g., including models, using a range of questions, checking for understanding, flexible grouping, pair-share).** **How to Find the Evidence:** Evaluate teacher materials, noting instructional approaches suggested for whole class and differentiated lessons and activities.	**Evidence-** In the Teacher Edition, each lesson is designed to provide the teacher with multiple strategies and techniques that can be used in enhance student learning. Each lesson begins with an essential question to guide the learning. Then there are a variety of strategies suggested such as: questioning strategies, collaborative learning ideas, differentiated instruction, extension activities, and journal prompts. Each homework assignment has a guide that categorizes questions based on depth of knowledge and mathematical practice. The guide also indicates which questions are higher order thinking (H.O.T).	**_X___Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Alignment Criterion 3: Materials must provide supports for English Language Learners and other special populations. **AC 3** Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 points, the Criterion has not been met. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewers only.)** **Move to the Evaluation Summary and record the final Meets or Does Not Meet rating .**		**__X__Meets** **____Does Not Meet** **Strengths/Weaknesses:** The HMH Integrated Math program addresses Spanish learners but no other language. There is response to intervention available to support struggling students, but no honors materials. Teachers are provided with multiple supports that will enhance the lessons and make the material accessible to all students.

Once an evaluation for alignment to the Shifts and major features of the CCSS has been conducted using Sections 1-3, it's important to evaluate for overall quality and best practices. A starting list of Indicators of Quality are suggested below. States, districts and others evaluating instructional materials are encouraged to add to this list to ensure materials reflect local contexts. For background information on some of the Indicators of Quality in this section, refer to pp.16–18 in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).

Indicators of Quality	Evidence- Give specific examples.	Rating: (Reviewer only.)
1. Lessons are thoughtfully structured and support the teacher in leading the class through the learning paths at hand, with active participation by all students in their own learning and in the learning of their classmates.	**Evidence-** The lessons are structured around the 5 E instructional model. Engage, Explore, Explain, Elaborate, Evaluate. Each section is addressed in the Teacher's Edition to support instruction. Each lesson seems to be well thought out and the sequencing of the lessons makes sense according to what students need to learn. Students are asked to be actively involved during the lesson. There are reflection questions after almost every example for students to explain their understanding. There are also several "your turn" problems for students to practice the mathematical concepts. The lesson usually ends with an "elaboration" where students are asked to write about the essential understandings of the lesson.	**(Reviewer only.)** **___X___ Yes** **_____ No**
2. The underlying design of the materials includes both problems and exercises. (In solving problems, students learn new mathematics, whereas in working exercises, students apply what they have already learned to build mastery.) Each problem or exercise has a purpose. **NOTE: This Criterion does not require that the problems and exercises be labeled as such.**	**Evidence-** Each lesson contains multiple problems to help students understand the main concepts of the lesson. Most problems are following by a "your turn" exercise. At the end of each lesson there is an "Evaluate: Homework and Practice" section. This section has several exercises for students to practice and build mastery. Each lesson also has a performance task for students to apply their knowledge.	**(Reviewer only.)** **____X__ Yes** **_____ No**

3. Design of assignments is not haphazard: exercises are given in intentional sequences in order to strengthen students' mathematical understanding.	**Evidence-** The homework assignments follow the same sequencing as the lessons. Each homework assignments have an assignment guide that informs the teacher which problems correspond to the example problems. The lesson is also broken down into depth of knowledge levels. Most assignments begin with a D.O.K. level of 1, recall of information, and then increases from there to skills/concepts, then strategic thinking.	**(Reviewer only.)** __X____ Yes _____ No
4. There are separate teacher materials that support and reward teacher study including, but not limited to: discussion of the mathematics of the units and the mathematical point of each lesson as it relates to the organizing concepts of the unit, discussion on student ways of thinking and anticipating a variety of students responses, guidance on lesson flow, guidance on questions that prompt students thinking, and discussion of desired mathematical behaviors being elicited among students.	**Evidence-** The teacher text provides several supports for teachers. Each chapter begins with a pacing guide for 45 and 90 minute classes. Most lessons include questioning strategies, teaching tips, resources of differentiated instruction, common errors, collaborative learning ideas, journal prompts, language supports, content vocabulary, visual cues and assignment guides. There are also additional teacher supports found online.	**(Reviewer only.)** ___X___ Yes _____ No
5. Manipulatives suggested in the materials are faithful representations of the mathematical objects they represent and are connected to written methods.	**Evidence-** Limited manipulatives were used, but the use is appropriate. Each use of manipulatives would increase student understanding. Most manipulives are found in the extension activities or differentiated instruction. If students use the online interactive textbook there are several manipulatives that are available, such as algebra tiles, calculators, geometry sketcher, stretch pad, and graphing utilities.	**(Reviewer only.)** ____X__ Yes _____ No

6. Materials include a variety of curriculum-embedded assessme Examples include pre-, formative, summative, and self-assessment resources.	**Evidence-** Yes, a variety assessments are offered. Each module begins with a pre-assessment called "Are you ready?" which reviews the skills needed to complete the module. Throughout the lesson there are "your turn" problems for students to access their own understanding. At the end of each module there is a practice test in the student text called "Assessment Readiness". There is an entire book of Response to Intervention pre-tests, post-tests, and intervention worksheets. The online recourses have additional assessments. Each unit has 3 forms of the assessment as well as a modified assessment that has mostly limited multiple choice. Each of these assessments come in pdf form or word so it can be edited.	**(Reviewer only.)** ___X___ **Yes** _____ **No**
7. Assessments contain aligned rubrics, answer keys, and scoring guidelines that provide sufficient guidance for interpreting student performance.	**Evidence-** Any assessment/quiz that is in the textbook has answers in the teacher addition. Each performance task has a rubric. The online assessments also include an answer key. Although a rubric is provided it is basically the same for all performance tasks 2 pts for right answer and explaining reason, 1 pt for good understanding but missed something, 0 pts for not showing sufficient understanding.	**(Reviewer only.)** ___X___ **Yes** _____ **No**

8. Materials assess student proficiency using methods that are accessible and unbiased, including the use of course-level language in student prompts.	**Evidence-** Yes, the problems in the assessments reflect the math taught in the unit. The language is on grade level. There are a lot of support for teachers to ensure that the mathematics and real world situations are assessable for all students. This includes a dictionary with English, Spanish, and visual representation. Throughout the lessons there are language support suggestions, content vocabulary suggestions, visual cue suggestions all of which are intended to make the math accessible to all learners and all learning types.	**(Reviewer only.)** ___X___ **Yes** _____ **No**
9. Materials are carefully evaluated by qualified individuals, whose names are listed, in an effort to ensure freedom from mathematical errors and course-level appropriateness.	**Evidence-** The textbook as 5 authors listed: Kanold, Burger, Dixon, Larson, and Leinwand. There was also a performance task consultant and two STEM consultants. Finally, there are nine reviews from various school districts as teachers or content specialists.	**(Reviewer only.)** ___X___ **Yes** _____ **No**
10. The visual design supports students in engaging thoughtfully with the subject. Navigation through the text is clear.	**Evidence-** The visual design will draw students interest and the text is easy to navigate.	**(Reviewer only.)** ___X___ **Yes** _____ **No**

Reviewer IMET Evaluation Summary Title/Level: Integrated Math 1

Publisher: HMH Copyright: 2015 ISBN: 978-0-544-38978-6

Reviewer ID # JB and TG Date Review Completed: 3/8/2016

Non-Negotiable Criteria-The Non-Negotiable must be met in order for the Non-Negotiable Alignment Criteria to be met overall.

Non- Negotiable 1: Focus and Coherence

___X__ Meets

_____ Does Not Meet

Non-Negotiable Overall:

___X__ Meets _____ Does Not Meet

Alignment Criteria- Each Alignment Criterion must be met with a sufficient number of points in order for Alignment Criteria to be labeled as "Meets" overall. The more points the materials receive on the Alignment Criteria, the better they are aligned.

Alignment Criterion 1: Rigor and Balance	Alignment Criterion 2: Standards of Mathematical Practice	Alignment Criterion 3: Access to Standards for All Learners
Points: __6___ of 6 possible. (Materials must receive at least 5 of 6 points to align.)	**Points: __6___ of 6 possible.** (Materials must receive at least 5 of 6 points to align.)	**Points: ____6_ of 6 possible.** (Materials must receive at least 5 of 6 points to align.)
____X___ Meets	**____X___ Meets**	**__X_____ Meets**
_____ Does Not Meet	**_____ Does Not Meet**	**_____ Does Not Meet**

Alignment Criteria Overall:

__X___ Meets _____ Does Not Meet

If the materials meet the Non-Negotiable Criterion and each Alignment Criterion, they are aligned to the Shifts and major features of the Co[illegible]tandards. **Do the materials meet every Non-Negotia[illegible] and Alignment Criterion? ___X__ Yes _____ N[illegible]**

What are the specific areas of strength and weakness based on this evaluation? Publishers or others modifying or developing assessments can use this information to make improvements and/or to remedy gaps in the alignment of assessment materials.

Strengths
Lots of extra materials for the teacher.
Extra support materials for special populations
Task based learning
Lots of online resources for students and teachers.
A variety of assessment.

Weaknesses
Not a lot of focus on the conceptual understanding.
Textbook I lacking in color

2015-16 Mathematics Interim Review Recommendation & Summary

Publisher Name:	Houghton Mifflin Harcourt
Title:	Integrated Math 2
ISBN #	978 0544 389 861
Grade Level(s) or Course:	9-12
Reviewer ID:	TG & DSQ

RECOMMENDED AS:

__/__ **Core Mathematics Program-** a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials. Substantial evidence clearly supports the designation of this program as Core.

_____ **Other Mathematics Program-** a program that substantially, but partially, meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for supplemental materials. Substantial evidence clearly supports the designation of this program as Other.

_____ **Component Mathematics Program-** a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs. Substantial evidence clearly supports the designation of this program as Component.

_____ **Intervention Program-** a program designed and intended to target and support students' specific needs. Substantial evidence clearly supports the designation of this program as Intervention.

_____ **Does not meet criteria** for recommendation as a Curricular Material or Online Resource for Mathematics.

EVIDENCE SUMMARY:

FOCUS- 66% of the time students are focused on the WAT's. 6-8 Skills are prevelent throughout.

COHERENCE-
Eight chapters focus on Geometry.
Content is on course level.

RIGOR-
Rigor is at course level.

CONCEPTUAL UNDERSTANDING-
Procedual skills is main focus leading to conceptual skills.

MATHEMATICAL PRACTICES-
Mathematical practices are address throughout.

ACCESSIBILITY OF STANDARDS TO ALL STUDENTS-
Book scaffolds well.

OTHER:
Main focus is procedural skills

Many resources for teachers to use to reach a vairty of learners where their current understanding is. Easy to navigate. Book is allgined with the standards and is easy to find the allginment in the teachers edition. Nice glossary, however it is only supports English and Spanish readers. Focus is on procedual skills. The student edition is consumable however there is an on-line resource.

2015-1 nterim Mathematics Review

Mathematics Evaluation Tool – High School

Publisher: Houghton Mufflin Harcourt

Title of Material: Integrated Mathematics 2

Author: TD Kanold, EB Buger, JK Dixon, MR Larson SJ Leinwand

ISBN #: 9780544389861 **Copyright** 2015

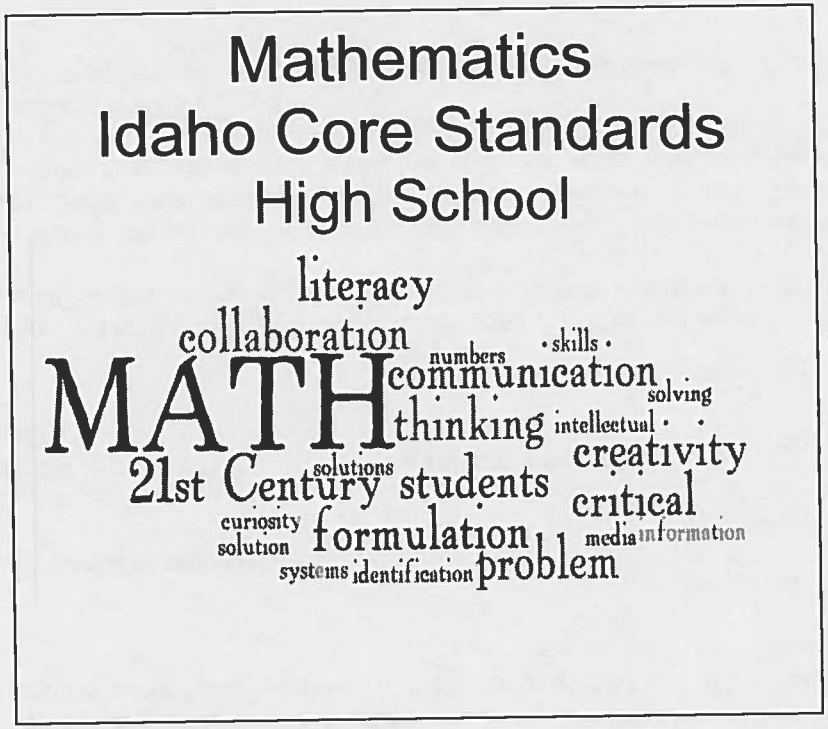
Reviewer ID: TG DJQ

Core Mathematics Program- a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Core.

Other Mathematics Program- a program that substantially, but partially, meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Other.

Component Mathematics Program- a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs.
Substantial evidence clearly supports the designation of this program as Component.

Intervention Program- a program designed and intended to target and support students' specific needs.
Substantial evidence clearly supports the designation of this program as Intervention.



- Evaluation Form adapted from Instructional Materials Evaluation Toolkit (IMET).

The IMET was developed by Student Achievement Partners. Educators may use or adapt. http://creativecommons.org/licenses/by/3.0/ Download this tool at http://achievethecore.org/IMET

Instructional Materials Evaluation Tool

Mathematics, High School

What Are the Purposes of the IMET?

This Math IMET is designed to help educators determine whether instructional materials are aligned to the Shifts and major features of the Common Core State Standards (CCSS). The substantial instructional Shifts (http://www.corestandards.org/other-resources/key-shifts-in-mathematics/) at the heart of the Common Core State Standards are:

- **Focus** strongly where the Standards focus
- **Coherence**: Think across grades and link to major topics within the grade
- **Rigor**: In major topics, pursue conceptual understanding, procedural skill and fluency, and application with equal intensity.

The IMET draws directly from the following documents:

- Common Core State Standards for Mathematics (www.corestandards.org/Math)
- Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013) (http://www. corestandards.org/wp-content/uploads/Math_Publishers_Criteria_ HS_Spring_2013_FINAL1.pdf)

When to use the IMET

1. Purchasing materials: Many factors go into local purchasing decisions. Alignment to the Standards is a critical factor to consider. This tool is designed to evaluate alignment of instructional materials to the Shifts and the major features of the CCSS. It also provides suggestions of additional indicators to consider in the materials evaluation and purchasing process
2. Evaluating materials currently in use: The IMET can be used to analyze the degree of alignment of existing materials and help to highlight specific, concrete flaws in alignment. Even where materials and tools currently in use fail to meet one or more of these criteria, the pattern of failure is likely to be informative. States and districts can use the evaluation to create a thoughtful plan to modify or combine existing resources in such a way that students' actual learning experiences approach the focus, coherence, and rigor of the Standards.
3. Developing programs: Those developing new programs can use this tool as guidance for creating aligned curricula.

Please note this tool was designed for evaluating comprehensive curricula (including any supplemental or ancillary materials), but it was not designed for the evaluation of standalone supplemental materials.

Who Uses the IMET?

Evaluating instructional materials requires both subject-matter and pedagogical expertise. Evaluators should be well versed in the Standards (www.corestandards.org/Math) for all grades in which materials are being evaluated. This includes understanding the Widely Applicable Prerequisites (www.achievethecore.org/prerequisites), how the content fits into the progressions in the Standards (www. achievethecore.org/progressions), and the expectations of the Standards with respect to conceptual understanding, procedural skill and fluency, and application. Evaluators also should be familiar with the substantial instructional Shifts (http://www.corestandards.org/other-resources/key-shifts-in-mathematics/) of Focus, Coherence and Rigor that are listed above.

Getting Started

Prior to Evaluation

Assemble all of the materials necessary for the evaluation. It is essential for evaluators to have materials for all grades covered by the program, as some criteria cannot be rated without having access to each grade. In addition, each evaluator should have a reference copy of the Common Core State Standards for Mathematics (CCSSM) and the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).

Before conducting the evaluation itself, it is important to develop a protocol for the evaluation process. The protocol should include having evaluators study the Publishers' Criteria and the IMET. It will also be helpful for evaluators to get a sense of each program overall before beginning the process. At a minimum, this would include reading the front matter of the text, looking at the table of contents and paging through multiple chapters.

Sections 1-3 below should be completed to produce a comprehensive picture of the strengths and weaknesses of the materials under evaluation. Information about areas in need of improvement or supplementation should be shared with internal and external stakeholders.

Navigating the Tool

Begin with Section 1: Non-Negotiable Alignment Criteria

- The Non-Negotiable Alignment Criteria must each be met in full for materials to be considered aligned to the Shifts and the major features of the Common Core State Standards. Each Non-Negotiable Alignment Criterion has one or more metrics associated with it; every one of these metrics must be met in order for the criterion as a whole to be met.

- Examine the relevant materials and use evidence to rate the materials against each criterion and its associated metric(s).

- Record and explain the evidence upon which the rating is based.

Continue to Section 2: Alignment Criteria

- The Alignment Criteria must each be met for materials to be considered aligned to the Shifts and the major features of the Common Core State Standards. Each Alignment Criterion has one or more metric associated with it; a specific number of these metrics must be met or partially met in order for the criterion as a whole to be met.

- Examine the materials in relation to these criteria, assigning each metric a point value. Rate the criterion as "Meets" or "Does Note Meet" based on the number of points assigned. The more points the materials receive on the alignment Criteria, the better they are aligned.

- Record and explain the evidence upon which the rating is based.

Proceed to Section 4: Indicators of Quality

- Indicators of Quality are important considerations that will help evaluators better understand the overall quality of instructional materials. These considerations are not criteria for alignment to the CCSS, but they provide valuable information about additional program characteristics. Evaluators may want to add their own indicators to the examples provided.

Directions for Non-Negotiable 1

Focus and Coherence

Criterion	Evidence- Give specific examples.	Rating: (Reviewer only.)
Non-Negotiable 1: Focus and Coherence- Materials must focus coherently on the Widely Applicable Prerequisites in a way that is consistent with the progressions in the Standards. Focus and coherence are the two major evidence-based design principles of the Common Core State Standards for Mathematics (CCSSM, p. 3). Focus is necessary in order to fulfill the ambitious promise the states have made to their students by adopting the Standards: greater achievement at the college and career-ready level; greater depth of understanding of mathematics; and a rich classroom environment in which reasoning, sense-making, applications, and a range of mathematical practices flourish. In high school courses, narrowing and deepening the curriculum creates a structure that ties topics together. Thus, materials must focus coherently on the Widely Applicable Prerequisites in a way that is consistent with the progressions in the Standards.	Focus and coherence are the two major evidence-based design principles of the Common Core State Standards for Mathematics (CCSSM, p. 3). Focus is necessary in order to fulfill the ambitious promise the states have made to their students by adopting the Standards: greater achievement at the college and career-ready level; greater depth of understanding of mathematics; and a rich classroom environment in which reasoning, sense-making, applications, and a range of mathematical practices flourish. In high school courses, narrowing and deepening the curriculum creates a structure that ties topics together. Thus, materials must focus coherently on the Widely Applicable Prerequisites in a way that is consistent with the progressions in the Standards. **Required Materials:** • Common Core State Standards for Mathematics (www.corestandards.org/wpcontent/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_HS_Spring_2013_FINAL1.pdf) • Widely Applicable Prerequisites for College and Careers (http://achievethecore.org/prerequisites) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion:** Non-Negotiable 1 is rated as Meets or Does Not Meet. To rate Non-Negotiable 1, first rate Metrics 1A–1H. Each of these eight metrics must be rated as Meets in order for Non-Negotiable 1 to be rated as Meets. Rate each metric 1A–1H as Meets or Does Not Meet/Insufficient Evidence. If the evidence examined shows that the Criterion is met, then mark the Criterion as Meets. If the evidence examined shows that the Criterion is not met—or if there is insufficient evidence to make a determination—then mark the Criterion as Does Not Meet/Insufficient Evidence. Support all ratings with evidence.

Metric NN1A: **In any single course, students spend at least 50% of their time on Widely Applicable Prerequisites.** **How to Find the Evidence:** Familiarize yourself with the Widely Applicable Prerequisites. Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, lessons, homework assignments, and assessments. (Evaluate both student and teacher materials.) Consider time spent on the Widely Applicable Prerequisites and judge qualitatively whether students and teachers using the materials as designed will devote the majority of time to the Widely Applicable Prerequisites For context, read Criterion #1 in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** 89 total lessons 59 cover WAP This is 66.3% of the time students will be ingaged with the WAP	✓ **Meets** ___ **Does Not Meet Insufficient Evidence**
Metric NN1B: **Student work in Geometry involves significant work with applications/modeling and problems that use algebra skills.** **How to Find the Evidence:** Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, lessons, homework assignments, and assessments. (Evaluate both student and teacher materials. NOTE: Since Geometry contains relatively fewer Widely Applicable Prerequisites, this Criterion is important to help foster students' college and career readiness. Problems that use algebra skills might include, for example, algebraic geometry problems in a coordinate setting, or problems of measurement involving unknown quantities.	**Evidence-** There are eight chapters devoted to geometry: Chapters 14-21 provides problems problems, examples, explorations that include algebra skills.	✓ **Meets** ___ **Does Not Meet Insufficient Evidence**

Metric NN1C: **There are problems at a level of sophistication appropriate to high school (beyond mere review of middle school topics) that involve the application of knowledge and skills from grades 6-8.** **How to Find the Evidence:** Evaluate lessons, chapter/unit assessments, and homework assignments. NOTE: Problems should include application of the following topics from grades 6-8: • Ratios and proportional relationships. • Percentage and unit conversions, e.g., in the context of complex measurement problems involving quantities with derived or compound units (such as mg/mL, kg/ m3, acre-feet, etc.). • Basic function concepts, e.g., by interpreting the features of a graph in the context of an applied problem. • Concepts and skills of geometric measurement e.g., when analyzing a diagram or schematic. • Concepts and skills of basic statistics and probability (see grades 6–8.SP) • Performing rational number arithmetic fluently. For context, read Table 1 on Page 8 of the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** "Are You Ready?" offers opportunity for students to work problems at a high school level that apply knowledge and skills from 6-8. Ex: Module 16: Students use their knowledge of ratios & proportions to solve problems.	✓ **Meets** ___ **Does Not Meet Insufficient Evidence**
Metric NN1D: **Materials base courses on the content specified in the Standards.** **How to Find the Evidence:** Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, and lessons in both student and teacher materials. For context, read Criterion #3a in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** Each section, example, exploration & problem set corresponds to the standards	✓ **Meets** ___ **Does Not Meet Insufficient Evidence**
Metric NN1E: **Materials give all students extensive work with course-level problems.** **How to Find the Evidence:** Evaluate both student and teacher materials. If the materials provide resources for differentiated learning, consider whether lower-performing students have opportunities to engage with course-level problems. Also consider whether higher-performing students are given opportunities to learn current course-level content in greater depth. For context, read Criterion #3b in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** Differentiated Instruction Resources provided for each chapter: Challenge, Reading Strategies, Prerequisit Skills practice, Alternative Strategies Extension Activities	✓ **Meets** ___ **Does Not Meet Insufficient Evidence**

Metric NN1F: **Materials relate course-level concepts explicitly to prior knowledge from earlier grades or courses. The materials are designed so that prior knowledge becomes reorganized and extended to accommodate the new knowledge.** **How to Find the Evidence:** Evaluate student and teacher materials, looking for problems that involve extending the knowledge learned in earlier grades and courses. NOTE: An example of evaluating this Criterion might be to look at whether materials connect the equation of a circle with the distance formula and the Pythagorean theorem. For context, read Criterion #3c in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** Each Chapter starts with "Are You Ready?"; "These problems are review of skills that are needed to be successful in the coming chapter. The real world video which helps students relate real world and prior knowledge to the lessons.	✓ **Meets** ___ **Does Not Meet Insufficient Evidence**
Metric NN1G: **Materials include learning objectives that are visibly shaped by CCSSM cluster and domain headings.** **How to Find the Evidence:** Select several clusters from the course being evaluated. Evaluate teacher and student materials in relation to these clusters. For context, read Criterion #4a in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** Each lesson is designed to meet one or more of the CCSSM. The units are aligned with the standards listed in the pathways.	✓ **Meets** ___ **Does Not Meet Insufficient Evidence**
Metric NN1H: **Materials include problems and activities that serve to connect two or more clusters in a domain, or two or more domains in a category, or two or more categories, in cases where these connections are natural and important.** **How to Find the Evidence:** In the course being evaluated, choose two or more clusters, two or more domains, or two or more categories for which connections are natural and important. Evaluate the units, chapters, and lessons that deal with the chosen topics, looking for problems and activities that serve to connect the chosen clusters or domains. NOTE: An example of evaluating this Criterion might be to look at whether materials include problems in which students analyze a situation by building a function, graphing it, and using it to create and solve an equation. For context, read Criterion #4b in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** "Assessment Readiness" section is designed to help students make connections between clusters, domains and categories Ex: Unit 7 Assessment Readiness" Item 3; 5 relate to other clusters, domains; categories	✓ **Meets** ___ **Does Not Meet Insufficient Evidence**

Non-Negotiable 1: Focus and Coherence- Materials must focus coherently on the Widely Applicable Prerequisites in a way that is consistent with the progressions in the Standards.

Metric NN 1: If all metrics 1A–1H were rated as Meets, then rate Non-Negotiable 1 as Meets. If one or more metrics were rated as Does Not Meet/Insufficient Evidence, then rate Non-Negotiable 1 as Does Not Meet. Check the final rating.
Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)**

Before moving to Alignment Criterion 1, record the final Meets or Does Not Meet rating in the Evaluation Summary.

✓ **Meets**

Does Not Meet

Strengths/Weaknesses

Focus & Coherence on the WAP is met. Alignment to the standards is clear.

Now continue by evaluating Alignment Criterion 1 for Rigor and Balance.

Directions for Alignment Criterion 1

Rigor and Balance

Alignment Criterion 1:
Rigor and Balance- Materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.

The Standards set expectations for attention to all three aspects of rigor: conceptual understanding, procedural skill and fluency, and applications. Thus, materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.

The Standards set expectations for attention to all three aspects of rigor: conceptual understanding, procedural skill and fluency, and applications. Thus, materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.

- Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf)
- Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_HS_Spring_2013_FINAL1.pdf)
- Widely Applicable Prerequisites for College and Careers (http://achievethecore.org/prerequisites)
- From the materials being evaluated: teacher guides, student texts and workbooks

Rating this Criterion:

Alignment Criterion 1 is rated as Meets or Does Not Meet.

To rate Alignment Criterion 1, first rate metrics 1A, 1B, and 1C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). For each metric, guiding questions are provided to aid in gathering evidence.

Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 1 if the materials rate 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as rigor and balance, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.

AC Metric 1A: **The materials support the development of students' conceptual understanding of key mathematical concepts, especially where called for in specific content Standards or cluster headings.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Widely Applicable Prerequisites that relate specifically to conceptual understanding to use throughout the questions associated with this metric. NOTE: Some examples of clusters or Standards that call for conceptual understanding include: N-RN.A.1, A-APR.B, A-REI.A.1, A-REI.D.10, A.REI.D.11, F.IF.A.1, F-LE.A.1, G.SRT.A.2, G-SRT.C.6, S-ID.C.7 For context, read Criterion #2a in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	• Choose a cluster/Standard from the Widely Applicable Prerequisites that is aligned to each aspect of rigor and use it to evaluate these metrics. It is most helpful if the same clusters and Standards are chosen for all of the programs being evaluated. (Guidance in choosing clusters/Standards is included in "How to Find the Evidence" below.)	**Use the questions for AC Metric 1A to evaluate Metric 1A. Record evidence for each question and rate Metric 1A.** ____**Meets (2)** __✓__**Partially Meets (1)** ____**Does Not Meet (0)**
Is conceptual understanding attended to thoroughly where the Standards set explicit expectations for understanding or interpreting? Evaluate lessons, chapter/unit assessments and homework assignments, paying attention to work aligned to Standards that explicitly call for understanding or interpreting.	**Evidence-** Focuses on procedural skills, but tries to draw out the conceptual understandings	
Do the materials feature high-quality conceptual problems and conceptual discussion questions? Evaluate lessons, chapter/unit assessments, and homework assignments. NOTE: Examples of conceptual problems might include such questions as "What is the maximum value of the function f(t) = 5 – t2 ?" or "Is √2 a polynomial? How about ½(x + √2)+ ½ (-x + √2)?"	**Evidence-** "Performance" Tasks are conceptual problems; TE offers discussion questions.	
Do the materials feature opportunities to identify correspondences across mathematical representations? Evaluate lessons, chapter/unit assessments and homework assignments. NOTE: An example of evaluating this metric might include looking at whether materials support students in identifying correspondences among the expression that defines a function, the graph that shows the relationship, and the behavior of the phenomenon being modeled (if any).	**Evidence-** Multiple representations are used, however using the same equation across multiple representations is weak.	

AC Metric 1B: **The materials are designed so that students attain the fluencies and procedural skills required by the Standards.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Widely Applicable Prerequisites that relate specifically to fluency and procedural skill to use throughout the questions associated with this metric. NOTE: Some examples of Standards that call for procedural skill and fluency include: A-SSE.A.1b, A-SSE.2, A-APR.A.1, A-APR.C.6, F-BF.B.3, G-GPE.B.4, G-GPE.B.5, G-GPE.B.7, G-CO.A.1, G-SRT.B.5 For context, read Criterion #2b in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).		**Use the questions for AC Metric 1B to evaluate Metric 1B. Record evidence for each question and rate Metric 1B.** ✓ **Meets (2)** ____ **Partially Meets (1)** ____ **Does Not Meet (0)**
Is progress toward fluency and procedural skill interwoven with the student's developing conceptual understanding of the skills in question? Evaluate lessons, chapter/unit assessments, daily routines, and homework assignments for evidence that the development of fluency and procedural skill is supported by conceptual understanding.	**Evidence-** The flow of the text is procedural to conceptual.	
Are purely procedural problems and exercises present that include cases in which opportunistic strategies are valuable and generic cases that require efficient and general procedures present? Evaluate lessons, chapter/unit assessments, daily routines, and homework assignments. NOTE: Problems in which opportunistic strategies are valuable might include such examples as solving x2 + 5 = 49 + 5 or (3x – 2)2 = 6x – 4. Generic cases that require efficient and general procedures might include such problems as solving c + 8 – c2 = 3(c – 1)2 – 5).	**Evidence-** The procedural problems provide opportunities for students to choose which strategy is best.	
AC Metric 1C: **The materials are designed so that teachers and students spend sufficient time working with engaging applications, without losing focus on the Widely Applicable Prerequisites.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Widely Applicable Prerequisites that relate specifically to application to use throughout the questions associated with this metric. NOTE: Some examples of clusters or Standards that call for application include: N-Q.A, A-SSE.B.3, A-REI.D.11, F-IF.B, F-IF.C.7, F-BF.A.1, G-SRT.C.8, S-ID.A.2, S-IC.A.1 For context, read Criterion #2c in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).		**Use the questions for AC Metric 1C to evaluate Metric 1C. Record evidence for each question and rate Metric 1C.** ✓ **Meets (2)** ____ **Partially Meets (1)** ____ **Does Not Meet (0)**
Are there single- and multi-step contextual problems, including non-routine problems, that develop the mathematics of the course, afford opportunities for practice, and engage students in problem solving? Do the problems attend thoroughly to those places in the content Standards where expectations for multi-step and real-world problems are explicit? Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** The "Performance Task" afford the opportunity for the student to practice single step & multi-step contextual problems.	

Do application problems particularly stress applying the Widely Applicable Prerequisites? Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** The applications problems stress the WAP. The application problems consist of the "Performance Task"	
Are there ample opportunities for students to engage with modeling problems? Do materials require students to use both individual parts of the modeling cycle as well as the full modeling cycle? Read the pages on High School—Modeling in the Standards for Mathematics (pp. 72 and 73). Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** Modeling problems can be found in the Ready to Go On section.	

Alignment Criterion 1: Materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.

AC 1: Materials must earn at least 5 of 6 points to meet this Alignment Criterion. If materials earn less than 5 points, the Criterion has not been met. Check the final rating.
Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)**

Before moving to Alignment Criterion 2, record the final Meets or Does Not Meet rating in the Evaluation Summary.

✓ **Meets**

___ **Does Not Meet**

Strengths/Weaknesses: There is rigor & balance.

Alignment Criterion 2: **Standards for Mathematical Practice- Materials must demonstrate authentic connections between content Standards and practice Standards.** The Standards require that designers of instructional materials connect the mathematical practices to mathematical content in instruction. Thus, materials must demonstrate authentic connections between content Standards and practice Standards.	The Standards require that designers of instructional materials connect the mathematical practices to mathematical content in instruction. Thus, materials must demonstrate authentic connections between content Standards and practice Standards. **Required Materials**: • Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_HS_Spring_2013_FINAL1.pdf) • Widely Applicable Prerequisites for College and Careers (http://achievethecore.org/prerequisites) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion:** Alignment Criterion 2 is rated as Meets or Does Not Meet. To rate Alignment Criterion 2, first rate metrics 2A, 2B, and 2C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). For each metric, guiding questions are provided to aid in gathering evidence. Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 2 if the materials rate 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as mathematical practices, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.

AC Metric 2A: **Materials address the practice Standards in such a way as to enrich the Widely Applicable Prerequisites; practices strengthen the focus of the course instead of detracting from it, in both teacher and student materials.** **How to Find the Evidence:** Familiarize yourself with the Widely Applicable Prerequisites. Evaluate teacher and student materials for evidence that the mathematical practices support and connect to the focus of the course. NOTE: An example of evaluating this Criterion might include looking at whether materials use regularity in repeated reasoning to illuminate formal algebra as well as functions, particularly recursive definitions of functions. For context, read Criterion #6 in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** The WAP are addressed in the practice standards In the Teacher edition for each set of Homework/ Practice there is a table at the bottom connecting Math Practice to each problem. Ex: 288 bottom	✓ Meets (2) ___ Partially Meets (1) ___ Does Not Meet (0)
AC Metric 2B: **Materials attend to the full meaning of each practice Standard.** **How to Find the Evidence:** For context, read Criterion #7 in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).		**Use the questions for AC Metric 2B to evaluate Metric 2B. Record evidence for each question and rate Metric 2B.** ✓ Meets (2) ___ Partially Meets (1) ___ Does Not Meet (0)
Over the course of any given year of instruction, is each mathematical practice Standard meaningfully present in the form of assignments, activities, or problems that stimulate students to develop the habits of mind described in the practice Standard? Evaluate lessons, chapter/ unit assessments, and homework assignments for evidence of each mathematical practice being meaningfully present in instruction.	**Evidence-** Practices are listed in each lesson and addressed throughout. Sometimes this is forced not natural.	
Are teacher-directed materials that explain the role of the practice Standards in the classroom and in students' mathematical development included? Are alignments to practice Standards accurate? Evaluate teacher materials, paying attention to explanations of the role of the practice Standards in the classroom and in students' mathematical development. Evaluate documents aligning lessons to practice Standards for accuracy. NOTE: Examples to look for when evaluating this metric might include the following: a highly scaffolded problem should not be aligned to MP.1; or a problem that directs a student to use a calculator should not be aligned to MP.5; or a problem about merely extending a pattern should not be aligned to MP.8.	**Evidence-** Alignment is accurate and is present in each lesson Tends to take the "I" out of the standards.	

AC Metric 2C: **Materials support the Standards' emphasis on mathematical reasoning.** **How to Find the Evidence:** For context, read Criterion #8 in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).		Use the questions for AC Metric 2C to evaluate Metric 2C. Record evidence for each question and rate Metric. ✓ **Meets (2)** ____ **Partially Meets (1)** ____ **Does Not Meet (0)**
Do the materials support students in constructing viable arguments and critiquing the arguments of others concerning course-level mathematics that is detailed in the content Standards? Read Standard for Mathematical Practice 3. Evaluate teacher and student materials to ensure that students are given opportunities to reason with grade-level mathematics.	**Evidence-** Performance Tasks. are requires to construct viable arguments & There are Peer to Peer activities. There are Journal prompts.	
Do the materials support students in producing not only answers and solutions, but also, in a course-appropriate way, arguments, explanations, diagrams, mathematical models, etc., especially in the Widely Applicable Prerequisites? Familiarize yourself with the Widely Applicable Prerequisites. Evaluate teacher and student materials to understand the types of work students are expected to produce.	**Evidence-** Application and contextual problems require students to use arguments, explanations, diagrams, mathematical models.	
Do materials explicitly attend to the specialized language of mathematics? Is the language of argument, problem solving, and mathematical explanations taught rather than assumed? Evaluate teacher and student materials, paying attention to how mathematical language is taught. NOTE: An example of evaluating this Criterion might include looking at whether students are supported in: basing arguments on definitions; using the method of providing a counter example; or recognizing that examples alone do not establish a general statement.	**Evidence-** The language of argument, problem solving and math explanations taught throughout.	

Alignment Criterion 2: Materials must demonstrate authentic connections between content Standards and practice Standards.

✓ **Meets**

____ **Does Not Meet**

AC 2: Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 points, the Criterion has not been met. Check the final rating.
Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewers only.)**

Strengths/Weaknesses:
The materials do connect content standards to the practice standards

Before moving to Alignment Criterion 3, record the final Meets or Does Not Meet rating in the Evaluation Summary.

Alignment Criterion 3: **Access to the Standards for All Students- Materials must provide supports for English Language Learners and other special populations.** Because Standards are for all students, alignment requires thoughtful support to ensure all students are able to meet the Standards. Thus, aligned materials must provide supports for English Language Learners and other special populations.	Because Standards are for all students, alignment requires thoughtful support to ensure all students are able to meet the Standards. Thus, aligned materials must provide supports for English Language Learners and other special populations. **Required Materials:** • Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math Publishers_Criteria_HS_Spring_2013_FINAL1.pdf) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion:** Alignment Criterion 3 is rated as Meets or Does Not Meet. To rate Alignment Criterion 3, first rate metrics 3A, 3B, and 3C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 3 if the materials rate 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as support for special population, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.
AC Metric 3A: **Support for English Language Learners and other special populations is thoughtful and helps those students meet the same Standards as all other students. The language in which problems are posed is carefully considered.** **How to Find the Evidence:** Evaluate teacher and student materials, paying attention to supports offered for special populations.	**Evidence-** Glossary has visual where appropriate On-line resources for ~~sta~~ teachers	✓ **Meets (2)** **Partially Meets (1)** **Does Not Meet (0)**
AC Metric 3B: **Materials provide appropriate level and type of scaffolding, differentiation, intervention, and support for a broad range of learners with gradual removal of supports, when needed, to allow students to demonstrate their mathematical understanding independently.** **How to Find the Evidence:** Evaluate teacher and student materials, paying attention to whether materials provide differentiation that will lead all learners to engage with on-grade-level content.	**Evidence-** Teacher Resources have differentiation resources to help at all levels. The Personal Math Trainer is for personalized instruction	✓ **Meets (2)** **Partially Meets (1)** **Does Not Meet (0)**
AC Metric 3C: **Design of lessons recommends and facilitates a mix of instructional approaches for a variety of learners such as using multiple representations (e.g., including models, using a range of questions, checking for understanding, flexible grouping, pair-share).** **How to Find the Evidence:** Evaluate teacher materials, noting instructional approaches suggested for whole class and differentiated lessons and activities.	**Evidence-** Variety of strategies are present for each lesson ex. Question Strategies, Collaborative Learning Peer to Peer Active Differentiated Instruction & Language Support.	✓ **Meets (2)** **Partially Meets (1)** **Does Not Meet (0)**

Alignment Criterion 3: Materials must provide supports for English Language Learners and other special populations. AC 3 Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 points, the Criterion has not been met. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewers only.)** **Move to the Evaluation Summary and record the final Meets or Does Not Meet rating .**	✓ **Meets** ____ **Does Not Meet** **Strengths/Weaknesses:** The glossary only supports English and Spanish, however On-line resource for "Success for English Learners"

Once an evaluation for alignment to the Shifts and major features of the CCSS has been conducted using Sections 1-3, it's important to evaluate for overall quality and best practices. A starting list of Indicators of Quality are suggested below. States, districts and others evaluating instructional materials are encouraged to add to this list to ensure materials reflect local contexts. For background information on some of the Indicators of Quality in this section, refer to pp.16–18 in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).

Indicators of Quality	**Evidence- Give specific examples.**	**Rating: (Reviewer only.)**
1. Lessons are thoughtfully structured and support the teacher in leading the class through the learning paths at hand, with active participation by all students in their own learning and in the learning of their classmates.	**Evidence-** The lessons are structured on engage, Explore, Explain Elaborate, Evaluate.	**(Reviewer only.)** ✓ **Yes** ____ **No**
2. The underlying design of the materials includes both problems and exercises. (In solving problems, students learn new mathematics, whereas in working exercises, students apply what they have already learned to build mastery.) Each problem or exercise has a purpose. **NOTE: This Criterion does not require that the problems and exercises be labeled as such.**	**Evidence-** The problem sets start with practice problems then builds to Mastery Problems and Problem Solving questions	**(Reviewer only.)** ✓ **Yes** ____ **No**

3. Design of assignments is not haphazard: exercises are given in intentional sequences in order to strengthen students' mathematical understanding.	Evidence- The lessons are given in an intentional sequence. This helps to strengthens the mathematical understanding for the students.	(Reviewer only.) ✓ Yes ____ No
4. There are separate teacher materials that support and reward teacher study including, but not limited to: discussion of the mathematics of the units and the mathematical point of each lesson as it relates to the organizing concepts of the unit, discussion on student ways of thinking and anticipating a variety of students responses, guidance on lesson flow, guidance on questions that prompt students thinking, and discussion of desired mathematical behaviors being elicited among students.	Evidence- There is an on-line teacher Resource that offeres support for teachers.	(Reviewer only.) ✓ Yes ____ No
5. Manipulatives suggested in the materials are faithful representations of the mathematical objects they represent and are connected to written methods.	Evidence- There are on-line resources, no kinesthetics	(Reviewer only.) ✓ Yes ____ No
6. Materials include a variety of curriculum-embedded assessments. Examples include pre-, formative, summative, and self-assessment resources.	Evidence- There are a variety of on-line curriculum-embeded assessments.	(Reviewer only.) ✓ Yes ____ No
7. Assessments contain aligned rubrics, answer keys, and scoring guidelines that provide sufficient guidance for interpreting student performance.	Evidence- There ar rubrics for the Peaformance Assessment.	(Reviewer only.) ✓ Yes ____ No
8. Materials assess student proficiency using methods that are accessible and unbiased, including the use of course-level language in student prompts.	Evidence- The materials assess students proficiency at course level language.	(Reviewer only.) ✓ Yes ____ No

9. Materials are carefully evaluated by qualified individuals whose names are listed, in an effort to ensure freedom from mathematical errors and course-level appropriateness.	Evidence- yes see inside front of textbook	(Reviewer only.) ✓ Yes ____ No
10. The visual design supports students in engaging thoughtfully with the subject. Navigation through the text is clear.	Evidence- Navagation is clear The design is not too busy. diagrams & pictures are appropriate	(Reviewer only.) ✓ Yes ____ No

Reviewer IMET Evaluation Summary **Title/Level:** Integrated Math 2 / 9-12

Publisher: Houghton Mifflin Harcourt **Copyright:** 2015 **ISBN:** 9 March 2016

Reviewer ID # JG & DJQ **Date Review Completed:** 9780544389861

Non-Negotiable Criteria-The Non-Negotiable must be met in order for the Non-Negotiable Alignment Criteria to be met overall.

Non- Negotiable 1: Focus and Coherence

✓ **Meets**

____ **Does Not Meet**

Non-Negotiable Overall:

_____ **Meets** _____ **Does Not Meet**

Alignment Criteria- Each Alignment Criterion must be met with a sufficient number of points in order for Alignment Criteria to be labeled as "Meets" overall. The more points the materials receive on the Alignment Criteria, the better they are aligned.

Alignment Criterion 1: Rigor and Balance	**Alignment Criterion 2: Standards of Mathematical Practice**	**Alignment Criterion 3: Access to Standards for All Learners**
Points: 5 **of 6 possible.** **(Materials must receive at least 5 of 6 points to align.)**	**Points:** 6 **of 6 possible.** **(Materials must receive at least 5 of 6 points to align.)**	**Points:** 6 **of 6 possible.** **(Materials must receive at least 5 of 6 points to align.)**
✓ **Meets**	✓ **Meets**	✓ **Meets**
_____ **Does Not Meet**	_____ **Does Not Meet**	_____ **Does Not Meet**

Alignment Criteria Overall:

✓ **Meets** _____ **Does Not Meet**

If the materials meet the Non-Negotiable Criterion and each Alignment Criterion, they are aligned to the Shifts and major features of the Co Standards. **Do the materials meet every Non-Negoti e and Alignment Criterion?** ✓ **Yes** ____ **No**

What are the specific areas of strength and weakness based on this evaluation? Publishers or others modifying or developing assessments can use this information to make improvements and/or to remedy gaps in the alignment of assessment materials.

Many resources for the teacher to use to reach students where they are at. Easy to navagate. Book is alligned with the standards and is easy to find the allignment in the teachers edition. Nice Glossary, however it is only supported for English and Spanish. Focus is on procedural skills. The student edition is consumable, however there are on-line resources.

2015-16 Mathematics Interim Review Recommendation & Summary

Publisher Name:	HMH
Title:	Integrated Math 3
ISBN #	978-0554471263
Grade Level(s) or Course:	High School - Jr or Sr
Reviewer ID:	MK & CJ

RECOMMENDED AS:

✓

_____**Core Mathematics Program-** a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials. Substantial evidence clearly supports the designation of this program as Core.

_____**Other Mathematics Program-** a program that substantially, but partially, meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for supplemental materials. Substantial evidence clearly supports the designation of this program as Other.

_____**Component Mathematics Program-** a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs. Substantial evidence clearly supports the designation of this program as Component.

_____**Intervention Program-** a program designed and intended to target and support students' specific needs. Substantial evidence clearly supports the designation of this program as Intervention.

_____ **Does not meet criteria** for recommendation as a Curricular Material or Online Resource for Mathematics.

EVIDENCE SUMMARY:

FOCUS- Meets the more than 50% of time on WAPs. Includes more geometry.

COHERENCE- Aligns with the Standards and makes connections across clusters. Attends to (+) Standards. Math Background teacher notes support coherent development of concepts.

RIGOR- Essential Questions & Performance Tasks focus on the mathematics in authentic manner. Higher-order tasks included in each section.

CONCEPTUAL UNDERSTANDING-

Multi-step contextual problems & higher-order thinking tasks encourage communication of & about the mathematics

Contexts are engaging.

MATHEMATICAL PRACTICES-

Teacher materials highlight practices throughout; visible in teacher edition as well.

Persevering in problem solving (MP1) and tool choice (MP5) are perhaps weakest.

ACCESSIBILITY OF STANDARDS TO ALL STUDENTS-

Language support visible for all lessons. Scaffolding and differentiation suggestions also easily accessible.

Personal Math Trainer available & user-friendly

Online tools exist as good support.

OTHER:

Inclusion of geometry topics would support accelerated students who would benefit from more of a geometry strand.

2015-1 nterim Mathematics Review

Mathematics Evaluation Tool – High School

Publisher: HMH

Title of Material: Integrated Math 3

Author: Kunold, Burger, Dixon, Larson, Leinwand

ISBN #: 978-0554671263 **Copyright** 2015

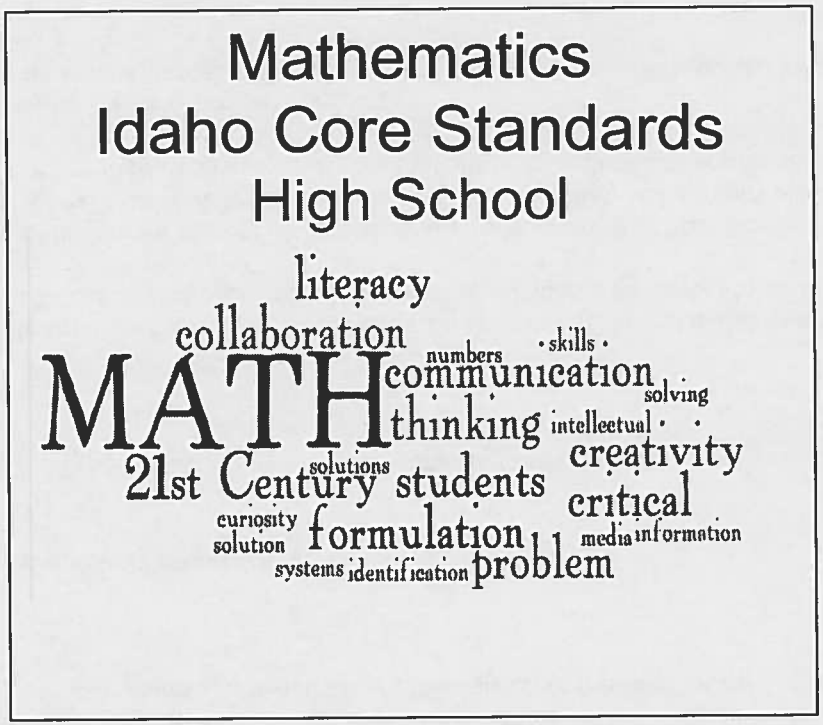
Reviewer ID: MK & CJ

Core Mathematics Program- a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Core.

Other Mathematics Program- a program that substantially, but partially, meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Other.

Component Mathematics Program- a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs.
Substantial evidence clearly supports the designation of this program as Component.

Intervention Program- a program designed and intended to target and support students' specific needs.
Substantial evidence clearly supports the designation of this program as Intervention.



- Evaluation Form adapted from Instructional Materials Evaluation Toolkit (IMET).

The IMET was developed by Student Achievement Partners. Educators may use or adapt. http://creativecommons.org/licenses/by/3.0/ Download this tool at http://achievethecore.org/IMET

Instructional Materials Evaluation Tool

Mathematics, High School

What Are the Purposes of the IMET?

This Math IMET is designed to help educators determine whether instructional materials are aligned to the Shifts and major features of the Common Core State Standards (CCSS). The substantial instructional Shifts (http://www.corestandards.org/other-resources/key-shifts-in-mathematics/) at the heart of the Common Core State Standards are:

- **Focus** strongly where the Standards focus
- **Coherence**: Think across grades and link to major topics within the grade
- **Rigor**: In major topics, pursue conceptual understanding, procedural skill and fluency, and application with equal intensity.

The IMET draws directly from the following documents:

- Common Core State Standards for Mathematics (www.corestandards.org/Math)
- Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013) (http://www. corestandards.org/wp-content/uploads/Math_Publishers_Criteria_ HS_Spring_2013_FINAL1.pdf)

When to use the IMET

1. Purchasing materials: Many factors go into local purchasing decisions. Alignment to the Standards is a critical factor to consider. This tool is designed to evaluate alignment of instructional materials to the Shifts and the major features of the CCSS. It also provides suggestions of additional indicators to consider in the materials evaluation and purchasing process
2. Evaluating materials currently in use: The IMET can be used to analyze the degree of alignment of existing materials and help to highlight specific, concrete flaws in alignment. Even where materials and tools currently in use fail to meet one or more of these criteria, the pattern of failure is likely to be informative. States and districts can use the evaluation to create a thoughtful plan to modify or combine existing resources in such a way that students' actual learning experiences approach the focus, coherence, and rigor of the Standards.
3. Developing programs: Those developing new programs can use this tool as guidance for creating aligned curricula.

Please note this tool was designed for evaluating comprehensive curricula (including any supplemental or ancillary materials), but it was not designed for the evaluation of standalone supplemental materials.

Who Uses the IMET?

Evaluating instructional materials requires both subject-matter and pedagogical expertise. Evaluators should be well versed in the Standards (www.corestandards.org/Math) for all grades in which materials are being evaluated. This includes understanding the Widely Applicable Prerequisites (www.achievethecore.org/prerequisites), how the content fits into the progressions in the Standards (www. achievethecore.org/progressions), and the expectations of the Standards with respect to conceptual understanding, procedural skill and fluency, and application. Evaluators also should be familiar with the substantial instructional Shifts (http://www.corestandards.org/other-resources/key-shifts-in-mathematics/) of Focus, Coherence and Rigor that are listed above.

Getting Started

Prior to Evaluation

Assemble all of the materials necessary for the evaluation. It is essential for evaluators to have materials for all grades covered by the program, as some criteria cannot be rated without having access to each grade. In addition, each evaluator should have a reference copy of the Common Core State Standards for Mathematics (CCSSM) and the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).

Before conducting the evaluation itself, it is important to develop a protocol for the evaluation process. The protocol should include having evaluators study the Publishers' Criteria and the IMET. It will also be helpful for evaluators to get a sense of each program overall before beginning the process. At a minimum, this would include reading the front matter of the text, looking at the table of contents and paging through multiple chapters.

Sections 1-3 below should be completed to produce a comprehensive picture of the strengths and weaknesses of the materials under evaluation. Information about areas in need of improvement or supplementation should be shared with internal and external stakeholders.

Navigating the Tool

Begin with Section 1: Non-Negotiable Alignment Criteria

- The Non-Negotiable Alignment Criteria must each be met in full for materials to be considered aligned to the Shifts and the major features of the Common Core State Standards. Each Non-Negotiable Alignment Criterion has one or more metrics associated with it; every one of these metrics must be met in order for the criterion as a whole to be met.

- Examine the relevant materials and use evidence to rate the materials against each criterion and its associated metric(s).

- Record and explain the evidence upon which the rating is based.

Continue to Section 2: Alignment Criteria

- The Alignment Criteria must each be met for materials to be considered aligned to the Shifts and the major features of the Common Core State Standards. Each Alignment Criterion has one or more metric associated with it; a specific number of these metrics must be met or partially met in order for the criterion as a whole to be met.

- Examine the materials in relation to these criteria, assigning each metric a point value. Rate the criterion as "Meets" or "Does Note Meet" based on the number of points assigned. The more points the materials receive on the alignment Criteria, the better they are aligned.

- Record and explain the evidence upon which the rating is based.

Proceed to Section 4: Indicators of Quality

- Indicators of Quality are important considerations that will help evaluators better understand the overall quality of instructional materials. These considerations are not criteria for alignment to the CCSS, but they provide valuable information about additional program characteristics. Evaluators may want to add their own indicators to the examples provided.

Directions for Non-Negotiable 1

Focus and Coherence

Criterion	Evidence- Give specific examples.	Rating: (Reviewer only.)
Non-Negotiable 1: Focus and Coherence- Materials must focus coherently on the Widely Applicable Prerequisites in a way that is consistent with the progressions in the Standards. Focus and coherence are the two major evidence-based design principles of the Common Core State Standards for Mathematics (CCSSM, p. 3). Focus is necessary in order to fulfill the ambitious promise the states have made to their students by adopting the Standards: greater achievement at the college and career-ready level; greater depth of understanding of mathematics; and a rich classroom environment in which reasoning, sense-making, applications, and a range of mathematical practices flourish. In high school courses, narrowing and deepening the curriculum creates a structure that ties topics together. Thus, materials must focus coherently on the Widely Applicable Prerequisites in a way that is consistent with the progressions in the Standards.	Focus and coherence are the two major evidence-based design principles of the Common Core State Standards for Mathematics (CCSSM, p. 3). Focus is necessary in order to fulfill the ambitious promise the states have made to their students by adopting the Standards: greater achievement at the college and career-ready level; greater depth of understanding of mathematics; and a rich classroom environment in which reasoning, sense-making, applications, and a range of mathematical practices flourish. In high school courses, narrowing and deepening the curriculum creates a structure that ties topics together. Thus, materials must focus coherently on the Widely Applicable Prerequisites in a way that is consistent with the progressions in the Standards. **Required Materials:** • Common Core State Standards for Mathematics (www.corestandards.org/wpcontent/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_HS_Spring_2013_FINAL1.pdf) • Widely Applicable Prerequisites for College and Careers (http://achievethecore.org/prerequisites) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion:** Non-Negotiable 1 is rated as Meets or Does Not Meet. To rate Non-Negotiable 1, first rate Metrics 1A–1H. Each of these eight metrics must be rated as Meets in order for Non-Negotiable 1 to be rated as Meets. Rate each metric 1A–1H as Meets or Does Not Meet/Insufficient Evidence. If the evidence examined shows that the Criterion is met, then mark the Criterion as Meets. If the evidence examined shows that the Criterion is not met—or if there is insufficient evidence to make a determination—then mark the Criterion as Does Not Meet/Insufficient Evidence. Support all ratings with evidence.

Metric NN1F: **Materia[illegible]late course-level concepts explicitly to prior knowledge from earlier grades or courses. The materials are designed so that prior knowledge becomes reorganized and extended to accommodate the new knowledge.** **How to Find the Evidence:** Evaluate student and teacher materials, looking for problems that involve extending the knowledge learned in earlier grades and courses. NOTE: An example of evaluating this Criterion might be to look at whether materials connect the equation of a circle with the distance formula and the Pythagorean theorem. For context, read Criterion #3c in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** See notes on NN1C[illegible]e about connections to MS standards. Math Background discussions in teacher materials are nice. These are also visible throughout the units (not just at start of unit; "Tracking learning progression" notes included in each lesson). Some discussions may be minimal in terms of the Standards. For example, the Standards ask for seeing polynomials as a system with properties similar to natural numbers (closure, etc.). This idea is discussed briefly in the math background related to complex numbers ("closed algebraically") but not explicitly with respect to polynomials, and not explicitly with respect to complex numbers in the student materials. That is, a teacher could choose to highlight this, but the materials do not make it explicit. Examples: Lesson 5.1: Builds upon the work done in MS and Mathematics I regarding transformation (F-BF.B.3), starting with exploration into translations and then reflections and stretch/compression. Lesson 8.1: Takes the above further and applies transformation rules to the graphs of simple rational functions, exploring end behavior and asymptotes. Lesson 18.3: Using a Pythagorean Identity. Learned previously, the Pythagorean Theorem is applied to trigonometric ratios.	**X Meets** **____Does Not Meet** **Insufficient Evidence**

Metric NN1G: **Materials include learning objectives that are visibly shaped by CCSSM cluster and domain headings.** **How to Find the Evidence:** Select several clusters from the course being evaluated. Evaluate teacher and student materials in relation to these clusters. For context, read Criterion #4a in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** Each lesson is targeted at a specific standard and the learning objective is listed explicitly, with no change, in the teacher textbook. References to supporting standards, mathematical process standards, and language objectives are included. The student text does not include the above, but it does start with an essential question that reflects the learning objective. Lessons in both versions of the textbook end with an essential question check-in that expands upon the question by adding any parts of the standard. For instance: Lesson 4.2: G-MG.A.1: Use geometric shapes, their measures, and their properties to describe objects. Essential Question: How can you model real-world situations involving density? Performance task is connected ("find the density of a gold pyramid") Lesson 4.3: Same standard as above. Essential Question: How can you model situations to meet real world constraints? Lesson 8.2: F-IF.C.7d: Graph rational functions, identifying zeros and asymptotes when suitable factorizations are available, and showing end behavior. Essential Question: What features of the graph of a rational function should identify in order to sketch the graph? How do you identify these features? Lesson 19.4: F-TF.B.5: Choose trig. Functions to model periodic phenomena… Essential Question: How can you model data using a sine function?	**X Meets** **____Does Not Meet Insufficient Evidence**
Metric NN1H: **Materials include problems and activities that serve to connect two or more clusters in a domain, or two or more domains in a category, or two or more categories, in cases where these connections are natural and important.** **How to Find the Evidence:** In the course being evaluated, choose two or more clusters, two or more domains, or two or more categories for which connections are natural and important. Evaluate the units, chapters, and lessons that deal with the chosen topics, looking for problems and activities that serve to connect the chosen clusters or domains. NOTE: An example of evaluating this Criterion might be to look at whether materials include problems in which students analyze a situation by building a function, graphing it, and using it to create and solve an equation. For context, read Criterion #4b in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** Throughout. For example: A-CED.A.3 (represent constraints and interpret solutions as viable or non-viable in a modeling context) connected with A-REI.A.2 (Solve simple rational…equations…and give examples showing how extraneous solutions may arise) in Lesson 9.3. Students solve rational equations using graphs, tables, and algebraically. Extraneous solutions are discussed as directed questioning is used to justify the inclusion (or exclusion) of a value. The lesson includes application problems with questions about the value of a variable in context. S-ID.B.6a (fit a function to the data…solve problems in the context of the data) connected with F-IF.C.7e (graph exponential…functions, showing intercepts and end behavior) and F-IF.B.4 (For a function that models a relationship…interpret key features of graphs and tables in terms of the quantities) in Lesson 14.1. Students identify sets of data as exponential or not, and then write functions to model the data. After some perfect scenarios, students model data in application problems (such as population statistics, revenue, and fish at a fishery). This work is done manually, and with graphing technology. After creating models, students are tasked with describing behavior in the context of the problem and finding specific values.	**X Meets** **____Does Not Meet Insufficient Evidence**

Non-Negotiable 1: Focus and Coherence- Materials must focus coherently on the Widely Applicable Prerequisites in a way that is consistent with the progressions in the Standards.

Metric NN 1: If all metrics 1A–1H were rated as Meets, then rate Non-Negotiable 1 as Meets. If one or more metrics were rated as Does Not Meet/Insufficient Evidence, then rate Non-Negotiable 1 as Does Not Meet. Check the final rating.
Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)**

Before moving to Alignment Criterion 1, record the final Meets or Does Not Meet rating in the Evaluation Summary.

X Meets

____Does Not Meet

Strengths/Weaknesses

Strengths:
-Essential questions used to launch each lesson, connected to performance tasks
-Dynamic tools available online
-Math background sections are very useful
-Teacher resources are visible, but not overwhelming

Weaknesses:
-Lack of authentic problem solving (does it require perseverance regularly?)

Now continue by evaluating Alignment Criterion 1 for Rigor and Balance.

Directions for Alignment Criterion 1

Rigor and Balance

Alignment Criterion 1:
Rigor and Balance- Materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.

The Standards set expectations for attention to all three aspects of rigor: conceptual understanding, procedural skill and fluency, and applications. Thus, materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.

The Standards set expectations for attention to all three aspects of rigor: conceptual understanding, procedural skill and fluency, and applications. Thus, materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.

- Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf)
- Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_HS_Spring_2013_FINAL1.pdf)
- Widely Applicable Prerequisites for College and Careers (http://achievethecore.org/prerequisites)
- From the materials being evaluated: teacher guides, student texts and workbooks

Rating this Criterion:

Alignment Criterion 1 is rated as Meets or Does Not Meet.

To rate Alignment Criterion 1, first rate metrics 1A, 1B, and 1C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). For each metric, guiding questions are provided to aid in gathering evidence.
Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 1 if the materials rate 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as rigor and balance, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.

AC Metric 1A: **The materials support the development of students' conceptual understanding of key mathematical concepts, especially where called for in specific content Standards or cluster headings.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Widely Applicable Prerequisites that relate specifically to conceptual understanding to use throughout the questions associated with this metric. NOTE: Some examples of clusters or Standards that call for conceptual understanding include: N-RN.A.1, A-APR.B, A-REI.A.1, A-REI.D.10, A.REI.D.11, F.IF.A.1, F-LE.A.1, G.SRT.A.2, G-SRT.C.6, S-ID.C.7 For context, read Criterion #2a in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	• Choose a cluster/Standard from the Widely Applicable Prerequisites that is applied to each aspect of rigor and use it to evaluate these metrics. It is most helpful if the same clusters and Standards are chosen for all of the programs being evaluated. (Guidance in choosing clusters/Standards is included in "How to Find the Evidence" below.)	**Use the questions for AC Metric 1A to evaluate Metric 1A. Record evidence for each question and rate Metric** **X Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Is conceptual understanding attended to thoroughly where the Standards set explicit expectations for understanding or interpreting? Evaluate lessons, chapter/unit assessments and homework assignments, paying attention to work aligned to Standards that explicitly call for understanding or interpreting.	**Evidence-** Extensive scaffolding sometimes is overwhelming—some of the tasks have very prescribed methods and students are not given an opportunity to persevere through these conceptual understanding pieces. Otherwise, conceptual understanding is fully attended to. Selection of standards addressing conceptual understanding: **A-APR.B.3: "Identify zeros of polynomials when suitable factorizations are available, and use the zeros to construct a rough graph of the function...."** -Lesson 5.4: Student sketch polynomial functions based upon end behavior, turning points, and factors. -Lesson 7.2: Students find zeros of polynomials using the rational root theorem. **F-IF.B.4: "For a function that models a relationship between two quantities, interpret key features...and sketch graphs showing key features given in a verbal description of the relationship."** -Lesson 10.3: Analyzing the key features of the cubic parent function and graphing transformations. This includes examples and practice problems where key features are described, and a graph is sketched. -Lesson 19.1: Stretching, compressing and reflecting sine and cosine graphs. Starting with base graphs for sine and cosine, students develop new graphs based upon transformations by identifying changes to intercepts and asymptotes.	

Do the materials feature high-quality conceptual problems and conceptual discussion questions? Evaluate lessons, chapter/unit assessments, and homework assignments. NOTE: Examples of conceptual problems might include such questions as "What is the maximum value of the function f(t) = 5 – t2 ?" or "Is √2 a polynomial? How about ½(x + √2)+ ½ (-x + √2)?"	**Evidence-** Questioning strategies included in each lesson to help teachers foster discussion about the concepts in the lesson. These are quite helpful. Selection of standards addressing conceptual understanding: **A-APR.B.3** -Lesson 5.4: Practice 20: sketch the graph of a polynomial function of degree 5. Performance task: after modeling volume using a polynomial, maximize the volume. -Lesson 7.1: Practice 14: explain the error for another student's work creating a polynomial function. **F-IF.B.4** -Lesson 19.1: students construct graphs and describe the changes based upon parameters. This includes reasoning before constructing the graph (what will the graph look like, based upon the parameters?), and exploring the effects of these transformations on domain and range.	
Do the materials feature opportunities to identify correspondences across mathematical representations? Evaluate lessons, chapter/unit assessments and homework assignments. NOTE: An example of evaluating this metric might include looking at whether materials support students in identifying correspondences among the expression that defines a function, the graph that shows the relationship, and the behavior of the phenomenon being modeled (if any).	**Evidence-** Selection of standards addressing conceptual understanding: **A-APR.B.3** -Lesson 5.4: features verbal descriptions, graphs, tables, and algebraic representations of polynomial functions. Students are expected to operate interchangeably. **F-IF.B.4** -Lesson 10.3: Example 1, practice 1-15 all include correspondences across multiple representations. -Lesson 19.1: all rule of four representations included in practice set.	
AC Metric 1B: **The materials are designed so that students attain the fluencies and procedural skills required by the Standards.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Widely Applicable Prerequisites that relate specifically to fluency and procedural skill to use throughout the questions associated with this metric. NOTE: Some examples of Standards that call for procedural skill and fluency include: A-SSE.A.1b, A-SSE.2, A-APR.A.1, A-APR.C.6, F-BF.B.3, G-GPE.B.4, G-GPE.B.5, G-GPE.B.7, G-CO.A.1, G-SRT.B.5 For context, read Criterion #2b in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).		**Use the questions for AC Metric 1B to evaluate Metric 1B. Record evidence for each question and rate Metric 1B.** **X Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**

Is progress toward fluency and procedural skill interwoven with the student's developing conceptual understanding of the skills in question? Evaluate lessons, chapter/unit assessments, daily routines, and homework assignments for evidence that the development of fluency and procedural skill is supported by conceptual understanding.	**Evidence-** Selection of standards addressing fluency and procedural skill: **A-SSE.A.2: "Use the structure of an expression to identify ways to rewrite it."** -Lesson 6.4: Factoring polynomials. Students explore skills for factoring polynomials, with plenty of opportunity to practice and develop fluency. This is in support of the later modules (polynomial functions, graphing polynomials, modeling with polynomials). **A-CED.A.4: "Rearrange formulas to highlight a quantity of interest, using the same reasoning as in solving equations."** -Lesson 9.2: Multiplying and dividing rational expressions. The procedure for rearranging rational equations is included along with the development of the concept that rational expressions have analogous operations to rational numbers. -Lesson 16.2: Solving exponential equations. Logarithms are used to solve exponential equations, including rearrangement of formulae.	
Are purely procedural problems and exercises present that include cases in which opportunistic strategies are valuable and generic cases that require efficient and general procedures present? Evaluate lessons, chapter/unit assessments, daily routines, and homework assignments. NOTE: Problems in which opportunistic strategies are valuable might include such examples as solving x2 + 5 = 49 + 5 or (3x – 2)2 = 6x – 4. Generic cases that require efficient and general procedures might include such problems as solving c + 8 – c2 = 3(c – 1)2 – 5).	**Evidence-** There are not explicit instructions in opportunistic strategies, but there are multiple examples of generalizing ideas from procedures. When applicable, there are some strategies that pop up as a result of the lesson. Selection of standards addressing fluency and procedural skill: **A-SSE.A.2** -Lesson 6.4: identifying special factoring patterns and factoring by grouping. See practice 3, 7, 13-18. **A-CED.A.4** -Lesson 9.2: See practice 18, and lesson performance task. -Lesson 16.2: Practice 6-9 (solve using logarithms), Practice 12-13 (solve application using logarithms to rearrange).	
AC Metric 1C: **The materials are designed so that teachers and students spend sufficient time working with engaging applications, without losing focus on the Widely Applicable Prerequisites.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Widely Applicable Prerequisites that relate specifically to application to use throughout the questions associated with this metric. NOTE: Some examples of clusters or Standards that call for application include: N-Q.A, A-SSE.B.3, A-REI.D.11, F-IF.B, F-IF.C.7, F-BF.A.1, G-SRT.C.8, S-ID.A.2, S-IC.A.1 For context, read Criterion #2c in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).		**Use the questions for AC Metric 1C to evaluate Metric 1C. Record evidence for each question and rate Metric 1C.** **____Meets (2)** **X Partially Meets (1)** **____Does Not Meet (0)**

Are there single- and multi-step contextual problems, including non-routine problems, that develop the mathematics of the course, afford opportunities for practice, and engage students in problem solving? Do the problems attend thoroughly to those places in the content Standards where expectations for multi-step and real-world problems are explicit? Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** Each practice set ends with multi-step contextual problems (both inside the higher order thinking section, and outside) that develop the mathematics of the course. The performance tasks do this as well. Problems are set up formula-style in many cases. Selection of standards addressing applications: **A-CED.A.3: "Represent constraints by equations or inequalities, and by systems of equations and/or inequalities, and interpret solutions as viable or non-viable options in a modeling context."** -Lesson 7.1: finding rational solutions of polynomial equations. After providing procedural instruction in using the rational zero theorem, the lesson provides examples of real-world problems, and the necessity to exclude non-viable answers from solutions (complex and negative numbers in this case). Practice problems 13-15, and the lesson performance task are each application problems that develop student understanding of how constraints develop in the context of applications of polynomials. -Lesson 9.3: Similar to the instruction for polynomial functions noted above, this lesson targets rational equations and the application of these equations to real-world problems. Domain restrictions are noted, and applied to applications to determine viability. See practice 13, and 7 on the assessment review (page 516). **F-BF.A.1b: "Combine standard function types using arithmetic operations."** -Lesson 6.1: Students add and subtract polynomials to model situations. See example 3, practice 17-20, and the performance task. -Lesson 9.2: See practice 18-20.	
Do application problems particularly stress applying the Widely Applicable Prerequisites? Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** When appropriate, the application problems directly support whatever standard a lesson is addressing, including the widely applicable prerequisites. For instance, practice 22 in lesson 8.1 requires that students model a situation using a rational function and then find a point of intersection. This aligns with F-IF.C.7d (graph rational functions), A-APR.D.6 (rewrite rational functions in different forms), and A-REI.C.11 (explain why the x-coordinates of the point of intersection is a solution to…). The lesson performance task in lesson 15.2 requires that students model a set of data logarithmically, describing the necessary transformations and creating a graph. This aligns with F-IF.C.7e (graph logarithmic functions), A-CED.A.2 (create equations in two variables), and F-IF.B.4 (for a modeling function, interpret key features of graphs and tables; give a verbal description).	

Are there ample opportunities for students to engage with modeling problem[illegible] materials require students to use both individual parts of the mode[illegible]g cycle as well as the full modeling cycle? Read the pages on High School—Modeling in the Standards for Mathematics (pp. 72 and 73). Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** Every lesson and p[illegible]y every assessment/performance task includes opportunities for s[illegible]ts to engage with modeling situations. At certain point in the text, direct instruction and practice is provided for choosing a model (e.g., Lesson 14.2). The language of the modeling cycle from the CCSSM is not used within this text. Each individual step is generally addressed, but there isn't work in the text, or in the online resources, that requires student to go through the entirety of the modeling cycle in cyclical fashion—the teacher would need to provide this instruction along with support for student struggle and perseverance (MP 1). Almost all modeling problems happen contextually along with the skills required for the problem itself, so students rarely revisit these steps, nor are they provided an opportunity to formulate a plan (which model should I use? How can I find the solution?). Lesson 14.2 is one example in which students are provided direct instruction in choosing a model.	
Alignment Criterion 1: Materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations. **AC 1:** Materials must earn at least 5 of 6 points to meet this Alignment Criterion. If materials earn less than 5 points, the Criterion has not been met. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)** **Before moving to Alignment Criterion 2, record the final Meets or Does Not Meet rating in the Evaluation Summary.**	**X Meets** **____Does Not Meet** **Strengths/Weaknesses:** **Strengths:** **-Engaging contexts** **-Videos that support that material** **Weaknesses:** **-Could lower the cognitive level and students would still be able to complete performance tasks because of the extensive scaffolding** **-Application of CCSSM modeling cycle not readily apparent or fully attended to**

Alignment Criterion 2: **Standards for Mathematical Practice- Materials must demonstrate authentic connections between content Standards and practice Standards.** The Standards require that designers of instructional materials connect the mathematical practices to mathematical content in instruction. Thus, materials must demonstrate authentic connections between content Standards and practice Standards.	The Standards require that designers of instructional materials connect the mathematical practices to mathematical content in instruction. Thus, materials must demonstrate authentic connections between content Standards and practice Standards. **Required Materials**: • Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_HS_Spring_2013_FINAL1.pdf) • Widely Applicable Prerequisites for College and Careers (http://achievethecore.org/prerequisites) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion:** Alignment Criterion 2 is rated Meets or Does Not Meet. To rate Alignment Criterion 2, first rate metrics 2A, 2B, and 2C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). For each metric, guiding questions are provided to aid in gathering evidence. Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 2 if the materials rate 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as mathematical practices, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.

AC Metric 2A:

Materials address the practice Standards in such a way as to enrich the Widely Applicable Prerequisites; practices strengthen the focus of the course instead of detracting from it, in both teacher and student materials.

How to Find the Evidence:

Familiarize yourself with the Widely Applicable Prerequisites.

Evaluate teacher and student materials for evidence that the mathematical practices support and connect to the focus of the course.

NOTE: An example of evaluating this Criterion might include looking at whether materials use regularity in repeated reasoning to illuminate formal algebra as well as functions, particularly recursive definitions of functions.

For context, read Criterion #6 in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).

Evidence-

Mathematical Practice standards are present throughout the text, highlighted in the teacher resource. The text includes an index at the front of the book that cites examples of MP standards (CC11) throughout the book, and each lesson indicates which MP standards are present.

Some concerns regarding two practice standards:
MP 1: Often, scaffolding is present that it detracts from student perseverance. The HOT problems and performance tasks reflect the work in the lesson, meaning that a formula, or a process has already been provided.

MP 5: Tools are often explicitly suggested (e.g., use a graphing calculator on this problem).

The teacher notes for each lesson provides further details about how to focus on the practice standard. For instance:

Lesson 4.2 (Modeling and Density) includes the following Integrate Mathematical Practices note on 222: "Focus on math connections: MP 1: Encourage students to create a table of area and volume formulas they use for reference as they work to find densities. Suggest that they include examples and units labeled."

Lesson 19.1 (Stretching, Compressing, and Reflecting Sine and Cosine Graphs) includes the following note on 973: "Focus on critical thinking: MP 3: Have students analyze the graphs of $f(x) = \sin x$ and $f(x) = \csc x$ to observe the increasing/decreasing relationship that exists between the reciprocal functions. Ask them to explain why the relationship exists. Then have them consider how it is possible for one of the functions to have a bounded range while the other does not."

The support and integration of the practice standards is within the scope of the text—these standards aren't tacked on, and problems aren't created to meet the practice standard.

Examples of this enrichment:

Lesson 2.6 (Subdividing a Segment in a Given Ratio): Students use the tools of geometry to construct partitions of a segment (MP 5) in support of G-GPE.B.6.

Lesson 11.2 (Simplifying Radical Expressions): Students explore patterns of various operations with rational exponents to establish properties of exponents (MP 8). After establishing these properties, students simply and rearrange radical expressions (N-RN.A.2) and model radical functions using graphing technology (F-IF.C.7b).

Lesson 12.1 (Arithmetic Sequences): Students explore the structure of arithmetic sequences (MP 7), write explicit and recursive rules for the sequence, and apply sequences to problems in support of the widely applicable prerequisite A-CED.A.2 (create equations to represent relationships and graph).

____ Meets (2)

X Partially Meets (1)

____Does Not Meet (0)

AC Metric 2B: **Materials attend to the full meaning of each practice Standard.** **How to Find the Evidence:** For context, read Criterion #7 in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).		**Use the questions for AC Metric 2B to evaluate Metric 2B. Record evidence for each question and rate Metric 2B.** **X Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Over the course of any given year of instruction, is each mathematical practice Standard meaningfully present in the form of assignments, activities, or problems that stimulate students to develop the habits of mind described in the practice Standard? Evaluate lessons, chapter/ unit assessments, and homework assignments for evidence of each mathematical practice being meaningfully present in instruction.	**Evidence-** All show up, perhaps not integrated as seamlessly as possible. Perseverance and tool choice may be the most lacking. Tasks are often scaffolded to the point that students do not develop a problem-solving mindset. Yes. See notes above, and additional examples below: Lesson 18.1 (Angles of Rotation and Radian Measure): Students explore the relationship between the unit circle and radian measure. Repeated reasoning (MP 8) is used to understand that the measures of coterminal angles differ by +- 360 degrees, the use of structure (MP 7) in included examples, such as explore 2 (915), and practice (1-14). Like many of the higher order thinking problems throughout the text, number 25 requires that the student persevere in finding a solution (MP 1) without prescribing a specific method. Lesson 20.1: Students work to answer the essential question: "under what circumstances should a sample statistic be used as an estimator of a population parameter?" supporting S-IC.A.1 (understand stats as a process for making inferences…). Students compute measures of a population manually and then load data into a calculator, or spreadsheet to describe and make predictions about the data (MP 5). Calculators are also used to generate random data. The supporting examples and practice problems require that students use tools appropriately—many practice problems, such as 5, require that the student reason their way through the problem and construct a viable argument (MP 3). When appropriate, tools are used for the collection and operation on data.	

Are teacher-directed materials that explain the role of the practice Standards in the classroom and in students' mathematical development included? Are alignments to practice Standards accurate? Evaluate teacher materials, paying attention to explanations of the role of the practice Standards in the classroom and in students' mathematical development. Evaluate documents aligning lessons to practice Standards for accuracy. NOTE: Examples to look for when evaluating this metric might include the following: a highly scaffolded problem should not be aligned to MP.1; or a problem that directs a student to use a calculator should not be aligned to MP.5; or a problem about merely extending a pattern should not be aligned to MP.8.	**Evidence-** Yes. Included throughout the text in the teacher notes. When presented, the practice standards are attended to faithfully, aligned to the CCSSM standards for the current lesson. Often, the practice standards offer an extension for the daily lesson. For instance: Lesson 5.4: Students predict the behavior of polynomial functions before graphing functions based upon their understanding of polynomials, the degree, and end behavior. This supports MP 3 (making reasonable predictions) and also is a lead-in for using tools appropriately (MP 5): by predicting the behavior of a function, students are prepared to recognize when technology (or the user) fails. Lesson 15.1 suggests that teachers have students explore the formula for atmospheric pressure, discussing the meaning of the variables in the equation, and the signs included (such as the negative in the exponent). This aligns with MP 1 as students are working to understand a formula, not just using it without understanding the mathematical basis for its derivation.	
AC Metric 2C: **Materials support the Standards' emphasis on mathematical reasoning.** **How to Find the Evidence:** For context, read Criterion #8 in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).		**Use the questions for AC Metric 2C to evaluate Metric 2C. Record evidence for each question and rate Metric 2C.** **X Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Do the materials support students in constructing viable arguments and critiquing the arguments of others concerning course-level mathematics that is detailed in the content Standards? Read Standard for Mathematical Practice 3. Evaluate teacher and student materials to ensure that students are given opportunities to reason with grade-level mathematics.	**Evidence-** Yes. As noted below, and previously, the text is designed to support students in the development and extension of mathematical reasoning. Nearly every assignment expects that students be able to justify a solution, explain reasoning, and critique an argument while attending to the widely applicable prerequisites. This is especially true for the performance tasks. Question strategies provided for teacher are good at leading discussion and assisting students in constructing viable arguments.	

Do the materials support students in producing not only answers and solutions, also, in a course-appropriate way, arguments, explanations, diagrams, mathematical models, etc., especially in the Widely Applicable Prerequisites? Familiarize yourself with the Widely Applicable Prerequisites. Evaluate teacher and student materials to understand the types of work students are expected to produce.	**Evidence-** Lesson 2.1, Practice 5: explain the error problem concerning slope of segments. Lesson 2.5, Practice 18-20: Explain the error, prove the area of a kite is half the product of diagonals (without the use of numerical calculations), justify that the area of a trapezoid is the product of its midsegment and its length. The examples of the lesson preceding the practice set support students in answer these types of question by providing discussion points that emphasize reasoning. Lesson 11.2, Practice 21-22: critique a student's reasoning; show that a property is true. In support of F-IF.C.7b. Lesson 17.1, Performance Task: students must produce a geometric representation of a water molecule and apply knowledge and skills from the lesson/module. Most higher order thinking (HOT) problems at the end of each lesson's practice set requires reasoning beyond just finding a solution.	
Do materials explicitly attend to the specialized language of mathematics? Is the language of argument, problem solving, and mathematical explanations taught rather than assumed? Evaluate teacher and student materials, paying attention to how mathematical language is taught. NOTE: An example of evaluating this Criterion might include looking at whether students are supported in: basing arguments on definitions; using the method of providing a counter example; or recognizing that examples alone do not establish a general statement.	**Evidence-** Module 1, especially Lessons 1.1 and 1.3 provide direct instruction in the language of mathematical argument. The practice problems supporting these lessons include sentence proofs, and the expectation established by the text is that these proofs refer to properties, definitions and theorems and follow a logical line of thought. Future lessons in the textbook (i.e., everything after module 1) continue to expect this reasoning, but much less explicit instruction is provided.	
Alignment Criterion 2: Materials must demonstrate authentic connections between content Standards and practice Standards. **AC 2:** Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 points, the Criterion has not been met. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewers only.)** **Before moving to Alignment Criterion 3, record the final Meets or Does Not Meet rating in the Evaluation Summary.**	**X Meets** **____Does Not Meet** **Strengths/Weaknesses:** Strengths: -Practices are visible throughout... Weaknesses: -but, MP 1 and MP 5 could better developed and supported.	

Alignment Criterion 3: **Access to the Standards for All Students- Materials must provide supports for English Language Learners and other special populations.** Because Standards are for all students, alignment requires thoughtful support to ensure all students are able to meet the Standards. Thus, aligned materials must provide supports for English Language Learners and other special populations.	Because Standards are for all students, alignment requires thoughtful support to ensure all students are able to meet the Standards. Thus, aligned materials must provide supports for English Language Learners and other special populations. **Required Materials:** • Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math Publishers_Criteria_HS_Spring_2013_FINAL1.pdf) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion:** Alignment Criterion 3 is rated Meets or Does Not Meet. To rate Alignment Criterion 3, first rate metrics 3A, 3B, and 3C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 3 if the materials rate 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as support for special population, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.
AC Metric 3A: **Support for English Language Learners and other special populations is thoughtful and helps those students meet the same Standards as all other students. The language in which problems are posed is carefully considered.** **How to Find the Evidence:** Evaluate teacher and student materials, paying attention to supports offered for special populations.	**Evidence-** Throughout. The teacher text generally includes snippets for language support in each lesson, making note of vocabulary and concepts that are challenging for English Language Learners. Additionally, each lesson has a language objective, along with "Connect Vocabulary" instructional recommendations. The text includes a glossary in English and Spanish, and the website provide a glossary with many more languages (some of which are spoken). The videos online include Spanish subtitles. Communication is reinforced throughout. Each lesson also includes scaffolding suggestions, as well as differentiation activities (reteaches, tiered intervention, extensions, questioning strategies). The language used within lessons supports all learners, regardless of background. For examples, exercises and practice problems that describe situations in which a student maybe unfamiliar, adequate background and supporting figures (diagrams, graphs, pictures, etc.) are provided. The text is inclusive for all learners. **Lesson 5.4 (Graphing Polynomial Functions):** Language Objective: "Work with a partner or small group to match functions to their equations or definitions." Connect Vocabulary: "Relate turning point to driving a car north and then turning the car to drive south. Explain that turning point is the point at which the car reverses direction." Connect Vocabulary: provide note cards to students and have students participate in a matching activity. **Lesson 24.2 (Angles in Inscribed Quadrilaterals)** Language Objective: "Work with a small group to decide whether statements about inscribed quadrilaterals are true or false." Connect Vocabulary: remind students about IFF and biconditional statements Differentiate instruction: Describe a method for inscribing a square in a circle and ask students to determine the validity (with explanation). Connect Vocabulary: students write true and false statements about inscribed quadrilaterals on note cards and test their peers.	**X Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**

AC Metric 3B: **Materials provide appropriate level and type of scaffolding, differentiation, intervention, and support for a broad range of learners with gradual removal of supports, when needed, to allow students to demonstrate their mathematical understanding independently.** **How to Find the Evidence:** Evaluate teacher and student materials, paying attention to whether materials provide differentiation that will lead all learners to engage with on-grade-level content.	**Evidence-** Scaffolding is most[illegible]n provided at end of module review. Personal Math Trainer is a r[illegible]ddition for supporting students. Example: Module 16 review on page 857 suggests providing students the properties of logarithms and certain formulae necessary to complete the review. Within lessons and student practice sets, scaffolding is also provided by breaking larger questions into smaller chunks that guide the student to the answer. As the lesson progress, this support is gradually removed. Example: In Lesson 8.1, students graph simple rational functions. Initially, students go through each aspect of a rational function to eventually produce a graph (domain, end behavior, table, asymptotes, and then the graphing itself). Tables are provided on later examples that contain the same process in condensed form. Early problems in the practice set focus on singular tasks for graphing rational functions (such as verbally describe the behavior) progressing to complete graphing of a function. The performance task for the lesson tasks students with applying a rational function to a situation involving snowboarding at a ski resort. Differentiation and intervention are detailed in AC3a. A broad range of learners are supported by explicit attention to differing learning styles. Multiple representations are regularly embedded within lesson, but when not, notes direct the teacher to task students with creating additional representations of material in the text. The online version of the text provides additional support in the form of prescriptive practice, video demonstrations of techniques, audio support (text to speech), step-by-step practice, and practice with immediate feedback	**X Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**

AC Metric 3C: **Desig[illegible]lessons recommends and facilitates a mix of instructional approaches for a variety of learners such as using multiple representations (e.g., including models, using a range of questions, checking for understanding, flexible grouping, pair-share).** **How to Find the Evidence:** Evaluate teacher materials, noting instructional approaches suggested for whole class and differentiated lessons and activities.	**Evidence-** As noted previous[illegible]ultiple representations are frequently used within the text (for instan[illegible]ages 251-254, 429-430, 959-962). Teaching suggestions that target a variety of learners are regularly included in the text. Questioning strategies are well implemented. Online toolbox supports multiple representations. Lesson 5.1: Peer-to-peer: students graph functions and compare transformations. Students attempt to predict transformations before graphing on calculator. Lesson 8.1: Differentiate Instruction: students work together to create graphs, tables and verbal representations of a rational functions and then come up with advantages and disadvantages for each method. Lesson 11.1: Differentiate Instruction: students that are struggling with numerator/denominator use descriptive variables to assist in translating rational exponents (write as e/I, e for exponent, i for index) Lesson 14.2: Peer-to-peer: students practice finding regression equations for data sets Lesson 18.1: Whole Class: class measures a variety of circular objects and relates the circumference measure to known formulae and to radian measures. Lesson 18.2: Differentiate Instruction: Kinesthetic Experience—physical representation and manipulation of angles using pencil and paper. Every lesson includes support for all learners in the form of reteach activities, tiered intervention support, and extension activities.	**X Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Alignment Criterion 3: Materials must provide supports for English Language Learners and other special populations. AC 3 Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 points, the Criterion has not been met. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewers only.)** **Move to the Evaluation Summary and record the final Meets or Does Not Meet rating .**		**X Meets** **____Does Not Meet** **Strengths/Weaknesses:** Strengths: -Online tools and glossary; representations easily accessible -support for all learners Weaknesses: -None noted

Once an evaluation for alignment to the Shifts and major features of the CCSS has been conducted using Sections 1-3, it's important to evaluate for overall quality and best practices. A starting list of Indicators of Quality are suggested below. States, districts and others evaluating instructional materials are encouraged to add to this list to ensure materials reflect local contexts. For background information on some of the Indicators of Quality in this section, refer to pp.16–18 in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).

Indicators of Quality	Evidence- Give specific examples.	Rating: (Reviewer only.)
1. Lessons are thoughtfully structured and support the teacher in leading the class through the learning paths at hand, with active participation by all students in their own learning and in the learning of their classmates.	**Evidence-** Lessons feature a mix of teaching strategies including explorations, class discussions, small group activities, and inclusionary, supportive language. Additionally, lessons highlight common errors, support for English language learners, extension activities and support for struggling learners.	**(Reviewer only.)** **X Yes** **_____ No**
2. The underlying design of the materials includes both problems and exercises. (In solving problems, students learn new mathematics, whereas in working exercises, students apply what they have already learned to build mastery.) Each problem or exercise has a purpose. **NOTE: This Criterion does not require that the problems and exercises be labeled as such.**	**Evidence-** Units start with "Are you ready?" assessments that provide practice and review of previously learned material. Within each lesson, examples support the acquisition of new mathematics. The practice sets are labeled "Evaluate: Homework and Practice", and feature exercises and problems, generally in this order. The RTI resources provide addition exercises to assist students in building mastery.	**(Reviewer only.)** **X Yes** **_____ No**
3. Design of assignments is not haphazard: exercises are given in intentional sequences in order to strengthen students' mathematical understanding.	**Evidence-** The flow in every lesson and the following assignment is always intentional. Assignments always start with process problems, building to multistep problems, application problems, critical thinking problems, and then a performance task that reflects the essential question (and learning standard) for the lesson. For instance: **Lesson 16.1:** Practice problems 1-8: apply the properties of logarithms to simplify expressions 9-16: application of logarithms 17: equivalent expressions 18-19: prove properties of logarithms 20. Multistep application 21. Explain the error 22. Communicate mathematical ideas (MP 3) 23. Analyze and reason abstractly Performance task: develop a logarithmic model	**(Reviewer only.)** **X Yes** **_____ No**

4. There are separate teacher materials that support and rewa[illegible]eacher study including, but not limited to: discussion of the mathematics of the units and the mathematical point of each lesson as it relates to the organizing concepts of the unit, discussion on student ways of thinking and anticipating a variety of students responses, guidance on lesson flow, guidance on questions that prompt students thinking, and discussion of desired mathematical behaviors being elicited among students.	**Evidence-** Throughout teacher t[illegible]nd at my.hrw.com. The teacher resource is very supportive in develop[illegible]essons, providing many opportunities for differentiation, guiding questions, and suggestions for cooperative learning (peer-to-peer, small group, whole class). Each unit begins with a pacing guide (for 45 or 90 minute classes), a summary of program resources, and a helpful math background refresher that previews the upcoming learning (e.g., pages 421A-F).	**(Reviewer only.)** **X Yes** **_____ No**
5. Manipulatives suggested in the materials are faithful representations of the mathematical objects they represent and are connected to written methods.	**Evidence-** Manipulatives are generally suggested as a differentiation activity within the textbook (e.g., Lesson 1.1). These manipulatives are faithful representations. Strangely, opportunities that would almost always be associated with a manipulative, such as cross sections and nets, seem to be underdeveloped. For instance, a nice feature for the online textbook would be a manipulative solid with cross sections.	**(Reviewer only.)** **X Yes** **_____ No**
6. Materials include a variety of curriculum-embedded assessments. Examples include pre-, formative, summative, and self-assessment resources.	**Evidence-** Included on my.hrw.com, including teacher editable files. There are student self-assessment resources embedded into the online textbook (quick checks and similar). Student text includes selected answers for rapid self-assessment. RTI resources include diagnostic assessments for placing students in the most supportive intervention tiers.	**(Reviewer only.)** **X Yes** **_____ No**
7. Assessments contain aligned rubrics, answer keys, and scoring guidelines that provide sufficient guidance for interpreting student performance.	**Evidence-** Rudimentary (0, 1, or 2) rubrics included for performance tasks at end of each lesson. Answer key in teacher textbook for all examples, exercises and practice set problems. Generally, these keys are quite thorough, including all work for problems. RTI materials include answer key at back of resource, and online. Pre and posttests included for tiered intervention, with recommendations for support based upon student performance.	**(Reviewer only.)** **X Yes** **_____ No**
8. Materials assess student proficiency using methods that are accessible and unbiased, including the use of course-level language in student prompts.	**Evidence-** Questions are unbiased throughout, using appropriate language. See notes for AC3 above, especially 3a. Only concern is that my.hrw.com uses a proprietary text-to-speech reader which means it may not be compatible with third party screen readers that students use as part of accommodation for 504/IEP.	**(Reviewer only.)** **X Yes** **_____ No**
9. Materials are carefully evaluated by qualified individuals, whose names are listed, in an effort to ensure freedom from mathematical errors and course-level appropriateness.	**Evidence-** Yes: established record of review by qualified individuals included in front of each version of text.	**(Reviewer only.)** **X Yes** **_____ No**

10. The visual design supports students in engaging thoughtf with the subject. Navigation through the text is clear.	**Evidence-** Clean design with eff use of white space, textual emphasis, and color. Figures are faithful re entations of the material at hand, and the design conventions are consistent throughout: at no point, do design elements subtract from the text, or detract from the lesson at hand. Online materials, especially the interactive student textbook are very good. Negatives: interactive index is hard to find, and complete, single pdf of text is seemingly unavailable. This last point may be personal preference, but full-text pdf search is **much** more effective than using the built-in search at my.hrw.com.	**(Reviewer only.)** **X Yes** **_____ No**

Reviewer IMET Evaluation Summary **Title/Level: HMH Integrated Mathematics 3**

Publisher: Houghton Mifflin Harcourt Copyright: 2015 ISBN: 978-0-544-38990-8

Reviewer ID # CJ, MK **Date Review Completed: 03/7/2016**

Non-Negotiable Criteria-The Non-Negotiable must be met in order for the Non-Negotiable Alignment Criteria to be met overall.

Non- Negotiable 1: Focus and Coherence

X Meets

_____ Does Not Meet

Non-Negotiable Overall:

x Meets **_____ Does Not Meet**

Alignment Criteria- Each Alignment Criterion must be met with a sufficient number of points in order for Alignment Criteria to be labeled as "Meets" overall. The more points the materials receive on the Alignment Criteria, the better they are aligned.

Alignment Criterion 1: Rigor and Balance	Alignment Criterion 2: Standards of Mathematical Practice	Alignment Criterion 3: Access to Standards for All Learners
Points: 5 of 6 possible. (Materials must receive at least 5 of 6 points to align.)	**Points: 5 of 6 possible.** (Materials must receive at least 5 of 6 points to align.)	**Points: 6 of 6 possible.** (Materials must receive at least 5 of 6 points to align.)
x Meets	**x Meets**	**x Meets**
_____ Does Not Meet	**_____ Does Not Meet**	**_____ Does Not Meet**

Alignment Criteria Overall:

x Meets **_____ Does Not Meet**

If the materials meet the Non-Negotiable Criterion and each Alignment Criterion, they are aligned to the Shifts and major features of the Common Core Standards. **Do the materials meet every Non-Negotiable and Alignment Criterion? x Yes _____ No**

What are the specific areas of strength and weakness based on this evaluation? Publishers or others modifying or developing assessments can use this information to make improvements and/or to remedy gaps in the alignment of assessment materials.

Strengths: This curriculum is a complete package that addresses the needs of all learners. Differentiation and tiered interventions are provided for every lesson, scaffolding is embedded in the curriculum with appropriate gradual release, language support is well developed, and extensions are provided for accelerated learners. Assistive support is included in the digital curriculum.

The design of the curriculum is consistent throughout the digital and print presentations. Color, white space, and textual emphasis are used effectively to convey information without overwhelming the learner or the teacher (page layout is significantly better than some older textbooks). The digital material, especially the interactive textbooks, is quite useful. The digital glossary, including 10+ languages, is handy.

Weaknesses: The weight of the paper that the textbook is printed on seems low as compared to some other texts. I have no doubt that the material can last six years, but the texture and feel of the paper is off. The size of the textbook is significant (1000+ pages) so this does have the benefit of reducing the total weight of the text. If given the proper support (training and technology), students and teachers will probably prefer the digital edition for day to day reference, so this may be a non-starter.

The digital version of this text are accessible (a plus), but the design of the interactive textbook is concerning. Although developed as an HTML5 application, some material is hidden behind menus and options which means some screen readers may not be able to access the material. This is problematic as students that receive this type of assistive technology may not be able to use their screen reader of choice. Additionally, speech-to-text is not included in the interactive textbook. iOS Dictation does work in the interactive textbook, so this probably isn't an issue for other assistive programs.

One other nitpick: the digital edition is clearly designed for tablet interfaces but common tablet interactions are not recognized, or don't behave as expected. Swiping does not provide navigation between pages of each lesson, and zooming by pinch does not work.

Teachers can download an offline copy of the teacher resources, but it isn't clear if a single pdf download is available for the text. As noted previously, PDF search is more efficient in external programs. If this pdf is available, it isn't easy to find.

2015-16 Mathematics Interim Review Recommendation & Summary

Publisher Name:	HMH
Title:	Math 180 Course I
ISBN #	978-0-545-58542-2
Grade Level(s) or Course:	Course I (Level 6)
Reviewer ID:	PLB BP

RECOMMENDED AS:

_____**Core Mathematics Program-** a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials. Substantial evidence clearly supports the designation of this program as Core.

_____**Other Mathematics Program-** a program that substantially, but partially, meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for supplemental materials. Substantial evidence clearly supports the designation of this program as Other.

_____**Component Mathematics Program-** a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs. Substantial evidence clearly supports the designation of this program as Component.

__X__**Intervention Program-** a program designed and intended to target and support students' specific needs. Substantial evidence clearly supports the designation of this program as Intervention.

_____ **Does not meet criteria** for recommendation as a Curricular Material or Online Resource for Mathematics.

EVIDENCE SUMMARY:

FOCUS- Standards focus typically on previous grade level standards in order to remediate.

COHERENCE- Majority of curriculum is meant to help students be ready for grade level curriculum.

RIGOR- The curriculum is set up so students progress through multiple levels of learning.

CONCEPTUAL UNDERSTANDING- Students must gain conceptual understanding through reasoning & multiple representations.

MATHEMATICAL PRACTICES- Mathematical Practices are addressed throughout the curriculum and vocabulary reflects that as well.

ACCESSIBILITY OF STANDARDS TO ALL STUDENTS- The consumable products are available to Bi-Lingual students (Spanish) as is the online resources.

OTHER: The student books are consumables.

2015-16 Interim Mathematics Review

Mathematics Evaluation Tool Grades K-8

Publisher: HMH

Title of Material: Math 180 Course I

Author: 978-0-545-58542-2

ISBN #: D. Ball, T. Hassel bring, S. Bechmann D. Dockterman **Copyright** 2014-15

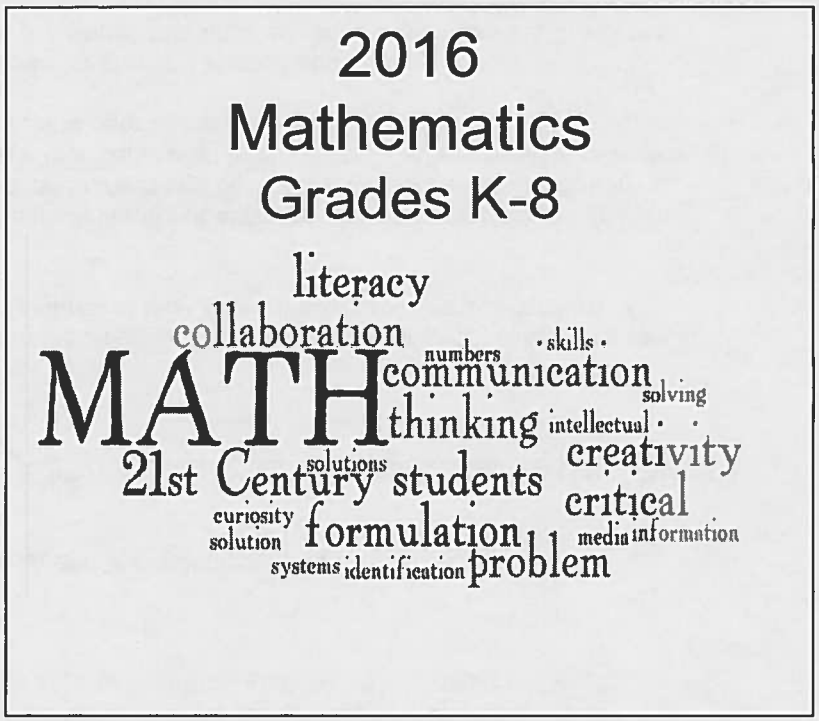
Reviewer ID: BP PB

Core Mathematics Program- a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Core.

Other Mathematics Program- a program that substantially, but partially, meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Other.

Component Mathematics Program- a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs.
Substantial evidence clearly supports the designation of this program as Component.

Intervention Program- a program designed and intended to target and support students' specific needs.
Substantial evidence clearly supports the designation of this program as Intervention.



- Evaluation Form adapted from Instructional Materials Evaluation Toolkit (IMET).

The IMET was developed by Student Achievement Partners. Educators may use or adapt. http://creativecommons.org/licenses/by/3.0/ Download this tool at http://achievethecore.org/IMET

Instructional Materials Evaluation Tool

Mathematics, Grades K-8

What Are the Purposes of the IMET?

This Math IMET is designed to help educators determine whether instructional materials are aligned to the Shifts and major features of the Common Core State Standards (CCSS). The substantial instructional Shifts (http://www.corestandards.org/other-resources/key-shifts-inmathematics/) at the heart of the Common Core State Standards are:

- **Focus** strongly where the Standards focus
- **Coherence**: Think across grades and link to major topics within the grade
- **Rigor**: In major topics, pursue conceptual understanding, procedural skill and fluency, and application with equal intensity.

The IMET draws directly from the following documents:

- Common Core State Standards for Mathematics (www.corestandards.org/Math)
- Publishers' Criteria for the Common Core State Standards in Mathematics grade K-8 (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)

When to use the IMET

1. Purchasing materials: Many factors go into local purchasing decisions. Alignment to the Standards is a critical factor to consider. This tool is designed to evaluate alignment of instructional materials to the Shifts and the major features of the CCSS. It also provides suggestions of additional indicators to consider in the materials evaluation and purchasing process.

2. Evaluating materials currently in use: The IMET can be used to analyze the degree of alignment of existing materials and help to highlight specific, concrete flaws in alignment. Even where materials and tools currently in use fail to meet one or more of these criteria, the pattern of failure is likely to be informative. States and districts can use the evaluation to create a thoughtful plan to modify or combine existing resources in such a way that students' actual learning experiences approach the focus, coherence, and rigor of the Standards.

3. Developing programs: Those developing new programs can use this tool as guidance for creating aligned curricula.
Please note this tool was designed for evaluating comprehensive curricula (including any supplemental or ancillary materials), but it was not designed for the evaluation of standalone supplemental materials.

Who Uses the IMET?

Evaluating instructional materials requires both subject-matter and pedagogical expertise. Evaluators should be well versed in the Standards (www.corestandards.org/Math) for all grades in which materials are being evaluated. This includes understanding the Major Work of the grade (www.achievethecore/focus), the Supporting and Additional work, how the content fits into the progressions in the Standards (www.achievethecore.org/progressions), and the expectations of the Standards with respect to conceptual understanding, procedural skill and fluency, and application. Evaluators also should be familiar with the substantial instructional Shifts (http:// www.corestandards.org/other-resources/key-shifts-in-mathematics/) of Focus, Coherence and Rigor that are listed above.

Getting Started

Prior to Evaluation

Assemble all of the materials necessary for the evaluation. It is essential for evaluators to have materials for all grades covered by the program, as some criteria cannot be rated without having access to each grade. In addition, each evaluator should have a reference copy of the Common Core State Standards for Mathematics (CCSSM) and the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013).

Instructional Materials Evaluation Tool
Mathematics, Grades K-8

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Getting Started
Prior to Evaluation

Assemble all of the materials necessary for the evaluation. It is essential for evaluators to have materials for all grades covered by the program, as some criteria cannot be rated without having access to each grade. In addition, each evaluator should have a reference copy of the Common Core State Standards for Mathematics (CCSSM) and the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013).

Before conducting the evaluation itself, it is important to develop a protocol for the evaluation process. The protocol should include having evaluators study the Publishers' Criteria and the IMET. It will also be helpful for evaluators to get a sense of each program overall before beginning the process. At a minimum, this would include reading the front matter of the text, looking at the table of contents and paging through multiple chapters.

Sections 1-3 below should be completed to produce a comprehensive picture of the strengths and weaknesses of the materials under evaluation. Information about areas in need of improvement or supplementation should be shared with internal and external stakeholders.

Navigating the Tool

Begin with Section 1: Non-Negotiable Alignment Criteria

- The Non-Negotiable Alignment Criteria must each be met in full for materials to be considered aligned to the Shifts and the major features of the Common Core State Standards. Each Non-Negotiable Alignment Criterion has one or more metrics associated with it; every one of these metrics must be met in order for the criterion as a whole to be met.

- Examine the relevant materials and use evidence to rate the materials against each criterion and its associated metric(s).

- Record and explain the evidence upon which the rating is based.

Continue to Section 2: Alignment Criteria

- The Alignment Criteria must each be met for materials to be considered aligned to the Shifts and the major features of the Common Core State Standards. Each Alignment Criterion has one or more metric associated with it; a specific number of these metrics must be met or partially met in order for the criterion as a whole to be met.

- Examine the materials in relation to these criteria, assigning each metric a point value. Rate the criterion as "Meets" or "Does Note Meet" based on the number of points assigned. The more points the materials receive on the alignment Criteria, the better they are aligned.

Record and explain the evidence upon which the rating is based.

Proceed to Section 4: Indicators of Quality

- Indicators of Quality are important considerations that will help evaluators better understand the overall quality of instructional materials. These considerations are not criteria for alignment to the CCSS, but they provide valuable information about additional program characteristics. Evaluators may want to add their own indicators to the examples provided.

Directions for Non-Negotiable 1

Freedom from Obstacles to Focus

Criterion	Evidence- Give specific examples.	Rating: (Reviewer only.)
Non-Negotiable 1: **Freedom from Obstacles to Focus** **Materials must reflect the content architecture of the Standards by not assessing the topics named before the grade level where they first appear in the Standards.** The Standards foster students' progress to algebra by focusing strongly on arithmetic. Consistent with this focus, certain topics from outside of arithmetic appear only in later grades. Thus, to be aligned, materials must reflect the content architecture of the Standards by not assessing the topics named before the grade level where they first appear in the Standards. In this criterion, "topics named" means the topics that are explicitly named in Metric 1A. No other topics should be added to the list in Metric 1A. (Note that other topics in the standards are addressed in criterion NN2.)	**Required Materials** • Common Core State Standards for Mathematics (www.corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf) • From the materials being evaluated: teacher guides and all assessment components	**Rating this Criterion**: Non-Negotiable 1 is rated as Meets or Does Not Meet. To rate Non-Negotiable 1, begin by rating Metric 1A. Since Metric 1A is the only metric for Non-Negotiable 1, the rating for Non-Negotiable 1 is the same as the rating for Metric 1A. If Metric 1A is rated as Does Not Meet, include evidence of when the named topic(s) is/are assessed. If the metric is rated as Meets, list the grade(s) examined in the evaluation.

Metric NN1A: **Materials re[illegible] the basic architecture of the Standards by not assessing the listed topics before the grade level indicated.** • Probability, including chance, likely outcomes, probability models. (Introduced in the CCSSM in grade 7) • Statistical distributions, including center, variation, clumping, outliers, mean, median, mode, range, quartiles; and statistical association or trends, including two-way tables, bivariate measurement data, scatter plots, trend line, line of best fit, correlation. (Introduced in the CCSSM in grade 6) • Similarity, congruence, or geometric transformations. (Introduced in the CCSSM in grade 8) • Symmetry of shapes, including line/ reflection symmetry, rotational symmetry. (Introduced in the CCSSM in grade 4) **How to Find the Evidence:** Evaluate the table of contents, all chapter tests, all unit tests, and other such assessment components (including rubrics). For context, read Criterion #2 from the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013). NOTE: Grade alignments of other topics are addressed in Non-Negotiable 2, Focus and Coherence.) In this criterion, "topics named" means the topics that are explicitly named in Metric 1A. No other topics should be added to the list in Metric 1A. (Note that other topics in the standards are addressed in criterion NN2.)	**Evidence-** **Table of Contents C[illegible]y indicates what each Block and Topic are that will be covered.**	**(Reviewer only.)** **__X__Meets** **____Does Not Meet**
Non-Negotiable 1: Materials must reflect the content architecture of the Standards by not assessing the topics named* before the grade level where they first appear in the Standards. **NN 1** If Metric 1A was rated as Meets, then rate Non-Negotiable 1 as Meets. If Metric 1A was rated as Does Not Meet, then rate Non- Negotiable 1 as Does Not Meet. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion.**(Reviewer only.)** **Before moving to Non-Negotiable 2, record the final Meets or Does Not Meet rating in the Evaluation Summary.**		**(Reviewer only.)** **__X__Meets** **____Does Not Meet** **Strengths/Weaknesses:** Strengths, Students and teachers can see exactly what will be covered on any given day.

Directions for Non-Negotiable 2

Focus and Coherence

Non-Negotiable 2: **Focus and Coherence** **Materials must focus coherently on the Major Work of the grade in a way that is consistent with the progressions in the Standards.** Focus and coherence are the two major evidence-based design principles of the Common Core State Standards for Mathematics (CCSSM, p. 3). Focus is necessary in order to fulfill the ambitious promise the states have made to their students by adopting the Standards: greater achievement at the college and career ready level; greater depth of understanding of mathematics; and a rich classroom environment in which reasoning, sense-making, applications, and a range of mathematical practices flourish. In simpler terms, a mile-wide, inch-deep curriculum translates to less time per topic. Less time means less depth and moving on without many students. Thus, materials must focus coherently on the Major Work of the grade in a way that is consistent with the progressions in the Standards.	**Required Materials** • Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf) • Focus by Grade Level for the grade being evaluated (www.achievethecore.org/focus) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion:** Non-Negotiable 2 is rated as Meets or Does Not Meet. To rate Non-Negotiable 2, first rate metrics 2A–2H. Each of these eight metrics must be rated as Meets in order for Non-Negotiable 2 to be rated as Meets. Rate each metric 2A-2H as Meets or Does Not Meet/Insufficient Evidence. If the evidence examined shows that the Criterion is met, then mark the Criterion Meets. If the evidence examined shows that the Criterion is not met—or if there is insufficient evidence to make a determination—then mark the Criterion as Does Not Meet/Insufficient Evidence. Support all ratings with evidence.
Metric NN2A: **In each grade K–8, students and teachers using the materials as designed devote the large majority of time to the Major Work of the grade.** **How to Find the Evidence:** Familiarize yourself with the Major Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, lessons, homework assignments, and assessments. (Evaluate both student and teacher materials.) Consider time spent on the Major Work of the grade and judge qualitatively whether students and teachers using the materials as designed will devote the large majority of time to the Major Work of the grade. For context, read Criterion #1 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013)	**Evidence-** 6th grade Major Works: Ratios to solve problems, Number System to multiply and divide fractions, use rational numbers, Expressions and Equations to include single variable expressions and solve them. A majority of time (23/27 topics [5-6 lessons per topic]) claims to work on the major work, but seems to focus on 5th grade versions and difficulty. **Ratios has a single topic in Block 4** devoted to it which could be an issue, but is then readdressed intuitively in several Number Systems topics afterwards. Supporting clusters are a minor part by comparison, Geometry is touched early in the first topic and then again near the last.	**(Reviewer only.)** **___Meets** **_x__Does Not Meet/** Most individual lessons seem to address 5th grade material. Which makes sense considering this is an intervention tool for remediation.

Metric NN2B: **Supporting work, where present, enhances focus and coherence simultaneously by also engaging students in the Major Work of the grade.** **How to Find the Evidence:** Familiarize yourself with the Major Work and Supporting Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate chapters and lessons that focus on Supporting Work. NOTE: Example of evaluating this Criterion might include looking at whether materials for K–5 generally treat data displays as an occasion for solving grade-level word problems using the four operations (e.g., see 3.MD.B.3); or whether materials for grade 7 take advantage of opportunities to use probability to support ratios, proportions, and percentages. For context, read Criterion #3 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Factors and Multiples is used to build a foundation in Block 1 to prepare for multiplications and division of fractions in Blocks 4, 5, and 6 (Major Cluster) Area model is used to demonstrate multiplication strategies.	**(Reviewer only.)** **_x_ Meets** **____Does Not Meet/**
Metric NN2C: **Materials base content progressions on the grade-by-grade progressions in the Standards. Content from previous or future grades does not unduly interfere with or displace on-grade-level content.** **How to Find the Evidence:** Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, and lessons in both student and teacher materials. NOTE: In some cases it may be possible that aligned materials might address some aspects of a topic in a strategic way before or after the grade level in which the topic is central in the Standards' progressions; for example, a curriculum author might purposefully choose to explore adding fractions with unlike denominators in a way appropriate to grade four, recognizing that this work is not really required until the next grade. However, any such purposeful discrepancies in content progressions should enhance the required learning in each grade; not unduly interfere with or displace grade-level content; and be clearly aimed at helping students meet the Standards as written rather than effectively rewriting the progressions in the Standards. And in all cases, note that Non-Negotiable 1 must be met for materials to be aligned. For context, read Criterion #5a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Many lessons focus a grade behind. They build to prepare for the grade they are on, but everything remediates to the point of being almost a whole grade behind. A big concern with this is that, while ratios (a major cluster) are touched on, they are not fully addressed until the 7th grade book.	**(Reviewer only.)** **____Meets** **__x__ Does Not Meet/** **Focus is remediation in interventions.**

Metric NN2D: **Materials gi[illegible]ll students extensive work with on-grade-level problems.** **How to Find the Evidence:** Evaluate both student and teacher materials. If the materials provide resources for differentiated learning, consider whether lower-performing students have opportunities to engage with grade-level problems. Also consider whether higher-performing students are given opportunities to learn current grade-level content in greater depth. For context, read Criterion #5b in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Students are given o[illegible]tunities to solve previous-grade-level problems. Problems are broken down so that struggling students can see step by step. Gradually moving to problems on grade level material.	**(Reviewer only.)** **____Meets** **__x__Does Not Meet/** **Insufficient Evidence**
Metric NN2E: **Materials relate on-grade-level concepts explicitly to prior knowledge from earlier grades.** **How to Find the Evidence:** Evaluate both student and teacher materials. NOTE: Examples of evaluating this Criterion might include looking at the way the materials extend basic ideas of place value across the decimal point; or the role that properties of operations play when the materials extend arithmetic beyond whole numbers to fractions, variables, and expressions. More generally, cluster headings in the Standards sometimes signal key moments where reorganizing and extending previous knowledge is important in order to accommodate new knowledge (e.g., see cluster headings that use the phrase "Apply and extend previous understanding"). For context, read Criterion #5c in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Math 180 uses concepts of grade school games to help students find and solve equations that apply to the real world. Any mathematical concepts are given a quick reminder and example for students to look off. Grade level concepts are tied in generally.	**(Reviewer only.)** **____Meets** **__x_Does Not Meet/** **Problems focus on below grade concepts and gradually move to general on grade concepts**
Metric NN2F: **Review of material from previous grades is clearly identified as such to the teacher, and teacher and students can see what their specific responsibility is for the current year.** **How to Find the Evidence:** Evaluate the table of contents, but do not stop there; also evaluate units, chapters, lessons, homework assignments and assessments. (Evaluate both student and teacher materials.) Identify any content from previous grades and check whether it is identified as such. For context, read Criterion #5a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Students and teachers can see what is expected of them throughout the book. Both can see a general overview in their table of contents for each Block as well as individual page headings. **But,** most of the material addresses previous grade work.	**(Reviewer only.)** **____Meets** **__x__Does Not Meet/** **Insufficient Evidence**

Metric NN2G: **Materials include learning objectives that are visibly shaped by CCSSM cluster headings.** **How to Find the Evidence:** Select several clusters from the Major Work in the grade being evaluated. Evaluate teacher and student materials in relation to these clusters. For context, read Criterion #6a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Page headings are used to give students an idea of what their learning objectives are. Ex. Course I, Block 4 Topic 1: 148 "Model Fractions as Part of a Whole" These headings easily translate into "I can…" statements for students.	**(Reviewer only.)** **__x__Meets** **____Does Not Meet/ Insufficient Evidence**
Metric NN2H: **Materials include problems and activities that serve to connect two or more clusters in a domain, or two or more domains in a grade, in cases where these connections are natural and important.** **How to Find the Evidence:** In the grade being evaluated, choose two or more clusters or two or more domains for which connections are natural and important. Evaluate the units, chapters, and lessons that deal with the chosen topics, looking for problems and activities that serve to connect the chosen clusters or domains. NOTE: An example of evaluating this Criterion might include looking at whether problems in grade 4 sometimes or often involve students applying their developing computation skills (detailed in domain NBT) in the context of solving word problems (detailed in domain OA). For context, read Criterion #6b in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Students are initially given problems where they must find the missing number inside the problem (not the solution); and are gradually given variables (in the form of blank spaces or objects and then abstracts like x or y)	**(Reviewer only.)** **__x__Meets** **____Does Not Meet/ Insufficient Evidence**
Non-Negotiable 2: **Focus and Coherence** **Materials must focus coherently on the Major Work of the grade in a way that is consistent with the progressions in the Standards.** NN 2 If all Metrics 2A – 2H were rated as Meets, then rate Non-Negotiable 2 as Meets. If one or more Metric was rated Does Not Meet/Insufficient Evidence, then rate Non-Negotiable 2 as Does Not Meet. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)** **Before moving to Alignment Criterion 1, record the final Meets or Does Not Meet rating in the Evaluation Summary.**		**(Reviewer only.)** **___Meets** **__x__Does Not Meet** **Strengths/Weaknesses:** Some major works are addressed in a way that students may not fully comprehend what they are doing, but they are present, identifiable, and acquired to reasonable efficacy for an intervention program.

Now continue by evaluating the Alignment Criterion 1 for Rigor and Balance.

Directions for Alignment Criterion 1

Rigor and Balance

Alignment Criterion 1: Rigor and Balance

Materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.

The Standards set expectations for attention to all three aspects of rigor: conceptual understanding, procedural skill and fluency, and applications. Thus, materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.

Required Materials

- Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf)
- Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)
- Focus by Grade Level for the grade being evaluated (achievethecore.org/focus)
- Situation Types for the Operations in Word Problems (achievethecore.org/situation-types)
- From the materials being evaluated: teacher guides, student texts and workbooks

Rating this Criterion:

Alignment Criterion 1 is rated as Meets or Does Not Meet.

To rate Alignment Criterion 1, first rate metrics 1A, 1B, and 1C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). For each metric, guiding questions are provided to aid in gathering evidence.
Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 1 if the materials rate 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as rigor and balance, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.

Metric AC1A:
The materials support the development of students' conceptual understanding of key mathematical concepts, especially where called for in specific content Standards or cluster headings.

How to Find the Evidence:

Select one or more cluster(s) or Standard(s) from the Major Work for the grade being evaluated that relate specifically conceptual understanding to use throughout the questions associated with this metric. NOTE: Some examples of clusters or Standards that call for conceptual understanding include: K.OA.A.1, (1.NBT.B, 1.NBT.C), (2.NBT.A, 2.NBT.B), (3.OA.A.1, 3.OA.A.2), 4.NF.A, (4.NBT.A, 4.NBT.B), 5.NF.B, (5.NBT.A, 5.NBT.B), 6.RP.A, 6.EE.A.3, 7.NS.A, 7.EE.A, 8.EE.B, 8.F.A, 8.G.A

Clusters or Standards grouped by parentheses are closely connected and could be analyzed together.

For context, read Criterion #4a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).

-Choose a cluster/Standard from the Major Work that is aligned to each aspect of rigor and use it to evaluate these metrics. It is most helpful if the same clusters/Standards are chosen for all of the programs being evaluated. (Guidance in choosing clusters/Standards is included in "How to Find the Evidence".)

Use the questions for AC Metric 1A to evaluate Metric 1A. Record evidence for each question and rate Metric 1A.

__x__ **Meets (2)**

____ **Partially Meets (1)**

____ **Does Not Meet (0)**

Is conceptual understanding attended to thoroughly where the Standards set e[illegible] expectations for understanding or interpreting? Evaluate lessons, chapter/unit assessments and homework assignments, paying attention to work aligned to Standards that explicitly call for understanding or interpreting. NOTE: Examples of evaluating this Criterion might include looking at how well the multi-digit addition and subtraction algorithms are developed and explained on the basis of place value and properties of operations; or how well the multi-digit multiplication and division algorithms are developed and explained on the basis of place value and properties of operations; or how well solving equations is presented and explained as a process of reasoning.	**Evidence-** 6.EE.A.3- Begins being addressed in 8.2.5 Formulas are [illegible]ablished using charts and addressing patterns.	
Do the materials feature high-quality conceptual problems and conceptual discussion questions? Evaluate lessons, chapter/unit assessments, and homework assignments. NOTE: Example of conceptual problems might include such questions as "Find a number greater than 1/5 and less than 1/4," or "If the divisor does not change and the dividend increases, what happens to the quotient?"	**Evidence-** These patterns lead to fractions patterns and solving for unknowns in 8.3 using questions like: "after spending 4/5 of his money, he has $6.04 left. One taco costs $3.02. How many tacos did he buy?"	
Do the materials feature opportunities to identify correspondences across mathematical representations? Evaluate lessons, chapter/unit assessments and homework assignments. NOTE: Examples of evaluating this Criterion might include looking at whether students are supported in identifying correspondences among: the verbal description of a situation, the diagrams that distill its mathematical features, and the equations that model it; or equivalent forms of numbers (e.g., 3 and 6/2) and the number line; or rational number operations and representations of them via models such as the vector model; or the expression that defines a function and the graph that shows the relationship.	**Evidence-** Patterns are initially addressed using decimals with unknowns and develops into using them with fractions and how they mirror the patterns of decimals as well as setting up problems to solve them.	
Metric AC1B: **The materials are designed so that students attain the fluencies and procedural skills required by the Standards.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Major Work for the grade being evaluated that relate specifically to fluency and procedural skill to use throughout the questions associated with this metric. NOTE: Some examples of Standards that call for procedural skill and fluency include: K.OA.A.5, 1.OA.C.6, 2.OA.B.2, 2.NBT.B.5, 3.OA.C.7, 3.NBT.A.2, 4.NBT.B.4, 5.NBT.B.5, 6.NS.B.2, and 6.NS.B.3, 6.EE.A, 7.NS.A, 7.EE.A.1,7.EE.B.4a, 8.EE.C.7, 8.EE.C.8b For context, read Criterion #4b in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).		**Use the questions for Metric 1B to evaluate Metric 1 B. Record evidence for each question and rate Metric 1B.** **(Reviewer only.)** **__x__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**

Is progress toward fluency and procedural skill interwoven with students' develo conceptual understanding of the operations in question? Evaluate lessons, chapter/unit assessments, daily routines, and homework assignments for evidence that the development of fluency and procedural skill is supported by conceptual understanding.	**Evidence-** 7.1.2 Establish rela ships between Fractions (what we know) and Decimals What we don't know. 8.3.5 combines past knowledge with finding unkowns.	
Are purely procedural problems and exercises present that include cases in which opportunistic strategies are valuable and generic cases that require efficient algorithms present? Evaluate lessons, chapter/unit assessments, daily routines, and homework assignments. NOTE: Examples of problems in which opportunistic strategies are valuable might include the sum 698 + 240 or the system x + y = 1, 2x + 2y = 3. Examples of generic cases that require efficient algorithms might include the sum 8767+2286 or the system 6y + x = x + 3, – x = 1 + 2y.	**Evidence-** Block 8 does not provide lots of procedural practice all by itself. However, it pushes real world application in every lesson and problem.	
Do the materials in grades K–6 provide repeated practice toward attainment of fluency Standards? Evaluate lessons, daily routines, and homework assignments for evidence of repeated practice toward attainment of the following K–6 Standards that set an explicit expectation of fluent (accurate and reasonably fast) computation: K.OA.A.5, 1.OA.C.6, 2.OA.B.2, 2.NBT.B.5, 3.OA.C.7, 3.NBT.A.2, 4.NBT.B.4, 5.NBT.B.5, 6.NS.B.2, 6.NS.B.3.	**Evidence-** Block 8 uses constant practice and procedures of *what* the problems is, *what* it looks like as a representation, and *what* the steps look like to solve it.	
Metric AC1C: **The materials are designed so that teachers and students spend sufficient time working with engaging applications, without losing focus on the Major Work of each grade.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Major Work for the grade being evaluated that relate specifically application to use throughout the questions associated with this metric. NOTE: Some examples of clusters or Standards that call for application include: K.OA.A.2, 1.OA.A, 2.OA.A, 3.OA.A.3, 3.OA.D.8, 4.OA.A.3, 4.NF.B.3d, 4.NF.B.4c, 5.NF.B.6, 5.NF.B.7c, 6.RP.A.3, 6.NS.A.1, 6.EE.B.7, 6.EE.C.9, 7.RP.A, 7.NS.A.3, 7.EE.B.3, 8.EE.C.8c, 8.F.B For context, read Criterion #4c in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Every single block uses examples from real life and shows how the topics might be used in real life application for businesses (block 8), medicine (block 5), or even exploration and temperature (block 9).	**Use the questions for Metric 1C to evaluate Metric 1C. Record evidence for each question and rate Metric 1C.** **(Reviewer only.)** **____Meets (2)** **__x_Partially Meets (1)** **____Does Not Meet (0)** Much time is spend on low grade major works to establish proficiency that can be used later in the course of on grade level major works.
Are there are single- and multi-step contextual problems, including non-routine problems, that develop the mathematics of the grade, afford opportunities for practice, and engage students in problem solving? Do the problems attend thoroughly to those places in the content Standards where expectations for multi-step and real-world problems are explicit? Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** Block 6.3.1-6.3.3 address steps to divide fractions and develop short cuts to use with the representation.	

Do application problems particularly stress applying the Major Work of the grade? Evaluate lessons, chapter/unit assessments, and homework assignments. NOTE: Examples of evaluating this Criterion might include looking at: how well, by the end of grade 2, students using the materials as designed can represent and solve a full range of one-step addition and subtraction word problems; or how well, by the end of grade 3, students using the materials as designed can represent and solve a full range of one-step multiplication and division word problems; or how well these basic situation types for each operation are carried coherently across the grades, (e.g., with fractions and algebraic expressions); or, in all grades, whether the problems connect concepts, Standards, and domains in ways that are natural and important. For a list of situation types for one-step addition, subtraction, multiplication, and division problems, see Situation Types for the Operations in Word Problems	**Evidence-** Most all major work is addressed in a single grade level frequently, however, the course seems to be designed to focus less on some (like ratios) and focus more on others (like fractions and decimals).	
Does modeling build slowly across K–8, with applications that are relatively simple in earlier grades and when students are encountering new content? In grades 6–8, do the problems begin to provide opportunities for students to make their own assumptions or simplifications in order to model a situation mathematically? Read Standard for Mathematical Practice 4, Model with Mathematics. Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** Every new topic is addressed with examples as well as work space to follow every step; slowly moving students toward taking fewer steps on paper as they take steps mentally.	

Alignment Criterion 1: Rigor and Balance

Materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.

AC1 Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 out of 6 points, the Criterion has not been met. Check the final rating.
Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)**

Before moving to Alignment Criterion 2, record the final Meets or Does Not Meet rating in the Evaluation Summary.

(Reviewer only.)

__x__Meets

____Does Not Meet

Strengths/Weaknesses:

Much of the book remediates and thus focuses on below grade level material and establish foundations to build off of.

Directions for Alignment Criterion 2

Standards for Mathematical Practice

Alignment Criterion 2: Standards for Mathematical Practice

Materials must demonstrate authentic connections between content Standards and practice Standards.

The Standards require that designers of instructional materials connect the mathematical practices to mathematical content in instruction. Thus, materials must demonstrate authentic connections between content Standards and practice Standards.

Required Materials:

- Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf)
- Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)
- Focus by Grade Level for the grade being evaluated (www.achievethecore.org/focus)
- From the materials being evaluated: teacher guides, student texts and workbooks

Rating this Criterion

Alignment Criterion 2 is rated as Meet or Does Not Meet.

To rate Alignment Criterion 2, first rate metrics 2A, 2B, and 2C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). For each metric, guiding questions are provided to aid in gathering evidence.

Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 2 if the materials earn 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as mathematical practices, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.

Metric AC2A:

Materials address the practice Standards in such a way as to enrich the Major Work of the grade; practices strengthen the focus on Major Work instead of detracting from it, in both teacher and student materials.

How to Find the Evidence:

Familiarize yourself with the Major Work of the grade being evaluated (see the Focus by Grade Level documents.)

Evaluate teacher and student materials for evidence that the mathematical practices support and connect to the focus of the grade.

NOTE: Examples of evaluating this Criterion might include looking at whether, in grades K–5, students using the materials are supported to look for and express regularity in repeated reasoning about the addition table, the multiplication table, the properties of operations, the relationship between addition and subtraction or multiplication and division, and the place value system; or whether, in grades 6–8, students using the materials are supported to look for and express regularity in repeated reasoning about proportional relationships and linear functions.

For context, read Criterion #8 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013).

Evidence-

Book I begins with below grade level problems to establish foundations to build the at grade level material.

Every major work is directly addressed *except* ratios. While some work is used to touch on them, they seem to be intuitively compared to fractions rather than given their own material.

(Reviewer only.)

____Meets (2)

_x__Partially Meets (1)

____Does Not Meet (0)

Metric AC2B: **Materials attend to the full meaning of each practice Standard.** **How to Find the Evidence:** For context, read Criterion #7 and Criterion #9 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).		**Use the questions for Metric 2B to evaluate Metric 2B. Record evidence for each question and rate Metric 2B.** **(Reviewer only.)** **_x_ Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Over the course of any given year of instruction, is each mathematical practice Standard meaningfully present in the form of assignments, activities, or problems that stimulate students to develop the habits of mind described in the practice Standard? Evaluate lessons, chapter/ unit assessments, and homework assignments for evidence of each mathematical practice being meaningfully present in instruction.	**Evidence-** **Practice is addressed and challenging in every lesson following the model of I do, we do, groups do, you do. Though it seems little homework is provided.**	
Do the materials treat the practice Standards as developing across grades or grade bands? Are the practice Standards in early grades appropriately simple? Do they display an arc of growing sophistication across the grades?	**Evidence-** **Throughout the material, students spiral into more difficult and critical thinking based problems rather than simple math drills.**	
Are there teacher-directed materials that explain the role of the practice Standards in the classroom and in students' mathematical development? Are alignments to practice Standards accurate?	**Evidence-** **While the common core standards are not explicitly identified in the chapters, the focus of each lesson as well as grade level connections are marked at every lesson entry.**	
Metric AC2C: **Materials support the Standards' emphasis on mathematical reasoning.** **How to Find the Evidence:** For context, read Criterion #10 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).		**Use the questions for Metric 2C to evaluate Metric 2C. Record evidence for each question and rate Metric 2C.** **(Reviewer only.)** **_x_ Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Do the materials support students in constructing viable arguments and critiquing the arguments of others concerning grade-level mathematics that is detailed in the content Standards? Read Standard for Mathematical Practice 3. Evaluate teacher and student materials to ensure that students are given opportunities to reason with grade-level mathematics.	**Evidence-** **Lesson set up allows students to develop reasoning skills for *why* and *how* in solving math problems. Examples are provided in every lesson as well as areas to justify your answer.**	
Do the materials support students in producing not only answers and solutions, but also, in a grade-appropriate way, arguments, explanations, diagrams, mathematical models, etc., especially in the Major Work of the grade? Familiarize yourself with the Major Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate teacher and student materials, to understand the types of work students are expected to produce.	**Evidence-** **Each problem in the book requires justification from the student from *how do you know* to *explain your reasoning.***	

Do materials explicitly attend to the specialized language of mathematics? Is the language of argument, problem solving, and mathematical explanations taught rather than assumed? Evaluate teacher and student materials, paying attention to how mathematical language is taught. NOTE: Examples of evaluating this Criterion might include looking at whether students are supported in: basing arguments on definitions; using the method of providing a counterexample; or recognizing that examples alone do not establish a general statement.	**Evidence-** **Appropriate vocabulary is identified at the beginning of every unit and lesson. As well as being defined in the chapter when the vocabulary should be taught. Ex. 1.3.3 Associative Property of Multiplication p. 45**	
Alignment Criterion 2: **Standards for Mathematical Practice** **Materials must demonstrate authentic connections between content Standards and practice Standards.** **AC2** Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 out of 6 points, the Criterion has not been met. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)** **Before moving to Alignment Criterion 3, record the final Meets or Does Not Meet rating in the Evaluation Summary.**		**(Reviewer only.)** **_x_ Meets** **____Does Not Meet** **Strengths/Weaknesses:**
Alignment Criterion 3: **Access to the Standards for All Students** **Materials must provide supports for English Language Learners and other special populations.** Because Standards are for all students, alignment requires thoughtful support to ensure all students are able to meet the Standards. Thus, aligned materials must provide supports for English Language Learners and other special populations.	**Required Materials:** • Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion:** Alignment Criterion 3 is rated as Meets or Does Not Meet. To rate Alignment Criterion 3, first rate metrics 3A, 3B, and 3C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 3 if the materials earn 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as support for special population, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.

Metric AC3A: **Support for English Language Learners and other special populations is thoughtful and helps those students meet the same Standards as all other students. The language in which problems are posed is carefully considered.** **How to Find the Evidence:** Evaluate teacher and student materials, paying attention to supports offered for special populations.	**Evidence-** Vocabulary is provided in Spanish. Online material is available in Spanish. Addresses need for the *why* math vocabulary is needed and important.	**Reviewer only.)** **__x__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Metric AC3B: **Materials provide appropriate level and type of scaffolding, differentiation, intervention, and support for a broad range of learners with gradual removal of supports, when needed, to allow students to demonstrate their mathematical understanding independently.** **How to Find the Evidence:** Evaluate teacher and student materials, paying attention to whether materials provide differentiation that will lead all learners to engage with on-grade-level content.	**Evidence-** Extention and review lessons and adaptations are available for every lesson in the Professional Learning book.	**Reviewer only.)** **__x__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Metric AC3C: **Design of lessons recommends and facilitates a mix of instructional approaches for a variety of learners such as using multiple representations (e.g., including models, using a range of questions, checking for understanding, flexible grouping, pair-share).** **How to Find the Evidence:** Evaluate teacher materials, noting instructional approaches suggested for whole class and differentiated lessons and activities.	**Evidence-** Lessons are designed for whole group and smaller groups to maximize student learning styles. Computer groups, teacher instruction, and others are used to help students learn.	**Reviewer only.)** **__x__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**

Alignment Criterion 3: Access to the Standards for All Students **Materials must provide supports for English Language Learners and other special populations.** **AC3** Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 points, the Criterion has not been met. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion.**(Reviewer only.)** **Move to the Evaluation Summary and record the final Meets or Does Not Meet rating .**	**(Reviewer only.)** **__x__Meets** **____Does Not Meet** **Strengths/Weaknesses:**

Once an evaluation for alignment to the Shifts and major features of the CCSS has been conducted using Sections 1-3, it's important to evaluate for overall quality and best practices. A starting list of Indicators of Quality are suggested below. States, districts and others evaluating instructional materials are encouraged to add to this list to ensure materials reflect local contexts. For background information on some of the Indicators of Quality in this section, refer to pp.18–21 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).

Indicators of Quality	Evidence- Give specific examples.	Rating: (Reviewers only.)
1. Lessons are thoughtfully structured and support the teacher in leading the class through the learning paths at hand, with active participation by all students in their own learning and in the learning of their classmates.	**Evidence-**Lessons are structured: as a group, in pairs, by self. Allowing teachers to spot struggling students as well as allowing students to help one another.	**(Reviewer only.)** **__x__ Yes** **_____ No**
2. The underlying design of the materials includes both problems and exercises. (In solving problems, students learn new mathematics, whereas in working exercises, students apply what they have already learned to build mastery.) Each problem or exercise has a purpose. **NOTE: This Criterion does not require that the problems and exercises be labeled as such.**	**Evidence-**Students are given exact instructions and step by step examples when learning and given story problems to combine exercise with application.	**(Reviewer only.)** **__x__ Yes** **_____ No**

3. Design of assignments is not haphazard: exercises are given in intentional sequences in order to strengthen students' mathematical understanding.	**Evidence-**Topic 1: students represent multiplication with pictures and find products before being introduced to the Commutative and Associative Properties of Multiplication. Factors and products help students see the connections.	**(Reviewer only.)** __x__ **Yes** _____ **No**
4. There are separate teacher materials that support and reward teacher study including, but not limited to: discussion of the mathematics of the units and the mathematical point of each lesson as it relates to the organizing concepts of the unit, discussion on student ways of thinking and anticipating a variety of students responses, guidance on lesson flow, guidance on questions that prompt students thinking, and discussion of desired mathematical behaviors being elicited among students.	**Evidence-** Math 180 includes an entire extra book that encourages teacher prep for assessment as well as extension of materials for advanced students as well as how to help ELL students.	**(Reviewer only.)** __x__ **Yes** _____ **No**
5. Manipulatives suggested in the materials are faithful representations of the mathematical objects they represent and are connected to written methods.	**Evidence- 1.3.1:** multiplying with 1 digit factors, 3x8 is represented with an area model (3 high, eight across). It shows different ways to count it, add it, multiply it, as well as how the associative property works with it.	**(Reviewer only.)** __x__ **Yes** _____ **No**
6. Materials include a variety of curriculum-embedded assessments. Examples include pre-, formative, summative, and self-assessment resources.	**Evidence-** Every lesson has an "exit ticket" requiring students to demonstrate understanding by solving problems *as well as* explaining *why* the math works the way it does. Ex. 1.2.1: Find the product of 7x6. Must be split into 2 more simple problems and an explanation must be given as to *why* this could be helpful.	**(Reviewer only.)** __x__ **Yes** _____ **No**
7. Assessments contain aligned rubrics, answer keys, and scoring guidelines that provide sufficient guidance for interpreting student performance.	**Evidence-** in class assessments contain answer keys, but little else is offered with the exception of online assessments.	**(Reviewer only.)** _____ **Yes** __x__ **No**
8. Materials assess student proficiency using methods that are accessible and unbiased, including the use of course-level language in student prompts.	**Evidence-** Students are tested with appropriate language. Questions for test seem to come from a preapproved set of questions rather than having potential bias from a teacher.	**(Reviewer only.)** __x__ **Yes** _____ **No**

9. Materials are carefully evaluated by qualified individuals, [illegible]se names are listed, in an effort to ensure freedom from mathematical errors and course-level appropriateness.	**Evidence-** Material was compiled and reviewed by various professors and dean o[illegible]ous colleges. Each qualified individual was given multiple responsibilities that overlapped others to ensure complete coverage, accountability, and accuracy.	**(Reviewer only.)** **__x__ Yes** **_____ No**
10. The visual design supports students in engaging thoughtfully with the subject. Navigation through the text is clear.	**Evidence-** Bright colors engage students and the application to real world problems shows actual value to the material beyond school.	**(Reviewer only.)** **__x__ Yes** **_____ No**
11. The materials engage parents in appropriate ways. For example, homework assignments in elementary grades, consist of routine problems, practice with getting answers, and fluency-building exercises that parents can easily support.	**Evidence-**Unable to find any parent engagement.	**(Reviewer only.)** **_____ Yes** **__x__ No**

Reviewer IMET Evaluation Summary **Title/Level:** _____

Publisher: _____ **Copyright:** _____ **ISBN:** _____

Reviewer ID # _____ **Date Review Completed:** _____

Non-Negotiable Criteria- Each Non-Negotiable must be met in order for the Non-Negotiable Alignment Criteria to be met overall.

Non-Negotiable 1: Freedom from Obstacles to Focus	Non- Negotiable 2: Focus and Coherence
___x___ Meets	_____ Meets
_____ Does Not Meet	___x___ Does Not Meet

Non-Negotiable Overall:

_____ **Meets** ___x___ **Does Not Meet**

Alignment Criteria- Each Alignment Criterion must be met with a sufficient number of points in order for Alignment Criteria to be labeled as "Meets" overall. The more points the materials receive on the Alignment Criteria, the better they are aligned.

Alignment Criterion 1: Rigor and Balance	Alignment Criterion 2: Standards of Mathematical Practice	Alignment Criterion 3: Access to Standards for All Learners
Points: ___5___ of 6 possible. (Materials must receive at least 5 of 6 points to align.)	Points: ___5___ of 6 possible. (Materials must receive at least 5 of 6 points to align.)	Points: ___6___ of 6 possible. (Materials must receive at least 5 of 6 points to align.)
___x___ Meets	___x___ Meets	___x___ Meets
_____ Does Not Meet	_____ Does Not Meet	_____ Does Not Meet

Alignment Criteria Overall:

_____ **Meets** _____ **Does Not Meet**

If the materials meet both Non-Negotiables and relevant Alignment Criterion, they are aligned to the Shifts and major features of the Core Standards. **the materials meet every Non-Negotiable and Alignment Criterion? _____ Yes ___x__ No**

What are the specific areas of strength and weakness based on this evaluation? Publishers or others modifying or developing assessments can use this information to make improvements and/or to remedy gaps in the alignment of assessment materials.

This course is great for remediating kids. However, some things seem to be are more heavily addressed (fractions) than others (ratios). Homework doesn't seem to be big aspect of the program but regular assessment in class is a great bonus. Failure in the Non-negotiables resulted from much of the time being spend on lower grade major works that build a foundation for on grade level works.

2015-16 Mathematics Interim Review Recommendation & Summary

Publisher Name:	Math 180 HMH
Title:	Math 180
ISBN #	978-0-545-80632-9
Grade Level(s) or Course:	(7) Course II
Reviewer ID:	BP

RECOMMENDED AS:

_____**Core Mathematics Program-** a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials. Substantial evidence clearly supports the designation of this program as Core.

_____**Other Mathematics Program-** a program that substantially, but partially, meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for supplemental materials. Substantial evidence clearly supports the designation of this program as Other.

_____**Component Mathematics Program-** a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs. Substantial evidence clearly supports the designation of this program as Component.

__X__**Intervention Program-** a program designed and intended to target and support students' specific needs. Substantial evidence clearly supports the designation of this program as Intervention.

_____ **Does not meet criteria** for recommendation as a Curricular Material or Online Resource for Mathematics.

EVIDENCE SUMMARY:

FOCUS- Standards focus typically on previous grade level standards in order to remediate.

COHERENCE- Majority of curriculum is meant to help students be ready for grade level curriculum.

RIGOR- The curriculum is set up so students progress thrugh multiple levels of learning.

CONCEPTUAL UNDERSTANDING-
Students must gain conceptual understanding through reasoning and multiple representations.

MATHEMATICAL PRACTICES-
The Mathematical Practices are addressed throughout the curriculum and vocabulary reflects that as well.

ACCESSIBILITY OF STANDARDS TO ALL STUDENTS-
Products are available in Spanish and the online resources have a translator option.

OTHER:
The student books are consumables.

2015-16 Interim Mathematics Review

Mathematics Evaluation Tool Grades K-8

Publisher: HMH

Title of Material: Math 180 Course II

Author: D. Ball, T. Hasselbring, S Bechmann, D. Dockterman

ISBN #: 978-0-545-80632-9 **Copyright**

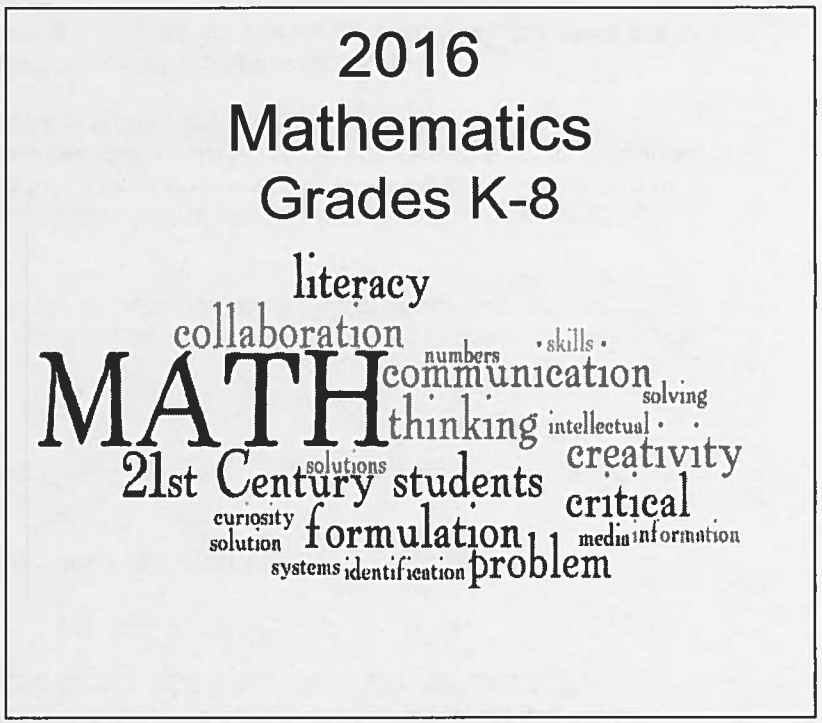
Reviewer ID: PB BP

Core Mathematics Program- a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Core.

Other Mathematics Program- a program that substantially, but partially, meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Other.

Component Mathematics Program- a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs.
Substantial evidence clearly supports the designation of this program as Component.

Intervention Program- a program designed and intended to target and support students' specific needs.
Substantial evidence clearly supports the designation of this program as Intervention.



- Evaluation Form adapted from Instructional Materials Evaluation Toolkit (IMET).

The IMET was developed by Student Achievement Partners. Educators may use or adapt. http://creativecommons.org/licenses/by/3.0/ Download this tool at http://achievethecore.org/IMET

Instructional Materials Evaluation Tool

Mathematics, Grades K-8

What Are the Purposes of the IMET?

This Math IMET is designed to help educators determine whether instructional materials are aligned to the Shifts and major features of the Common Core State Standards (CCSS). The substantial instructional Shifts (http://www.corestandards.org/other-resources/key-shifts-inmathematics/) at the heart of the Common Core State Standards are:

- **Focus** strongly where the Standards focus
- **Coherence**: Think across grades and link to major topics within the grade
- **Rigor**: In major topics, pursue conceptual understanding, procedural skill and fluency, and application with equal intensity.

The IMET draws directly from the following documents:

- Common Core State Standards for Mathematics (www.corestandards.org/Math)
- Publishers' Criteria for the Common Core State Standards in Mathematics grade K-8 (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)

When to use the IMET

1. Purchasing materials: Many factors go into local purchasing decisions. Alignment to the Standards is a critical factor to consider. This tool is designed to evaluate alignment of instructional materials to the Shifts and the major features of the CCSS. It also provides suggestions of additional indicators to consider in the materials evaluation and purchasing process.

2. Evaluating materials currently in use: The IMET can be used to analyze the degree of alignment of existing materials and help to highlight specific, concrete flaws in alignment. Even where materials and tools currently in use fail to meet one or more of these criteria, the pattern of failure is likely to be informative. States and districts can use the evaluation to create a thoughtful plan to modify or combine existing resources in such a way that students' actual learning experiences approach the focus, coherence, and rigor of the Standards.

3. Developing programs: Those developing new programs can use this tool as guidance for creating aligned curricula.
Please note this tool was designed for evaluating comprehensive curricula (including any supplemental or ancillary materials), but it was not designed for the evaluation of standalone supplemental materials.

Who Uses the IMET?

Evaluating instructional materials requires both subject-matter and pedagogical expertise. Evaluators should be well versed in the Standards (www.corestandards.org/Math) for all grades in which materials are being evaluated. This includes understanding the Major Work of the grade (www.achievethecore/focus), the Supporting and Additional work, how the content fits into the progressions in the Standards (www.achievethecore.org/progressions), and the expectations of the Standards with respect to conceptual understanding, procedural skill and fluency, and application. Evaluators also should be familiar with the substantial instructional Shifts (http:// www.corestandards.org/other-resources/key-shifts-in-mathematics/) of Focus, Coherence and Rigor that are listed above.

Getting Started

Prior to Evaluation

Assemble all of the materials necessary for the evaluation. It is essential for evaluators to have materials for all grades covered by the program, as some criteria cannot be rated without having access to each grade. In addition, each evaluator should have a reference copy of the Common Core State Standards for Mathematics (CCSSM) and the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013).

Instructional Materials Evaluation Tool
Mathematics, Grades K-8

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- Common Core State Standards for Mathematics (www.corestandards.org/Math)
- Publishers' Criteria for the Common Core State Standards in Mathematics grade K-8 (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)

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Getting Started
Prior to Evaluation

Assemble all of the materials necessary for the evaluation. It is essential for evaluators to have materials for all grades covered by the program, as some criteria cannot be rated without having access to each grade. In addition, each evaluator should have a reference copy of the Common Core State Standards for Mathematics (CCSSM) and the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013).

Before conducting the evaluation itself, it is important to develop a protocol for the evaluation process. The protocol should include having evaluators study the Publishers' Criteria and the IMET. It will also be helpful for evaluators to get a sense of each program overall before beginning the process. At a minimum, this would include reading the front matter of the text, looking at the table of contents and paging through multiple chapters.

Sections 1-3 below should be completed to produce a comprehensive picture of the strengths and weaknesses of the materials under evaluation. Information about areas in need of improvement or supplementation should be shared with internal and external stakeholders.

Navigating the Tool

Begin with Section 1: Non-Negotiable Alignment Criteria

- The Non-Negotiable Alignment Criteria must each be met in full for materials to be considered aligned to the Shifts and the major features of the Common Core State Standards. Each Non-Negotiable Alignment Criterion has one or more metrics associated with it; every one of these metrics must be met in order for the criterion as a whole to be met.

- Examine the relevant materials and use evidence to rate the materials against each criterion and its associated metric(s).

- Record and explain the evidence upon which the rating is based.

Continue to Section 2: Alignment Criteria

- The Alignment Criteria must each be met for materials to be considered aligned to the Shifts and the major features of the Common Core State Standards. Each Alignment Criterion has one or more metric associated with it; a specific number of these metrics must be met or partially met in order for the criterion as a whole to be met.

- Examine the materials in relation to these criteria, assigning each metric a point value. Rate the criterion as "Meets" or "Does Note Meet" based on the number of points assigned. The more points the materials receive on the alignment Criteria, the better they are aligned.

Record and explain the evidence upon which the rating is based.

Proceed to Section 4: Indicators of Quality

- Indicators of Quality are important considerations that will help evaluators better understand the overall quality of instructional materials. These considerations are not criteria for alignment to the CCSS, but they provide valuable information about additional program characteristics. Evaluators may want to add their own indicators to the examples provided.

Directions for Non-Negotiable 1

Freedom from Obstacles to Focus

Criterion	Evidence- Give specific examples.	Rating: (Reviewer only.)
Non-Negotiable 1: **Freedom from Obstacles to Focus** **Materials must reflect the content architecture of the Standards by not assessing the topics named before the grade level where they first appear in the Standards.** The Standards foster students' progress to algebra by focusing strongly on arithmetic. Consistent with this focus, certain topics from outside of arithmetic appear only in later grades. Thus, to be aligned, materials must reflect the content architecture of the Standards by not assessing the topics named before the grade level where they first appear in the Standards. In this criterion, "topics named" means the topics that are explicitly named in Metric 1A. No other topics should be added to the list in Metric 1A. (Note that other topics in the standards are addressed in criterion NN2.)	**Required Materials** • Common Core State Standards for Mathematics (www.corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf) • From the materials being evaluated: teacher guides and all assessment components	**Rating this Criterion**: Non-Negotiable 1 is rated as Meets or Does Not Meet. To rate Non-Negotiable 1, begin by rating Metric 1A. Since Metric 1A is the only metric for Non-Negotiable 1, the rating for Non-Negotiable 1 is the same as the rating for Metric 1A. If Metric 1A is rated as Does Not Meet, include evidence of when the named topic(s) is/are assessed. If the metric is rated as Meets, list the grade(s) examined in the evaluation.

Metric NN1A: **Materials ref[illegible] the basic architecture of the Standards by not assessing the listed topics before the grade level indicated.** • Probability, including chance, likely outcomes, probability models. (Introduced in the CCSSM in grade 7) • Statistical distributions, including center, variation, clumping, outliers, mean, median, mode, range, quartiles; and statistical association or trends, including two-way tables, bivariate measurement data, scatter plots, trend line, line of best fit, correlation. (Introduced in the CCSSM in grade 6) • Similarity, congruence, or geometric transformations. (Introduced in the CCSSM in grade 8) • Symmetry of shapes, including line/ reflection symmetry, rotational symmetry. (Introduced in the CCSSM in grade 4) **How to Find the Evidence:** Evaluate the table of contents, all chapter tests, all unit tests, and other such assessment components (including rubrics). For context, read Criterion #2 from the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013). NOTE: Grade alignments of other topics are addressed in Non-Negotiable 2, Focus and Coherence.) In this criterion, "topics named" means the topics that are explicitly named in Metric 1A. No other topics should be added to the list in Metric 1A. (Note that other topics in the standards are addressed in criterion NN2.)	**Evidence-** **Table of Contents C[illegible]y indicates what each Block and Topic are that will be covered.**	**(Reviewer only.)** **__X__Meets** **____Does Not Meet**
Non-Negotiable 1: Materials must reflect the content architecture of the Standards by not assessing the topics named* before the grade level where they first appear in the Standards. **NN 1** If Metric 1A was rated as Meets, then rate Non-Negotiable 1 as Meets. If Metric 1A was rated as Does Not Meet, then rate Non- Negotiable 1 as Does Not Meet. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion.**(Reviewer only.)** **Before moving to Non-Negotiable 2, record the final Meets or Does Not Meet rating in the Evaluation Summary.**		**(Reviewer only.)** **__X__Meets** **____Does Not Meet** **Strengths/Weaknesses:** Strengths, Students and teachers can see exactly what will be covered on any given day.

Directions for Non-Negotiable 2

Focus and Coherence

Non-Negotiable 2: **Focus and Coherence** **Materials must focus coherently on the Major Work of the grade in a way that is consistent with the progressions in the Standards.** Focus and coherence are the two major evidence-based design principles of the Common Core State Standards for Mathematics (CCSSM, p. 3). Focus is necessary in order to fulfill the ambitious promise the states have made to their students by adopting the Standards: greater achievement at the college and career ready level; greater depth of understanding of mathematics; and a rich classroom environment in which reasoning, sense-making, applications, and a range of mathematical practices flourish. In simpler terms, a mile-wide, inch-deep curriculum translates to less time per topic. Less time means less depth and moving on without many students. Thus, materials must focus coherently on the Major Work of the grade in a way that is consistent with the progressions in the Standards.	**Required Materials** • Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf) • Focus by Grade Level for the grade being evaluated (www.achievethecore.org/focus) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion:** Non-Negotiable 2 is rated as Meets or Does Not Meet. To rate Non-Negotiable 2, first rate metrics 2A–2H. Each of these eight metrics must be rated as Meets in order for Non-Negotiable 2 to be rated as Meets. Rate each metric 2A-2H as Meets or Does Not Meet/Insufficient Evidence. If the evidence examined shows that the Criterion is met, then mark the Criterion Meets. If the evidence examined shows that the Criterion is not met—or if there is insufficient evidence to make a determination—then mark the Criterion as Does Not Meet/Insufficient Evidence. Support all ratings with evidence.
Metric NN2A: **In each grade K–8, students and teachers using the materials as designed devote the large majority of time to the Major Work of the grade.** **How to Find the Evidence:** Familiarize yourself with the Major Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, lessons, homework assignments, and assessments. (Evaluate both student and teacher materials.) Consider time spent on the Major Work of the grade and judge qualitatively whether students and teachers using the materials as designed will devote the large majority of time to the Major Work of the grade. For context, read Criterion #1 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013)	**Evidence-** 7th grade Major Works: Area (proportional relationships), Rational Numbers in expressions and equations, scales and geometry (area, surface area, volume) Almost every lesson is directed to the major works but focus on lower grade major works to build up on grade major works. There are a few lessons spent tying thing together rather than learning new material, but this is expected.	**(Reviewer only.)** **____ Meets** **__x__Does Not Meet/** **Insufficient Evidence** Most individual lessons focus on below grade level material to build a foundation for grade level material. Great for low level interventions.

Metric NN2B: **Supporting work, where present, enhances focus and coherence simultaneously by also engaging students in the Major Work of the grade.** **How to Find the Evidence:** Familiarize yourself with the Major Work and Supporting Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate chapters and lessons that focus on Supporting Work. NOTE: Example of evaluating this Criterion might include looking at whether materials for K–5 generally treat data displays as an occasion for solving grade-level word problems using the four operations (e.g., see 3.MD.B.3); or whether materials for grade 7 take advantage of opportunities to use probability to support ratios, proportions, and percentages. For context, read Criterion #3 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Support works and minimal, but are used in conjunction to ratios and proportions	**(Reviewer only.)** **_x_ Meets** **____Does Not Meet/ Insufficient Evidence**
Metric NN2C: **Materials base content progressions on the grade-by-grade progressions in the Standards. Content from previous or future grades does not unduly interfere with or displace on-grade-level content.** **How to Find the Evidence:** Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, and lessons in both student and teacher materials. NOTE: In some cases it may be possible that aligned materials might address some aspects of a topic in a strategic way before or after the grade level in which the topic is central in the Standards' progressions; for example, a curriculum author might purposefully choose to explore adding fractions with unlike denominators in a way appropriate to grade four, recognizing that this work is not really required until the next grade. However, any such purposeful discrepancies in content progressions should enhance the required learning in each grade; not unduly interfere with or displace grade-level content; and be clearly aimed at helping students meet the Standards as written rather than effectively rewriting the progressions in the Standards. And in all cases, note that Non-Negotiable 1 must be met for materials to be aligned. For context, read Criterion #5a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Many lessons focus a grade behind. They build to prepare for the grade they are on, but everything remediates to the point of being almost a whole grade behind. A lot of time is spent reviewing 6th grade material to help solidify new content that matches in 7th grade.	**(Reviewer only.)** **____Meets** **_x_ Does Not Meet/ Insufficient Evidence**

Metric NN2D: **Materials gi[illegible]l students extensive work with on-grade-level problems.** **How to Find the Evidence:** Evaluate both student and teacher materials. If the materials provide resources for differentiated learning, consider whether lower-performing students have opportunities to engage with grade-level problems. Also consider whether higher-performing students are given opportunities to learn current grade-level content in greater depth. For context, read Criterion #5b in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Students are given o[illegible]tunities to previous-grade-level problems. Problems are broken down so that struggling students can see step by step. Gradually moving to problems on grade level material.	**(Reviewer only.)** **____Meets** **__x__Does Not Meet/** **Insufficient Evidence**
Metric NN2E: **Materials relate on-grade-level concepts explicitly to prior knowledge from earlier grades.** **How to Find the Evidence:** Evaluate both student and teacher materials. NOTE: Examples of evaluating this Criterion might include looking at the way the materials extend basic ideas of place value across the decimal point; or the role that properties of operations play when the materials extend arithmetic beyond whole numbers to fractions, variables, and expressions. More generally, cluster headings in the Standards sometimes signal key moments where reorganizing and extending previous knowledge is important in order to accommodate new knowledge (e.g., see cluster headings that use the phrase "Apply and extend previous understanding"). For context, read Criterion #5c in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Math 180 uses concepts of grade school games to help students find and solve equations that apply to the real world. Any mathematical concepts are given a quick reminder and example for students to look off. Grade level concepts are tied in generally.	**(Reviewer only.)** **____Meets** **__x_Does Not Meet/** **Insufficient Evidence**
Metric NN2F: **Review of material from previous grades is clearly identified as such to the teacher, and teacher and students can see what their specific responsibility is for the current year.** **How to Find the Evidence:** Evaluate the table of contents, but do not stop there; also evaluate units, chapters, lessons, homework assignments and assessments. (Evaluate both student and teacher materials.) Identify any content from previous grades and check whether it is identified as such. For context, read Criterion #5a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Students and teachers can see what is expected of them throughout the book. Both can see a general overview in their table of contents for each Block as well as individual page headings. **But,** most of the material addresses previous grade work.	**(Reviewer only.)** **___Meets** **_x_Does Not Meet/** **Insufficient Evidence**

Metric NN2G: **Materials include learning objectives that are visibly shaped by CCSSM cluster headings.** **How to Find the Evidence:** Select several clusters from the Major Work in the grade being evaluated. Evaluate teacher and student materials in relation to these clusters. For context, read Criterion #6a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Page headings are used to give students an idea of what their learning objectives are. Ex. Course I, Block 4 Topic 1: 214 "Use Percent to Construct Arguments" These headings easily translate into "I can…" statements for students.	(Reviewer only.) **__x_Meets** **____Does Not Meet/** **Insufficient Evidence**
Metric NN2H: **Materials include problems and activities that serve to connect two or more clusters in a domain, or two or more domains in a grade, in cases where these connections are natural and important.** **How to Find the Evidence:** In the grade being evaluated, choose two or more clusters or two or more domains for which connections are natural and important. Evaluate the units, chapters, and lessons that deal with the chosen topics, looking for problems and activities that serve to connect the chosen clusters or domains. NOTE: An example of evaluating this Criterion might include looking at whether problems in grade 4 sometimes or often involve students applying their developing computation skills (detailed in domain NBT) in the context of solving word problems (detailed in domain OA). For context, read Criterion #6b in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Students are initially given problems where they are solving equations that use fractions and other whole numbers; and are gradually given variables in equations like how x relates to y.	(Reviewer only.) **__x_Meets** **____Does Not Meet/** **Insufficient Evidence**
Non-Negotiable 2: **Focus and Coherence** **Materials must focus coherently on the Major Work of the grade in a way that is consistent with the progressions in the Standards.** **NN 2** If all Metrics 2A – 2H were rated as Meets, then rate Non-Negotiable 2 as Meets. If one or more Metric was rated Does Not Meet/Insufficient Evidence, then rate Non-Negotiable 2 as Does Not Meet. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)** **Before moving to Alignment Criterion 1, record the final Meets or Does Not Meet rating in the Evaluation Summary.**		(Reviewer only.) **___Meets** **__x__Does Not Meet** **Strengths/Weaknesses:** Some major works are addressed in a way that students may not fully comprehend what they are doing, but they are present, identifiable, and acquired to reasonable efficacy.

Now continue by evaluating the Alignment Criterion 1 for Rigor and Balance.

Directions for Alignment Criterion 1

Rigor and Balance

Alignment Criterion 1: Rigor and Balance **Materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.** The Standards set expectations for attention to all three aspects of rigor: conceptual understanding, procedural skill and fluency, and applications. Thus, materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.	**Required Materials** • Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf) • Focus by Grade Level for the grade being evaluated (achievethecore.org/focus) • Situation Types for the Operations in Word Problems (achievethecore.org/situation-types) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion:** Alignment Criterion 1 is rated as Meets or Does Not Meet. To rate Alignment Criterion 1, first rate metrics 1A, 1B, and 1C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). For each metric, guiding questions are provided to aid in gathering evidence. Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 1 if the materials rate 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as rigor and balance, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.
Metric AC1A: **The materials support the development of students' conceptual understanding of key mathematical concepts, especially where called for in specific content Standards or cluster headings.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Major Work for the grade being evaluated that relate specifically conceptual understanding to use throughout the questions associated with this metric. NOTE: Some examples of clusters or Standards that call for conceptual understanding include: K.OA.A.1, (1.NBT.B, 1.NBT.C), (2.NBT.A, 2.NBT.B), (3.OA.A.1, 3.OA.A.2), 4.NF.A, (4.NBT.A, 4.NBT.B), 5.NF.B, (5.NBT.A, 5.NBT.B), 6.RP.A, 6.EE.A.3, 7.NS.A, 7.EE.A, 8.EE.B, 8.F.A, 8.G.A Clusters or Standards grouped by parentheses are closely connected and could be analyzed together. For context, read Criterion #4a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	-Choose a cluster/Standard from the Major Work that is aligned to each aspect of rigor and use it to evaluate these metrics. It is most helpful if the same clusters/Standards are chosen for all of the programs being evaluated. (Guidance in choosing clusters/Standards is included in "How to Find the Evidence".)	**Use the questions for AC Metric 1A to evaluate Metric 1A. Record evidence for each question and rate Metric 1A.** __x__ **Meets (2)** ____ **Partially Meets (1)** ____ **Does Not Meet (0)**

Is conceptual understanding attended to thoroughly where the Standards set ex expectations for understanding or interpreting? Evaluate lessons, chapter/unit assessments and homework assignments, paying attention to work aligned to Standards that explicitly call for understanding or interpreting. NOTE: Examples of evaluating this Criterion might include looking at how well the multi-digit addition and subtraction algorithms are developed and explained on the basis of place value and properties of operations; or how well the multi-digit multiplication and division algorithms are developed and explained on the basis of place value and properties of operations; or how well solving equations is presented and explained as a process of reasoning.	**Evidence-** Lesson 6.2.1 begin address proportional relationships and prepares for relating x to y.	
Do the materials feature high-quality conceptual problems and conceptual discussion questions? Evaluate lessons, chapter/unit assessments, and homework assignments. NOTE: Example of conceptual problems might include such questions as "Find a number greater than 1/5 and less than 1/4," or "If the divisor does not change and the dividend increases, what happens to the quotient?"	**Evidence-** The patterns prep for finding slope of any given line. "The height of a skateboard ramp is half the length of its bas. She builds a ramp with a height of 3.5 ft. What is the length of the base of the ramp?"	
Do the materials feature opportunities to identify correspondences across mathematical representations? Evaluate lessons, chapter/unit assessments and homework assignments. NOTE: Examples of evaluating this Criterion might include looking at whether students are supported in identifying correspondences among: the verbal description of a situation, the diagrams that distill its mathematical features, and the equations that model it; or equivalent forms of numbers (e.g., 3 and 6/2) and the number line; or rational number operations and representations of them via models such as the vector model; or the expression that defines a function and the graph that shows the relationship.	**Evidence-** Patterns are initially addressed using triangles and transition into simple slopes with a rise and run.	
Metric AC1B: **The materials are designed so that students attain the fluencies and procedural skills required by the Standards.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Major Work for the grade being evaluated that relate specifically to fluency and procedural skill to use throughout the questions associated with this metric. NOTE: Some examples of Standards that call for procedural skill and fluency include: K.OA.A.5, 1.OA.C.6, 2.OA.B.2, 2.NBT.B.5, 3.OA.C.7, 3.NBT.A.2, 4.NBT.B.4, 5.NBT.B.5, 6.NS.B.2, and 6.NS.B.3, 6.EE.A, 7.NS.A, 7.EE.A.1,7.EE.B.4a, 8.EE.C.7, 8.EE.C.8b For context, read Criterion #4b in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).		**Use the questions for Metric 1B to evaluate Metric 1 B. Record evidence for each question and rate Metric 1B.** **(Reviewer only.)** **__x__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**

Is progress toward fluency and procedural skill interwoven with students' developing conceptual understanding of the operations in question? Evaluate lessons, chapter/unit assessments, daily routines, and homework assignments for evidence that the development of fluency and procedural skill is supported by conceptual understanding.	**Evidence-** 6.2.2 Shows the relationship between those triangles and slope on a graph.	
Are purely procedural problems and exercises present that include cases in which opportunistic strategies are valuable and generic cases that require efficient algorithms present? Evaluate lessons, chapter/unit assessments, daily routines, and homework assignments. NOTE: Examples of problems in which opportunistic strategies are valuable might include the sum 698 + 240 or the system x + y = 1, 2x + 2y = 3. Examples of generic cases that require efficient algorithms might include the sum 8767+2286 or the system 6y + x = x + 3, – x = 1 + 2y.	**Evidence-** Real world application is in every lesson and problem, thought practice on any *lone* topic seems minimal.	
Do the materials in grades K–6 provide repeated practice toward attainment of fluency Standards? Evaluate lessons, daily routines, and homework assignments for evidence of repeated practice toward attainment of the following K–6 Standards that set an explicit expectation of fluent (accurate and reasonably fast) computation: K.OA.A.5, 1.OA.C.6, 2.OA.B.2, 2.NBT.B.5, 3.OA.C.7, 3.NBT.A.2, 4.NBT.B.4, 5.NBT.B.5, 6.NS.B.2, 6.NS.B.3.	**Evidence-** Course II uses constant practice and procedures of *what* the problems is, *what* it looks like as a representation, and *what* the steps look like to solve it.	
Metric AC1C: **The materials are designed so that teachers and students spend sufficient time working with engaging applications, without losing focus on the Major Work of each grade.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Major Work for the grade being evaluated that relate specifically application to use throughout the questions associated with this metric. NOTE: Some examples of clusters or Standards that call for application include: K.OA.A.2, 1.OA.A, 2.OA.A, 3.OA.A.3, 3.OA.D.8, 4.OA.A.3, 4.NF.B.3d, 4.NF.B.4c, 5.NF.B.6, 5.NF.B.7c, 6.RP.A.3, 6.NS.A.1, 6.EE.B.7, 6.EE.C.9, 7.RP.A, 7.NS.A.3, 7.EE.B.3, 8.EE.C.8c, 8.F.B For context, read Criterion #4c in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Every single block uses examples from real life and shows how the topics might be used in real life application for hackers/programming (block 8), artists and programmers (block 5), or even doctors (block 9).	**Use the questions for Metric 1C to evaluate Metric 1C. Record evidence for each question and rate Metric 1C.** **(Reviewer only.)** **____Meets (2)** **__x_Partially Meets (1)** **____Does Not Meet (0)**
There are single- and multi-step contextual problems, including non-routine problems, that develop the mathematics of the grade, afford opportunities for practice, and engage students in problem solving? Do the problems attend thoroughly to those places in the content Standards where expectations for multi-step and real-world problems are explicit? Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** Block 6.3 addresses steps to interpretive linear equations and all the information one needs to find the equation.	

Do application problems particularly stress applying the Major Work of the grade? Evaluate lessons, chapter/unit assessments, and homework assignments. NOTE: Examples of evaluating this Criterion might include looking at: how well, by the end of grade 2, students using the materials as designed can represent and solve a full range of one-step addition and subtraction word problems; or how well, by the end of grade 3, students using the materials as designed can represent and solve a full range of one-step multiplication and division word problems; or how well these basic situation types for each operation are carried coherently across the grades, (e.g., with fractions and algebraic expressions); or, in all grades, whether the problems connect concepts, Standards, and domains in ways that are natural and important. For a list of situation types for one-step addition, subtraction, multiplication, and division problems, see Situation Types for the Operations in Word Problems	**Evidence-** Most all major work is addressed in a single grade level frequently.	
Does modeling build slowly across K–8, with applications that are relatively simple in earlier grades and when students are encountering new content? In grades 6–8, do the problems begin to provide opportunities for students to make their own assumptions or simplifications in order to model a situation mathematically? Read Standard for Mathematical Practice 4, Model with Mathematics. Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** Every new topic is addressed with examples as well as work space to follow every step; slowly moving students toward taking fewer steps on paper as they take steps mentally.	

Alignment Criterion 1: Rigor and Balance

Materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.

(Reviewer only.)

__x_Meets

____Does Not Meet

AC1 Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 out of 6 points, the Criterion has not been met. Check the final rating.
Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)**

Strengths/Weaknesses:

Before moving to Alignment Criterion 2, record the final Meets or Does Not Meet rating in the Evaluation Summary.

Directions for Alignment Criterion 2

Standards for Mathematical Practice

Alignment Criterion 2: Standards for Mathematical Practice **Materials must demonstrate authentic connections between content Standards and practice Standards.** The Standards require that designers of instructional materials connect the mathematical practices to mathematical content in instruction. Thus, materials must demonstrate authentic connections between content Standards and practice Standards.	**Required Materials:** • Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf) • Focus by Grade Level for the grade being evaluated (www.achievethecore.org/focus) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion** Alignment Criterion 2 is rated as Meets or Does Not Meet. To rate Alignment Criterion 2, first rate metrics 2A, 2B, and 2C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). For each metric, guiding questions are provided to aid in gathering evidence. Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 2 if the materials earn 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as mathematical practices, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.
Metric AC2A: **Materials address the practice Standards in such a way as to enrich the Major Work of the grade; practices strengthen the focus on Major Work instead of detracting from it, in both teacher and student materials.** **How to Find the Evidence:** Familiarize yourself with the Major Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate teacher and student materials for evidence that the mathematical practices support and connect to the focus of the grade. NOTE: Examples of evaluating this Criterion might include looking at whether, in grades K–5, students using the materials are supported to look for and express regularity in repeated reasoning about the addition table, the multiplication table, the properties of operations, the relationship between addition and subtraction or multiplication and division, and the place value system; or whether, in grades 6–8, students using the materials are supported to look for and express regularity in repeated reasoning about proportional relationships and linear functions. For context, read Criterion #8 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013).	**Evidence-** Book II begins with below grade level problems to establish foundations to build the at grade level material. Every major work is eventually addressed, though at a lower difficulty.	**(Reviewer only.)** **____Meets (2)** **__x__Partially Meets (1)** **____Does Not Meet (0)**

Metric AC2B: **Materials att to the full meaning of each practice Standard.** **How to Find the Evidence:** For context, read Criterion #7 and Criterion #9 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).		**Use the questions for Metric 2B to evaluate Metric 2B. Record evidence for each ques and rate Metric 2B.** **(Reviewer only.)** **_x_ Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Over the course of any given year of instruction, is each mathematical practice Standard meaningfully present in the form of assignments, activities, or problems that stimulate students to develop the habits of mind described in the practice Standard? Evaluate lessons, chapter/ unit assessments, and homework assignments for evidence of each mathematical practice being meaningfully present in instruction.	**Evidence-** **Practice is addressed and challenging in every lesson following the model of I do, we do, groups do, you do. Though it seems little homework is provided.**	
Do the materials treat the practice Standards as developing across grades or grade bands? Are the practice Standards in early grades appropriately simple? Do they display an arc of growing sophistication across the grades?	**Evidence-** **Throughout the material, students spiral into more difficult and critical thinking based problems rather than simple math drills.**	
Are there teacher-directed materials that explain the role of the practice Standards in the classroom and in students' mathematical development? Are alignments to practice Standards accurate?	**Evidence-** **While the common core standards are not explicitly identified in the chapters, the focus of each lesson as well as grade level connections are marked at every lesson entry.**	
Metric AC2C: **Materials support the Standards' emphasis on mathematical reasoning.** **How to Find the Evidence:** For context, read Criterion #10 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).		**Use the questions for Metric 2C to evaluate Metric 2C. Record evidence for each question and rate Metric 2C.** **(Reviewer only.)** **_x_ Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Do the materials support students in constructing viable arguments and critiquing the arguments of others concerning grade-level mathematics that is detailed in the content Standards? Read Standard for Mathematical Practice 3. Evaluate teacher and student materials to ensure that students are given opportunities to reason with grade-level mathematics.	**Evidence-** **Lesson set up allows students to develop reasoning skills for *why* and *how* in solving math problems. Examples are provided in every lesson as well as areas to justify your answer.**	
Do the materials support students in producing not only answers and solutions, but also, in a grade-appropriate way, arguments, explanations, diagrams, mathematical models, etc., especially in the Major Work of the grade? Familiarize yourself with the Major Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate teacher and student materials, to understand the types of work students are expected to produce.	**Evidence-** **Each problem in the book requires justification from the student from *how do you know* to *explain your reasoning.***	

Do materials explicitly attend to the specialized language of mathematics? Is the language of argument, problem solving, and mathematical explanations taught rather than assumed? Evaluate teacher and student materials, paying attention to how mathematical language is taught. NOTE: Examples of evaluating this Criterion might include looking at whether students are supported in: basing arguments on definitions; using the method of providing a counterexample; or recognizing that examples alone do not establish a general statement.	**Evidence-** **Appropriate vocabulary is identified at the beginning of every unit and lesson. As well as being defined in the chapter when the vocabulary should be taught. Ex. Additive Inverse 7.1**	

Alignment Criterion 2:
Standards for Mathematical Practice

Materials must demonstrate authentic connections between content Standards and practice Standards.

AC2 Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 out of 6 points, the Criterion has not been met. Check the final rating.
Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion.
(Reviewer only.)

Before moving to Alignment Criterion 3, record the final Meets or Does Not Meet rating in the Evaluation Summary.

(Reviewer only.)

_x_ Meets

____Does Not Meet

Strengths/Weaknesses:

Alignment Criterion 3:
Access to the Standards for All Students

Materials must provide supports for English Language Learners and other special populations.

Because Standards are for all students, alignment requires thoughtful support to ensure all students are able to meet the Standards. Thus, aligned materials must provide supports for English Language Learners and other special populations.

Required Materials:

- Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf)
- Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)
- From the materials being evaluated: teacher guides, student texts and workbooks

Rating this Criterion:

Alignment Criterion 3 is rated as Meets or Does Not Meet.

To rate Alignment Criterion 3, first rate metrics 3A, 3B, and 3C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points).

Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 3 if the materials earn 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as support for special population, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.

Metric AC3A: **Support for [illegible]ish Language Learners and other special populations is thoughtful and helps those students meet the same Standards as all other students. The language in which problems are posed is carefully considered.** **How to Find the Evidence:** Evaluate teacher and student materials, paying attention to supports offered for special populations.	**Evidence-** Vocabulary is provi[illegible] in Spanish. Online material is available in Spanish. Addresses need for the *why* math vocabulary is needed and important.	**Reviewer only.)** **__x__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Metric AC3B: **Materials provide appropriate level and type of scaffolding, differentiation, intervention, and support for a broad range of learners with gradual removal of supports, when needed, to allow students to demonstrate their mathematical understanding independently.** **How to Find the Evidence:** Evaluate teacher and student materials, paying attention to whether materials provide differentiation that will lead all learners to engage with on-grade-level content.	**Evidence-** Extention and review lessons and adaptations are available for every lesson in the professional Learning book.	**Reviewer only.)** **__x__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Metric AC3C: **Design of lessons recommends and facilitates a mix of instructional approaches for a variety of learners such as using multiple representations (e.g., including models, using a range of questions, checking for understanding, flexible grouping, pair-share).** **How to Find the Evidence:** Evaluate teacher materials, noting instructional approaches suggested for whole class and differentiated lessons and activities.	**Evidence-** Lessons are designed for whole group and smaller groups to maximize student learning styles. Computer groups, teacher instruction, and others are used to help students learn.	**Reviewer only.)** **__x__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**

Alignment Criterion 3: **Access to the Standards for All Students** **Materials must provide supports for English Language Learners and other special populations.** **AC3** Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 points, the Criterion has not been met. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion.**(Reviewer only.)** **Move to the Evaluation Summary and record the final Meets or Does Not Meet rating .**	**(Reviewer only.)** **_x_Meets** **____Does Not Meet** **Strengths/Weaknesses:**

Once an evaluation for alignment to the Shifts and major features of the CCSS has been conducted using Sections 1-3, it's important to evaluate for overall quality and best practices. A starting list of Indicators of Quality are suggested below. States, districts and others evaluating instructional materials are encouraged to add to this list to ensure materials reflect local contexts. For background information on some of the Indicators of Quality in this section, refer to pp.18–21 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).

Indicators of Quality	**Evidence- Give specific examples.**	**Rating: (Reviewers only.)**
1. Lessons are thoughtfully structured and support the teacher in leading the class through the learning paths at hand, with active participation by all students in their own learning and in the learning of their classmates.	**Evidence-**Lessons are structured: as a group, in pairs, by self. Allowing teachers to spot struggling students as well as allowing students to help one another.	**(Reviewer only.)** **__x__ Yes** **_____ No**
2. The underlying design of the materials includes both problems and exercises. (In solving problems, students learn new mathematics, whereas in working exercises, students apply what they have already learned to build mastery.) Each problem or exercise has a purpose. **NOTE: This Criterion does not require that the problems and exercises be labeled as such.**	**Evidence-**Students are given exact instructions and step by step examples when learning and given story problems to combine exercise with application.	**(Reviewer only.)** **__x__ Yes** **_____ No**

3. Design of assignments is not haphazard: exercises are given in intentional sequences in order to strengthen students' mathematical understanding.	**Evidence-**Topic 1: students represent multiplication with pictures and find products before being introduced to the Commutative and Associative Properties of Multiplication. Factors and products help students see the connections.	**(Reviewer only.)** __x__ **Yes** _____ **No**
4. There are separate teacher materials that support and reward teacher study including, but not limited to: discussion of the mathematics of the units and the mathematical point of each lesson as it relates to the organizing concepts of the unit, discussion on student ways of thinking and anticipating a variety of students responses, guidance on lesson flow, guidance on questions that prompt students thinking, and discussion of desired mathematical behaviors being elicited among students.	**Evidence-** Math 180 includes an entire extra book that encourages teacher prep for assessment as well as extension of materials for advanced students as well as how to help ELL students.	**(Reviewer only.)** __x__ **Yes** _____ **No**
5. Manipulatives suggested in the materials are faithful representations of the mathematical objects they represent and are connected to written methods.	**Evidence- 1.3.1:** Finding slope is compared to a triangle with visuals.	**(Reviewer only.)** __x__ **Yes** _____ **No**
6. Materials include a variety of curriculum-embedded assessments. Examples include pre-, formative, summative, and self-assessment resources.	**Evidence-** Every lesson has an "exit ticket" requiring students to demonstrate understanding by solving problems *as well as* explaining *why* the math works the way it does.	**(Reviewer only.)** __x__ **Yes** _____ **No**
7. Assessments contain aligned rubrics, answer keys, and scoring guidelines that provide sufficient guidance for interpreting student performance.	**Evidence-** in class assessments contain answer keys, but little else is offered with the exception of online assessments.	**(Reviewer only.)** _____ **Yes** __x__ **No**
8. Materials assess student proficiency using methods that are accessible and unbiased, including the use of course-level language in student prompts.	**Evidence-** Students are tested with appropriate language. Questions for test seem to come from a preapproved set of questions rather than having potential bias from a teacher.	**(Reviewer only.)** __x__ **Yes** _____ **No**

9. Materials are carefully evaluated by qualified individuals, whose names are listed, in an effort to ensure freedom from mathematical errors and course-level appropriateness.	**Evidence-** Material was compiled and reviewed by various professors and dean of various colleges. Each qualified individual was given multiple responsibilities that overlapped others to ensure complete coverage, accountability, and accuracy.	**(Reviewer only.)** **__x__ Yes** **_____ No**
10. The visual design supports students in engaging thoughtfully with the subject. Navigation through the text is clear.	**Evidence-** Bright colors engage students and the application to real world problems shows actual value to the material beyond school.	**(Reviewer only.)** **__x__ Yes** **_____ No**
11. The materials engage parents in appropriate ways. For example, homework assignments in elementary grades, consist of routine problems, practice with getting answers, and fluency-building exercises that parents can easily support.	**Evidence-**Unable to find any parent engagement.	**(Reviewer only.)** **_____ Yes** **__x__ No**

Reviewer IMET Evaluation Summary **Title/Level:** _____

Publisher: _____ **Copyright:** _____ **ISBN:** _____

Reviewer ID # _____ **Date Review Completed:** _____

Non-Negotiable Criteria- Each Non-Negotiable must be met in order for the Non-Negotiable Alignment Criteria to be met overall.

Non-Negotiable 1: Freedom from Obstacles to Focus	Non- Negotiable 2: Focus and Coherence
__x__ Meets _____ Does Not Meet	_____ Meets __x__ Does Not Meet

Non-Negotiable Overall:

_____ **Meets** __x__ **Does Not Meet**

Alignment Criteria- Each Alignment Criterion must be met with a sufficient number of points in order for Alignment Criteria to be labeled as "Meets" overall. The more points the materials receive on the Alignment Criteria, the better they are aligned.

Alignment Criterion 1: Rigor and Balance	Alignment Criterion 2: Standards of Mathematical Practice	Alignment Criterion 3: Access to Standards for All Learners
Points: __5__ of 6 possible. (Materials must receive at least 5 of 6 points to align.) __x__ Meets _____ Does Not Meet	Points: __5__ of 6 possible. (Materials must receive at least 5 of 6 points to align.) __x__ Meets _____ Does Not Meet	Points: __6__ of 6 possible. (Materials must receive at least 5 of 6 points to align.) __x__ Meets _____ Does Not Meet

Alignment Criteria Overall:

__x__ **Meets** _____ **Does Not Meet**

If the materials meet both Non-Negotiables and relevant Alignment Criterion, they are aligned to the Shifts and major features of the Core Standards. **the materials meet every Non-Negotiable and Alignment Criterion? _____ Yes __x__ No**

What are the specific areas of strength and weakness based on this evaluation? Publishers or others modifying or developing assessments can use this information to make improvements and/or to remedy gaps in the alignment of assessment materials.

This course is great for remediating kids. However, some things seem to be are more heavily addressed than others. Homework doesn't seem to be big aspect of the program but regular assessment in class is a great bonus. Failure in the Non-negotiables resulted from much of the time being spend on lower grade major works that build a foundation for on grade level works.

2015-16 Mathematics Interim Review Recommendation & Summary

Publisher Name:	LearnBop/Fuel Education
Title:	LearnBop
ISBN #	N/A
Grade Level(s) or Course:	3
Reviewer ID:	JM, CJ

RECOMMENDED AS:

_____**Core Mathematics Program-** a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials. Substantial evidence clearly supports the designation of this program as Core.

_____**Other Mathematics Program-** a program that substantially, but partially, meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for supplemental materials. Substantial evidence clearly supports the designation of this program as Other.

__X__**Component Mathematics Program-** a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs. Substantial evidence clearly supports the designation of this program as Component.

_____**Intervention Program-** a program designed and intended to target and support students' specific needs. Substantial evidence clearly supports the designation of this program as Intervention.

_____ **Does not meet criteria** for recommendation as a Curricular Material or Online Resource for Mathematics.

EVIDENCE SUMMARY:

FOCUS-

LearnBop is intended to be used as a computer based intervention program. It is designed to target and support students' specific needs.

COHERENCE-

LearnBop provides 18 activities developed to the Major Clusters of 3rd grade Content Emphasis

RIGOR-

LearnBop uses a combination of graphics, appropriate mathematical language, and visuals to help develop conceptual understanding. When a student is showing a lack of conceptual understanding, LearnBop also provides additional Hints to break down the standard. All answers, however, are given in the form of multiple choice.

CONCEPTUAL UNDERSTANDING

LearnBop is intended for use as a intervention program and/or one to check for mastery. It is intended to be used to check for mastery of skills after the teacher has taught a lesson and students have had ample opportunity to practice that skill. If a student does not show mastery of that skill, LearnBop provides broken down instruction on the skill being assessed.

MATHEMATICAL PRACTICES-

Mathematic Practices 1, 5, and 6 are present in LearnBop, however, there are no opportunities for mathematical practices 2, 3, and 4, 7 or 8.

ACCESSIBILITY OF STANDARDS TO ALL STUDENTS-

LearnBop requires a fair amount of reading and students do not have the opportunity for questions to be read to them. All materials and information ~~was~~ is provided in English only.

OTHER:

LearnBop is soley a computer based intervention program with multiple choice answers. According to LearnBop's best practices model, a significant amount of teacher time must be invested in order to make this intervention program successful. LearnBop requires a yearly subscription to be purchased.

2015-16 Interim Mathematics Review

Mathematics Evaluation Tool Grades K-8

Publisher: LearnBop / Fuel Education

Title of Material: LearnBop

Author: LearnBop in partnership w/ K-12 math educators

ISBN #: N/A **Copyright** N/A

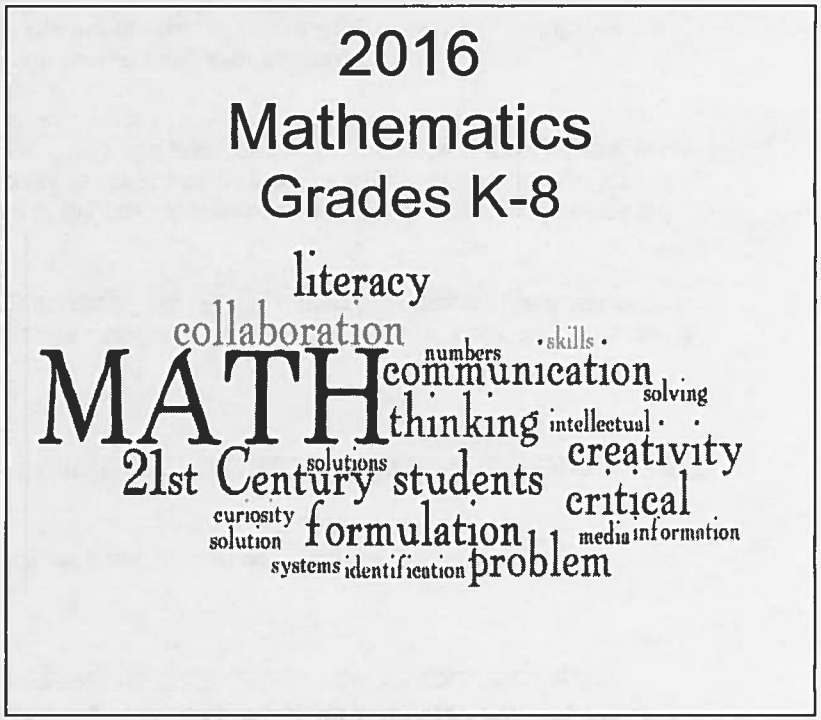
Reviewer ID: JM, CJ

Core Mathematics Program- a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Core.

Other Mathematics Program- a program that substantially, but partially, meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Other.

Component Mathematics Program- a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs.
Substantial evidence clearly supports the designation of this program as Component.

Intervention Program- a program designed and intended to target and support students' specific needs.
Substantial evidence clearly supports the designation of this program as Intervention.



- Evaluation Form adapted from Instructional Materials Evaluation Toolkit (IMET).

The IMET was developed by Student Achievement Partners. Educators may use or adapt. http://creativecommons.org/licenses/by/3.0/ Download this tool at http://achievethecore.org/IMET

Instructional Materials Evaluation Tool

Mathematics, Grades K-8

What Are the Purposes of the IMET?

This Math IMET is designed to help educators determine whether instructional materials are aligned to the Shifts and major features of the Common Core State Standards (CCSS). The substantial instructional Shifts (http://www.corestandards.org/other-resources/key-shifts-inmathematics/) at the heart of the Common Core State Standards are:

- **Focus** strongly where the Standards focus
- **Coherence**: Think across grades and link to major topics within the grade
- **Rigor**: In major topics, pursue conceptual understanding, procedural skill and fluency, and application with equal intensity.

The IMET draws directly from the following documents:

- Common Core State Standards for Mathematics (www.corestandards.org/Math)
- Publishers' Criteria for the Common Core State Standards in Mathematics grade K-8 (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)

When to use the IMET

1. Purchasing materials: Many factors go into local purchasing decisions. Alignment to the Standards is a critical factor to consider. This tool is designed to evaluate alignment of instructional materials to the Shifts and the major features of the CCSS. It also provides suggestions of additional indicators to consider in the materials evaluation and purchasing process.

2. Evaluating materials currently in use: The IMET can be used to analyze the degree of alignment of existing materials and help to highlight specific, concrete flaws in alignment. Even where materials and tools currently in use fail to meet one or more of these criteria, the pattern of failure is likely to be informative. States and districts can use the evaluation to create a thoughtful plan to modify or combine existing resources in such a way that students' actual learning experiences approach the focus, coherence, and rigor of the Standards.

3. Developing programs: Those developing new programs can use this tool as guidance for creating aligned curricula.
Please note this tool was designed for evaluating comprehensive curricula (including any supplemental or ancillary materials), but it was not designed for the evaluation of standalone supplemental materials.

Who Uses the IMET?

Evaluating instructional materials requires both subject-matter and pedagogical expertise. Evaluators should be well versed in the Standards (www.corestandards.org/Math) for all grades in which materials are being evaluated. This includes understanding the Major Work of the grade (www.achievethecore/focus), the Supporting and Additional work, how the content fits into the progressions in the Standards (www.achievethecore.org/progressions), and the expectations of the Standards with respect to conceptual understanding, procedural skill and fluency, and application. Evaluators also should be familiar with the substantial instructional Shifts (http:// www.corestandards.org/other-resources/key-shifts-in-mathematics/) of Focus, Coherence and Rigor that are listed above.

Getting Started

Prior to Evaluation

Assemble all of the materials necessary for the evaluation. It is essential for evaluators to have materials for all grades covered by the program, as some criteria cannot be rated without having access to each grade. In addition, each evaluator should have a reference copy of the Common Core State Standards for Mathematics (CCSSM) and the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013).

Before conducting the evaluation itself, it is important to develop a protocol for the evaluation process. The protocol should include having evaluators study the Publishers' Criteria and the IMET. It will also be helpful for evaluators to get a sense of each program overall before beginning the process. At a minimum, this would include reading the front matter of the text, looking at the table of contents and paging through multiple chapters.

Sections 1-3 below should be completed to produce a comprehensive picture of the strengths and weaknesses of the materials under evaluation. Information about areas in need of improvement or supplementation should be shared with internal and external stakeholders.

Navigating the Tool

Begin with Section 1: Non-Negotiable Alignment Criteria

- The Non-Negotiable Alignment Criteria must each be met in full for materials to be considered aligned to the Shifts and the major features of the Common Core State Standards. Each Non-Negotiable Alignment Criterion has one or more metrics associated with it; every one of these metrics must be met in order for the criterion as a whole to be met.

- Examine the relevant materials and use evidence to rate the materials against each criterion and its associated metric(s).

- Record and explain the evidence upon which the rating is based.

Continue to Section 2: Alignment Criteria

- The Alignment Criteria must each be met for materials to be considered aligned to the Shifts and the major features of the Common Core State Standards. Each Alignment Criterion has one or more metric associated with it; a specific number of these metrics must be met or partially met in order for the criterion as a whole to be met.

- Examine the materials in relation to these criteria, assigning each metric a point value. Rate the criterion as "Meets" or "Does Note Meet" based on the number of points assigned. The more points the materials receive on the alignment Criteria, the better they are aligned.

- Record and explain the evidence upon which the rating is based.

Proceed to Section 4: Indicators of Quality

- Indicators of Quality are important considerations that will help evaluators better understand the overall quality of instructional materials. These considerations are not criteria for alignment to the CCSS, but they provide valuable information about additional program characteristics. Evaluators may want to add their own indicators to the examples provided.

Directions for Non-Negotiable 1

Freedom from Obstacles to Focus

Criterion	Evidence- Give specific examples.	Rating: (Reviewer only.)
Non-Negotiable 1: **Freedom from Obstacles to Focus** **Materials must reflect the content architecture of the Standards by not assessing the topics named before the grade level where they first appear in the Standards.** The Standards foster students' progress to algebra by focusing strongly on arithmetic. Consistent with this focus, certain topics from outside of arithmetic appear only in later grades. Thus, to be aligned, materials must reflect the content architecture of the Standards by not assessing the topics named before the grade level where they first appear in the Standards. In this criterion, "topics named" means the topics that are explicitly named in Metric 1A. No other topics should be added to the list in Metric 1A. (Note that other topics in the standards are addressed in criterion NN2.)	**Required Materials** • Common Core State Standards for Mathematics (www.corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf) • From the materials being evaluated: teacher guides and all assessment components	**Rating this Criterion:** Non-Negotiable 1 is rated as Meets or Does Not Meet. To rate Non-Negotiable 1, begin by rating Metric 1A. Since Metric 1A is the only metric for Non-Negotiable 1, the rating for Non-Negotiable 1 is the same as the rating for Metric 1A. If Metric 1A is rated as Does Not Meet, include evidence of when the named topic(s) is/are assessed. If the metric is rated as Meets, list the grade(s) examined in the evaluation.

Metric NN1A: **Materials reflect the basic architecture of the Standards by not assessing the listed topics before the grade level indicated.** • Probability, including chance, likely outcomes, probability models. (Introduced in the CCSSM in grade 7) • Statistical distributions, including center, variation, clumping, outliers, mean, median, mode, range, quartiles; and statistical association or trends, including two-way tables, bivariate measurement data, scatter plots, trend line, line of best fit, correlation. (Introduced in the CCSSM in grade 6) • Similarity, congruence, or geometric transformations. (Introduced in the CCSSM in grade 8) • Symmetry of shapes, including line/ reflection symmetry, rotational symmetry. (Introduced in the CCSSM in grade 4) **How to Find the Evidence:** Evaluate the table of contents, all chapter tests, all unit tests, and other such assessment components (including rubrics). For context, read Criterion #2 from the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013). NOTE: Grade alignments of other topics are addressed in Non-Negotiable 2, Focus and Coherence.) In this criterion, "topics named" means the topics that are explicitly named in Metric 1A. No other topics should be added to the list in Metric 1A. (Note that other topics in the standards are addressed in criterion NN2.)	**Evidence-** LearnBop is designed to be used as an intervention program. It is designed to target and support students' specific needs. LearnBop is not intended for use as a Core Mathematics Program. LearnBop does not introduce standards before appropriate.	(Reviewer only.) __X__ **Meets** ____ **Does Not Meet**
Non-Negotiable 1: Materials must reflect the content architecture of the Standards by not assessing the topics named* before the grade level where they first appear in the Standards. **NN 1** If Metric 1A was rated as Meets, then rate Non-Negotiable 1 as Meets. If Metric 1A was rated as Does Not Meet, then rate Non- Negotiable 1 as Does Not Meet. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion.**(Reviewer only.)** **Before moving to Non-Negotiable 2, record the final Meets or Does Not Meet rating in the Evaluation Summary.**		(Reviewer only.) __X__ **Meets** ____ **Does Not Meet** **Strengths/Weaknesses:**

Direct ns for Non-Negotiable 2

Focus and Coherence

Non-Negotiable 2: **Focus and Coherence** **Materials must focus coherently on the Major Work of the grade in a way that is consistent with the progressions in the Standards.** Focus and coherence are the two major evidence-based design principles of the Common Core State Standards for Mathematics (CCSSM, p. 3). Focus is necessary in order to fulfill the ambitious promise the states have made to their students by adopting the Standards: greater achievement at the college and career ready level; greater depth of understanding of mathematics; and a rich classroom environment in which reasoning, sense-making, applications, and a range of mathematical practices flourish. In simpler terms, a mile-wide, inch-deep curriculum translates to less time per topic. Less time means less depth and moving on without many students. Thus, materials must focus coherently on the Major Work of the grade in a way that is consistent with the progressions in the Standards.	**Required Materials** • Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf) • Focus by Grade Level for the grade being evaluated (www.achievethecore.org/focus) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion:** Non-Negotiable 2 is rated as Meets or Does Not Meet. To rate Non-Negotiable 2, first rate metrics 2A–2H. Each of these eight metrics must be rated as Meets in order for Non-Negotiable 2 to be rated as Meets. Rate each metric 2A-2H as Meets or Does Not Meet/Insufficient Evidence. If the evidence examined shows that the Criterion is met, then mark the Criterion Meets. If the evidence examined shows that the Criterion is not met—or if there is insufficient evidence to make a determination—then mark the Criterion as Does Not Meet/Insufficient Evidence. Support all ratings with evidence.
Metric NN2A: **In each grade K–8, students and teachers using the materials as designed devote the large majority of time to the Major Work of the grade.** **How to Find the Evidence:** Familiarize yourself with the Major Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, lessons, homework assignments, and assessments. (Evaluate both student and teacher materials.) Consider time spent on the Major Work of the grade and judge qualitatively whether students and teachers using the materials as designed will devote the large majority of time to the Major Work of the grade. For context, read Criterion #1 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013)	**Evidence-** LearnBop provides 18 activities devoted to the Major Clusters of 3rd grade Content Emphases. The majority of the major clusters include multiple activities (i.e. Five activities devoted to **develop understanding of fractions as numbers** and four activities devoted to **solve problems involving the four operations, and identify and explain patterns in arithmetic**).	**(Reviewer only.)** **_X_ Meets** **____Does Not Meet/ Insufficient Evidence**

Metric NN2B: **Supporting work, where present, enhances focus and coherence simultaneously by also engaging students in the Major Work of the grade.** **How to Find the Evidence:** Familiarize yourself with the Major Work and Supporting Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate chapters and lessons that focus on Supporting Work. NOTE: Example of evaluating this Criterion might include looking at whether materials for K–5 generally treat data displays as an occasion for solving grade-level word problems using the four operations (e.g., see 3.MD.B.3); or whether materials for grade 7 take advantage of opportunities to use probability to support ratios, proportions, and percentages. For context, read Criterion #3 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** LearnBop provides 9 activities devoted to the Supporting Clusters of 3rd grade Content Emphases. LearnBop provides up to three activities devoted to a supporting cluster (i.e. Three activities devoted to **use place value understanding and properties of operations to perform multi-digit arithmetic** and one activity to **represent and interpret data**).	**(Reviewer only.)** **_X_ Meets** **____Does Not Meet/** **Insufficient Evidence**
Metric NN2C: **Materials base content progressions on the grade-by-grade progressions in the Standards. Content from previous or future grades does not unduly interfere with or displace on-grade-level content.** **How to Find the Evidence:** Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, and lessons in both student and teacher materials. NOTE: In some cases it may be possible that aligned materials might address some aspects of a topic in a strategic way before or after the grade level in which the topic is central in the Standards' progressions; for example, a curriculum author might purposefully choose to explore adding fractions with unlike denominators in a way appropriate to grade four, recognizing that this work is not really required until the next grade. However, any such purposeful discrepancies in content progressions should enhance the required learning in each grade; not unduly interfere with or displace grade-level content; and be clearly aimed at helping students meet the Standards as written rather than effectively rewriting the progressions in the Standards. And in all cases, note that Non-Negotiable 1 must be met for materials to be aligned. For context, read Criterion #5a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** LearnBop does a nice job of presenting materials at grade level appropriate times. When students are not accurate with answers, it then breaks down the problem for them with grade level appropriate models, if the student still lack understanding of the concept LearnBop uses below grade level instruction to help the student gain understanding. For example when a student is assigned Standard 3.NBT.A **Use place value understanding and properties of operations to perform multi-digit arithmetic**, there are three lessons presented, the first being **use place value to round**. When students do not answer correctly, the skill is broken down for instruction with third grade level appropriate models is used, if student still struggles, instruction with lower grade level models is presented to student to help achieve understanding.	**(Reviewer only.)** **_X_ Meets** **____Does Not Meet/** **Insufficient Evidence**

Metric NN2 **Materials g... all students extensive work with on-grade-level problems.** **How to Find the Evidence:** Evaluate both student and teacher materials. If the materials provide resources for differentiated learning, consider whether lower-performing students have opportunities to engage with grade-level problems. Also consider whether higher-performing students are given opportunities to learn current grade-level content in greater depth. For context, read Criterion #5b in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** LearnBop provides ... grade level concepts in the third grade curriculum. Multiple concepts are provided in each domain (measurement & data, number & operations in base ten, number and operations-fractions, operations and algebraic thinking) with the exception of geometry which provides just one concept development activity. LearnBop is an online program giving teachers instant access to reports on a multitude of things. Students can also track their assignments and mastery of concepts.	**(Reviewer only.)** **_X_ Meets** **____Does Not Meet/ Insufficient Evidence**
Metric NN2E: **Materials relate on-grade-level concepts explicitly to prior knowledge from earlier grades.** **How to Find the Evidence:** Evaluate both student and teacher materials. NOTE: Examples of evaluating this Criterion might include looking at the way the materials extend basic ideas of place value across the decimal point; or the role that properties of operations play when the materials extend arithmetic beyond whole numbers to fractions, variables, and expressions. More generally, cluster headings in the Standards sometimes signal key moments where reorganizing and extending previous knowledge is important in order to accommodate new knowledge (e.g., see cluster headings that use the phrase "Apply and extend previous understanding"). For context, read Criterion #5c in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** LearnBop requires students to use prior knowledge to demonstrate understanding of grade level concepts. When a student demonstrates a lack of understanding of a concept, LearnBop provides a tutorial that reviews prior knowledge and asks the student to extend that knowledge for the current grade level concept.	**(Reviewer only.)** **_X_ Meets** **____Does Not Meet/ Insufficient Evidence**
Metric NN2F: **Review of material from previous grades is clearly identified as such to the teacher, and teacher and students can see what their specific responsibility is for the current year.** **How to Find the Evidence:** Evaluate the table of contents, but do not stop there; also evaluate units, chapters, lessons, homework assignments and assessments. (Evaluate both student and teacher materials.) Identify any content from previous grades and check whether it is identified as such. For context, read Criterion #5a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** LearnBop has a Content Suite that provides a very concise and clear explanation as to what is covered in each grade level. The Content Suite is broken down into grade, then domain, then standard, then activity/concept.	**(Reviewer only.)** **_X_ Meets** **____Does Not Meet/ Insufficient Evidence**

Metric NN2G: **Materials in[illegible]e learning objectives that are visibly shaped by CCSSM cluster headings.** **How to Find the Evidence:** Select several clusters from the Major Work in the grade being evaluated. Evaluate teacher and student materials in relation to these clusters. For context, read Criterion #6a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** LearnBop is clearly shaped by the Common Core State Standards for Mathematics. The teacher assigns activities by first choosing the grade, then the CCSM domain, followed by choosing the description of the activity that has the specific standard listed with it.	**(Reviewer only.)** **_X_ Meets** **____Does Not Meet/** **Insufficient Evidence**
Metric NN2H: **Materials include problems and activities that serve to connect two or more clusters in a domain, or two or more domains in a grade, in cases where these connections are natural and important.** **How to Find the Evidence:** In the grade being evaluated, choose two or more clusters or two or more domains for which connections are natural and important. Evaluate the units, chapters, and lessons that deal with the chosen topics, looking for problems and activities that serve to connect the chosen clusters or domains. NOTE: An example of evaluating this Criterion might include looking at whether problems in grade 4 sometimes or often involve students applying their developing computation skills (detailed in domain NBT) in the context of solving word problems (detailed in domain OA). For context, read Criterion #6b in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** LearnBop is intended to be used as an intervention program. In the third grade curriculum it seems that LearnBop focuses on the standards on an individual basis and covers very limited amounts of information in each assignment in order to ensure student understanding before moving on to another standards. During the instructional portion if a student needs help to understand, there is some evidence of connections between domains.	**(Reviewer only.)** **_X_ Meets** **____Does Not Meet/** **Insufficient Evidence**
Non-Negotiable 2: **Focus and Coherence** **Materials must focus coherently on the Major Work of the grade in a way that is consistent with the progressions in the Standards.** **NN 2** If all Metrics 2A – 2H were rated as Meets, then rate Non-Negotiable 2 as Meets. If one or more Metric was rated Does Not Meet/Insufficient Evidence, then rate Non-Negotiable 2 as Does Not Meet. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)** **Before moving to Alignment Criterion 1, record the final Meets or Does Not Meet rating in the Evaluation Summary.**		**(Reviewer only.)** **_X_ Meets** **____Does Not Meet** **Strengths/Weaknesses:**

Now continue by evaluating the Alignment Criterion 1 for Rigor and Balance.

Directions for Alignment Criterion 1

Rigor and Balance

Alignment Criterion 1: Rigor and Balance

Materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.

The Standards set expectations for attention to all three aspects of rigor: conceptual understanding, procedural skill and fluency, and applications. Thus, materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.

Required Materials

- Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf)
- Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)
- Focus by Grade Level for the grade being evaluated (achievethecore.org/focus)
- Situation Types for the Operations in Word Problems (achievethecore.org/situation-types)
- From the materials being evaluated: teacher guides, student texts and workbooks

Rating this Criterion:

Alignment Criterion 1 is rated as Meets or Does Not Meet.

To rate Alignment Criterion 1, first rate metrics 1A, 1B, and 1C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). For each metric, guiding questions are provided to aid in gathering evidence.
Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 1 if the materials rate 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as rigor and balance, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.

Metric AC1A:
The materials support the development of students' conceptual understanding of key mathematical concepts, especially where called for in specific content Standards or cluster headings.

How to Find the Evidence:

Select one or more cluster(s) or Standard(s) from the Major Work for the grade being evaluated that relate specifically conceptual understanding to use throughout the questions associated with this metric. NOTE: Some examples of clusters or Standards that call for conceptual understanding include: K.OA.A.1, (1.NBT.B, 1.NBT.C), (2.NBT.A, 2.NBT.B), (3.OA.A.1, 3.OA.A.2), 4.NF.A, (4.NBT.A, 4.NBT.B), 5.NF.B, (5.NBT.A, 5.NBT.B), 6.RP.A, 6.EE.A.3, 7.NS.A, 7.EE.A, 8.EE.B, 8.F.A, 8.G.A

Clusters or Standards grouped by parentheses are closely connected and could be analyzed together.

For context, read Criterion #4a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).

-Choose a cluster/Standard from the Major Work that is aligned to each aspect of rigor and use it to evaluate these metrics. It is most helpful if the same clusters/Standards are chosen for all of the programs being evaluated. (Guidance in choosing clusters/Standards is included in "How to Find the Evidence".)

Use the questions for AC Metric 1A to evaluate Metric 1A. Record evidence for each question and rate Metric 1A.

_X_ Meets (2)

____Partially Meets (1)

____Does Not Meet (0)

Is conceptual understanding attended to thoroughly where the Standards set expectations for understanding or interpreting? Evaluate lessons, chapter/unit assessments and homework assignments, paying attention to work aligned to Standards that explicitly call for understanding or interpreting. NOTE: Examples of evaluating this Criterion might include looking at how well the multi-digit addition and subtraction algorithms are developed and explained on the basis of place value and properties of operations; or how well the multi-digit multiplication and division algorithms are developed and explained on the basis of place value and properties of operations; or how well solving equations is presented and explained as a process of reasoning.	**Evidence-** LearnBop uses a combination of graphics, appropriate mathematical language, and visuals to help develop conceptual understanding. When a student is showing a lack of conceptual understanding, LearnBop also provides additional Hints to break down the standard for the student.	
Do the materials feature high-quality conceptual problems and conceptual discussion questions? Evaluate lessons, chapter/unit assessments, and homework assignments. NOTE: Example of conceptual problems might include such questions as "Find a number greater than 1/5 and less than 1/4," or "If the divisor does not change and the dividend increases, what happens to the quotient?"	**Evidence-** LearnBop allows students the opportunity to receive immediate instruction on standards that they are demonstrating difficulty with. All answers, however, are given in the form of multiple choice.	
Do the materials feature opportunities to identify correspondences across mathematical representations? Evaluate lessons, chapter/unit assessments and homework assignments. NOTE: Examples of evaluating this Criterion might include looking at whether students are supported in identifying correspondences among: the verbal description of a situation, the diagrams that distill its mathematical features, and the equations that model it; or equivalent forms of numbers (e.g., 3 and 6/2) and the number line; or rational number operations and representations of them via models such as the vector model; or the expression that defines a function and the graph that shows the relationship.	**Evidence-** LearnBop provides videos of instruction for a student that is not understanding individual standards. LearnBop uses a variety of different graphics including pictures, charts, number lines, base ten blocks, etc. to help develop conceptual understanding.	
Metric AC1B: **The materials are designed so that students attain the fluencies and procedural skills required by the Standards.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Major Work for the grade being evaluated that relate specifically to fluency and procedural skill to use throughout the questions associated with this metric. NOTE: Some examples of Standards that call for procedural skill and fluency include: K.OA.A.5, 1.OA.C.6, 2.OA.B.2, 2.NBT.B.5, 3.OA.C.7, 3.NBT.A.2, 4.NBT.B.4, 5.NBT.B.5, 6.NS.B.2, and 6.NS.B.3, 6.EE.A, 7.NS.A, 7.EE.A.1,7.EE.B.4a, 8.EE.C.7, 8.EE.C.8b For context, read Criterion #4b in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).		**Use the questions for Metric 1B to evaluate Metric 1 B. Record evidence for each question and rate Metric 1B.** **(Reviewer only.)** **____Meets (2)** **_X_Partially Meets (1)** **____Does Not Meet (0)**

Is progress to[illegible] fluency and procedural skill interwoven with students' deve[illegible]g conceptual understanding of the operations in question? Evaluate lessons, chapter/unit assessments, daily routines, and homework assignments for evidence that the development of fluency and procedural skill is supported by conceptual understanding.	**Evidence-** LearnBop instructs o[illegible]ach standard independently. The step-by-step tutorial that a student may receive as they complete the assignment for Standard 3.NBT.A.3 Multiply by multiples of tens assists students in attaining the fluencies and procedural skills required.	
Are purely procedural problems and exercises present that include cases in which opportunistic strategies are valuable and generic cases that require efficient algorithms present? Evaluate lessons, chapter/unit assessments, daily routines, and homework assignments. NOTE: Examples of problems in which opportunistic strategies are valuable might include the sum 698 + 240 or the system x + y = 1, 2x + 2y = 3. Examples of generic cases that require efficient algorithms might include the sum 8767+2286 or the system 6y + x = x + 3, – x = 1 + 2y.	**Evidence-** LearnBop is intended to be used as an intervention program to gain conceptual understanding, however, there are some opportunities for students to use various strategies for efficient algorithms.	
Do the materials in grades K–6 provide repeated practice toward attainment of fluency Standards? Evaluate lessons, daily routines, and homework assignments for evidence of repeated practice toward attainment of the following K–6 Standards that set an explicit expectation of fluent (accurate and reasonably fast) computation: K.OA.A.5, 1.OA.C.6, 2.OA.B.2, 2.NBT.B.5, 3.OA.C.7, 3.NBT.A.2, 4.NBT.B.4, 5.NBT.B.5, 6.NS.B.2, 6.NS.B.3.	**Evidence-** LearnBop focuses on the conceptual understanding of the CCSSM in third grade. LearnBop provides opportunities for students to practice skills that work toward attainment of the expectation of fluent computation.	
Metric AC1C: **The materials are designed so that teachers and students spend sufficient time working with engaging applications, without losing focus on the Major Work of each grade.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Major Work for the grade being evaluated that relate specifically application to use throughout the questions associated with this metric. NOTE: Some examples of clusters or Standards that call for application include: K.OA.A.2, 1.OA.A, 2.OA.A, 3.OA.A.3, 3.OA.D.8, 4.OA.A.3, 4.NF.B.3d, 4.NF.B.4c, 5.NF.B.6, 5.NF.B.7c, 6.RP.A.3, 6.NS.A.1, 6.EE.B.7, 6.EE.C.9, 7.RP.A, 7.NS.A.3, 7.EE.B.3, 8.EE.C.8c, 8.F.B For context, read Criterion #4c in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** LearnBop is intended for use as an intervention program and/or one to check for mastery. It is intended to be used to check for mastery of skills after the teacher has taught a lesson and students have had ample opportunity to practice that skill. If a student does not show mastery of that skill, LearnBop provides broken down instruction on the skill being assessed.	**Use the questions for Metric 1C to evaluate Metric 1C. Record evidence for each question and rate Metric 1C.** **(Reviewer only.)** **____Meets (2)** **_X_Partially Meets (1)** **____Does Not Meet (0)**
Are there are single- and multi-step contextual problems, including non-routine problems, that develop the mathematics of the grade, afford opportunities for practice, and engage students in problem solving? Do the problems attend thoroughly to those places in the content Standards where expectations for multi-step and real-world problems are explicit? Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** LearnBop provides real world problems for students to work through. There is a variety of problems with a various number of steps required for completion and differing amounts of difficulty.	

Do application problems particularly stress applying the Major Work of the grade? Evaluate lessons, chapter/unit assessments, and homework assignments. NOTE: Examples of evaluating this Criterion might include looking at: how well, by the end of grade 2, students using the materials as designed can represent and solve a full range of one-step addition and subtraction word problems; or how well, by the end of grade 3, students using the materials as designed can represent and solve a full range of one-step multiplication and division word problems; or how well these basic situation types for each operation are carried coherently across the grades, (e.g., with fractions and algebraic expressions); or, in all grades, whether the problems connect concepts, Standards, and domains in ways that are natural and important. For a list of situation types for one-step addition, subtraction, multiplication, and division problems, see Situation Types for the Operations in Word Problems	**Evidence-** The majority of the concepts provided in LearnBop are focused on the Major Clusters in the third grade curriculum (18 of 27 concepts provided for third grade). Each of the situation types for the operations in word problems are provided within the LearnBop third grade concepts.	
Does modeling build slowly across K–8, with applications that are relatively simple in earlier grades and when students are encountering new content? In grades 6–8, do the problems begin to provide opportunities for students to make their own assumptions or simplifications in order to model a situation mathematically? Read Standard for Mathematical Practice 4, Model with Mathematics. Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** LearnBop uses appropriate graphics, visuals, models, and vocabulary in the third grade content. Students can easily use what is provided by LearnBop to assist in their conceptual understanding.	

Alignment Criterion 1: Rigor and Balance

Materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.

(Reviewer only.)

____Meets

_X_Does Not Meet

AC1 Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 out of 6 points, the Criterion has not been met. Check the final rating.
Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)**

Strengths/Weaknesses:
Reflex is intended to be used to build math fact fluency. Reflex uses student's speed and accuracy to demonstrate mastery of these skills only.

Before moving to Alignment Criterion 2, record the final Meets or Does Not Meet rating in the Evaluation Summary.

Directions for Alignment Criterion 2

Standards for Mathematical Practice

Alignment Criterion 2: Standards for Mathematical Practice **Materials must demonstrate authentic connections between content Standards and practice Standards.** The Standards require that designers of instructional materials connect the mathematical practices to mathematical content in instruction. Thus, materials must demonstrate authentic connections between content Standards and practice Standards.	**Required Materials:** • Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf) • Focus by Grade Level for the grade being evaluated (www.achievethecore.org/focus) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion** Alignment Criterion 2 is rated as Meets or Does Not Meet. To rate Alignment Criterion 2, first rate metrics 2A, 2B, and 2C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). For each metric, guiding questions are provided to aid in gathering evidence. Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 2 if the materials earn 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as mathematical practices, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.
Metric AC2A: **Materials address the practice Standards in such a way as to enrich the Major Work of the grade; practices strengthen the focus on Major Work instead of detracting from it, in both teacher and student materials.** **How to Find the Evidence:** Familiarize yourself with the Major Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate teacher and student materials for evidence that the mathematical practices support and connect to the focus of the grade. NOTE: Examples of evaluating this Criterion might include looking at whether, in grades K–5, students using the materials are supported to look for and express regularity in repeated reasoning about the addition table, the multiplication table, the properties of operations, the relationship between addition and subtraction or multiplication and division, and the place value system; or whether, in grades 6–8, students using the materials are supported to look for and express regularity in repeated reasoning about proportional relationships and linear functions. For context, read Criterion #8 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013).	**Evidence-** LearnBop provides opportunity for students to use Mathematical Practices in the third grade curriculum. LearnBop does this through tutoring with step-by-step instruction, visuals, guided questions, appropriate mathematical vocabulary, graphing tools, number lines, and by presenting problems in a variety of ways. LearnBop does not provide much opportunity for students to look for and express regularity in ~~reapet~~ repeated reasoning (i.e. higher level thinking, explaining, jounaling)	**(Reviewer only.)** **_X_ Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**

Metric AC2B: **Materials a[illegible] to the full meaning of each practice Standard.** **How to Find the Evidence:** For context, read Criterion #7 and Criterion #9 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).		**Use the questions for Metric 2B to evaluate Metric 2B. Record evidence for each qu[illegible] and rate Metric 2B.** **(Reviewer only.)** **____Meets (2)** **_X_Partially Meets (1)** **____Does Not Meet (0)**
Over the course of any given year of instruction, is each mathematical practice Standard meaningfully present in the form of assignments, activities, or problems that stimulate students to develop the habits of mind described in the practice Standard? Evaluate lessons, chapter/ unit assessments, and homework assignments for evidence of each mathematical practice being meaningfully present in instruction.	**Evidence-** LearnBop presents questions in assignments in a variety of ways as a method of presenting the mathematical practices. The exception is mathematical practice #8.	
Do the materials treat the practice Standards as developing across grades or grade bands? Are the practice Standards in early grades appropriately simple? Do they display an arc of growing sophistication across the grades?	**Evidence-** LearnBop presents each standard independently and uses the standards to provide appropriate grade level questions and practice standard implementation.	
Are there teacher-directed materials that explain the role of the practice Standards in the classroom and in students' mathematical development? Are alignments to practice Standards accurate?	**Evidence-** LearnBop does not provide teacher-directed materials that explain the role of the practice standards.	
Metric AC2C: **Materials support the Standards' emphasis on mathematical reasoning.** **How to Find the Evidence:** For context, read Criterion #10 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).		**Use the questions for Metric 2C to evaluate Metric 2C. Record evidence for each question and rate Metric 2C.** **(Reviewer only.)** **____Meets (2)** **_X_Partially Meets (1)** **____Does Not Meet (0)**
Do the materials support students in constructing viable arguments and critiquing the arguments of others concerning grade-level mathematics that is detailed in the content Standards? Read Standard for Mathematical Practice 3. Evaluate teacher and student materials to ensure that students are given opportunities to reason with grade-level mathematics.	**Evidence-** LearnBop provides tutorials with step-by-step break down of each problem that a student does not show mastery of the concept. Students are required to answer questions for each step of the process to demonstrate understanding. LearnBop provides additional hints for students who continue to lack understanding.	
Do the materials support students in producing not only answers and solutions, but also, in a grade-appropriate way, arguments, explanations, diagrams, mathematical models, etc., especially in the Major Work of the grade? Familiarize yourself with the Major Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate teacher and student materials, to understand the types of work students are expected to produce.	**Evidence-** LearnBop provides a multiple choice answering system so students are not producing arguments, explanations, diagrams, or mathematical models.	

Do materials explicitly attend to the specialized language of mathematics? Is the language of argument, problem solving, and mathematical explanations taught rather than assumed? Evaluate teacher and student materials, paying attention to how mathematical language is taught. NOTE: Examples of evaluating this Criterion might include looking at whether students are supported in: basing arguments on definitions; using the method of providing a counterexample; or recognizing that examples alone do not establish a general statement.	**Evidence-** LearnBop uses appropriate mathematical language as far as vocabulary students should know; however, with solely multiple choice answers, LearnBop materials do not explicitly attend to the instruction of mathematical language.	
Alignment Criterion 2: **Standards for Mathematical Practice** **Materials must demonstrate authentic connections between content Standards and practice Standards.** **AC2** Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 out of 6 points, the Criterion has not been met. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)** **Before moving to Alignment Criterion 3, record the final Meets or Does Not Meet rating in the Evaluation Summary.**		**(Reviewer only.)** **____Meets** **_X__Does Not Meet** **Strengths/Weaknesses:** LearnBop is not intended to meet this Criterion and is instead meant to be used as an intervention or check for mastery of concepts already instructed on.
Alignment Criterion 3: **Access to the Standards for All Students** **Materials must provide supports for English Language Learners and other special populations.** Because Standards are for all students, alignment requires thoughtful support to ensure all students are able to meet the Standards. Thus, aligned materials must provide supports for English Language Learners and other special populations.	**Required Materials:** • Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion:** Alignment Criterion 3 is rated as Meets or Does Not Meet. To rate Alignment Criterion 3, first rate metrics 3A, 3B, and 3C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 3 if the materials earn 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as support for special population, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.

Metric AC3A: **Support for English Language Learners and other special populations is thoughtful and helps those students meet the same Standards as all other students. The language in which problems are posed is carefully considered.** **How to Find the Evidence:** Evaluate teacher and student materials, paying attention to supports offered for special populations.	**Evidence-** LearnBop requires a fair amount of reading in the third grade assignments. LearnBop provides visuals and explicit systematic instruction for students who do not show mastery of a standard but this often requires reading as well. Video instruction is provided in English as well.	**Reviewer only.)** ____**Meets (2)** __X__**Partially Meets (1)** ____**Does Not Meet (0)**
Metric AC3B: **Materials provide appropriate level and type of scaffolding, differentiation, intervention, and support for a broad range of learners with gradual removal of supports, when needed, to allow students to demonstrate their mathematical understanding independently.** **How to Find the Evidence:** Evaluate teacher and student materials, paying attention to whether materials provide differentiation that will lead all learners to engage with on-grade-level content.	**Evidence-** LearnBop provides individualized instructions based on student needs. It provides each student with instruction based on their ability to demonstrate mastery of skills. Students are introduces to small amounts of materials in a step-by-step way and are asked questions during each step in case deeper scaffolding is needed.	**Reviewer only.)** __X__**Meets (2)** ____**Partially Meets (1)** ____**Does Not Meet (0)**
Metric AC3C: **Design of lessons recommends and facilitates a mix of instructional approaches for a variety of learners such as using multiple representations (e.g., including models, using a range of questions, checking for understanding, flexible grouping, pair-share).** **How to Find the Evidence:** Evaluate teacher materials, noting instructional approaches suggested for whole class and differentiated lessons and activities.	**Evidence-** LearnBop provides activities to develop concepts in grades K-12. Teachers can assign topics to the whole class or select students who do not demonstrate understanding.	**Reviewer only.)** __X__**Meets (2)** ____**Partially Meets (1)** ____**Does Not Meet (0)**

Alignment Criterion 3: Access to the Standards for All Students **Materials must provide supports for English Language Learners and other special populations.** AC3 Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 points, the Criterion has not been met. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion.**(Reviewer only.)** **Move to the Evaluation Summary and record the final Meets or Does Not Meet rating .**	**(Reviewer only.)** **_X_ Meets** **____Does Not Meet** **Strengths/Weaknesses:** Strength - LearnBop individualizes instruction based on student performances. Weakness – LearnBop requires a lot of student reading and tutorials are provided in English.

Once an evaluation for alignment to the Shifts and major features of the CCSS has been conducted using Sections 1-3, it's important to evaluate for overall quality and best practices. A starting list of Indicators of Quality are suggested below. States, districts and others evaluating instructional materials are encouraged to add to this list to ensure materials reflect local contexts. For background information on some of the Indicators of Quality in this section, refer to pp.18–21 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).

Indicators of Quality	Evidence- Give specific examples.	Rating: (Reviewers only.)
1. Lessons are thoughtfully structured and support the teacher in leading the class through the learning paths at hand, with active participation by all students in their own learning and in the learning of their classmates.	**Evidence-** LearnBop focuses on individual standards one at a time so teachers have the opportunity to make assignments to meet the class' individual needs. Teachers can also assign standards practice to certain groups or the entire class depending on student need.	**(Reviewer only.)** **_X_ Yes** **_____ No**
2. The underlying design of the materials includes both problems and exercises. (In solving problems, students learn new mathematics, whereas in working exercises, students apply what they have already learned to build mastery.) Each problem or exercise has a purpose. **NOTE: This Criterion does not require that the problems and exercises be labeled as such.**	**Evidence-** LearnBop has activities broken down by the standard they are covering. LearnBop uses student's demonstration of mastery to determine where and how much instruction is needed.	**(Reviewer only.)** **_X_ Yes** **_____ No**

3. Design of assignments is not haphazard: exercises are given in intentional sequences in order to strengthen students' mathematical understanding.	**Evidence-** LearnBop is clearly set up in the same structure as the Standards. Teachers then assign topics to students based on what is needed to strengthen student understanding.	**(Reviewer only.)** __X__ **Yes** _____ **No**
4. There are separate teacher materials that support and reward teacher study including, but not limited to: discussion of the mathematics of the units and the mathematical point of each lesson as it relates to the organizing concepts of the unit, discussion on student ways of thinking and anticipating a variety of students responses, guidance on lesson flow, guidance on questions that prompt students thinking, and discussion of desired mathematical behaviors being elicited among students.	**Evidence-** LearnBop provides teachers with reports on individual student progress and mastery. According to LearnBop, teachers are required to attend an approximate hour long training that focuses on implementing LearnBop.	**(Reviewer only.)** __X__ **Yes** _____ **No**
5. Manipulatives suggested in the materials are faithful representations of the mathematical objects they represent and are connected to written methods.	**Evidence-** LearnBop is an online program. There are no manipulatives included for student use. There are visuals of models throughout LearnBop.	**(Reviewer only.)** __X__ **Yes** _____ **No**
6. Materials include a variety of curriculum-embedded assessments. Examples include pre-, formative, summative, and self-assessment resources.	**Evidence-** LearnBop is intended to check for mastery or provide intervention. Teachers have the ability to create their own assessments through the assessment tab in LearnBop with generated questions. Teachers are easily able to check student performance through reports.	**(Reviewer only.)** __X__ **Yes** _____ **No**
7. Assessments contain aligned rubrics, answer keys, and scoring guidelines that provide sufficient guidance for interpreting student performance.	**Evidence-** LearnBop automatically assesses student progress and provides tutoring when necessary. The teacher is then provided data in order to provide students with the necessary practice/instruction as needed to develop the concept.	**(Reviewer only.)** __X__ **Yes** _____ **No**
8. Materials assess student proficiency using methods that are accessible and unbiased, including the use of course-level language in student prompts.	**Evidence-** Assessments are developed by the teacher, however, instruction, course-level language and student prompts are appropriate for the grade level.	**(Reviewer only.)** __X__ **Yes** _____ **No**

9. Materials are carefully evaluated by qualified individuals, whose names are listed, in an effort to ensure freedom from mathematical errors and course-level appropriateness.	**Evidence-** I found author profiles in the About Us section of the LearnBop website. Each author had a profile that talks about their experience and background in education.	**(Reviewer only.)** __X__ **Yes** _____ **No**
10. The visual design supports students in engaging thoughtfully with the subject. Navigation through the text is clear.	**Evidence-** LearnBop does include visuals that may help students in answering questions. Navigation, for students, through the site is very straightforward.	**(Reviewer only.)** __X__ **Yes** _____ **No**
11. The materials engage parents in appropriate ways. For example, homework assignments in elementary grades, consist of routine problems, practice with getting answers, and fluency-building exercises that parents can easily support.	**Evidence-** Students are able to login to LearnBop from home and could show parents their progress and the skills that they have mastered.	**(Reviewer only.)** __X__ **Yes** _____ **No**

Reviewer IMET Evaluation Summary **Title/Level:** LearnBop/Fuel Education

Publisher: LearnBop **Copyright:** 2015 **ISBN:** 978-1-4916-0801-2

Reviewer ID # JM, CJ **Date Review Completed:** 2/13/2016

Non-Negotiable Criteria- Each Non-Negotiable must be met in order for the Non-Negotiable Alignment Criteria to be met overall.

Non-Negotiable 1: Freedom from Obstacles to Focus	Non- Negotiable 2: Focus and Coherence
X Meets	X Meets
_____ Does Not Meet	_____ Does Not Meet

Non-Negotiable Overall:

X **Meets** _____ **Does Not Meet**

Alignment Criteria- Each Alignment Criterion must be met with a sufficient number of points in order for Alignment Criteria to be labeled as "Meets" overall. The more points the materials receive on the Alignment Criteria, the better they are aligned.

Alignment Criterion 1: Rigor and Balance	Alignment Criterion 2: Standards of Mathematical Practice	Alignment Criterion 3: Access to Standards for All Learners
Points: 4 of 6 possible. (Materials must receive at least 5 of 6 points to align.)	Points: 4 of 6 possible. (Materials must receive at least 5 of 6 points to align.)	Points: 5 of 6 possible. (Materials must receive at least 5 of 6 points to align.)
_____ Meets	_____ Meets	X Meets
X Does Not Meet	X Does Not Meet	_____ Does Not Meet

Alignment Criteria Overall:

_____ **Meets** X **Does Not Meet**

If the materials meet both Non-Negotiables and relevant Alignment Criterion, they are aligned to the Shifts and major features of the Core Standards. **Do the materials meet every Non-Negotiable and Alignment Criterion? _____ Yes __X__ No**

What are the specific areas of strength and weakness based on this evaluation? Publishers or others modifying or developing assessments can use this information to make improvements and/or to remedy gaps in the alignment of assessment materials.

The LearnBop program can accomplish what it is meant to do. LearnBop was developed to be used as an intervention program and/or a check for mastery of specific skills/standards. LearnBop does this in a way that each student's individual learning experience by providing instruction when needed and progressing without instruction when students demonstrate mastery.

LearnBop
~~Reflex~~ was not created to provide core instruction to students or to develop fluency and therefore does not cover requirements needed to meet the necessary evidence required for those categories.

2015-16 Mathematics Interim Review Recommendation & Summary

Publisher Name:	FuelEducation
Title:	LearnBop
ISBN #	
Grade Level(s) or Course:	4
Reviewer ID:	CB, LKE, MS

RECOMMENDED AS:

_____**Core Mathematics Program-** a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials. Substantial evidence clearly supports the designation of this program as Core.

_____**Other Mathematics Program-** a program that substantially, but partially, meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for supplemental materials. Substantial evidence clearly supports the designation of this program as Other.

__X__**Component Mathematics Program-** a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs. Substantial evidence clearly supports the designation of this program as Component.

_____**Intervention Program-** a program designed and intended to target and support students' specific needs. Substantial evidence clearly supports the designation of this program as Intervention.

_____ **Does not meet criteria** for recommendation as a Curricular Material or Online Resource for Mathematics.

Instructional Materials Evaluation Tool

Mathematics, Grades K-8

What Are the Purposes of the IMET?

This Math IMET is designed to help educators determine whether instructional materials are aligned to the Shifts and major features of the Common Core State Standards (CCSS). The substantial instructional Shifts (http://www.corestandards.org/other-resources/key-shifts-inmathematics/) at the heart of the Common Core State Standards are:

- **Focus** strongly where the Standards focus
- **Coherence**: Think across grades and link to major topics within the grade
- **Rigor**: In major topics, pursue conceptual understanding, procedural skill and fluency, and application with equal intensity.

The IMET draws directly from the following documents:

- Common Core State Standards for Mathematics (www.corestandards.org/Math)
- Publishers' Criteria for the Common Core State Standards in Mathematics grade K-8 (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)

When to use the IMET

1. Purchasing materials: Many factors go into local purchasing decisions. Alignment to the Standards is a critical factor to consider. This tool is designed to evaluate alignment of instructional materials to the Shifts and the major features of the CCSS. It also provides suggestions of additional indicators to consider in the materials evaluation and purchasing process.

2. Evaluating materials currently in use: The IMET can be used to analyze the degree of alignment of existing materials and help to highlight specific, concrete flaws in alignment. Even where materials and tools currently in use fail to meet one or more of these criteria, the pattern of failure is likely to be informative. States and districts can use the evaluation to create a thoughtful plan to modify or combine existing resources in such a way that students' actual learning experiences approach the focus, coherence, and rigor of the Standards.

3. Developing programs: Those developing new programs can use this tool as guidance for creating aligned curricula.
Please note this tool was designed for evaluating comprehensive curricula (including any supplemental or ancillary materials), but it was not designed for the evaluation of standalone supplemental materials.

Who Uses the IMET?

Evaluating instructional materials requires both subject-matter and pedagogical expertise. Evaluators should be well versed in the Standards (www.corestandards.org/Math) for all grades in which materials are being evaluated. This includes understanding the Major Work of the grade (www.achievethecore/focus), the Supporting and Additional work, how the content fits into the progressions in the Standards (www.achievethecore.org/progressions), and the expectations of the Standards with respect to conceptual understanding, procedural skill and fluency, and application. Evaluators also should be familiar with the substantial instructional Shifts (http:// www.corestandards.org/other-resources/key-shifts-in-mathematics/) of Focus, Coherence and Rigor that are listed above.

Getting Started

Prior to Evaluation

Assemble all of the materials necessary for the evaluation. It is essential for evaluators to have materials for all grades covered by the program, as some criteria cannot be rated without having access to each grade. In addition, each evaluator should have a reference copy of the Common Core State Standards for Mathematics (CCSSM) and the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013).

Before conducting the evaluation itself, it is important to develop a protocol for the evaluation process. The protocol should include having evaluators study the Publishers' Criteria and the IMET. It will also be helpful for evaluators to get a sense of each program overall before beginning the process. At a minimum, this would include reading the front matter of the text, looking at the table of contents and paging through multiple chapters.

Sections 1-3 below should be completed to produce a comprehensive picture of the strengths and weaknesses of the materials under evaluation. Information about areas in need of improvement or supplementation should be shared with internal and external stakeholders.

Navigating the Tool

Begin with Section 1: Non-Negotiable Alignment Criteria

- The Non-Negotiable Alignment Criteria must each be met in full for materials to be considered aligned to the Shifts and the major features of the Common Core State Standards. Each Non-Negotiable Alignment Criterion has one or more metrics associated with it; every one of these metrics must be met in order for the criterion as a whole to be met.

- Examine the relevant materials and use evidence to rate the materials against each criterion and its associated metric(s).

- Record and explain the evidence upon which the rating is based.

Continue to Section 2: Alignment Criteria

- The Alignment Criteria must each be met for materials to be considered aligned to the Shifts and the major features of the Common Core State Standards. Each Alignment Criterion has one or more metric associated with it; a specific number of these metrics must be met or partially met in order for the criterion as a whole to be met.

- Examine the materials in relation to these criteria, assigning each metric a point value. Rate the criterion as "Meets" or "Does Note Meet" based on the number of points assigned. The more points the materials receive on the alignment Criteria, the better they are aligned.

- Record and explain the evidence upon which the rating is based.

Proceed to Section 4: Indicators of Quality

- Indicators of Quality are important considerations that will help evaluators better understand the overall quality of instructional materials. These considerations are not criteria for alignment to the CCSS, but they provide valuable information about additional program characteristics. Evaluators may want to add their own indicators to the examples provided.

Directions for Non-Negotiable 1

Freedom from Obstacles to Focus

Criterion	Evidence- Give specific examples.	Rating: (Reviewer only.)
Non-Negotiable 1: **Freedom from Obstacles to Focus** **Materials must reflect the content architecture of the Standards by not assessing the topics named before the grade level where they first appear in the Standards.** The Standards foster students' progress to algebra by focusing strongly on arithmetic. Consistent with this focus, certain topics from outside of arithmetic appear only in later grades. Thus, to be aligned, materials must reflect the content architecture of the Standards by not assessing the topics named before the grade level where they first appear in the Standards. In this criterion, "topics named" means the topics that are explicitly named in Metric 1A. No other topics should be added to the list in Metric 1A. (Note that other topics in the standards are addressed in criterion NN2.)	**Required Materials** • Common Core State Standards for Mathematics (www.corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf) • From the materials being evaluated: teacher guides and all assessment components	**Rating this Criterion:** Non-Negotiable 1 is rated as Meets or Does Not Meet. To rate Non-Negotiable 1, begin by rating Metric 1A. Since Metric 1A is the only metric for Non-Negotiable 1, the rating for Non-Negotiable 1 is the same as the rating for Metric 1A. If Metric 1A is rated as Does Not Meet, include evidence of when the named topic(s) is/are assessed. If the metric is rated as Meets, list the grade(s) examined in the evaluation.

Metric NN1A: **Materials re[illegible] the basic architecture of the Standards by not assessing the listed topics before the grade level indicated.** • Probability, including chance, likely outcomes, probability models. (Introduced in the CCSSM in grade 7) • Statistical distributions, including center, variation, clumping, outliers, mean, median, mode, range, quartiles; and statistical association or trends, including two-way tables, bivariate measurement data, scatter plots, trend line, line of best fit, correlation. (Introduced in the CCSSM in grade 6) • Similarity, congruence, or geometric transformations. (Introduced in the CCSSM in grade 8) • Symmetry of shapes, including line/ reflection symmetry, rotational symmetry. (Introduced in the CCSSM in grade 4) **How to Find the Evidence:** Evaluate the table of contents, all chapter tests, all unit tests, and other such assessment components (including rubrics). For context, read Criterion #2 from the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013). NOTE: Grade alignments of other topics are addressed in Non-Negotiable 2, Focus and Coherence.) In this criterion, "topics named" means the topics that are explicitly named in Metric 1A. No other topics should be added to the list in Metric 1A. (Note that other topics in the standards are addressed in criterion NN2.)	**Evidence-** Assessments were aligned to grade-level standards and reflected problems presented in bops.	**(Reviewer only.)** X **Meets** ___ **Does Not Meet**
Non-Negotiable 1: Materials must reflect the content architecture of the Standards by not assessing the topics named* before the grade level where they first appear in the Standards. **NN 1** If Metric 1A was rated as Meets, then rate Non-Negotiable 1 as Meets. If Metric 1A was rated as Does Not Meet, then rate Non- Negotiable 1 as Does Not Meet. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion.**(Reviewer only.)** **Before moving to Non-Negotiable 2, record the final Meets or Does Not Meet rating in the Evaluation Summary.**		**(Reviewer only.)** X **Meets** ___ **Does Not Meet** **Strengths/Weaknesses:** Assessments and bops aligned to grade-level standards

Directions for Non-Negotiable 2

Focus and Coherence

Non-Negotiable 2:

Focus and Coherence

Materials must focus coherently on the Major Work of the grade in a way that is consistent with the progressions in the Standards.

Focus and coherence are the two major evidence-based design principles of the Common Core State Standards for Mathematics (CCSSM, p. 3). Focus is necessary in order to fulfill the ambitious promise the states have made to their students by adopting the Standards: greater achievement at the college and career ready level; greater depth of understanding of mathematics; and a rich classroom environment in which reasoning, sense-making, applications, and a range of mathematical practices flourish. In simpler terms, a mile-wide, inch-deep curriculum translates to less time per topic. Less time means less depth and moving on without many students. Thus, materials must focus coherently on the Major Work of the grade in a way that is consistent with the progressions in the Standards.

Required Materials

- Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf)
- Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)
- Focus by Grade Level for the grade being evaluated (www.achievethecore.org/focus)
- From the materials being evaluated: teacher guides, student texts and workbooks

Rating this Criterion:

Non-Negotiable 2 is rated as Meets or Does Not Meet.

To rate Non-Negotiable 2, first rate metrics 2A–2H. Each of these eight metrics must be rated as Meets in order for Non-Negotiable 2 to be rated as Meets. Rate each metric 2A-2H as Meets or Does Not Meet/Insufficient Evidence. If the evidence examined shows that the Criterion is met, then mark the Criterion Meets. If the evidence examined shows that the Criterion is not met—or if there is insufficient evidence to make a determination—then mark the Criterion as Does Not Meet/Insufficient Evidence. Support all ratings with evidence.

Metric NN2A:

In each grade K–8, students and teachers using the materials as designed devote the large majority of time to the Major Work of the grade.

How to Find the Evidence:

Familiarize yourself with the Major Work of the grade being evaluated (see the Focus by Grade Level documents.)

Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, lessons, homework assignments, and assessments. (Evaluate both student and teacher materials.)

Consider time spent on the Major Work of the grade and judge qualitatively whether students and teachers using the materials as designed will devote the large majority of time to the Major Work of the grade.

For context, read Criterion #1 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013)

Evidence-

- Major works were focus of lessons
- 100% of 4th + 5th grade lessons + assessments were focus

(Reviewer only.)

X **Meets**

____ **Does Not Meet/ Insufficient Evidence**

Metric NN2B: **Supporting [illegible]k, where present, enhances focus and coherence simultaneously by also engaging students in the Major Work of the grade.** **How to Find the Evidence:** Familiarize yourself with the Major Work and Supporting Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate chapters and lessons that focus on Supporting Work. NOTE: Example of evaluating this Criterion might include looking at whether materials for K–5 generally treat data displays as an occasion for solving grade-level word problems using the four operations (e.g., see 3.MD.B.3); or whether materials for grade 7 take advantage of opportunities to use probability to support ratios, proportions, and percentages. For context, read Criterion #3 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** -Supporting works also focused on in bops and assessments - extends experience with major works -100% supporting works represented for 4th + 5th grade	(Reviewer only.) X Meets ____Does Not Meet/ Insufficient Evidence
Metric NN2C: **Materials base content progressions on the grade-by-grade progressions in the Standards. Content from previous or future grades does not unduly interfere with or displace on-grade-level content.** **How to Find the Evidence:** Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, and lessons in both student and teacher materials. NOTE: In some cases it may be possible that aligned materials might address some aspects of a topic in a strategic way before or after the grade level in which the topic is central in the Standards' progressions; for example, a curriculum author might purposefully choose to explore adding fractions with unlike denominators in a way appropriate to grade four, recognizing that this work is not really required until the next grade. However, any such purposeful discrepancies in content progressions should enhance the required learning in each grade; not unduly interfere with or displace grade-level content; and be clearly aimed at helping students meet the Standards as written rather than effectively rewriting the progressions in the Standards. And in all cases, note that Non-Negotiable 1 must be met for materials to be aligned. For context, read Criterion #5a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Progressions match grade level; previous and next grade levels are accessible for progressions No interference from other grade levels because teacher can select specific grade level to assign students	(Reviewer only.) X Meets ____Does Not Meet/ Insufficient Evidence

Metric NN2D: **Materials give all students extensive work with on-grade-level problems.** **How to Find the Evidence:** Evaluate both student and teacher materials. If the materials provide resources for differentiated learning, consider whether lower-performing students have opportunities to engage with grade-level problems. Also consider whether higher-performing students are given opportunities to learn current grade-level content in greater depth. For context, read Criterion #5b in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Content catalogue lists grade-level concepts + # of concepts per grade level	(Reviewer only.) X Meets ____Does Not Meet/ Insufficient Evidence
Metric NN2E: **Materials relate on-grade-level concepts explicitly to prior knowledge from earlier grades.** **How to Find the Evidence:** Evaluate both student and teacher materials. NOTE: Examples of evaluating this Criterion might include looking at the way the materials extend basic ideas of place value across the decimal point; or the role that properties of operations play when the materials extend arithmetic beyond whole numbers to fractions, variables, and expressions. More generally, cluster headings in the Standards sometimes signal key moments where reorganizing and extending previous knowledge is important in order to accommodate new knowledge (e.g., see cluster headings that use the phrase "Apply and extend previous understanding"). For context, read Criterion #5c in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** major works from current + previous grade levels connected with on grade level work	(Reviewer only.) X Meets ____Does Not Meet/ Insufficient Evidence
Metric NN2F: **Review of material from previous grades is clearly identified as such to the teacher, and teacher and students can see what their specific responsibility is for the current year.** **How to Find the Evidence:** Evaluate the table of contents, but do not stop there; also evaluate units, chapters, lessons, homework assignments and assessments. (Evaluate both student and teacher materials.) Identify any content from previous grades and check whether it is identified as such. For context, read Criterion #5a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Because the program is designed by grade level, the teacher can easily choose material from grade levels in content catalogue	(Reviewer only.) X Meets ____Does Not Meet/ Insufficient Evidence

Metric NN2G: **Materials in[illegible]e learning objectives that are visibly shaped by CCSSM cluster headings.** **How to Find the Evidence:** Select several clusters from the Major Work in the grade being evaluated. Evaluate teacher and student materials in relation to these clusters. For context, read Criterion #6a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** objectives are clearly labeled within cluster headings	(Reviewer only.) _X_ Meets ____ Does Not Meet/ Insufficient Evidence
Metric NN2H: **Materials include problems and activities that serve to connect two or more clusters in a domain, or two or more domains in a grade, in cases where these connections are natural and important.** **How to Find the Evidence:** In the grade being evaluated, choose two or more clusters or two or more domains for which connections are natural and important. Evaluate the units, chapters, and lessons that deal with the chosen topics, looking for problems and activities that serve to connect the chosen clusters or domains. NOTE: An example of evaluating this Criterion might include looking at whether problems in grade 4 sometimes or often involve students applying their developing computation skills (detailed in domain NBT) in the context of solving word problems (detailed in domain OA). For context, read Criterion #6b in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Tutorials reconnect students to several concepts and clusters to current cluster As a component piece, clusters are not connected as lessons, rather, as re-teach opportunities	(Reviewer only.) _X_ Meets ____ Does Not Meet/ Insufficient Evidence
Non-Negotiable 2: **Focus and Coherence** **Materials must focus coherently on the Major Work of the grade in a way that is consistent with the progressions in the Standards.** **NN 2** If all Metrics 2A – 2H were rated as Meets, then rate Non-Negotiable 2 as Meets. If one or more Metric was rated Does Not Meet/Insufficient Evidence, then rate Non-Negotiable 2 as Does Not Meet. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)** **Before moving to Alignment Criterion 1, record the final Meets or Does Not Meet rating in the Evaluation Summary.**		(Reviewer only.) _X_ Meets ____ Does Not Meet **Strengths/Weaknesses:** Clusters + objectives are clearly visible + easy to find

Now continue by evaluating the Alignment Criterion 1 for Rigor and Balance.

Directions for Alignment Criterion 1

Rigor and Balance

Alignment Criterion 1: Rigor and Balance **Materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.** The Standards set expectations for attention to all three aspects of rigor: conceptual understanding, procedural skill and fluency, and applications. Thus, materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.	**Required Materials** • Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf) • Focus by Grade Level for the grade being evaluated (achievethecore.org/focus) • Situation Types for the Operations in Word Problems (achievethecore.org/situation-types) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion:** Alignment Criterion 1 is rated as Meets or Does Not Meet. To rate Alignment Criterion 1, first rate metrics 1A, 1B, and 1C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). For each metric, guiding questions are provided to aid in gathering evidence. Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 1 if the materials rate 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as rigor and balance, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.
Metric AC1A: **The materials support the development of students' conceptual understanding of key mathematical concepts, especially where called for in specific content Standards or cluster headings.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Major Work for the grade being evaluated that relate specifically conceptual understanding to use throughout the questions associated with this metric. NOTE: Some examples of clusters or Standards that call for conceptual understanding include: K.OA.A.1, (1.NBT.B, 1.NBT.C), (2.NBT.A, 2.NBT.B), (3.OA.A.1, 3.OA.A.2), 4.NF.A, (4.NBT.A, 4.NBT.B), 5.NF.B, (5.NBT.A, 5.NBT.B), 6.RP.A, 6.EE.A.3, 7.NS.A, 7.EE.A, 8.EE.B, 8.F.A, 8.G.A Clusters or Standards grouped by parentheses are closely connected and could be analyzed together. For context, read Criterion #4a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	-Choose a cluster/Standard from the Major Work that is aligned to each aspect of rigor and use it to evaluate these metrics. It is most helpful if the same clusters/Standards are chosen for all of the programs being evaluated. (Guidance in choosing clusters/Standards is included in "How to Find the Evidence".)	**Use the questions for AC Metric 1A to evaluate Metric 1A. Record evidence for each question and rate Metric 1A.** **_X_ Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**

Is conceptual understanding attended to thoroughly where the Standards set [redacted] expectations for understanding or interpreting? Evaluate lessons, chapter/unit assessments and homework assignments, paying attention to work aligned to Standards that explicitly call for understanding or interpreting. NOTE: Examples of evaluating this Criterion might include looking at how well the multi-digit addition and subtraction algorithms are developed and explained on the basis of place value and properties of operations; or how well the multi-digit multiplication and division algorithms are developed and explained on the basis of place value and properties of operations; or how well solving equations is presented and explained as a process of reasoning.	**Evidence-** extensive use of graphics, videos hints assists ↑learn zillion conceptual understanding	
Do the materials feature high-quality conceptual problems and conceptual discussion questions? Evaluate lessons, chapter/unit assessments, and homework assignments. NOTE: Example of conceptual problems might include such questions as "Find a number greater than 1/5 and less than 1/4," or "If the divisor does not change and the dividend increases, what happens to the quotient?"	**Evidence-** As an online program, no discussion was available (unless used as a whole-class teaching tool). Immediate feedback in form of "step-by-step" explanation gives student opportunity for increased conceptual understanding.	
Do the materials feature opportunities to identify correspondences across mathematical representations? Evaluate lessons, chapter/unit assessments and homework assignments. NOTE: Examples of evaluating this Criterion might include looking at whether students are supported in identifying correspondences among: the verbal description of a situation, the diagrams that distill its mathematical features, and the equations that model it; or equivalent forms of numbers (e.g., 3 and 6/2) and the number line; or rational number operations and representations of them via models such as the vector model; or the expression that defines a function and the graph that shows the relationship.	**Evidence-** Diagrams, models, videos, graphs represent problems in several ways	
Metric AC1B: **The materials are designed so that students attain the fluencies and procedural skills required by the Standards.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Major Work for the grade being evaluated that relate specifically to fluency and procedural skill to use throughout the questions associated with this metric. NOTE: Some examples of Standards that call for procedural skill and fluency include: K.OA.A.5, 1.OA.C.6, 2.OA.B.2, 2.NBT.B.5, 3.OA.C.7, 3.NBT.A.2, 4.NBT.B.4, 5.NBT.B.5, 6.NS.B.2, and 6.NS.B.3, 6.EE.A, 7.NS.A, 7.EE.A.1,7.EE.B.4a, 8.EE.C.7, 8.EE.C.8b For context, read Criterion #4b in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).		**Use the questions for Metric 1B to evaluate Metric 1 B. Record evidence for each question and rate Metric 1B.** **(Reviewer only.)** **____Meets (2)** **__X__Partially Meets (1)** **____Does Not Meet (0)**

Is progress toward fluency and procedural skill interwoven with students' developing conceptual understanding of the operations in question? Evaluate lessons, chapter/unit assessments, daily routines, and homework assignments for evidence that the development of fluency and procedural skill is supported by conceptual understanding.	**Evidence-** Concepts assist with developing procedural fluency. Program does not specifically include fluency practice for basic skills operations	
Are purely procedural problems and exercises present that include cases in which opportunistic strategies are valuable and generic cases that require efficient algorithms present? Evaluate lessons, chapter/unit assessments, daily routines, and homework assignments. NOTE: Examples of problems in which opportunistic strategies are valuable might include the sum 698 + 240 or the system x + y = 1, 2x + 2y = 3. Examples of generic cases that require efficient algorithms might include the sum 8767+2286 or the system 6y + x = x + 3, – x = 1 + 2y.	**Evidence-** Fluency comes in form of practicing concepts, but strictly fluency problems not present	
Do the materials in grades K–6 provide repeated practice toward attainment of fluency Standards? Evaluate lessons, daily routines, and homework assignments for evidence of repeated practice toward attainment of the following K–6 Standards that set an explicit expectation of fluent (accurate and reasonably fast) computation: K.OA.A.5, 1.OA.C.6, 2.OA.B.2, 2.NBT.B.5, 3.OA.C.7, 3.NBT.A.2, 4.NBT.B.4, 5.NBT.B.5, 6.NS.B.2, 6.NS.B.3.	**Evidence-** "Step-by-step" tutorial provides practice with fluency	
Metric AC1C: **The materials are designed so that teachers and students spend sufficient time working with engaging applications, without losing focus on the Major Work of each grade.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Major Work for the grade being evaluated that relate specifically application to use throughout the questions associated with this metric. NOTE: Some examples of clusters or Standards that call for application include: K.OA.A.2, 1.OA.A, 2.OA.A, 3.OA.A.3, 3.OA.D.8, 4.OA.A.3, 4.NF.B.3d, 4.NF.B.4c, 5.NF.B.6, 5.NF.B.7c, 6.RP.A.3, 6.NS.A.1, 6.EE.B.7, 6.EE.C.9, 7.RP.A, 7.NS.A.3, 7.EE.B.3, 8.EE.C.8c, 8.F.B For context, read Criterion #4c in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Features of program reinforces classroom instruction. "Step-by-step" tutorial re-teaches missed concepts	**Use the questions for Metric 1C to evaluate Metric 1C. Record evidence for each question and rate Metric 1C.** **(Reviewer only.)** **X Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Are there are single- and multi-step contextual problems, including non-routine problems, that develop the mathematics of the grade, afford opportunities for practice, and engage students in problem solving? Do the problems attend thoroughly to those places in the content Standards where expectations for multi-step and real-world problems are explicit? Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** There are a variety of problems that engage students	

Do application problems particularly stress applying the Major Work of the grade? Eval[illegible]essons, chapter/unit assessments, and homework assignments. NOTE: Examples of evaluating this Criterion might include looking at: how well, by the end of grade 2, students using the materials as designed can represent and solve a full range of one-step addition and subtraction word problems; or how well, by the end of grade 3, students using the materials as designed can represent and solve a full range of one-step multiplication and division word problems; or how well these basic situation types for each operation are carried coherently across the grades, (e.g., with fractions and algebraic expressions); or, in all grades, whether the problems connect concepts, Standards, and domains in ways that are natural and important. For a list of situation types for one-step addition, subtraction, multiplication, and division problems, see Situation Types for the Operations in Word Problems	**Evidence-** All problems + assessments are based on major works	
Does modeling build slowly across K–8, with applications that are relatively simple in earlier grades and when students are encountering new content? In grades 6–8, do the problems begin to provide opportunities for students to make their own assumptions or simplifications in order to model a situation mathematically? Read Standard for Mathematical Practice 4, Model with Mathematics. Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** "step-by-step" breaks down and enhances model. Visual representations assist in scaffolding pattern	

Alignment Criterion 1: Rigor and Balance

Materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.

AC1 Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 out of 6 points, the Criterion has not been met. Check the final rating.
Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)**

Before moving to Alignment Criterion 2, record the final Meets or Does Not Meet rating in the Evaluation Summary.

(Reviewer only.)

X **Meets** 5/6

___ **Does Not Meet**

Strengths/Weaknesses:
more multiple choice than open-ended responses

Directions for Alignment Criterion 2

Standards for Mathematical Practice

Alignment Criterion 2: Standards for Mathematical Practice

Materials must demonstrate authentic connections between content Standards and practice Standards.

The Standards require that designers of instructional materials connect the mathematical practices to mathematical content in instruction. Thus, materials must demonstrate authentic connections between content Standards and practice Standards.

Required Materials:

- Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf)
- Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)
- Focus by Grade Level for the grade being evaluated (www.achievethecore.org/focus)
- From the materials being evaluated: teacher guides, student texts and workbooks

Rating this Criterion

Alignment Criterion 2 is rated as Meets or Does Not Meet.

To rate Alignment Criterion 2, first rate metrics 2A, 2B, and 2C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). For each metric, guiding questions are provided to aid in gathering evidence.

Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 2 if the materials earn 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as mathematical practices, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.

Metric AC2A:

Materials address the practice Standards in such a way as to enrich the Major Work of the grade; practices strengthen the focus on Major Work instead of detracting from it, in both teacher and student materials.

How to Find the Evidence:

Familiarize yourself with the Major Work of the grade being evaluated (see the Focus by Grade Level documents.)

Evaluate teacher and student materials for evidence that the mathematical practices support and connect to the focus of the grade.

NOTE: Examples of evaluating this Criterion might include looking at whether, in grades K–5, students using the materials are supported to look for and express regularity in repeated reasoning about the addition table, the multiplication table, the properties of operations, the relationship between addition and subtraction or multiplication and division, and the place value system; or whether, in grades 6–8, students using the materials are supported to look for and express regularity in repeated reasoning about proportional relationships and linear functions.

For context, read Criterion #8 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013).

Evidence-

As an online program, students can't construct + evaluate arguments or produce their own models. This limits development of practice standards 3 + 4.

(Reviewer only.)

____**Meets (2)**

__X__**Partially Meets (1)**

____**Does Not Meet (0)**

Metric AC2B: **Materials at to the full meaning of each practice Standard.** **How to Find the Evidence:** For context, read Criterion #7 and Criterion #9 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).		**Use the questions for Metric 2B to evaluate Metric 2B. Record evidence for each question and rate Metric 2B.** **(Reviewer only.)** X **Meets (2)** **Partially Meets (1)** **Does Not Meet (0)**
Over the course of any given year of instruction, is each mathematical practice Standard meaningfully present in the form of assignments, activities, or problems that stimulate students to develop the habits of mind described in the practice Standard? Evaluate lessons, chapter/ unit assessments, and homework assignments for evidence of each mathematical practice being meaningfully present in instruction.	**Evidence-** With the exception of MP 3+4, all are attended to throughout the program	
Do the materials treat the practice Standards as developing across grades or grade bands? Are the practice Standards in early grades appropriately simple? Do they display an arc of growing sophistication across the grades?	**Evidence-** All standards for practice are aligned across grades	
Are there teacher-directed materials that explain the role of the practice Standards in the classroom and in students' mathematical development? Are alignments to practice Standards accurate?	**Evidence-** There are teacher slideshows but practices are not labelled as practice standards	
Metric AC2C: **Materials support the Standards' emphasis on mathematical reasoning.** **How to Find the Evidence:** For context, read Criterion #10 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).		**Use the questions for Metric 2C to evaluate Metric 2C. Record evidence for each question and rate Metric 2C.** **(Reviewer only.)** X **Meets (2)** **Partially Meets (1)** **Does Not Meet (0)**
Do the materials support students in constructing viable arguments and critiquing the arguments of others concerning grade-level mathematics that is detailed in the content Standards? Read Standard for Mathematical Practice 3. Evaluate teacher and student materials to ensure that students are given opportunities to reason with grade-level mathematics.	**Evidence-** Because this is an online program students are reading about concepts + practices + must respond to "step-by-step" tutorials	
Do the materials support students in producing not only answers and solutions, but also, in a grade-appropriate way, arguments, explanations, diagrams, mathematical models, etc., especially in the Major Work of the grade? Familiarize yourself with the Major Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate teacher and student materials, to understand the types of work students are expected to produce.	**Evidence-** "Step-by-step" tutorials provide explanations + diagrams and models are presented within tutorials	

Do materials explicitly attend to the specialized language of mathematics? Is the language of argument, problem solving, and mathematical explanations taught rather than assumed? Evaluate teacher and student materials, paying attention to how mathematical language is taught. NOTE: Examples of evaluating this Criterion might include looking at whether students are supported in: basing arguments on definitions; using the method of providing a counterexample; or recognizing that examples alone do not establish a general statement.	**Evidence-** Language is not explicitly taught but is used in tutorials. Models are provided for student in tutorials.	

Alignment Criterion 2:
Standards for Mathematical Practice

Materials must demonstrate authentic connections between content Standards and practice Standards.

AC2 Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 out of 6 points, the Criterion has not been met. Check the final rating.
Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion.
(Reviewer only.)

Before moving to Alignment Criterion 3, record the final Meets or Does Not Meet rating in the Evaluation Summary.

(Reviewer only.)

X **Meets** 5/6

____ **Does Not Meet**

Strengths/Weaknesses:
Practice standards 3+4 are shown to students through tutorials, but students do not construct own arguments + models

Alignment Criterion 3:
Access to the Standards for All Students

Materials must provide supports for English Language Learners and other special populations.

Because Standards are for all students, alignment requires thoughtful support to ensure all students are able to meet the Standards. Thus, aligned materials must provide supports for English Language Learners and other special populations.

Required Materials:

- Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf)
- Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)
- From the materials being evaluated: teacher guides, student texts and workbooks

Rating this Criterion:
Alignment Criterion 3 is rated as Meets or Does Not Meet.

To rate Alignment Criterion 3, first rate metrics 3A, 3B, and 3C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points).

Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 3 if the materials earn 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as support for special population, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.

Metric AC3A: **Support for [illegible]ish Language Learners and other special populations is thoughtful and helps those students meet the same Standards as all other students. The language in which problems are posed is carefully considered.** **How to Find the Evidence:** Evaluate teacher and student materials, paying attention to supports offered for special populations.	**Evidence-** no support for ELL + other populations other than pictures + diagrams, + models of concepts that are in most problems	**Reviewer only.)** ____Meets (2) _X_Partially Meets (1) ____Does Not Meet (0)
Metric AC3B: **Materials provide appropriate level and type of scaffolding, differentiation, intervention, and support for a broad range of learners with gradual removal of supports, when needed, to allow students to demonstrate their mathematical understanding independently.** **How to Find the Evidence:** Evaluate teacher and student materials, paying attention to whether materials provide differentiation that will lead all learners to engage with on-grade-level content.	**Evidence-** "Step-by-step" tutorials, hints, response feedback provided for answers. ↑incorrect Interventions can be created from teacher dashboard.	**Reviewer only.)** _X_Meets (2) ____Partially Meets (1) ____Does Not Meet (0)
Metric AC3C: **Design of lessons recommends and facilitates a mix of instructional approaches for a variety of learners such as using multiple representations (e.g., including models, using a range of questions, checking for understanding, flexible grouping, pair-share).** **How to Find the Evidence:** Evaluate teacher materials, noting instructional approaches suggested for whole class and differentiated lessons and activities.	**Evidence-** tutorials, multiple choice, remediate, assign work for advancement, technology enhanced bops	**Reviewer only.)** _X_Meets (2) ____Partially Meets (1) ____Does Not Meet (0)

Alignment Criterion 3: **Access to the Standards for All Students** **Materials must provide supports for English Language Learners and other special populations.** AC3 Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 points, the Criterion has not been met. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion.**(Reviewer only.)** **Move to the Evaluation Summary and record the final Meets or Does Not Meet rating .**	**(Reviewer only.)** X **Meets** 5/6 ____ **Does Not Meet** **Strengths/Weaknesses:** Explicit language support needed for ELL in addition to graphics

Once an evaluation for alignment to the Shifts and major features of the CCSS has been conducted using Sections 1-3, it's important to evaluate for overall quality and best practices. A starting list of Indicators of Quality are suggested below. States, districts and others evaluating instructional materials are encouraged to add to this list to ensure materials reflect local contexts. For background information on some of the Indicators of Quality in this section, refer to pp.18–21 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).

Indicators of Quality	**Evidence- Give specific examples.**	**Rating: (Reviewers only.)**
1. Lessons are thoughtfully structured and support the teacher in leading the class through the learning paths at hand, with active participation by all students in their own learning and in the learning of their classmates.	**Evidence-** Bops can be given to entire class. Bops can be used to remediate instruction & practice. Bops can accelerate instruction	**(Reviewer only.)** X **Yes** ____ **No**
2. The underlying design of the materials includes both problems and exercises. (In solving problems, students learn new mathematics, whereas in working exercises, students apply what they have already learned to build mastery.) Each problem or exercise has a purpose. **NOTE: This Criterion does not require that the problems and exercises be labeled as such.**	**Evidence-** Bops use specific math language. Graphics, visuals, hints, + videos aid in the development of conceptual understanding	**(Reviewer only.)** X **Yes** ____ **No**

3. Design of assignments is not haphazard: exercises ar[illegible]en in intentional sequences in order to strengthen students' mathematical understanding.	**Evidence-** Does follow the structure and organization of the standards	(Reviewer only.) X **Yes** ____ **No**
4. There are separate teacher materials that support and reward teacher study including, but not limited to: discussion of the mathematics of the units and the mathematical point of each lesson as it relates to the organizing concepts of the unit, discussion on student ways of thinking and anticipating a variety of students responses, guidance on lesson flow, guidance on questions that prompt students thinking, and discussion of desired mathematical behaviors being elicited among students.	**Evidence-** Explanation of materials and help box provided to help as overview of each lesson concept.	(Reviewer only.) X **Yes** ____ **No**
5. Manipulatives suggested in the materials are faithful representations of the mathematical objects they represent and are connected to written methods.	**Evidence-** ~~No manipulatives provided~~ LearnBop authors use models similar to those used in ~~illustrative Mathematics~~ resources from National Council of teachers and mathematics	(Reviewer only.) X **Yes** ____ **No**
6. Materials include a variety of curriculum-embedded assessments. Examples include pre-, formative, summative, and self-assessment resources.	**Evidence-** Assignments inform teacher of mastery of concepts from reports. Teachers can create or assign Pre, post, interim assignments Comprehensive assessments are available to assess students on grade level.	(Reviewer only.) X **Yes** ____ **No**
7. Assessments contain aligned rubrics, answer keys, and scoring guidelines that provide sufficient guidance for interpreting student performance.	**Evidence-** While rubrics are not provided. Results are provided for immediate feedback, and monitoring options are available	(Reviewer only.) X **Yes** ____ **No**
8. Materials assess student proficiency using methods that are accessible and unbiased, including the use of course-level language in student prompts.	**Evidence-** Content written and developed by master educators who understand CCSSM. Graphics are student friendly and questions are developmentally appropriate	(Reviewer only.) X **Yes** ____ **No**

9. Materials are carefully evaluated by qualified individuals, whose names are listed, in an effort to ensure freedom from mathematical errors and course-level appropriateness.	**Evidence-** Information found on website and tutorials mention the authors.	**(Reviewer only.)** X **Yes** ____ **No**
10. The visual design supports students in engaging thoughtfully with the subject. Navigation through the text is clear.	**Evidence-** Digital content includes visuals to show math ideas. Good for visual learners as well as all students to use.	**(Reviewer only.)** X **Yes** ____ **No**
11. The materials engage parents in appropriate ways. For example, homework assignments in elementary grades, consist of routine problems, practice with getting answers, and fluency-building exercises that parents can easily support.	**Evidence-** reasoning to solve word problems conceptually. Students can login anywhere there is internet access and at home. Parents can see their progress or completion of assignment or concept mastery.	**(Reviewer only.)** X **Yes** ____ **No**

Reviewer IMET Evaluation Summary **Title/Level:** learnbop

Publisher: Fuel Education **Copyright:** _____ **ISBN:** _____

Reviewer ID # CB, LKE, MS **Date Review Completed:** 3/7/16

Non-Negotiable Criteria- Each Non-Negotiable must be met in order for the Non-Negotiable Alignment Criteria to be met overall.

Non-Negotiable 1: Freedom from Obstacles to Focus	Non- Negotiable 2: Focus and Coherence
X Meets	X Meets
_____ Does Not Meet	_____ Does Not Meet

Non-Negotiable Overall:

X **Meets** _____ **Does Not Meet**

Alignment Criteria- Each Alignment Criterion must be met with a sufficient number of points in order for Alignment Criteria to be labeled as "Meets" overall. The more points the materials receive on the Alignment Criteria, the better they are aligned.

Alignment Criterion 1: Rigor and Balance	Alignment Criterion 2: Standards of Mathematical Practice	Alignment Criterion 3: Access to Standards for All Learners
Points: 6 of 6 possible. (Materials must receive at least 5 of 6 points to align.)	Points: 5 of 6 possible. (Materials must receive at least 5 of 6 points to align.)	Points: 5 of 6 possible. (Materials must receive at least 5 of 6 points to align.)
X Meets	X Meets	X Meets
_____ Does Not Meet	_____ Does Not Meet	_____ Does Not Meet

Alignment Criteria Overall:

X **Meets** _____ **Does Not Meet**

If the materials meet both Non-Negotiables and relevant Alignment Criterion, they are aligned to the Shifts and major features of the Core Standards. **Do the materials meet every Non-Negotiable and Alignment Criterion?** X **Yes** ____ **No**

What are the specific areas of strength and weakness based on this evaluation? Publishers or others modifying or developing assessments can use this information to make improvements and/or to remedy gaps in the alignment of assessment materials.

More language support for ELL students in addition to graphics necessary.

Strengths are found in tutorials that lead to conceptual understanding; immediate feedback upon submitting student answers.

Because the program is based on multiple choice selections and is presented online, it presents less opportunity for practice standards 3+4.

There are guided hints that help trigger prior knowledge.
Instructional videos provide immediate tutorials.
Targeted interventions
Classroom progress reports on all assignments that show where students have mastered and where students struggle on comprehensive + custom assessments
Teacher access to all graded work.
Comprehensive content catalog with interactive problems.

2015-16 Mathematics Interim Review Recommendation & Summary

Publisher Name:	Fuel Education
Title:	LearnBop
ISBN #	
Grade Level(s) or Course:	5
Reviewer ID:	CB, LKE, MS

RECOMMENDED AS:

_____**Core Mathematics Program-** a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials. Substantial evidence clearly supports the designation of this program as Core.

_____**Other Mathematics Program-** a program that substantially, but partially, meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for supplemental materials. Substantial evidence clearly supports the designation of this program as Other.

__X__**Component Mathematics Program-** a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs. Substantial evidence clearly supports the designation of this program as Component.

_____**Intervention Program-** a program designed and intended to target and support students' specific needs. Substantial evidence clearly supports the designation of this program as Intervention.

_____ **Does not meet criteria** for recommendation as a Curricular Material or Online Resource for Mathematics.

EVIDENCE SUMMARY:

FOCUS-
The clusters were the major focus of the program.

COHERENCE-
Major works follow standards progressions.

RIGOR-
Standards are reflected through different forms of rigorous practice.

CONCEPTUAL UNDERSTANDING-
The programs major focus is on conceptual understanding.

MATHEMATICAL PRACTICES-
Mathematical practices are present throughout program except for MP 3+4, in which students construct + critique arguments. Rather, arguments are presented as

ACCESSIBILITY OF STANDARDS TO ALL STUDENTS- reading samples + tutorials. Models + visuals support Ell students. Differentiation and intervention options available to teacher for use.

OTHER:

2015-16 Interim Mathematics Review

Mathematics Evaluation Tool Grades K-8

Publisher: Fuel Education

Title of Material: Learnbop 5th

Author: Board of Math Experts

ISBN #: _____ **Copyright**_____

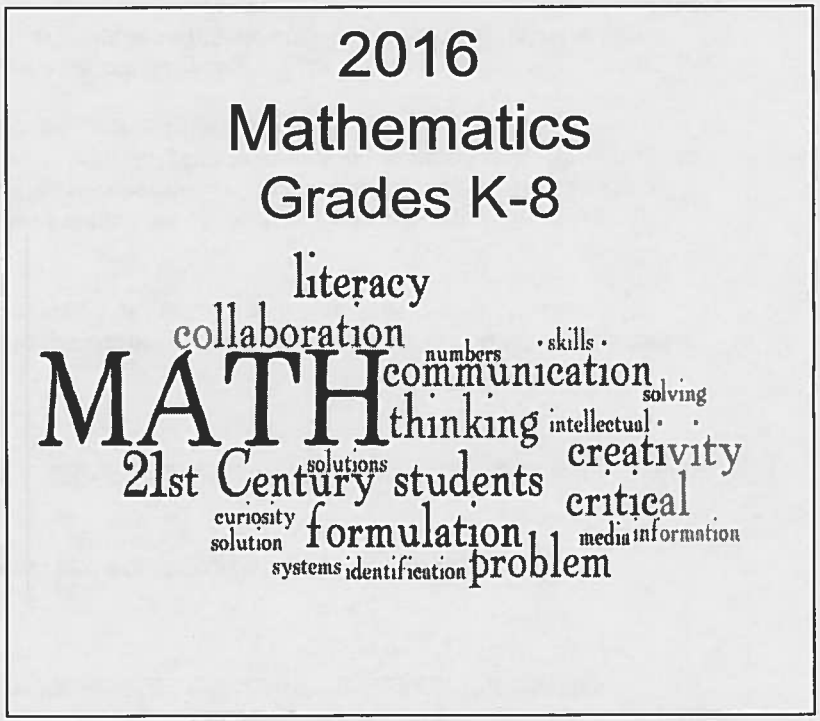
Reviewer ID: CB LKE MS

Core Mathematics Program- a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Core.

Other Mathematics Program- a program that substantially, but partially, meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Other.

Component Mathematics Program- a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs.
Substantial evidence clearly supports the designation of this program as Component.

Intervention Program- a program designed and intended to target and support students' specific needs.
Substantial evidence clearly supports the designation of this program as Intervention.



- Evaluation Form adapted from Instructional Materials Evaluation Toolkit (IMET).

The IMET was developed by Student Achievement Partners. Educators may use or adapt. http://creativecommons.org/licenses/by/3.0/ Download this tool at http://achievethecore.org/IMET

Instructional Materials Evaluation Tool

Mathematics, Grades K-8

What Are the Purposes of the IMET?

This Math IMET is designed to help educators determine whether instructional materials are aligned to the Shifts and major features of the Common Core State Standards (CCSS). The substantial instructional Shifts (http://www.corestandards.org/other-resources/key-shifts-inmathematics/) at the heart of the Common Core State Standards are:

- **Focus** strongly where the Standards focus
- **Coherence**: Think across grades and link to major topics within the grade
- **Rigor**: In major topics, pursue conceptual understanding, procedural skill and fluency, and application with equal intensity.

The IMET draws directly from the following documents:

- Common Core State Standards for Mathematics (www.corestandards.org/Math)
- Publishers' Criteria for the Common Core State Standards in Mathematics grade K-8 (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)

When to use the IMET

1. Purchasing materials: Many factors go into local purchasing decisions. Alignment to the Standards is a critical factor to consider. This tool is designed to evaluate alignment of instructional materials to the Shifts and the major features of the CCSS. It also provides suggestions of additional indicators to consider in the materials evaluation and purchasing process.

2. Evaluating materials currently in use: The IMET can be used to analyze the degree of alignment of existing materials and help to highlight specific, concrete flaws in alignment. Even where materials and tools currently in use fail to meet one or more of these criteria, the pattern of failure is likely to be informative. States and districts can use the evaluation to create a thoughtful plan to modify or combine existing resources in such a way that students' actual learning experiences approach the focus, coherence, and rigor of the Standards.

3. Developing programs: Those developing new programs can use this tool as guidance for creating aligned curricula.
Please note this tool was designed for evaluating comprehensive curricula (including any supplemental or ancillary materials), but it was not designed for the evaluation of standalone supplemental materials.

Who Uses the IMET?

Evaluating instructional materials requires both subject-matter and pedagogical expertise. Evaluators should be well versed in the Standards (www.corestandards.org/Math) for all grades in which materials are being evaluated. This includes understanding the Major Work of the grade (www.achievethecore/focus), the Supporting and Additional work, how the content fits into the progressions in the Standards (www.achievethecore.org/progressions), and the expectations of the Standards with respect to conceptual understanding, procedural skill and fluency, and application. Evaluators also should be familiar with the substantial instructional Shifts (http:// www.corestandards.org/other-resources/key-shifts-in-mathematics/) of Focus, Coherence and Rigor that are listed above.

Getting Started

Prior to Evaluation

Assemble all of the materials necessary for the evaluation. It is essential for evaluators to have materials for all grades covered by the program, as some criteria cannot be rated without having access to each grade. In addition, each evaluator should have a reference copy of the Common Core State Standards for Mathematics (CCSSM) and the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013).

2015-16 Interim Mathematics Review

Mathematics Evaluation Tool Grades K-8

Publisher: Fuel Education_____

Title of Material: Learnbop, 5th Grade_____

Author: Board of math experts (names not provided)_____

ISBN #: _____ **Copyright**_____

Reviewer ID: __CB, LKE, MS_____

Core Mathematics Program- a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Core.

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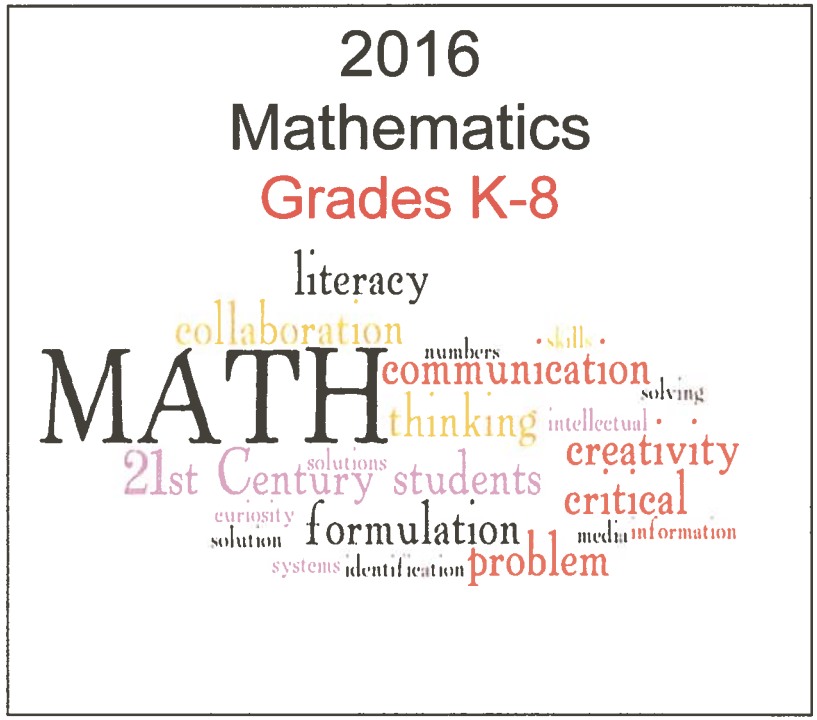
Substantial evidence clearly supports the designation of this program as Other.

Component Mathematics Program- a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs.
Substantial evidence clearly supports the designation of this program as Component.

Intervention Program- a program designed and intended to target and support students' specific needs.
Substantial evidence clearly supports the designation of this program as Intervention.



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Instructional Materials Evaluation Tool
Mathematics, Grades K-8

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- **Focus** strongly where the Standards focus
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2. Evaluating materials currently in use: The IMET can be used to analyze the degree of alignment of existing materials and help to highlight specific, concrete flaws in alignment. Even where materials and tools currently in use fail to meet one or more of these criteria, the pattern of failure is likely to be informative. States and districts can use the evaluation to create a thoughtful plan to modify or combine existing resources in such a way that students' actual learning experiences approach the focus, coherence, and rigor of the Standards.

3. Developing programs: Those developing new programs can use this tool as guidance for creating aligned curricula.
Please note this tool was designed for evaluating comprehensive curricula (including any supplemental or ancillary materials), but it was not designed for the evaluation of standalone supplemental materials.

Who Uses the IMET?
Evaluating instructional materials requires both subject-matter and pedagogical expertise. Evaluators should be well versed in the Standards (www.corestandards.org/Math) for all grades in which materials are being evaluated. This includes understanding the Major Work of the grade (www.achievethecore/focus), the Supporting and Additional work, how the content fits into the progressions in the Standards (www.achievethecore.org/progressions), and the expectations of the Standards with respect to conceptual understanding, procedural skill and fluency, and application. Evaluators also should be familiar with the substantial instructional Shifts (http:// www.corestandards.org/other-resources/key-shifts-in-mathematics/) of Focus, Coherence and Rigor that are listed above.

Getting Started
Prior to Evaluation

Assemble all of the materials necessary for the evaluation. It is essential for evaluators to have materials for all grades covered by the program, as some criteria cannot be rated without having access to each grade. In addition, each evaluator should have a reference copy of the Common Core State Standards for Mathematics (CCSSM) and the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013).

Before conducting the evaluation itself, it is important to develop a protocol for the evaluation process. The protocol should include having evaluators study the Publishers' Criteria and the IMET. It will also be helpful for evaluators to get a sense of each program overall before beginning the process. At a minimum, this would include reading the front matter of the text, looking at the table of contents and paging through multiple chapters.

Sections 1-3 below should be completed to produce a comprehensive picture of the strengths and weaknesses of the materials under evaluation. Information about areas in need of improvement or supplementation should be shared with internal and external stakeholders.

Navigating the Tool

Begin with Section 1: Non-Negotiable Alignment Criteria

- The Non-Negotiable Alignment Criteria must each be met in full for materials to be considered aligned to the Shifts and the major features of the Common Core State Standards. Each Non-Negotiable Alignment Criterion has one or more metrics associated with it; every one of these metrics must be met in order for the criterion as a whole to be met.

- Examine the relevant materials and use evidence to rate the materials against each criterion and its associated metric(s).

- Record and explain the evidence upon which the rating is based.

Continue to Section 2: Alignment Criteria

- The Alignment Criteria must each be met for materials to be considered aligned to the Shifts and the major features of the Common Core State Standards. Each Alignment Criterion has one or more metric associated with it; a specific number of these metrics must be met or partially met in order for the criterion as a whole to be met.

- Examine the materials in relation to these criteria, assigning each metric a point value. Rate the criterion as "Meets" or "Does Note Meet" based on the number of points assigned. The more points the materials receive on the alignment Criteria, the better they are aligned.

Record and explain the evidence upon which the rating is based.

Proceed to Section 4: Indicators of Quality

- Indicators of Quality are important considerations that will help evaluators better understand the overall quality of instructional materials. These considerations are not criteria for alignment to the CCSS, but they provide valuable information about additional program characteristics. Evaluators may want to add their own indicators to the examples provided.

Directions for Non-Negotiable 1

Freedom from Obstacles to Focus

Criterion	Evidence- Give specific examples.	Rating: (Reviewer only.)
Non-Negotiable 1: **Freedom from Obstacles to Focus** **Materials must reflect the content architecture of the Standards by not assessing the topics named before the grade level where they first appear in the Standards.** The Standards foster students' progress to algebra by focusing strongly on arithmetic. Consistent with this focus, certain topics from outside of arithmetic appear only in later grades. Thus, to be aligned, materials must reflect the content architecture of the Standards by not assessing the topics named before the grade level where they first appear in the Standards. In this criterion, "topics named" means the topics that are explicitly named in Metric 1A. No other topics should be added to the list in Metric 1A. (Note that other topics in the standards are addressed in criterion NN2.)	**Required Materials** • Common Core State Standards for Mathematics (www.corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf) • From the materials being evaluated: teacher guides and all assessment components	**Rating this Criterion:** Non-Negotiable 1 is rated as Meets or Does Not Meet. To rate Non-Negotiable 1, begin by rating Metric 1A. Since Metric 1A is the only metric for Non-Negotiable 1, the rating for Non-Negotiable 1 is the same as the rating for Metric 1A. If Metric 1A is rated as Does Not Meet, include evidence of when the named topic(s) is/are assessed. If the metric is rated as Meets, list the grade(s) examined in the evaluation.

Metric NN1A: **Materials reflect the basic architecture of the Standards by not assessing the listed topics before the grade level indicated.** • Probability, including chance, likely outcomes, probability models. (Introduced in the CCSSM in grade 7) • Statistical distributions, including center, variation, clumping, outliers, mean, median, mode, range, quartiles; and statistical association or trends, including two-way tables, bivariate measurement data, scatter plots, trend line, line of best fit, correlation. (Introduced in the CCSSM in grade 6) • Similarity, congruence, or geometric transformations. (Introduced in the CCSSM in grade 8) • Symmetry of shapes, including line/ reflection symmetry, rotational symmetry. (Introduced in the CCSSM in grade 4) **How to Find the Evidence:** Evaluate the table of contents, all chapter tests, all unit tests, and other such assessment components (including rubrics). For context, read Criterion #2 from the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013). NOTE: Grade alignments of other topics are addressed in Non-Negotiable 2, Focus and Coherence.) In this criterion, "topics named" means the topics that are explicitly named in Metric 1A. No other topics should be added to the list in Metric 1A. (Note that other topics in the standards are addressed in criterion NN2.)	**Evidence-** **Assessments were aligned to grade-level standards and reflected problems presented in learning bops.**	(Reviewer only.) **_X___Meets** **____Does Not Meet**
Non-Negotiable 1: Materials must reflect the content architecture of the Standards by not assessing the topics named* before the grade level where they first appear in the Standards. **NN 1** If Metric 1A was rated as Meets, then rate Non-Negotiable 1 as Meets. If Metric 1A was rated as Does Not Meet, then rate Non- Negotiable 1 as Does Not Meet. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion.**(Reviewer only.)** **Before moving to Non-Negotiable 2, record the final Meets or Does Not Meet rating in the Evaluation Summary.**		(Reviewer only.) **_X___Meets** **____Does Not Meet** **Strengths/Weaknesses: Assessments and learning bops aligned to grade level standards.**

Directions for Non-Negotiable 2

Focus and Coherence

Non-Negotiable 2: **Focus and Coherence** **Materials must focus coherently on the Major Work of the grade in a way that is consistent with the progressions in the Standards.** Focus and coherence are the two major evidence-based design principles of the Common Core State Standards for Mathematics (CCSSM, p. 3). Focus is necessary in order to fulfill the ambitious promise the states have made to their students by adopting the Standards: greater achievement at the college and career ready level; greater depth of understanding of mathematics; and a rich classroom environment in which reasoning, sense-making, applications, and a range of mathematical practices flourish. In simpler terms, a mile-wide, inch-deep curriculum translates to less time per topic. Less time means less depth and moving on without many students. Thus, materials must focus coherently on the Major Work of the grade in a way that is consistent with the progressions in the Standards.	**Required Materials** • Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf) • Focus by Grade Level for the grade being evaluated (www.achievethecore.org/focus) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion:** Non-Negotiable 2 is rated as Meets or Does Not Meet. To rate Non-Negotiable 2, first rate metrics 2A–2H. Each of these eight metrics must be rated as Meets in order for Non-Negotiable 2 to be rated as Meets. Rate each metric 2A-2H as Meets or Does Not Meet/Insufficient Evidence. If the evidence examined shows that the Criterion is met, then mark the Criterion Meets. If the evidence examined shows that the Criterion is not met—or if there is insufficient evidence to make a determination—then mark the Criterion as Does Not Meet/Insufficient Evidence. Support all ratings with evidence.
Metric NN2A: **In each grade K–8, students and teachers using the materials as designed devote the large majority of time to the Major Work of the grade.** **How to Find the Evidence:** Familiarize yourself with the Major Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, lessons, homework assignments, and assessments. (Evaluate both student and teacher materials.) Consider time spent on the Major Work of the grade and judge qualitatively whether students and teachers using the materials as designed will devote the large majority of time to the Major Work of the grade. For context, read Criterion #1 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013)	**Evidence-** **Major works were focus of learning bops. 100% of 5th grade learning bops and assessments were focus**	(Reviewer only.) **__X__Meets** **____Does Not Meet/** **Insufficient Evidence**

Metric NN2B: **Supporting work, where present, enhances focus and coherence simultaneously by also engaging students in the Major Work of the grade.** **How to Find the Evidence:** Familiarize yourself with the Major Work and Supporting Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate chapters and lessons that focus on Supporting Work. NOTE: Example of evaluating this Criterion might include looking at whether materials for K–5 generally treat data displays as an occasion for solving grade-level word problems using the four operations (e.g., see 3.MD.B.3); or whether materials for grade 7 take advantage of opportunities to use probability to support ratios, proportions, and percentages. For context, read Criterion #3 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** **Supporting works are focused on in learning bops and assessments-extended experience with major works** **100% supporting works represented for 5th grade**	**(Reviewer only.)** **_X___Meets** **____Does Not Meet/** **Insufficient Evidence**
Metric NN2C: **Materials base content progressions on the grade-by-grade progressions in the Standards. Content from previous or future grades does not unduly interfere with or displace on-grade-level content.** **How to Find the Evidence:** Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, and lessons in both student and teacher materials. NOTE: In some cases it may be possible that aligned materials might address some aspects of a topic in a strategic way before or after the grade level in which the topic is central in the Standards' progressions; for example, a curriculum author might purposefully choose to explore adding fractions with unlike denominators in a way appropriate to grade four, recognizing that this work is not really required until the next grade. However, any such purposeful discrepancies in content progressions should enhance the required learning in each grade; not unduly interfere with or displace grade-level content; and be clearly aimed at helping students meet the Standards as written rather than effectively rewriting the progressions in the Standards. And in all cases, note that Non-Negotiable 1 must be met for materials to be aligned. For context, read Criterion #5a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Progressions math grade level; previous and next grade levels are accessible for progressions No interference from other grade levels because teacher can select specific grade level to assign students	**(Reviewer only.)** **_X___Meets** **____Does Not Meet/** **Insufficient Evidence**

Metric NN2D: **Materials gi[illegible] students extensive work with on-grade-level problems.** **How to Find the Evidence:** Evaluate both student and teacher materials. If the materials provide resources for differentiated learning, consider whether lower-performing students have opportunities to engage with grade-level problems. Also consider whether higher-performing students are given opportunities to learn current grade-level content in greater depth. For context, read Criterion #5b in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Content catalogue[illegible]ts grade-level concepts and number of concepts per grade level	(Reviewer only.) **__X__Meets** **____Does Not Meet/ Insufficient Evidence**
Metric NN2E: **Materials relate on-grade-level concepts explicitly to prior knowledge from earlier grades.** **How to Find the Evidence:** Evaluate both student and teacher materials. NOTE: Examples of evaluating this Criterion might include looking at the way the materials extend basic ideas of place value across the decimal point; or the role that properties of operations play when the materials extend arithmetic beyond whole numbers to fractions, variables, and expressions. More generally, cluster headings in the Standards sometimes signal key moments where reorganizing and extending previous knowledge is important in order to accommodate new knowledge (e.g., see cluster headings that use the phrase "Apply and extend previous understanding"). For context, read Criterion #5c in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Major works from current and previous grade levels connected with on grade level work	(Reviewer only.) **_X___Meets** **____Does Not Meet/ Insufficient Evidence**
Metric NN2F: **Review of material from previous grades is clearly identified as such to the teacher, and teacher and students can see what their specific responsibility is for the current year.** **How to Find the Evidence:** Evaluate the table of contents, but do not stop there; also evaluate units, chapters, lessons, homework assignments and assessments. (Evaluate both student and teacher materials.) Identify any content from previous grades and check whether it is identified as such. For context, read Criterion #5a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Because the program is designed by grade level, the teacher can easily choose material from grade levels in content catalogue	(Reviewer only.) **__X__Meets** **____Does Not Meet/ Insufficient Evidence**

Metric NN2G: **Materials include learning objectives that are visibly shaped by CCSSM cluster headings.** **How to Find the Evidence:** Select several clusters from the Major Work in the grade being evaluated. Evaluate teacher and student materials in relation to these clusters. For context, read Criterion #6a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** **Objectives are clearly labeled within cluster headings**	(Reviewer only.) **__X__Meets** **____Does Not Meet/ Insufficient Evidence**
Metric NN2H: **Materials include problems and activities that serve to connect two or more clusters in a domain, or two or more domains in a grade, in cases where these connections are natural and important.** **How to Find the Evidence:** In the grade being evaluated, choose two or more clusters or two or more domains for which connections are natural and important. Evaluate the units, chapters, and lessons that deal with the chosen topics, looking for problems and activities that serve to connect the chosen clusters or domains. NOTE: An example of evaluating this Criterion might include looking at whether problems in grade 4 sometimes or often involve students applying their developing computation skills (detailed in domain NBT) in the context of solving word problems (detailed in domain OA). For context, read Criterion #6b in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** **Tutorials reconnect students to several concepts and clusters to current cluster** **As a component piece, clusters are not connected as lessons, rather, as re-teach opportunities**	(Reviewer only.) **__X__Meets** **____Does Not Meet/ Insufficient Evidence**
Non-Negotiable 2: **Focus and Coherence** **Materials must focus coherently on the Major Work of the grade in a way that is consistent with the progressions in the Standards.** NN 2 If all Metrics 2A – 2H were rated as Meets, then rate Non-Negotiable 2 as Meets. If one or more Metric was rated Does Not Meet/Insufficient Evidence, then rate Non-Negotiable 2 as Does Not Meet. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)** **Before moving to Alignment Criterion 1, record the final Meets or Does Not Meet rating in the Evaluation Summary.**		(Reviewer only.) **__X__Meets** **____Does Not Meet** **Strengths/Weaknesses:** **Clusters and objectives are clearly visible and easy to find**

Now continue by evaluating the Alignment Criterion 1 for Rigor and Balance.

Directions for Alignment Criterion 1

Rigor and Balance

Alignment Criterion 1: Rigor and Balance **Materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.** The Standards set expectations for attention to all three aspects of rigor: conceptual understanding, procedural skill and fluency, and applications. Thus, materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.	**Required Materials** • Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf) • Focus by Grade Level for the grade being evaluated (achievethecore.org/focus) • Situation Types for the Operations in Word Problems (achievethecore.org/situation-types) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion:** Alignment Criterion 1 is rated as Meets or Does Not Meet. To rate Alignment Criterion 1, first rate metrics 1A, 1B, and 1C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). For each metric, guiding questions are provided to aid in gathering evidence. Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 1 if the materials rate 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as rigor and balance, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.
Metric AC1A: **The materials support the development of students' conceptual understanding of key mathematical concepts, especially where called for in specific content Standards or cluster headings.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Major Work for the grade being evaluated that relate specifically conceptual understanding to use throughout the questions associated with this metric. NOTE: Some examples of clusters or Standards that call for conceptual understanding include: K.OA.A.1, (1.NBT.B, 1.NBT.C), (2.NBT.A, 2.NBT.B), (3.OA.A.1, 3.OA.A.2), 4.NF.A, (4.NBT.A, 4.NBT.B), 5.NF.B, (5.NBT.A, 5.NBT.B), 6.RP.A, 6.EE.A.3, 7.NS.A, 7.EE.A, 8.EE.B, 8.F.A, 8.G.A Clusters or Standards grouped by parentheses are closely connected and could be analyzed together. For context, read Criterion #4a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	-Choose a cluster/Standard from the Major Work that is aligned to each aspect of rigor and use it to evaluate these metrics. It is most helpful if the same clusters/Standards are chosen for all of the programs being evaluated. (Guidance in choosing clusters/Standards is included in "How to Find the Evidence".)	**Use the questions for AC Metric 1A to evaluate Metric 1A. Record evidence for each question and rate Metric 1A.** **__X__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**

Is conceptual understanding attended to thoroughly where the Standards set expectations for understanding or interpreting? Evaluate lessons, chapter/unit assessments and homework assignments, paying attention to work aligned to Standards that explicitly call for understanding or interpreting. NOTE: Examples of evaluating this Criterion might include looking at how well the multi-digit addition and subtraction algorithms are developed and explained on the basis of place value and properties of operations; or how well the multi-digit multiplication and division algorithms are developed and explained on the basis of place value and properties of operations; or how well solving equations is presented and explained as a process of reasoning.	**Evidence-** Extensive use of graphics, videos, hints assists conceptual understanding Learnzillion is used as a teaching video	
Do the materials feature high-quality conceptual problems and conceptual discussion questions? Evaluate lessons, chapter/unit assessments, and homework assignments. NOTE: Example of conceptual problems might include such questions as "Find a number greater than 1/5 and less than 1/4," or "If the divisor does not change and the dividend increases, what happens to the quotient?"	**Evidence-** As an online program, no discussion was available (unless used as a whole-class teaching tool), immediate feedback in form of "step-by-step" explanation gives student opportunity for increased conceptual understanding	
Do the materials feature opportunities to identify correspondences across mathematical representations? Evaluate lessons, chapter/unit assessments and homework assignments. NOTE: Examples of evaluating this Criterion might include looking at whether students are supported in identifying correspondences among: the verbal description of a situation, the diagrams that distill its mathematical features, and the equations that model it; or equivalent forms of numbers (e.g., 3 and 6/2) and the number line; or rational number operations and representations of them via models such as the vector model; or the expression that defines a function and the graph that shows the relationship.	**Evidence-** Diagrams, models, videos, graphs represent problems in several ways	
Metric AC1B: **The materials are designed so that students attain the fluencies and procedural skills required by the Standards.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Major Work for the grade being evaluated that relate specifically to fluency and procedural skill to use throughout the questions associated with this metric. NOTE: Some examples of Standards that call for procedural skill and fluency include: K.OA.A.5, 1.OA.C.6, 2.OA.B.2, 2.NBT.B.5, 3.OA.C.7, 3.NBT.A.2, 4.NBT.B.4, 5.NBT.B.5, 6.NS.B.2, and 6.NS.B.3, 6.EE.A, 7.NS.A, 7.EE.A.1,7.EE.B.4a, 8.EE.C.7, 8.EE.C.8b For context, read Criterion #4b in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).		**Use the questions for Metric 1B to evaluate Metric 1 B. Record evidence for each question and rate Metric 1B.** **(Reviewer only.)** **____Meets (2)** **_X___Partially Meets (1)** **____Does Not Meet (0)**

Is progress toward fluency and procedural skill interwoven with students' develo conceptual understanding of the operations in question? Evaluate lessons, chapter/unit assessments, daily routines, and homework assignments for evidence that the development of fluency and procedural skill is supported by conceptual understanding.	**Evidence-** Concepts assist wi eveloping procedural fluency. Program does not specifically include fluency practice for basic skills operations	
Are purely procedural problems and exercises present that include cases in which opportunistic strategies are valuable and generic cases that require efficient algorithms present? Evaluate lessons, chapter/unit assessments, daily routines, and homework assignments. NOTE: Examples of problems in which opportunistic strategies are valuable might include the sum 698 + 240 or the system x + y = 1, 2x + 2y = 3. Examples of generic cases that require efficient algorithms might include the sum 8767+2286 or the system 6y + x = x + 3, – x = 1 + 2y.	**Evidence-** Fluency comes in form of practicing concepts, but strictly fluency problems not present	
Do the materials in grades K–6 provide repeated practice toward attainment of fluency Standards? Evaluate lessons, daily routines, and homework assignments for evidence of repeated practice toward attainment of the following K–6 Standards that set an explicit expectation of fluent (accurate and reasonably fast) computation: K.OA.A.5, 1.OA.C.6, 2.OA.B.2, 2.NBT.B.5, 3.OA.C.7, 3.NBT.A.2, 4.NBT.B.4, 5.NBT.B.5, 6.NS.B.2, 6.NS.B.3.	**Evidence-** **"step-by-step" tutorial provides practice with fluency**	
Metric AC1C: **The materials are designed so that teachers and students spend sufficient time working with engaging applications, without losing focus on the Major Work of each grade.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Major Work for the grade being evaluated that relate specifically application to use throughout the questions associated with this metric. NOTE: Some examples of clusters or Standards that call for application include: K.OA.A.2, 1.OA.A, 2.OA.A, 3.OA.A.3, 3.OA.D.8, 4.OA.A.3, 4.NF.B.3d, 4.NF.B.4c, 5.NF.B.6, 5.NF.B.7c, 6.RP.A.3, 6.NS.A.1, 6.EE.B.7, 6.EE.C.9, 7.RP.A, 7.NS.A.3, 7.EE.B.3, 8.EE.C.8c, 8.F.B For context, read Criterion #4c in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Features of program reinforces classroom instruction. "Step-by-step" tutorial reteaches missed concepts	**Use the questions for Metric 1C to evaluate Metric 1C. Record evidence for each question and rate Metric 1C.** **(Reviewer only.)** **__X__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Are there are single- and multi-step contextual problems, including non-routine problems, that develop the mathematics of the grade, afford opportunities for practice, and engage students in problem solving? Do the problems attend thoroughly to those places in the content Standards where expectations for multi-step and real-world problems are explicit? Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** There are a variety of problems that engage students	

Alignment Criterion 2: Standards for Mathematical Practice **Materials must demonstrate authentic connections between content Standards and practice Standards.** The Standards require that designers of instructional materials connect the mathematical practices to mathematical content in instruction. Thus, materials must demonstrate authentic connections between content Standards and practice Standards.	**Required Materials:** • Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf) • Focus by Grade Level for the grade being evaluated (www.achievethecore.org/focus) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion** Alignment Criterion 2 is rated as Meets or Does Not Meet. To rate Alignment Criterion 2, first rate metrics 2A, 2B, and 2C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). For each metric, guiding questions are provided to aid in gathering evidence. Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 2 if the materials earn 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as mathematical practices, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.
Metric AC2A: **Materials address the practice Standards in such a way as to enrich the Major Work of the grade; practices strengthen the focus on Major Work instead of detracting from it, in both teacher and student materials.** **How to Find the Evidence:** Familiarize yourself with the Major Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate teacher and student materials for evidence that the mathematical practices support and connect to the focus of the grade. NOTE: Examples of evaluating this Criterion might include looking at whether, in grades K–5, students using the materials are supported to look for and express regularity in repeated reasoning about the addition table, the multiplication table, the properties of operations, the relationship between addition and subtraction or multiplication and division, and the place value system; or whether, in grades 6–8, students using the materials are supported to look for and express regularity in repeated reasoning about proportional relationships and linear functions. For context, read Criterion #8 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013).	**Evidence-** As an online program, students can't construct and evaluate arguments or produce their own models. This limits development of practice standards 3 and 4.	**(Reviewer only.)** **____Meets (2)** **__X__Partially Meets (1)** **____Does Not Meet (0)**

Do application problems particularly stress applying the Major Work of the grade? Evaluate lessons, chapter/unit assessments, and homework assignments. NOTE: Examples of evaluating this Criterion might include looking at: how well, by the end of grade 2, students using the materials as designed can represent and solve a full range of one-step addition and subtraction word problems; or how well, by the end of grade 3, students using the materials as designed can represent and solve a full range of one-step multiplication and division word problems; or how well these basic situation types for each operation are carried coherently across the grades, (e.g., with fractions and algebraic expressions); or, in all grades, whether the problems connect concepts, Standards, and domains in ways that are natural and important. For a list of situation types for one-step addition, subtraction, multiplication, and division problems, see Situation Types for the Operations in Word Problems	**Evidence-** All problems and assessments are based on major works	
Does modeling build slowly across K–8, with applications that are relatively simple in earlier grades and when students are encountering new content? In grades 6–8, do the problems begin to provide opportunities for students to make their own assumptions or simplifications in order to model a situation mathematically? Read Standard for Mathematical Practice 4, Model with Mathematics. Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** "Step-by-step" breaks down and enhances models. Visual representations assist in scaffolding pattern.	

Alignment Criterion 1: Rigor and Balance

Materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.

AC1 Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 out of 6 points, the Criterion has not been met. Check the final rating.
Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)**

Before moving to Alignment Criterion 2, record the final Meets or Does Not Meet rating in the Evaluation Summary.

(Reviewer only.)

__X__Meets

____Does Not Meet

Strengths/Weaknesses:
More multiple choice than open-ended responses

Directions for Alignment Criterion 2

Standards for Mathematical Practice

Metric AC2B: **Materials attend to the full meaning of each practice Standard.** **How to Find the Evidence:** For context, read Criterion #7 and Criterion #9 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).		**Use the questions for Metric 2B to evaluate Metric 2B. Record evidence for each question and rate Metric 2B.** **(Reviewer only.)** **___X_Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Over the course of any given year of instruction, is each mathematical practice Standard meaningfully present in the form of assignments, activities, or problems that stimulate students to develop the habits of mind described in the practice Standard? Evaluate lessons, chapter/ unit assessments, and homework assignments for evidence of each mathematical practice being meaningfully present in instruction.	**Evidence-** **With the exception of MP 3 and 4, all are attended to throughout the program**	
Do the materials treat the practice Standards as developing across grades or grade bands? Are the practice Standards in early grades appropriately simple? Do they display an arc of growing sophistication across the grades?	**Evidence-** **All standards for practice are aligned across grades**	
Are there teacher-directed materials that explain the role of the practice Standards in the classroom and in students' mathematical development? Are alignments to practice Standards accurate?	**Evidence-** **There are teacher slideshows but practices are not labeled as practice standards**	
Metric AC2C: **Materials support the Standards' emphasis on mathematical reasoning.** **How to Find the Evidence:** For context, read Criterion #10 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).		**Use the questions for Metric 2C to evaluate Metric 2C. Record evidence for each question and rate Metric 2C.** **(Reviewer only.)** **___X_Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Do the materials support students in constructing viable arguments and critiquing the arguments of others concerning grade-level mathematics that is detailed in the content Standards? Read Standard for Mathematical Practice 3. Evaluate teacher and student materials to ensure that students are given opportunities to reason with grade-level mathematics.	**Evidence-** **Because this is an online program, students are reading about concepts and practices, and must respond to "step-by-step" tutorials**	
Do the materials support students in producing not only answers and solutions, but also, in a grade-appropriate way, arguments, explanations, diagrams, mathematical models, etc., especially in the Major Work of the grade? Familiarize yourself with the Major Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate teacher and student materials, to understand the types of work students are expected to produce.	**Evidence-** **"Step-by-step" tutorials provide explanations and diagrams and models are presented within tutorials**	

Do materials explicitly attend to the specialized language of mathematics? Is the language of argument, problem solving, and mathematical explanations taught rather than assumed? Evaluate teacher and student materials, paying attention to how mathematical language is taught. NOTE: Examples of evaluating this Criterion might include looking at whether students are supported in: basing arguments on definitions; using the method of providing a counterexample; or recognizing that examples alone do not establish a general statement.	**Evidence-** **Language is not explicitly taught but is used in tutorials.** **Models are provided for student in tutorials.**	

Alignment Criterion 2:
Standards for Mathematical Practice

Materials must demonstrate authentic connections between content Standards and practice Standards.

AC2 Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 out of 6 points, the Criterion has not been met. Check the final rating.
Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion.
(Reviewer only.)

Before moving to Alignment Criterion 3, record the final Meets or Does Not Meet rating in the Evaluation Summary.

(Reviewer only.)

__X__Meets

____Does Not Meet

Strengths/Weaknesses:
Practce standards 3 and 4 are shown to students through tutorials, but students do not construct own arguments and models.

Alignment Criterion 3:
Access to the Standards for All Students

Materials must provide supports for English Language Learners and other special populations.

Because Standards are for all students, alignment requires thoughtful support to ensure all students are able to meet the Standards. Thus, aligned materials must provide supports for English Language Learners and other special populations.

Required Materials:

- Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf)
- Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)
- From the materials being evaluated: teacher guides, student texts and workbooks

Rating this Criterion:
Alignment Criterion 3 is rated as Meets or Does Not Meet.

To rate Alignment Criterion 3, first rate metrics 3A, 3B, and 3C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points).

Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 3 if the materials earn 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as support for special population, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.

Metric AC3A: **Support for [illegible]lish Language Learners and other special populations is thoughtful and helps those students meet the same Standards as all other students. The language in which problems are posed is carefully considered.** **How to Find the Evidence:** Evaluate teacher and student materials, paying attention to supports offered for special populations.	**Evidence-** No support for ELL[illegible]d other populations other than pictures, diagrams, and models of concepts that are in most problems	Reviewer only.) **____Meets (2)** **__X__Partially Meets (1)** **____Does Not Meet (0)**
Metric AC3B: **Materials provide appropriate level and type of scaffolding, differentiation, intervention, and support for a broad range of learners with gradual removal of supports, when needed, to allow students to demonstrate their mathematical understanding independently.** **How to Find the Evidence:** Evaluate teacher and student materials, paying attention to whether materials provide differentiation that will lead all learners to engage with on-grade-level content.	**Evidence-** "Step-by-step" tutorials, hints, response feedback provided for incorrect answers. Interventions can be created from teacher dashboard.	Reviewer only.) **__X__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Metric AC3C: **Design of lessons recommends and facilitates a mix of instructional approaches for a variety of learners such as using multiple representations (e.g., including models, using a range of questions, checking for understanding, flexible grouping, pair-share).** **How to Find the Evidence:** Evaluate teacher materials, noting instructional approaches suggested for whole class and differentiated lessons and activities.	**Evidence-** Tutorials, multiple choice, remediation, and assign work for advancement, as well as technology enhanced bops	Reviewer only.) **__X__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**

Alignment Criterion 3: **Access to the Standards for All Students** **Materials must provide supports for English Language Learners and other special populations.** AC3 Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 points, the Criterion has not been met. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion.**(Reviewer only.)** **Move to the Evaluation Summary and record the final Meets or Does Not Meet rating .**	**(Reviewer only.)** **__X__Meets** **____Does Not Meet** **Strengths/Weaknesses:** Explicit language support needed for ELL in addition to graphics

Once an evaluation for alignment to the Shifts and major features of the CCSS has been conducted using Sections 1-3, it's important to evaluate for overall quality and best practices. A starting list of Indicators of Quality are suggested below. States, districts and others evaluating instructional materials are encouraged to add to this list to ensure materials reflect local contexts. For background information on some of the Indicators of Quality in this section, refer to pp.18–21 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).

Indicators of Quality	**Evidence- Give specific examples.**	**Rating: (Reviewers only.)**
1. Lessons are thoughtfully structured and support the teacher in leading the class through the learning paths at hand, with active participation by all students in their own learning and in the learning of their classmates.	**Evidence-** **Teacher dashboard allows progress monitoring and lessons are scaffolded and go at student pace.**	**(Reviewer only.)** **____X__ Yes** **_____ No**
2. The underlying design of the materials includes both problems and exercises. (In solving problems, students learn new mathematics, whereas in working exercises, students apply what they have already learned to build mastery.) Each problem or exercise has a purpose. **NOTE: This Criterion does not require that the problems and exercises be labeled as such.**	**Evidence-** **Exercises provide the opportunity for reteaching. There are some fill in the blank problems with advancement available.**	**(Reviewer only.)** **__X____ Yes** **_____ No**

3. Design of assignments is not haphazard: exercises are given in intentional sequences in order to strengthen students' mathematical understanding.	Evidence- Lessons are scaffolded. Organization of standards is followed.	(Reviewer only.) __X____ Yes _____ No
4. There are separate teacher materials that support and reward teacher study including, but not limited to: discussion of the mathematics of the units and the mathematical point of each lesson as it relates to the organizing concepts of the unit, discussion on student ways of thinking and anticipating a variety of students responses, guidance on lesson flow, guidance on questions that prompt students thinking, and discussion of desired mathematical behaviors being elicited among students.	Evidence- Explanation of materials and "help box" are provided. No guide is provided for student responses and thinking. Support is given for teachers to implement Learnbop.	(Reviewer only.) _X_____ Yes _____ No
5. Manipulatives suggested in the materials are faithful representations of the mathematical objects they represent and are connected to written methods.	Evidence- No manipulatives are provided, but there are models presented visually.	(Reviewer only.) ___X___ Yes _____ No
6. Materials include a variety of curriculum-embedded assessments. Examples include pre-, formative, summative, and self-assessment resources.	Evidence- There are various forms of assessments, including a technology enhanced bop, as well as pre, and post assessments. There's a comprehensive assessment.	(Reviewer only.) ___X___ Yes _____ No
7. Assessments contain aligned rubrics, answer keys, and scoring guidelines that provide sufficient guidance for interpreting student performance.	Evidence- While rubrics are not provided, there are results available for immediate feedback, as well as progress monitoring options for teacher's use.	(Reviewer only.) ____X__ Yes _____ No
8. Materials assess student proficiency using methods that are accessible and unbiased, including the use of course-level language in student prompts.	Evidence- Graphics are student-friendly and questions are developmentally appropriate.	(Reviewer only.) __X____ Yes _____ No

9. Materials are carefully evaluated by qualified individuals, whose names are listed, in an effort to ensure freedom from mathematical errors and course-level appropriateness.	**Evidence-** **Contact information is found on the website and tutorials mention individuals.**	**(Reviewer only.)** **___X___ Yes** **_____ No**
10. The visual design supports students in engaging thoughtfully with the subject. Navigation through the text is clear.	**Evidence-** **Visuals are easy to read and are attractive.**	**(Reviewer only.)** **___X___ Yes** **_____ No**
11. The materials engage parents in appropriate ways. For example, homework assignments in elementary grades, consist of routine problems, practice with getting answers, and fluency-building exercises that parents can easily support.	**Evidence-** **The website is easy for parents to use for assisting their child. There are also tutorials for software use.**	**(Reviewer only.)** **___X___ Yes** **_____ No**

Reviewer IMET Evaluation Summary
Title/Level:_Learnbop_5th_____

Publisher: _Fuel Education_____ Copyright: _____
ISBN:_____

Reviewer ID # __CB, LKE, MS_____ Date Review 3/7/16
Completed:_____

Non-Negotiable Criteria- Each Non-Negotiable must be met in order for the Non-Negotiable Alignment Criteria to be met overall.

Non-Negotiable 1: Freedom from Obstacles to Focus	**Non- Negotiable 2: Focus and Coherence**
____X___ Meets	**___X__ Meets**
_____ Does Not Meet	**_____ Does Not Meet**

Non-Negotiable Overall:

___X__ Meets _____ Does Not Meet

Alignment Criteria- Each Alignment Criterion must be met with a sufficient number of points in order for Alignment Criteria to be labeled as "Meets" overall. The more points the materials receive on the Alignment Criteria, the better they are aligned.

Alignment Criterion 1: Rigor and Balance	**Alignment Criterion 2: Standards of Mathematical Practice**	**Alignment Criterion 3: Access to Standards for All Learners**
Points: __6___ of 6 possible. **(Materials must receive at least 5 of 6 points to align.)**	**Points: __5___ of 6 possible.** **(Materials must receive at least 5 of 6 points to align.)**	**Points: _5____ of 6 possible.** **(Materials must receive at least 5 of 6 points to align.)**
___X____ Meets	**____X___ Meets**	**___X____ Meets**
_____ Does Not Meet	**_____ Does Not Meet**	**_____ Does Not Meet**

Alignment Criteria Overall:

__X___ Meets _____ Does Not Meet

If the materials meet both Non-Negotiables and relevant Alignment Criterion, they are aligned to the Shifts and major features of the Core Standards. **the materials meet every Non-Negotiable and Alignment Criterion? __X___ Yes _____ No**

What are the specific areas of strength and weakness based on this evaluation? Publishers or others modifying or developing assessments can use this information to make improvements and/or to remedy gaps in the alignment of assessment materials.

More language support for Ell students in addition to graphics necessary.

Strengths are found in tutorials that lend to conceptual understanding; immediate feedback upon submitting student answers.

Because the program is based on multiple choice selections and is presented online, it presents less opportunity for practices standards 3 and 4.

There are guided hints to help access prior knowledge. Interventions can be targeted to specific skills. Classroom progress reports on all assignments show what students have mastered and what students strengths are. There are comprehensive assessments as well as customizable assessments available. There is total access to all grades K-12. There is a comprehensive content catalog with interactive problems.

2015-16 Mathematics Interim Review Recommendation & Summary

Publisher Name:	LearnBop / Fuel Education
Title:	Learn Bop 6
ISBN #	
Grade Level(s) or Course:	6
Reviewer ID:	KC + BP

RECOMMENDED AS:

_____**Core Mathematics Program-** a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials. Substantial evidence clearly supports the designation of this program as Core.

_____**Other Mathematics Program-** a program that substantially, but partially, meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for supplemental materials. Substantial evidence clearly supports the designation of this program as Other.

__X__**Component Mathematics Program-** a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs. Substantial evidence clearly supports the designation of this program as Component.

_____**Intervention Program-** a program designed and intended to target and support students' specific needs. Substantial evidence clearly supports the designation of this program as Intervention.

(was submitted as a component program)

_____**Does not meet criteria** for recommendation as a Curricular Material or Online Resource for Mathematics.

EVIDENCE SUMMARY:

FOCUS- Diagnostic assessment places students at their perceived level. Activities are aligned with CCSS, and work students through tasks.

COHERENCE- Tasks progress through standards, on an "as needed" basis. This is determined by the students' individual performance on the diagnostic and subsequent tasks.

RIGOR- Students receive information through examples and videos. This limits the rigor to the existing levels of the activities.

CONCEPTUAL UNDERSTANDING- Tasks are presented to students, additional "tutor-help" is available as step-by-step notes and explanatory videos. The videos are prompts, and do not give the answer away.

MATHEMATICAL PRACTICES- Students are asked to reason abstractly, but not necessarily reason + justify. There are visual models and digital manipulatives to model mathematics.

ACCESSIBILITY OF STANDARDS TO ALL STUDENTS- This program is very language heavy. A student with limited English would struggle to benefit from this model.

OTHER: The individualized instruction is helpful as a supplement to core curriculum instruction. My concern is that in isolation, students would not be given ample exposure to the content to reach mastery and deep conceptual understanding.

2015-16 Interim Mathematics Review

Mathematics Evaluation Tool Grades K-8

Publisher: LearnBop/Fuel Education

Title of Material: LearnBop (6th)

Author: LearnBop in partnership with K-12 mathematics educators

ISBN #: Various **Copyright** —

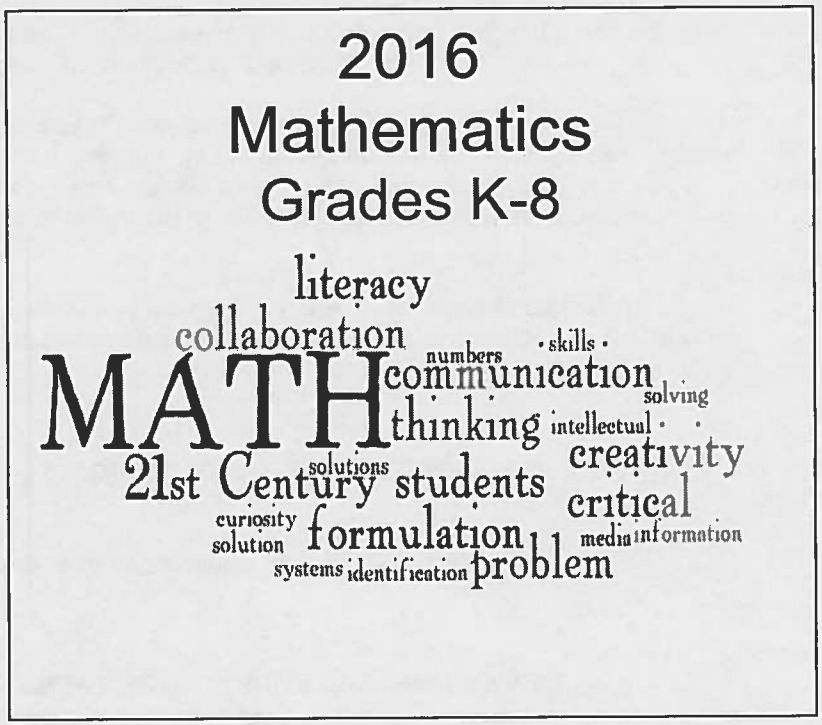
Reviewer ID: BP & KC

Core Mathematics Program- a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Core.

Other Mathematics Program- a program that substantially, but partially, meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Other.

Component Mathematics Program- a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs.
Substantial evidence clearly supports the designation of this program as Component.

Intervention Program- a program designed and intended to target and support students' specific needs.
Substantial evidence clearly supports the designation of this program as Intervention.



- Evaluation Form adapted from Instructional Materials Evaluation Toolkit (IMET).

The IMET was developed by Student Achievement Partners. Educators may use or adapt. http://creativecommons.org/licenses/by/3.0/ Download this tool at http://achievethecore.org/IMET

Instructional Materials Evaluation Tool

Mathematics, Grades K-8

What Are the Purposes of the IMET?

This Math IMET is designed to help educators determine whether instructional materials are aligned to the Shifts and major features of the Common Core State Standards (CCSS). The substantial instructional Shifts (http://www.corestandards.org/other-resources/key-shifts-inmathematics/) at the heart of the Common Core State Standards are:

- **Focus** strongly where the Standards focus
- **Coherence**: Think across grades and link to major topics within the grade
- **Rigor**: In major topics, pursue conceptual understanding, procedural skill and fluency, and application with equal intensity.

The IMET draws directly from the following documents:

- Common Core State Standards for Mathematics (www.corestandards.org/Math)
- Publishers' Criteria for the Common Core State Standards in Mathematics grade K-8 (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)

When to use the IMET

1. Purchasing materials: Many factors go into local purchasing decisions. Alignment to the Standards is a critical factor to consider. This tool is designed to evaluate alignment of instructional materials to the Shifts and the major features of the CCSS. It also provides suggestions of additional indicators to consider in the materials evaluation and purchasing process.

2. Evaluating materials currently in use: The IMET can be used to analyze the degree of alignment of existing materials and help to highlight specific, concrete flaws in alignment. Even where materials and tools currently in use fail to meet one or more of these criteria, the pattern of failure is likely to be informative. States and districts can use the evaluation to create a thoughtful plan to modify or combine existing resources in such a way that students' actual learning experiences approach the focus, coherence, and rigor of the Standards.

3. Developing programs: Those developing new programs can use this tool as guidance for creating aligned curricula.
Please note this tool was designed for evaluating comprehensive curricula (including any supplemental or ancillary materials), but it was not designed for the evaluation of standalone supplemental materials.

Who Uses the IMET?

Evaluating instructional materials requires both subject-matter and pedagogical expertise. Evaluators should be well versed in the Standards (www.corestandards.org/Math) for all grades in which materials are being evaluated. This includes understanding the Major Work of the grade (www.achievethecore/focus), the Supporting and Additional work, how the content fits into the progressions in the Standards (www.achievethecore.org/progressions), and the expectations of the Standards with respect to conceptual understanding, procedural skill and fluency, and application. Evaluators also should be familiar with the substantial instructional Shifts (http:// www.corestandards.org/other-resources/key-shifts-in-mathematics/) of Focus, Coherence and Rigor that are listed above.

Getting Started

Prior to Evaluation

Assemble all of the materials necessary for the evaluation. It is essential for evaluators to have materials for all grades covered by the program, as some criteria cannot be rated without having access to each grade. In addition, each evaluator should have a reference copy of the Common Core State Standards for Mathematics (CCSSM) and the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013).

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The IMET draws directly from the following documents:

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- Publishers' Criteria for the Common Core State Standards in Mathematics grade K-8 (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)

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Getting Started

Prior to Evaluation

Assemble all of the materials necessary for the evaluation. It is essential for evaluators to have materials for all grades covered by the program, as some criteria cannot be rated without having access to each grade. In addition, each evaluator should have a reference copy of the Common Core State Standards for Mathematics (CCSSM) and the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013).

Before conducting the evaluation itself, it is important to develop a protocol for the evaluation process. The protocol should include having evaluators study the Publishers' Criteria and the IMET. It will also be helpful for evaluators to get a sense of each program overall before beginning the process. At a minimum, this would include reading the front matter of the text, looking at the table of contents and paging through multiple chapters.

Sections 1-3 below should be completed to produce a comprehensive picture of the strengths and weaknesses of the materials under evaluation. Information about areas in need of improvement or supplementation should be shared with internal and external stakeholders.

Navigating the Tool

Begin with Section 1: Non-Negotiable Alignment Criteria

- The Non-Negotiable Alignment Criteria must each be met in full for materials to be considered aligned to the Shifts and the major features of the Common Core State Standards. Each Non-Negotiable Alignment Criterion has one or more metrics associated with it; every one of these metrics must be met in order for the criterion as a whole to be met.

- Examine the relevant materials and use evidence to rate the materials against each criterion and its associated metric(s).

- Record and explain the evidence upon which the rating is based.

Continue to Section 2: Alignment Criteria

- The Alignment Criteria must each be met for materials to be considered aligned to the Shifts and the major features of the Common Core State Standards. Each Alignment Criterion has one or more metric associated with it; a specific number of these metrics must be met or partially met in order for the criterion as a whole to be met.

- Examine the materials in relation to these criteria, assigning each metric a point value. Rate the criterion as "Meets" or "Does Note Meet" based on the number of points assigned. The more points the materials receive on the alignment Criteria, the better they are aligned.

- Record and explain the evidence upon which the rating is based.

Proceed to Section 4: Indicators of Quality

- Indicators of Quality are important considerations that will help evaluators better understand the overall quality of instructional materials. These considerations are not criteria for alignment to the CCSS, but they provide valuable information about additional program characteristics. Evaluators may want to add their own indicators to the examples provided.

Directions for Non-Negotiable 1

Freedom from Obstacles to Focus

Criterion	Evidence- Give specific examples.	Rating: (Reviewer only.)
Non-Negotiable 1: **Freedom from Obstacles to Focus** **Materials must reflect the content architecture of the Standards by not assessing the topics named before the grade level where they first appear in the Standards.** The Standards foster students' progress to algebra by focusing strongly on arithmetic. Consistent with this focus, certain topics from outside of arithmetic appear only in later grades. Thus, to be aligned, materials must reflect the content architecture of the Standards by not assessing the topics named before the grade level where they first appear in the Standards. In this criterion, "topics named" means the topics that are explicitly named in Metric 1A. No other topics should be added to the list in Metric 1A. (Note that other topics in the standards are addressed in criterion NN2.)	**Required Materials** • Common Core State Standards for Mathematics (www.corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf) • From the materials being evaluated: teacher guides and all assessment components	**Rating this Criterion:** Non-Negotiable 1 is rated as Meets or Does Not Meet. To rate Non-Negotiable 1, begin by rating Metric 1A. Since Metric 1A is the only metric for Non-Negotiable 1, the rating for Non-Negotiable 1 is the same as the rating for Metric 1A. If Metric 1A is rated as Does Not Meet, include evidence of when the named topic(s) is/are assessed. If the metric is rated as Meets, list the grade(s) examined in the evaluation.

Metric NN1A: **Materials reflect the basic architecture of the Standards by not assessing the listed topics before the grade level indicated.** • Probability, including chance, likely outcomes, probability models. (Introduced in the CCSSM in grade 7) • Statistical distributions, including center, variation, clumping, outliers, mean, median, mode, range, quartiles; and statistical association or trends, including two-way tables, bivariate measurement data, scatter plots, trend line, line of best fit, correlation. (Introduced in the CCSSM in grade 6) • Similarity, congruence, or geometric transformations. (Introduced in the CCSSM in grade 8) • Symmetry of shapes, including line/ reflection symmetry, rotational symmetry. (Introduced in the CCSSM in grade 4) **How to Find the Evidence:** Evaluate the table of contents, all chapter tests, all unit tests, and other such assessment components (including rubrics). For context, read Criterion #2 from the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013). NOTE: Grade alignments of other topics are addressed in Non-Negotiable 2, Focus and Coherence.) In this criterion, "topics named" means the topics that are explicitly named in Metric 1A. No other topics should be added to the list in Metric 1A. (Note that other topics in the standards are addressed in criterion NN2.)	**Evidence-** **Uses diagnostic pre[illegible]essment to place students. This allows students to work where skill improvement is needed. Teachers can also assign specific tasks.**	(Reviewer only.) **__x__Meets** **____Does Not Meet**
Non-Negotiable 1: Materials must reflect the content architecture of the Standards by not assessing the topics named* before the grade level where they first appear in the Standards. **NN 1** If Metric 1A was rated as Meets, then rate Non-Negotiable 1 as Meets. If Metric 1A was rated as Does Not Meet, then rate Non- Negotiable 1 as Does Not Meet. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion.**(Reviewer only.)** **Before moving to Non-Negotiable 2, record the final Meets or Does Not Meet rating in the Evaluation Summary.**		(Reviewer only.) **__x__Meets** **____Does Not Meet** **Strengths/Weaknesses:**

Alignment Criterion 2: Standards for Mathematical Practice

Materials must demonstrate authentic connections between content Standards and practice Standards.

The Standards require that designers of instructional materials connect the mathematical practices to mathematical content in instruction. Thus, materials must demonstrate authentic connections between content Standards and practice Standards.

Required Materials:

- Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf)
- Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)
- Focus by Grade Level for the grade being evaluated (www.achievethecore.org/focus)
- From the materials being evaluated: teacher guides, student texts and workbooks

Rating this Criterion

Alignment Criterion 2 is rated as Meets or Does Not Meet.

To rate Alignment Criterion 2, first rate metrics 2A, 2B, and 2C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). For each metric, guiding questions are provided to aid in gathering evidence.

Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 2 if the materials earn 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as mathematical practices, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.

Metric AC2A:

Materials address the practice Standards in such a way as to enrich the Major Work of the grade; practices strengthen the focus on Major Work instead of detracting from it, in both teacher and student materials.

How to Find the Evidence:

Familiarize yourself with the Major Work of the grade being evaluated (see the Focus by Grade Level documents.)

Evaluate teacher and student materials for evidence that the mathematical practices support and connect to the focus of the grade.

NOTE: Examples of evaluating this Criterion might include looking at whether, in grades K–5, students using the materials are supported to look for and express regularity in repeated reasoning about the addition table, the multiplication table, the properties of operations, the relationship between addition and subtraction or multiplication and division, and the place value system; or whether, in grades 6–8, students using the materials are supported to look for and express regularity in repeated reasoning about proportional relationships and linear functions.

For context, read Criterion #8 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013).

Evidence-

Yes, students spend all their time strengthening their skills. Those in need of remediation are given extra help, students at grade level are given standards they need to succeed, and advanced students are given higher level work to encourage progression.

(Reviewer only.)

_x_ Meets (2)

____ Partially Meets (1)

____ Does Not Meet (0)

Metric AC2B: **Materials at[illegible] to the full meaning of each practice Standard.** **How to Find the Evidence:** For context, read Criterion #7 and Criterion #9 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).		**Use the questions for Metric 2B to evaluate Metric 2B. Record evidence for each que[illegible]n and rate Metric 2B.** **(Reviewer only.)** **____Meets (2)** **____Partially Meets (1)** **___x___Does Not Meet (0)**
Over the course of any given year of instruction, is each mathematical practice Standard meaningfully present in the form of assignments, activities, or problems that stimulate students to develop the habits of mind described in the practice Standard? Evaluate lessons, chapter/ unit assessments, and homework assignments for evidence of each mathematical practice being meaningfully present in instruction.	**Evidence-** **All standards are integrated in questions and help, but there is little in terms of lesson design other than when students get the question wrong. At which point students are given more instruction on material appropriate to the standard and solving the problem.**	
Do the materials treat the practice Standards as developing across grades or grade bands? Are the practice Standards in early grades appropriately simple? Do they display an arc of growing sophistication across the grades?	**Evidence-** **Standards are developed and designed for particular grade levels, but are not explicitly identified for students, only the teacher.**	
Are there teacher-directed materials that explain the role of the practice Standards in the classroom and in students' mathematical development? Are alignments to practice Standards accurate?	**Evidence-** **N/A**	
Metric AC2C: **Materials support the Standards' emphasis on mathematical reasoning.** **How to Find the Evidence:** For context, read Criterion #10 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).		**Use the questions for Metric 2C to evaluate Metric 2C. Record evidence for each question and rate Metric 2C.** **(Reviewer only.)** **___x_Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Do the materials support students in constructing viable arguments and critiquing the arguments of others concerning grade-level mathematics that is detailed in the content Standards? Read Standard for Mathematical Practice 3. Evaluate teacher and student materials to ensure that students are given opportunities to reason with grade-level mathematics.	**Evidence-** **There are small sections addressing this, but most comes from the "tutor help" and correcting your own work.**	
Do the materials support students in producing not only answers and solutions, but also, in a grade-appropriate way, arguments, explanations, diagrams, mathematical models, etc., especially in the Major Work of the grade? Familiarize yourself with the Major Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate teacher and student materials, to understand the types of work students are expected to produce.	**Evidence-** **If and when students get a wrong answer, the "tutor help" guides students with questions and information based on pasted and current material.**	

Do materials explicitly attend to the specialized language of mathematics? Is language of argument, problem solving, and mathematical explanations taught rather than assumed? Evaluate teacher and student materials, paying attention to how mathematical language is taught. NOTE: Examples of evaluating this Criterion might include looking at whether students are supported in: basing arguments on definitions; using the method of providing a counterexample; or recognizing that examples alone do not establish a general statement.	**Evidence-** **Yes, each "bop" uses different language to address real world and mathematical vocabulary.**	

Alignment Criterion 2:
Standards for Mathematical Practice

Materials must demonstrate authentic connections between content Standards and practice Standards.

AC2 Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 out of 6 points, the Criterion has not been met. Check the final rating.
Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion.
(Reviewer only.)

(Reviewer only.)

____Meets

__x__Does Not Meet

Strengths/Weaknesses:

Before moving to Alignment Criterion 3, record the final Meets or Does Not Meet rating in the Evaluation Summary.

Alignment Criterion 3:
Access to the Standards for All Students

Materials must provide supports for English Language Learners and other special populations.

Because Standards are for all students, alignment requires thoughtful support to ensure all students are able to meet the Standards. Thus, aligned materials must provide supports for English Language Learners and other special populations.

Required Materials:

- Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf)
- Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)
- From the materials being evaluated: teacher guides, student texts and workbooks

Rating this Criterion:
Alignment Criterion 3 is rated as Meets or Does Not Meet.

To rate Alignment Criterion 3, first rate metrics 3A, 3B, and 3C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points).

Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 3 if the materials earn 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as support for special population, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.

Metric AC3A: **Support for English Language Learners and other special populations is thoughtful and helps those students meet the same Standards as all other students. The language in which problems are posed is carefully considered.** **How to Find the Evidence:** Evaluate teacher and student materials, paying attention to supports offered for special populations.	**Evidence-** Could not find any	**Reviewer only.)** **____Meets (2)** **____Partially Meets (1)** **__x__Does Not Meet (0)**
Metric AC3B: **Materials provide appropriate level and type of scaffolding, differentiation, intervention, and support for a broad range of learners with gradual removal of supports, when needed, to allow students to demonstrate their mathematical understanding independently.** **How to Find the Evidence:** Evaluate teacher and student materials, paying attention to whether materials provide differentiation that will lead all learners to engage with on-grade-level content.	**Evidence-** Scaffolding is strong. Steps are broken down for students that need help but are not "spoon fed." Students still receive questions to help them figure it out.	**Reviewer only.)** **__x__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Metric AC3C: **Design of lessons recommends and facilitates a mix of instructional approaches for a variety of learners such as using multiple representations (e.g., including models, using a range of questions, checking for understanding, flexible grouping, pair-share).** **How to Find the Evidence:** Evaluate teacher materials, noting instructional approaches suggested for whole class and differentiated lessons and activities.	**Evidence-** Everything is self learning on a computer, but there are a variety of visuals, charts, videos, etc.	**Reviewer only.)** **__x__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**

Alignment Criterion 3: Access to the Standards for All Students **Materials must provide supports for English Language Learners and other special populations.** AC3 Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 points, the Criterion has not been met. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion.**(Reviewer only.)** **Move to the Evaluation Summary and record the final Meets or Does Not Meet rating .**	**(Reviewer only.)** ____**Meets** __x__**Does Not Meet** **Strengths/Weaknesses:**

Once an evaluation for alignment to the Shifts and major features of the CCSS has been conducted using Sections 1-3, it's important to evaluate for overall quality and best practices. A starting list of Indicators of Quality are suggested below. States, districts and others evaluating instructional materials are encouraged to add to this list to ensure materials reflect local contexts. For background information on some of the Indicators of Quality in this section, refer to pp.18–21 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).

Indicators of Quality	Evidence- Give specific examples.	Rating: (Reviewers only.)
1. Lessons are thoughtfully structured and support the teacher in leading the class through the learning paths at hand, with active participation by all students in their own learning and in the learning of their classmates.	**Evidence-** **Multiple ways of addressing problems are given for students that give incorrect answers.**	**(Reviewer only.)** __x__ **Yes** _____ **No**
2. The underlying design of the materials includes both problems and exercises. (In solving problems, students learn new mathematics, whereas in working exercises, students apply what they have already learned to build mastery.) Each problem or exercise has a purpose. **NOTE: This Criterion does not require that the problems and exercises be labeled as such.**	**Evidence-** **Every exercise focuses on a particular CCSS and moves students to mastery.**	**(Reviewer only.)** __x__ **Yes** _____ **No**

3. Design of assignments is not haphazard: exercises are given in intentional sequences in order to strengthen students' mathematical understanding.	**Evidence-** **Scope and sequence clear and logical**	**(Reviewer only.)** **__x__ Yes** **_____ No**
4. There are separate teacher materials that support and reward teacher study including, but not limited to: discussion of the mathematics of the units and the mathematical point of each lesson as it relates to the organizing concepts of the unit, discussion on student ways of thinking and anticipating a variety of students responses, guidance on lesson flow, guidance on questions that prompt students thinking, and discussion of desired mathematical behaviors being elicited among students.	**Evidence-** **Teacher interface provides instructional feedback**	**(Reviewer only.)** **__x__ Yes** **_____ No**
5. Manipulatives suggested in the materials are faithful representations of the mathematical objects they represent and are connected to written methods.	**Evidence-** **Mainpulatives are all digital with drag and drop aspects, but are only available on some problems.**	**(Reviewer only.)** **__x__ Yes** **_____ No**
6. Materials include a variety of curriculum-embedded assessments. Examples include pre-, formative, summative, and self-assessment resources.	**Evidence-** **Assessment is formative and summative.**	**(Reviewer only.)** **__x__ Yes** **_____ No**
7. Assessments contain aligned rubrics, answer keys, and scoring guidelines that provide sufficient guidance for interpreting student performance.	**Evidence-** **Assessment is computer scored and can be viewed by teachers.**	**(Reviewer only.)** **__x__ Yes** **_____ No**
8. Materials assess student proficiency using methods that are accessible and unbiased, including the use of course-level language in student prompts.	**Evidence-** **All access is online which may inhibit some student access, but language is course appropriate.**	**(Reviewer only.)** **__x__ Yes** **_____ No**

9. Materials are carefully evaluated by qualified individuals, whose names are listed, in an effort to ensure freedom from mathematical errors and course-level appropriateness.	**Evidence-** **Authors have combined total of over 60 years math teaching experience and are, or were, on state education boards.**	**(Reviewer only.)** **__x__ Yes** **_____ No**
10. The visual design supports students in engaging thoughtfully with the subject. Navigation through the text is clear.	**Evidence-** **Navigation is easy and thought out for both teachers and students. Visuals do not clutter the screen but are sufficient allow for clarity in the problem**	**(Reviewer only.)** **__x__ Yes** **_____ No**
11. The materials engage parents in appropriate ways. For example, homework assignments in elementary grades, consist of routine problems, practice with getting answers, and fluency-building exercises that parents can easily support.	**Evidence-** **No access for parents beyond accessing student login or print outs from the teacher.**	**(Reviewer only.)** **_____ Yes** **__x__ No**

Reviewer IMET Evaluation Summary **Title/Level:** LearnBOP/6

Publisher: LearnBop / Fuel Education **Copyright:** N/A **ISBN:** N/A

Reviewer ID # KC & BP **Date Review Completed:** 3/8/16

Non-Negotiable Criteria- Each Non-Negotiable must be met in order for the Non-Negotiable Alignment Criteria to be met overall.

Non-Negotiable 1: Freedom from Obstacles to Focus	Non- Negotiable 2: Focus and Coherence
x Meets	x Meets
_____ Does Not Meet	_____ Does Not Meet

Non-Negotiable Overall:

x **Meets** _____ **Does Not Meet**

Alignment Criteria- Each Alignment Criterion must be met with a sufficient number of points in order for Alignment Criteria to be labeled as "Meets" overall. The more points the materials receive on the Alignment Criteria, the better they are aligned.

Alignment Criterion 1: Rigor and Balance	Alignment Criterion 2: Standards of Mathematical Practice	Alignment Criterion 3: Access to Standards for All Learners
Points: 6 of 6 possible. (Materials must receive at least 5 of 6 points to align.)	Points: 4 of 6 possible. (Materials must receive at least 5 of 6 points to align.)	Points: 4 of 6 possible. (Materials must receive at least 5 of 6 points to align.)
x Meets	_____ Meets	_____ Meets
_____ Does Not Meet	x Does Not Meet	x Does Not Meet

Alignment Criteria Overall:

_____ **Meets** x **Does Not Meet**

If the materials meet both Non-Negotiables and relevant Alignment Criterion, they are aligned to the Shifts and major features of the Core Standards. **the materials meet every Non-Negotiable and Alignment Criterion? _____ Yes _____ No**

What are the specific areas of strength and weakness based on this evaluation? Publishers or others modifying or developing assessments can use this information to make improvements and/or to remedy gaps in the alignment of assessment materials.

ELL is not addressed at all. Language heavy material may make it difficult for students with reading abilities. Computer skills needed and may prohibit students without these skill as well as students with special needs that interfere with these skills.

2015-16 Mathematics Interim Review Recommendation & Summary

Publisher Name:	LearnBop / Fuel Education
Title:	LearnBop
ISBN #	
Grade Level(s) or Course:	7
Reviewer ID:	KC + BP

RECOMMENDED AS:

_____**Core Mathematics Program-** a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials. Substantial evidence clearly supports the designation of this program as Core.

_____**Other Mathematics Program-** a program that substantially, but partially, meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for supplemental materials. Substantial evidence clearly supports the designation of this program as Other.

__X__**Component Mathematics Program-** a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs. Substantial evidence clearly supports the designation of this program as Component.

_____**Intervention Program-** a program designed and intended to target and support students' specific needs. Substantial evidence clearly supports the designation of this program as Intervention.

(was submitted as a component program)

_____ **Does not meet criteria** for recommendation as a Curricular Material or Online Resource for Mathematics.

EVIDENCE SUMMARY:

FOCUS- Diagnostic tools Keep students focused on materials on their level. Teachers can assign materials to match classroom materials. Everything is CCSS aligned.

COHERENCE- Scaffolded subjects help guide students through each standard. All students are give instructions that push students to mastery. Standards are tested on an as needed basis.

RIGOR- Concepts build on one another with clear questioning. Speed is dependent on students as the program self accellerates or remediates as needed. Time is spent strengthening individual skills.

CONCEPTUAL UNDERSTANDING- Concepts are clear and initially compartamentalized unless other concepts are explicitly needed. Programs focus on strengthening weak areas as well as building on student assignments from teachers

MATHEMATICAL PRACTICES- No teacher directed material. All CCSS are addressed and taught. Students must reason abstractly, but rarely need to justify answers.

ACCESSIBILITY OF STANDARDS TO ALL STUDENTS- Standards are clearly scaffolded in english. There is currently no ELL resource with this program. Because of computer skill requirements, students with special needs may struggle. While standards are clear, the program is language heavy.

OTHER:

2015-16 Interim Mathematics Review

Mathematics Evaluation Tool Grades K-8

Publisher: LearnBop/Fuel Education

Title of Material: Learn Bop (7th)

Author: LearnBop in partnership with K-12 mathematics educators

ISBN #: Various **Copyright** —

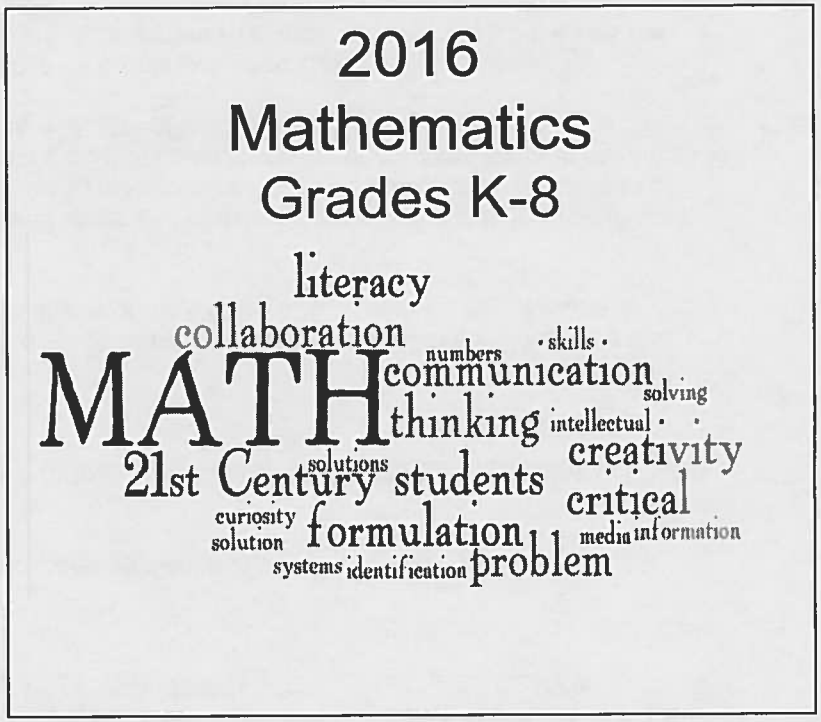
Reviewer ID: BP & KC

Core Mathematics Program- a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Core.

Other Mathematics Program- a program that substantially, but partially, meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Other.

Component Mathematics Program- a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs.
Substantial evidence clearly supports the designation of this program as Component.

Intervention Program- a program designed and intended to target and support students' specific needs.
Substantial evidence clearly supports the designation of this program as Intervention.



- Evaluation Form adapted from Instructional Materials Evaluation Toolkit (IMET).

The IMET was developed by Student Achievement Partners. Educators may use or adapt. http://creativecommons.org/licenses/by/3.0/ Download this tool at http://achievethecore.org/IMET

Instructional Materials Evaluation Tool

Mathematics, Grades K-8

What Are the Purposes of the IMET?

This Math IMET is designed to help educators determine whether instructional materials are aligned to the Shifts and major features of the Common Core State Standards (CCSS). The substantial instructional Shifts (http://www.corestandards.org/other-resources/key-shifts-inmathematics/) at the heart of the Common Core State Standards are:

- **Focus** strongly where the Standards focus
- **Coherence**: Think across grades and link to major topics within the grade
- **Rigor**: In major topics, pursue conceptual understanding, procedural skill and fluency, and application with equal intensity.

The IMET draws directly from the following documents:

- Common Core State Standards for Mathematics (www.corestandards.org/Math)
- Publishers' Criteria for the Common Core State Standards in Mathematics grade K-8 (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)

When to use the IMET

1. Purchasing materials: Many factors go into local purchasing decisions. Alignment to the Standards is a critical factor to consider. This tool is designed to evaluate alignment of instructional materials to the Shifts and the major features of the CCSS. It also provides suggestions of additional indicators to consider in the materials evaluation and purchasing process.

2. Evaluating materials currently in use: The IMET can be used to analyze the degree of alignment of existing materials and help to highlight specific, concrete flaws in alignment. Even where materials and tools currently in use fail to meet one or more of these criteria, the pattern of failure is likely to be informative. States and districts can use the evaluation to create a thoughtful plan to modify or combine existing resources in such a way that students' actual learning experiences approach the focus, coherence, and rigor of the Standards.

3. Developing programs: Those developing new programs can use this tool as guidance for creating aligned curricula.
Please note this tool was designed for evaluating comprehensive curricula (including any supplemental or ancillary materials), but it was not designed for the evaluation of standalone supplemental materials.

Who Uses the IMET?

Evaluating instructional materials requires both subject-matter and pedagogical expertise. Evaluators should be well versed in the Standards (www.corestandards.org/Math) for all grades in which materials are being evaluated. This includes understanding the Major Work of the grade (www.achievethecore/focus), the Supporting and Additional work, how the content fits into the progressions in the Standards (www.achievethecore.org/progressions), and the expectations of the Standards with respect to conceptual understanding, procedural skill and fluency, and application. Evaluators also should be familiar with the substantial instructional Shifts (http:// www.corestandards.org/other-resources/key-shifts-in-mathematics/) of Focus, Coherence and Rigor that are listed above.

Getting Started

Prior to Evaluation

Assemble all of the materials necessary for the evaluation. It is essential for evaluators to have materials for all grades covered by the program, as some criteria cannot be rated without having access to each grade. In addition, each evaluator should have a reference copy of the Common Core State Standards for Mathematics (CCSSM) and the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013).

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Getting Started
Prior to Evaluation

Assemble all of the materials necessary for the evaluation. It is essential for evaluators to have materials for all grades covered by the program, as some criteria cannot be rated without having access to each grade. In addition, each evaluator should have a reference copy of the Common Core State Standards for Mathematics (CCSSM) and the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013).

Before conducting the evaluation itself, it is important to develop a protocol for the evaluation process. The protocol should include having evaluators study the Publishers' Criteria and the IMET. It will also be helpful for evaluators to get a sense of each program overall before beginning the process. At a minimum, this would include reading the front matter of the text, looking at the table of contents and paging through multiple chapters.

Sections 1-3 below should be completed to produce a comprehensive picture of the strengths and weaknesses of the materials under evaluation. Information about areas in need of improvement or supplementation should be shared with internal and external stakeholders.

Navigating the Tool

Begin with Section 1: Non-Negotiable Alignment Criteria

- The Non-Negotiable Alignment Criteria must each be met in full for materials to be considered aligned to the Shifts and the major features of the Common Core State Standards. Each Non-Negotiable Alignment Criterion has one or more metrics associated with it; every one of these metrics must be met in order for the criterion as a whole to be met.

- Examine the relevant materials and use evidence to rate the materials against each criterion and its associated metric(s).

- Record and explain the evidence upon which the rating is based.

Continue to Section 2: Alignment Criteria

- The Alignment Criteria must each be met for materials to be considered aligned to the Shifts and the major features of the Common Core State Standards. Each Alignment Criterion has one or more metric associated with it; a specific number of these metrics must be met or partially met in order for the criterion as a whole to be met.

- Examine the materials in relation to these criteria, assigning each metric a point value. Rate the criterion as "Meets" or "Does Note Meet" based on the number of points assigned. The more points the materials receive on the alignment Criteria, the better they are aligned.

- Record and explain the evidence upon which the rating is based.

Proceed to Section 4: Indicators of Quality

- Indicators of Quality are important considerations that will help evaluators better understand the overall quality of instructional materials. These considerations are not criteria for alignment to the CCSS, but they provide valuable information about additional program characteristics. Evaluators may want to add their own indicators to the examples provided.

Directions for Non-Negotiable 1

Freedom from Obstacles to Focus

Criterion	Evidence- Give specific examples.	Rating: (Reviewer only.)
Non-Negotiable 1: **Freedom from Obstacles to Focus** **Materials must reflect the content architecture of the Standards by not assessing the topics named before the grade level where they first appear in the Standards.** The Standards foster students' progress to algebra by focusing strongly on arithmetic. Consistent with this focus, certain topics from outside of arithmetic appear only in later grades. Thus, to be aligned, materials must reflect the content architecture of the Standards by not assessing the topics named before the grade level where they first appear in the Standards. In this criterion, "topics named" means the topics that are explicitly named in Metric 1A. No other topics should be added to the list in Metric 1A. (Note that other topics in the standards are addressed in criterion NN2.)	**Required Materials** • Common Core State Standards for Mathematics (www.corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf) • From the materials being evaluated: teacher guides and all assessment components	**Rating this Criterion:** Non-Negotiable 1 is rated as Meets or Does Not Meet. To rate Non-Negotiable 1, begin by rating Metric 1A. Since Metric 1A is the only metric for Non-Negotiable 1, the rating for Non-Negotiable 1 is the same as the rating for Metric 1A. If Metric 1A is rated as Does Not Meet, include evidence of when the named topic(s) is/are assessed. If the metric is rated as Meets, list the grade(s) examined in the evaluation.

Metric NN1A: **Materials re[illegible] the basic architecture of the Standards by not assessing the listed topics before the grade level indicated.** • Probability, including chance, likely outcomes, probability models. (Introduced in the CCSSM in grade 7) • Statistical distributions, including center, variation, clumping, outliers, mean, median, mode, range, quartiles; and statistical association or trends, including two-way tables, bivariate measurement data, scatter plots, trend line, line of best fit, correlation. (Introduced in the CCSSM in grade 6) • Similarity, congruence, or geometric transformations. (Introduced in the CCSSM in grade 8) • Symmetry of shapes, including line/ reflection symmetry, rotational symmetry. (Introduced in the CCSSM in grade 4) **How to Find the Evidence:** Evaluate the table of contents, all chapter tests, all unit tests, and other such assessment components (including rubrics). For context, read Criterion #2 from the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013). NOTE: Grade alignments of other topics are addressed in Non-Negotiable 2, Focus and Coherence.) In this criterion, "topics named" means the topics that are explicitly named in Metric 1A. No other topics should be added to the list in Metric 1A. (Note that other topics in the standards are addressed in criterion NN2.)	**Evidence-** **Uses diagnostic pr[illegible]essment to place students. This allows students to work where skill improvement is needed. Teachers can also assign specific tasks.**	**(Reviewer only.)** **__x__Meets** **____Does Not Meet**
Non-Negotiable 1: Materials must reflect the content architecture of the Standards by not assessing the topics named* before the grade level where they first appear in the Standards. **NN 1** If Metric 1A was rated as Meets, then rate Non-Negotiable 1 as Meets. If Metric 1A was rated as Does Not Meet, then rate Non- Negotiable 1 as Does Not Meet. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion.**(Reviewer only.)** **Before moving to Non-Negotiable 2, record the final Meets or Does Not Meet rating in the Evaluation Summary.**		**(Reviewer only.)** **__x__Meets** **____Does Not Meet** **Strengths/Weaknesses:**

Directions for Non-Negotiable 2

Focus and Coherence

Non-Negotiable 2: **Focus and Coherence** **Materials must focus coherently on the Major Work of the grade in a way that is consistent with the progressions in the Standards.** Focus and coherence are the two major evidence-based design principles of the Common Core State Standards for Mathematics (CCSSM, p. 3). Focus is necessary in order to fulfill the ambitious promise the states have made to their students by adopting the Standards: greater achievement at the college and career ready level; greater depth of understanding of mathematics; and a rich classroom environment in which reasoning, sense-making, applications, and a range of mathematical practices flourish. In simpler terms, a mile-wide, inch-deep curriculum translates to less time per topic. Less time means less depth and moving on without many students. Thus, materials must focus coherently on the Major Work of the grade in a way that is consistent with the progressions in the Standards.	**Required Materials** • Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf) • Focus by Grade Level for the grade being evaluated (www.achievethecore.org/focus) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion:** Non-Negotiable 2 is rated as Meets or Does Not Meet. To rate Non-Negotiable 2, first rate metrics 2A–2H. Each of these eight metrics must be rated as Meets in order for Non-Negotiable 2 to be rated as Meets. Rate each metric 2A-2H as Meets or Does Not Meet/Insufficient Evidence. If the evidence examined shows that the Criterion is met, then mark the Criterion Meets. If the evidence examined shows that the Criterion is not met—or if there is insufficient evidence to make a determination—then mark the Criterion as Does Not Meet/Insufficient Evidence. Support all ratings with evidence.
Metric NN2A: **In each grade K–8, students and teachers using the materials as designed devote the large majority of time to the Major Work of the grade.** **How to Find the Evidence:** Familiarize yourself with the Major Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, lessons, homework assignments, and assessments. (Evaluate both student and teacher materials.) Consider time spent on the Major Work of the grade and judge qualitatively whether students and teachers using the materials as designed will devote the large majority of time to the Major Work of the grade. For context, read Criterion #1 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013)	**Evidence-** **Dependent of Teacher and Student. Diagnostics determine student needs, but teachers can assign major works.**	**(Reviewer only.)** **__x__Meets** **____Does Not Meet/** **Insufficient Evidence**

Metric NN2B: **Supporting work, where present, enhances focus and coherence simultaneously by also engaging students in the Major Work of the grade.** **How to Find the Evidence:** Familiarize yourself with the Major Work and Supporting Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate chapters and lessons that focus on Supporting Work. NOTE: Example of evaluating this Criterion might include looking at whether materials for K–5 generally treat data displays as an occasion for solving grade-level word problems using the four operations (e.g., see 3.MD.B.3); or whether materials for grade 7 take advantage of opportunities to use probability to support ratios, proportions, and percentages. For context, read Criterion #3 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** **Lessons are designed to fill gaps students may have in their understanding and push to work students at grade level.**	(Reviewer only.) **__x__Meets** **____Does Not Meet/** **Insufficient Evidence**
Metric NN2C: **Materials base content progressions on the grade-by-grade progressions in the Standards. Content from previous or future grades does not unduly interfere with or displace on-grade-level content.** **How to Find the Evidence:** Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, and lessons in both student and teacher materials. NOTE: In some cases it may be possible that aligned materials might address some aspects of a topic in a strategic way before or after the grade level in which the topic is central in the Standards' progressions; for example, a curriculum author might purposefully choose to explore adding fractions with unlike denominators in a way appropriate to grade four, recognizing that this work is not really required until the next grade. However, any such purposeful discrepancies in content progressions should enhance the required learning in each grade; not unduly interfere with or displace grade-level content; and be clearly aimed at helping students meet the Standards as written rather than effectively rewriting the progressions in the Standards. And in all cases, note that Non-Negotiable 1 must be met for materials to be aligned. For context, read Criterion #5a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** All material progression covers the Standards for every grade.	(Reviewer only.) **__x__Meets** **____Does Not Meet/** **Insufficient Evidence**

Metric NN2D: **Materials gi[illegible]ll students extensive work with on-grade-level problems.** **How to Find the Evidence:** Evaluate both student and teacher materials. If the materials provide resources for differentiated learning, consider whether lower-performing students have opportunities to engage with grade-level problems. Also consider whether higher-performing students are given opportunities to learn current grade-level content in greater depth. For context, read Criterion #5b in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Students work on [illegible]oblems until mastery is achieved (preset of 90 %).	(Reviewer only.) **__x__Meets** **____Does Not Meet/ Insufficient Evidence**
Metric NN2E: **Materials relate on-grade-level concepts explicitly to prior knowledge from earlier grades.** **How to Find the Evidence:** Evaluate both student and teacher materials. NOTE: Examples of evaluating this Criterion might include looking at the way the materials extend basic ideas of place value across the decimal point; or the role that properties of operations play when the materials extend arithmetic beyond whole numbers to fractions, variables, and expressions. More generally, cluster headings in the Standards sometimes signal key moments where reorganizing and extending previous knowledge is important in order to accommodate new knowledge (e.g., see cluster headings that use the phrase "Apply and extend previous understanding"). For context, read Criterion #5c in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Problems require knowledge and skills from previous grades and lessons. If student gets the question wrong, the program breaks the problem into these smaller parts.	(Reviewer only.) **__x__Meets** **____Does Not Meet/ Insufficient Evidence**
Metric NN2F: **Review of material from previous grades is clearly identified as such to the teacher, and teacher and students can see what their specific responsibility is for the current year.** **How to Find the Evidence:** Evaluate the table of contents, but do not stop there; also evaluate units, chapters, lessons, homework assignments and assessments. (Evaluate both student and teacher materials.) Identify any content from previous grades and check whether it is identified as such. For context, read Criterion #5a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Reports show all lessons and the level of mastery each student currently has and their individual performance (# correct without help/# correct with guide).	(Reviewer only.) **__x__Meets** **____Does Not Meet/ Insufficient Evidence**

Metric NN2G: **Materials in[illegible]e learning objectives that are visibly shaped by CCSSM cluster headings.** **How to Find the Evidence:** Select several clusters from the Major Work in the grade being evaluated. Evaluate teacher and student materials in relation to these clusters. For context, read Criterion #6a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** **Assignments are o[illegible]ized and labeled with CCSS**	(Reviewer only.) __x__ **Meets** ____ **Does Not Meet/** **Insufficient Evidence**
Metric NN2H: **Materials include problems and activities that serve to connect two or more clusters in a domain, or two or more domains in a grade, in cases where these connections are natural and important.** **How to Find the Evidence:** In the grade being evaluated, choose two or more clusters or two or more domains for which connections are natural and important. Evaluate the units, chapters, and lessons that deal with the chosen topics, looking for problems and activities that serve to connect the chosen clusters or domains. NOTE: An example of evaluating this Criterion might include looking at whether problems in grade 4 sometimes or often involve students applying their developing computation skills (detailed in domain NBT) in the context of solving word problems (detailed in domain OA). For context, read Criterion #6b in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** **Assignments focus on a single CCSS and avoid complications, but some problems connect clusters and, if the student gets the problem initially wrong, will break the problem down into smaller parts that may work on connecting domains or earlier grade materials as well.**	(Reviewer only.) __x__ **Meets** ____ **Does Not Meet/** **Insufficient Evidence**
Non-Negotiable 2: **Focus and Coherence** **Materials must focus coherently on the Major Work of the grade in a way that is consistent with the progressions in the Standards.** NN 2 If all Metrics 2A – 2H were rated as Meets, then rate Non-Negotiable 2 as Meets. If one or more Metric was rated Does Not Meet/Insufficient Evidence, then rate Non-Negotiable 2 as Does Not Meet. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)** **Before moving to Alignment Criterion 1, record the final Meets or Does Not Meet rating in the Evaluation Summary.**		(Reviewer only.) __x__ **Meets** ____ **Does Not Meet** **Strengths/Weaknesses:**

Now continue by evaluating the Alignment Criterion 1 for Rigor and Balance.

Directions for Alignment Criterion 1

Rigor and Balance

Alignment Criterion 1: Rigor and Balance

Materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.

The Standards set expectations for attention to all three aspects of rigor: conceptual understanding, procedural skill and fluency, and applications. Thus, materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.

Required Materials

- Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf)
- Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)
- Focus by Grade Level for the grade being evaluated (achievethecore.org/focus)
- Situation Types for the Operations in Word Problems (achievethecore.org/situation-types)
- From the materials being evaluated: teacher guides, student texts and workbooks

Rating this Criterion:

Alignment Criterion 1 is rated as Meets or Does Not Meet.

To rate Alignment Criterion 1, first rate metrics 1A, 1B, and 1C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). For each metric, guiding questions are provided to aid in gathering evidence.
Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 1 if the materials rate 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as rigor and balance, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.

Metric AC1A:
The materials support the development of students' conceptual understanding of key mathematical concepts, especially where called for in specific content Standards or cluster headings.

How to Find the Evidence:

Select one or more cluster(s) or Standard(s) from the Major Work for the grade being evaluated that relate specifically conceptual understanding to use throughout the questions associated with this metric. NOTE: Some examples of clusters or Standards that call for conceptual understanding include: K.OA.A.1, (1.NBT.B, 1.NBT.C), (2.NBT.A, 2.NBT.B), (3.OA.A.1, 3.OA.A.2), 4.NF.A, (4.NBT.A, 4.NBT.B), 5.NF.B, (5.NBT.A, 5.NBT.B), 6.RP.A, 6.EE.A.3, 7.NS.A, 7.EE.A, 8.EE.B, 8.F.A, 8.G.A

Clusters or Standards grouped by parentheses are closely connected and could be analyzed together.

For context, read Criterion #4a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).

-Choose a cluster/Standard from the Major Work that is aligned to each aspect of rigor and use it to evaluate these metrics. It is most helpful if the same clusters/Standards are chosen for all of the programs being evaluated. (Guidance in choosing clusters/Standards is included in "How to Find the Evidence".)

Use the questions for AC Metric 1A to evaluate Metric 1A. Record evidence for each question and rate Metric 1A.

__x__Meets (2)

____Partially Meets (1)

____Does Not Meet (0)

Is conceptual understanding attended to thoroughly where the Standards set e[illegible] expectations for understanding or interpreting? Evaluate lessons, chapter/unit assessments and homework assignments, paying attention to work aligned to Standards that explicitly call for understanding or interpreting. NOTE: Examples of evaluating this Criterion might include looking at how well the multi-digit addition and subtraction algorithms are developed and explained on the basis of place value and properties of operations; or how well the multi-digit multiplication and division algorithms are developed and explained on the basis of place value and properties of operations; or how well solving equations is presented and explained as a process of reasoning.	**Evidence-** Problems are conc[illegible]based scaffolding and adaptive based on student needs.	
Do the materials feature high-quality conceptual problems and conceptual discussion questions? Evaluate lessons, chapter/unit assessments, and homework assignments. NOTE: Example of conceptual problems might include such questions as "Find a number greater than 1/5 and less than 1/4," or "If the divisor does not change and the dividend increases, what happens to the quotient?"	**Evidence-** Students are asked to apply concepts, but as an all online program, it refrains from open ended questioning.	
Do the materials feature opportunities to identify correspondences across mathematical representations? Evaluate lessons, chapter/unit assessments and homework assignments. NOTE: Examples of evaluating this Criterion might include looking at whether students are supported in identifying correspondences among: the verbal description of a situation, the diagrams that distill its mathematical features, and the equations that model it; or equivalent forms of numbers (e.g., 3 and 6/2) and the number line; or rational number operations and representations of them via models such as the vector model; or the expression that defines a function and the graph that shows the relationship.	**Evidence-** Visuals, Written responses, as well as interactive responses and video all work to connect the student to several mathematical representations.	
Metric AC1B: **The materials are designed so that students attain the fluencies and procedural skills required by the Standards.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Major Work for the grade being evaluated that relate specifically to fluency and procedural skill to use throughout the questions associated with this metric. NOTE: Some examples of Standards that call for procedural skill and fluency include: K.OA.A.5, 1.OA.C.6, 2.OA.B.2, 2.NBT.B.5, 3.OA.C.7, 3.NBT.A.2, 4.NBT.B.4, 5.NBT.B.5, 6.NS.B.2, and 6.NS.B.3, 6.EE.A, 7.NS.A, 7.EE.A.1,7.EE.B.4a, 8.EE.C.7, 8.EE.C.8b For context, read Criterion #4b in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).		**Use the questions for Metric 1B to evaluate Metric 1 B. Record evidence for each question and rate Metric 1B.** **(Reviewer only.)** **_x_ Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**

Is progress toward fluency and procedural skill interwoven with students' develo conceptual understanding of the operations in question? Evaluate lessons, chapter/unit assessments, daily routines, and homework assignments for evidence that the development of fluency and procedural skill is supported by conceptual understanding.	**Evidence-** At grades 6 and 7, dents are practicing flexibility rather than fluency.	
Are purely procedural problems and exercises present that include cases in which opportunistic strategies are valuable and generic cases that require efficient algorithms present? Evaluate lessons, chapter/unit assessments, daily routines, and homework assignments. NOTE: Examples of problems in which opportunistic strategies are valuable might include the sum 698 + 240 or the system x + y = 1, 2x + 2y = 3. Examples of generic cases that require efficient algorithms might include the sum 8767+2286 or the system 6y + x = x + 3, – x = 1 + 2y.	**Evidence-** Problems are mostly problems solving based, but if students answer the initial question wrong, the recorded "tutor" helps to show procedures.	
Do the materials in grades K–6 provide repeated practice toward attainment of fluency Standards? Evaluate lessons, daily routines, and homework assignments for evidence of repeated practice toward attainment of the following K–6 Standards that set an explicit expectation of fluent (accurate and reasonably fast) computation: K.OA.A.5, 1.OA.C.6, 2.OA.B.2, 2.NBT.B.5, 3.OA.C.7, 3.NBT.A.2, 4.NBT.B.4, 5.NBT.B.5, 6.NS.B.2, 6.NS.B.3.	**Evidence-** **Students continue working on a standard until it is considered "mastered"**	
Metric AC1C: **The materials are designed so that teachers and students spend sufficient time working with engaging applications, without losing focus on the Major Work of each grade.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Major Work for the grade being evaluated that relate specifically application to use throughout the questions associated with this metric. NOTE: Some examples of clusters or Standards that call for application include: K.OA.A.2, 1.OA.A, 2.OA.A, 3.OA.A.3, 3.OA.D.8, 4.OA.A.3, 4.NF.B.3d, 4.NF.B.4c, 5.NF.B.6, 5.NF.B.7c, 6.RP.A.3, 6.NS.A.1, 6.EE.B.7, 6.EE.C.9, 7.RP.A, 7.NS.A.3, 7.EE.B.3, 8.EE.C.8c, 8.F.B For context, read Criterion #4c in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** **Teachers may review acquisition of skills and may remediate, accelerate, or provide more grade level practice for students, as necessary, to maximize their fluency.**	**Use the questions for Metric 1C to evaluate Metric 1C. Record evidence for each question and rate Metric 1C.** **(Reviewer only.)** **__x__ Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Are there are single- and multi-step contextual problems, including non-routine problems, that develop the mathematics of the grade, afford opportunities for practice, and engage students in problem solving? Do the problems attend thoroughly to those places in the content Standards where expectations for multi-step and real-world problems are explicit? Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** Every "bop" is different and may have more or less single- to multi-step problems; but every "bop" has at least some of each.	

Do application problems particularly stress applying the Major Work of the grade? Eva[illegible]essons, chapter/unit assessments, and homework assignments. NOTE: Examples of evaluating this Criterion might include looking at: how well, by the end of grade 2, students using the materials as designed can represent and solve a full range of one-step addition and subtraction word problems; or how well, by the end of grade 3, students using the materials as designed can represent and solve a full range of one-step multiplication and division word problems; or how well these basic situation types for each operation are carried coherently across the grades, (e.g., with fractions and algebraic expressions); or, in all grades, whether the problems connect concepts, Standards, and domains in ways that are natural and important. For a list of situation types for one-step addition, subtraction, multiplication, and division problems, see Situation Types for the Operations in Word Problems	**Evidence-** Yes, grade level w[illegible]is identified and only introduced if and when the student needs it (if a student already has fluency it is only addressed slightly and if a student needs remediation, they will be assigned skills that will build them toward being able to address grade level work. However, teachers may override the diagnostic programing and assign Major Works as need in the class.	
Does modeling build slowly across K–8, with applications that are relatively simple in earlier grades and when students are encountering new content? In grades 6–8, do the problems begin to provide opportunities for students to make their own assumptions or simplifications in order to model a situation mathematically? Read Standard for Mathematical Practice 4, Model with Mathematics. Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** All grade standards (K-12) are integrated and used to build students toward grade level mastery.	

Alignment Criterion 1: Rigor and Balance

Materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.

AC1 Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 out of 6 points, the Criterion has not been met. Check the final rating.
Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)**

Before moving to Alignment Criterion 2, record the final Meets or Does Not Meet rating in the Evaluation Summary.

(Reviewer only.)

__x__ Meets

____Does Not Meet

Strengths/Weaknesses:

Directions for Alignment Criterion 2

Standards for Mathematical Practice

Alignment Criterion 2: Standards for Mathematical Practice **Materials must demonstrate authentic connections between content Standards and practice Standards.** The Standards require that designers of instructional materials connect the mathematical practices to mathematical content in instruction. Thus, materials must demonstrate authentic connections between content Standards and practice Standards.	**Required Materials:** • Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf) • Focus by Grade Level for the grade being evaluated (www.achievethecore.org/focus) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion** Alignment Criterion 2 is rated as Meets or Does Not Meet. To rate Alignment Criterion 2, first rate metrics 2A, 2B, and 2C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). For each metric, guiding questions are provided to aid in gathering evidence. Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 2 if the materials earn 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as mathematical practices, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.
Metric AC2A: **Materials address the practice Standards in such a way as to enrich the Major Work of the grade; practices strengthen the focus on Major Work instead of detracting from it, in both teacher and student materials.** **How to Find the Evidence:** Familiarize yourself with the Major Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate teacher and student materials for evidence that the mathematical practices support and connect to the focus of the grade. NOTE: Examples of evaluating this Criterion might include looking at whether, in grades K–5, students using the materials are supported to look for and express regularity in repeated reasoning about the addition table, the multiplication table, the properties of operations, the relationship between addition and subtraction or multiplication and division, and the place value system; or whether, in grades 6–8, students using the materials are supported to look for and express regularity in repeated reasoning about proportional relationships and linear functions. For context, read Criterion #8 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013).	**Evidence-** Yes, students spend all their time strengthening their skills. Those in need of remediation are given extra help, students at grade level are given standards they need to succeed, and advanced students are given higher level work to encourage progression.	**(Reviewer only.)** **_x_ Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**

Metric AC2B: **Materials attend to the full meaning of each practice Standard.** **How to Find the Evidence:** For context, read Criterion #7 and Criterion #9 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).		**Use the questions for Metric 2B to evaluate Metric 2B. Record evidence for each question and rate Metric 2B.** **(Reviewer only.)** **____Meets (2)** **____Partially Meets (1)** **__x__Does Not Meet (0)**
Over the course of any given year of instruction, is each mathematical practice Standard meaningfully present in the form of assignments, activities, or problems that stimulate students to develop the habits of mind described in the practice Standard? Evaluate lessons, chapter/ unit assessments, and homework assignments for evidence of each mathematical practice being meaningfully present in instruction.	**Evidence-** **All standards are integrated in questions and help, but there is little in terms of lesson design other than when students get the question wrong. At which point students are given more instruction on material appropriate to the standard and solving the problem.**	
Do the materials treat the practice Standards as developing across grades or grade bands? Are the practice Standards in early grades appropriately simple? Do they display an arc of growing sophistication across the grades?	**Evidence-** **Standards are developed and designed for particular grade levels, but are not explicitly identified for students, only the teacher.**	
Are there teacher-directed materials that explain the role of the practice Standards in the classroom and in students' mathematical development? Are alignments to practice Standards accurate?	**Evidence-** **N/A**	
Metric AC2C: **Materials support the Standards' emphasis on mathematical reasoning.** **How to Find the Evidence:** For context, read Criterion #10 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).		**Use the questions for Metric 2C to evaluate Metric 2C. Record evidence for each question and rate Metric 2C.** **(Reviewer only.)** **__x__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Do the materials support students in constructing viable arguments and critiquing the arguments of others concerning grade-level mathematics that is detailed in the content Standards? Read Standard for Mathematical Practice 3. Evaluate teacher and student materials to ensure that students are given opportunities to reason with grade-level mathematics.	**Evidence-** **There are small sections addressing this, but most comes from the "tutor help" and correcting your own work.**	
Do the materials support students in producing not only answers and solutions, but also, in a grade-appropriate way, arguments, explanations, diagrams, mathematical models, etc., especially in the Major Work of the grade? Familiarize yourself with the Major Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate teacher and student materials, to understand the types of work students are expected to produce.	**Evidence-** **If and when students get a wrong answer, the "tutor help" guides students with questions and information based on pasted and current material.**	

Do materials explicitly attend to the specialized language of mathematics? Is language of argument, problem solving, and mathematical explanations taught rather than assumed? Evaluate teacher and student materials, paying attention to how mathematical language is taught. NOTE: Examples of evaluating this Criterion might include looking at whether students are supported in: basing arguments on definitions; using the method of providing a counterexample; or recognizing that examples alone do not establish a general statement.	**Evidence-** **Yes, each "bop" uses different language to address real world and mathematical vocabulary.**	

Alignment Criterion 2:
Standards for Mathematical Practice

Materials must demonstrate authentic connections between content Standards and practice Standards.

AC2 Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 out of 6 points, the Criterion has not been met. Check the final rating.
Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion.
(Reviewer only.)

Before moving to Alignment Criterion 3, record the final Meets or Does Not Meet rating in the Evaluation Summary.

(Reviewer only.)

____Meets

__x__Does Not Meet

Strengths/Weaknesses:

Alignment Criterion 3:
Access to the Standards for All Students

Materials must provide supports for English Language Learners and other special populations.

Because Standards are for all students, alignment requires thoughtful support to ensure all students are able to meet the Standards. Thus, aligned materials must provide supports for English Language Learners and other special populations.

Required Materials:

- Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf)
- Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)
- From the materials being evaluated: teacher guides, student texts and workbooks

Rating this Criterion:
Alignment Criterion 3 is rated as Meets or Does Not Meet.

To rate Alignment Criterion 3, first rate metrics 3A, 3B, and 3C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points).

Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 3 if the materials earn 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as support for special population, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.

Metric AC3A: **Support for English Language Learners and other special populations is thoughtful and helps those students meet the same Standards as all other students. The language in which problems are posed is carefully considered.** **How to Find the Evidence:** Evaluate teacher and student materials, paying attention to supports offered for special populations.	**Evidence-** Could not find any	**Reviewer only.)** ____**Meets (2)** ____**Partially Meets (1)** __x__**Does Not Meet (0)**
Metric AC3B: **Materials provide appropriate level and type of scaffolding, differentiation, intervention, and support for a broad range of learners with gradual removal of supports, when needed, to allow students to demonstrate their mathematical understanding independently.** **How to Find the Evidence:** Evaluate teacher and student materials, paying attention to whether materials provide differentiation that will lead all learners to engage with on-grade-level content.	**Evidence-** Scaffolding is strong. Steps are broken down for students that need help but are not "spoon fed." Students still receive questions to help them figure it out.	**Reviewer only.)** __x__**Meets (2)** ____**Partially Meets (1)** ____**Does Not Meet (0)**
Metric AC3C: **Design of lessons recommends and facilitates a mix of instructional approaches for a variety of learners such as using multiple representations (e.g., including models, using a range of questions, checking for understanding, flexible grouping, pair-share).** **How to Find the Evidence:** Evaluate teacher materials, noting instructional approaches suggested for whole class and differentiated lessons and activities.	**Evidence-** Everything is self learning on a computer, but there are a variety of visuals, charts, videos, etc.	**Reviewer only.)** __x__**Meets (2)** ____**Partially Meets (1)** ____**Does Not Meet (0)**

Alignment Criterion 3: Access to the Standards for All Students **Materials must provide supports for English Language Learners and other special populations.** AC3 Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 points, the Criterion has not been met. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion.**(Reviewer only.)** **Move to the Evaluation Summary and record the final Meets or Does Not Meet rating .**	**(Reviewer only.)** ____**Meets** __x__**Does Not Meet** **Strengths/Weaknesses:**

Once an evaluation for alignment to the Shifts and major features of the CCSS has been conducted using Sections 1-3, it's important to evaluate for overall quality and best practices. A starting list of Indicators of Quality are suggested below. States, districts and others evaluating instructional materials are encouraged to add to this list to ensure materials reflect local contexts. For background information on some of the Indicators of Quality in this section, refer to pp.18–21 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).

Indicators of Quality	Evidence- Give specific examples.	Rating: (Reviewers only.)
1. Lessons are thoughtfully structured and support the teacher in leading the class through the learning paths at hand, with active participation by all students in their own learning and in the learning of their classmates.	**Evidence-** **Multiple ways of addressing problems are given for students that give incorrect answers.**	**(Reviewer only.)** __x__ **Yes** _____ **No**
2. The underlying design of the materials includes both problems and exercises. (In solving problems, students learn new mathematics, whereas in working exercises, students apply what they have already learned to build mastery.) Each problem or exercise has a purpose. **NOTE: This Criterion does not require that the problems and exercises be labeled as such.**	**Evidence-** **Every exercise focuses on a particular CCSS and moves students to mastery.**	**(Reviewer only.)** __x__ **Yes** _____ **No**

3. Design of assignments is not haphazard: exercises are given in intentional sequences in order to strengthen students' mathematical understanding.	Evidence- Scope and sequence clear and logical	(Reviewer only.) __x__ Yes _____ No
4. There are separate teacher materials that support and reward teacher study including, but not limited to: discussion of the mathematics of the units and the mathematical point of each lesson as it relates to the organizing concepts of the unit, discussion on student ways of thinking and anticipating a variety of students responses, guidance on lesson flow, guidance on questions that prompt students thinking, and discussion of desired mathematical behaviors being elicited among students.	Evidence- Teacher interface provides instructional feedback	(Reviewer only.) __x__ Yes _____ No
5. Manipulatives suggested in the materials are faithful representations of the mathematical objects they represent and are connected to written methods.	Evidence- Mainpulatives are all digital with drag and drop aspects, but are only available on some problems.	(Reviewer only.) __x__ Yes _____ No
6. Materials include a variety of curriculum-embedded assessments. Examples include pre-, formative, summative, and self-assessment resources.	Evidence- Assessment is formative and summative.	(Reviewer only.) __x__ Yes _____ No
7. Assessments contain aligned rubrics, answer keys, and scoring guidelines that provide sufficient guidance for interpreting student performance.	Evidence- Assessment is computer scored and can be viewed by teachers.	(Reviewer only.) __x__ Yes _____ No
8. Materials assess student proficiency using methods that are accessible and unbiased, including the use of course-level language in student prompts.	Evidence- All access is online which may inhibit some student access, but language is course appropriate.	(Reviewer only.) __x__ Yes _____ No

9. Materials are carefully evaluated by qualified individuals, whose names are listed, in an effort to ensure freedom from mathematical errors and course-level appropriateness.	**Evidence-** **Authors have combined total of over 60 years math teaching experience and are, or were, on state education boards.**	(Reviewer only.) __x__ Yes _____ No
10. The visual design supports students in engaging thoughtfully with the subject. Navigation through the text is clear.	**Evidence-** **Navigation is easy and thought out for both teachers and students. Visuals do not clutter the screen but are sufficient allow for clarity in the problem**	(Reviewer only.) __x__ Yes _____ No
11. The materials engage parents in appropriate ways. For example, homework assignments in elementary grades, consist of routine problems, practice with getting answers, and fluency-building exercises that parents can easily support.	**Evidence-** **No access for parents beyond accessing student login or print outs from the teacher.**	(Reviewer only.) _____ Yes __x__ No

Reviewer IMET Evaluation Summary **Title/Level:** LearnBOP/7

Publisher: LearnBop / Fuel Education **Copyright:** N/A **ISBN:** N/A

Reviewer ID # KC & BP **Date Review Completed:** 3/8/16

Non-Negotiable Criteria- Each Non-Negotiable must be met in order for the Non-Negotiable Alignment Criteria to be met overall.

Non-Negotiable 1: Freedom from Obstacles to Focus	Non- Negotiable 2: Focus and Coherence
x Meets	x Meets
_____ Does Not Meet	_____ Does Not Meet

Non-Negotiable Overall:

x **Meets** _____ **Does Not Meet**

Alignment Criteria- Each Alignment Criterion must be met with a sufficient number of points in order for Alignment Criteria to be labeled as "Meets" overall. The more points the materials receive on the Alignment Criteria, the better they are aligned.

Alignment Criterion 1: Rigor and Balance	Alignment Criterion 2: Standards of Mathematical Practice	Alignment Criterion 3: Access to Standards for All Learners
Points: 6 of 6 possible. (Materials must receive at least 5 of 6 points to align.)	Points: 4 of 6 possible. (Materials must receive at least 5 of 6 points to align.)	Points: 4 of 6 possible. (Materials must receive at least 5 of 6 points to align.)
x Meets	_____ Meets	_____ Meets
_____ Does Not Meet	x Does Not Meet	x Does Not Meet

Alignment Criteria Overall:

_____ **Meets** x **Does Not Meet**

If the materials meet both Non-Negotiables and relevant Alignment Criterion, they are aligned to the Shifts and major features of the Core Standards. **the materials meet every Non-Negotiable and Alignment Criterion? __x__ Yes _____ No**

What are the specific areas of strength and weakness based on this evaluation? Publishers or others modifying or developing assessments can use this information to make improvements and/or to remedy gaps in the alignment of assessment materials.

ELL is not addressed at all. Language heavy material may make it difficult for students with reading abilities. Computer skills needed and may prohibit students without these skill as well as students with special needs that interfere with these skills.

2015-16 Mathematics Interim Review Recommendation & Summary

Publisher Name:	LearnBop / Fuel Education
Title:	Learn Bop 8
ISBN #	NA
Grade Level(s) or Course:	8
Reviewer ID:	

RECOMMENDED AS:

_____**Core Mathematics Program-** a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials. Substantial evidence clearly supports the designation of this program as Core.

_____**Other Mathematics Program-** a program that substantially, but partially, meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for supplemental materials. Substantial evidence clearly supports the designation of this program as Other.

__X__**Component Mathematics Program-** a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs. Substantial evidence clearly supports the designation of this program as Component.

_____**Intervention Program-** a program designed and intended to target and support students' specific needs. Substantial evidence clearly supports the designation of this program as Intervention.

_____ **Does not meet criteria** for recommendation as a Curricular Material or Online Resource for Mathematics.

EVIDENCE SUMMARY:

FOCUS- Covers standards for 8th Grade. Missing in seperate area is 8.6.1. Major clusters are ~~to~~ covered in Expressions, Functions, and Geometry

COHERENCE- The flow of material stays within grade level work and adheres to CCSS for 8th grade. The teacher can select various assignments at different complexity levels to engage all students

RIGOR- The assignment cover all conceptual standards. Concept problems help review material.
There are good discussion problems to develop understanding.

CONCEPTUAL UNDERSTANDING-

The Problems are high level and develop understanding by discussion with computer. There are multistep problems to build understanding.

MATHEMATICAL PRACTICES-

Each lesson engages the student in the Math Practices
Expressions and Equations - attend to precision
In Statistics and Probability - modeling and constructing argument

ACCESSIBILITY OF STANDARDS TO ALL STUDENTS-

The visuals are designed to help all students "see" what is happening. The problems are free from Bias. Tutorials guide a student to the right answer when it is answered wrong

OTHER:

2015-1 nterim Mathematics Review

Mathematics Evaluation Tool – High School

Publisher: Learn Bop / Fuel Education

Title of Material: Learn Bop Grade 8

Author: Learn Bop in Partnership with K-12 Mathematics Educators

ISBN #: NA **Copyright** NA

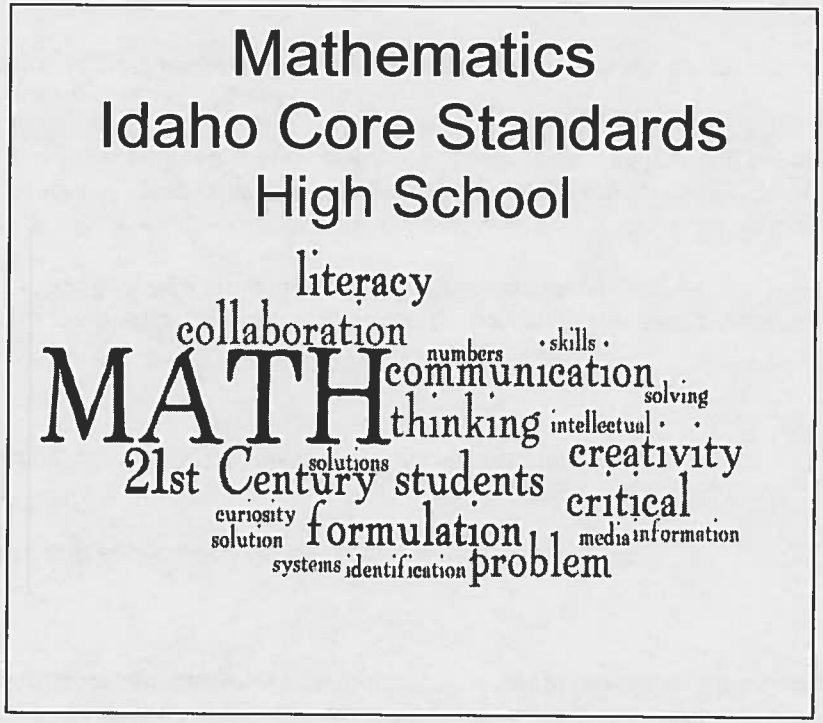
Reviewer ID:

Core Mathematics Program- a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Core.

Other Mathematics Program- a program that substantially, but partially, meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Other.

Component Mathematics Program- a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs.
Substantial evidence clearly supports the designation of this program as Component.

Intervention Program- a program designed and intended to target and support students' specific needs.
Substantial evidence clearly supports the designation of this program as Intervention.



- Evaluation Form adapted from Instructional Materials Evaluation Toolkit (IMET).

The IMET was developed by Student Achievement Partners. Educators may use or adapt. http://creativecommons.org/licenses/by/3.0/ Download this tool at http://achievethecore.org/IMET

Instructional Materials Evaluation Tool

Mathematics, High School

What Are the Purposes of the IMET?

This Math IMET is designed to help educators determine whether instructional materials are aligned to the Shifts and major features of the Common Core State Standards (CCSS). The substantial instructional Shifts (http://www.corestandards.org/other-resources/key-shifts-in-mathematics/) at the heart of the Common Core State Standards are:

- **Focus** strongly where the Standards focus
- **Coherence**: Think across grades and link to major topics within the grade
- **Rigor**: In major topics, pursue conceptual understanding, procedural skill and fluency, and application with equal intensity.

The IMET draws directly from the following documents:

- Common Core State Standards for Mathematics (www.corestandards.org/Math)
- Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013) (http://www. corestandards.org/wp-content/uploads/Math_Publishers_Criteria_ HS_Spring_2013_FINAL1.pdf)

When to use the IMET

1. Purchasing materials: Many factors go into local purchasing decisions. Alignment to the Standards is a critical factor to consider. This tool is designed to evaluate alignment of instructional materials to the Shifts and the major features of the CCSS. It also provides suggestions of additional indicators to consider in the materials evaluation and purchasing process
2. Evaluating materials currently in use: The IMET can be used to analyze the degree of alignment of existing materials and help to highlight specific, concrete flaws in alignment. Even where materials and tools currently in use fail to meet one or more of these criteria, the pattern of failure is likely to be informative. States and districts can use the evaluation to create a thoughtful plan to modify or combine existing resources in such a way that students' actual learning experiences approach the focus, coherence, and rigor of the Standards.
3. Developing programs: Those developing new programs can use this tool as guidance for creating aligned curricula.

Please note this tool was designed for evaluating comprehensive curricula (including any supplemental or ancillary materials), but it was not designed for the evaluation of standalone supplemental materials.

Who Uses the IMET?

Evaluating instructional materials requires both subject-matter and pedagogical expertise. Evaluators should be well versed in the Standards (www.corestandards.org/Math) for all grades in which materials are being evaluated. This includes understanding the Widely Applicable Prerequisites (www.achievethecore.org/prerequisites), how the content fits into the progressions in the Standards (www. achievethecore.org/progressions), and the expectations of the Standards with respect to conceptual understanding, procedural skill and fluency, and application. Evaluators also should be familiar with the substantial instructional Shifts (http://www.corestandards.org/other-resources/key-shifts-in-mathematics/) of Focus, Coherence and Rigor that are listed above.

Getting Started

Prior to Evaluation

Assemble all of the materials necessary for the evaluation. It is essential for evaluators to have materials for all grades covered by the program, as some criteria cannot be rated without having access to each grade. In addition, each evaluator should have a reference copy of the Common Core State Standards for Mathematics (CCSSM) and the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).

The IMET was developed by Student Achievement Partners. Educators may use or adapt. http://creativecommons.org/licenses/by/3.0/ Download this tool at http://achievethecore.org/IMET

Instructional Materials Evaluation Tool

Mathematics, Grades K-8

What Are the Purposes of the IMET?

This Math IMET is designed to help educators determine whether instructional materials are aligned to the Shifts and major features of the Common Core State Standards (CCSS). The substantial instructional Shifts (http://www.corestandards.org/other-resources/key-shifts-inmathematics/) at the heart of the Common Core State Standards are:

- **Focus** strongly where the Standards focus
- **Coherence**: Think across grades and link to major topics within the grade
- **Rigor**: In major topics, pursue conceptual understanding, procedural skill and fluency, and application with equal intensity.

The IMET draws directly from the following documents:

- Common Core State Standards for Mathematics (www.corestandards.org/Math)
- Publishers' Criteria for the Common Core State Standards in Mathematics grade K-8 (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)

When to use the IMET

1. Purchasing materials: Many factors go into local purchasing decisions. Alignment to the Standards is a critical factor to consider. This tool is designed to evaluate alignment of instructional materials to the Shifts and the major features of the CCSS. It also provides suggestions of additional indicators to consider in the materials evaluation and purchasing process.

2. Evaluating materials currently in use: The IMET can be used to analyze the degree of alignment of existing materials and help to highlight specific, concrete flaws in alignment. Even where materials and tools currently in use fail to meet one or more of these criteria, the pattern of failure is likely to be informative. States and districts can use the evaluation to create a thoughtful plan to modify or combine existing resources in such a way that students' actual learning experiences approach the focus, coherence, and rigor of the Standards.

3. Developing programs: Those developing new programs can use this tool as guidance for creating aligned curricula.
Please note this tool was designed for evaluating comprehensive curricula (including any supplemental or ancillary materials), but it was not designed for the evaluation of standalone supplemental materials.

Who Uses the IMET?

Evaluating instructional materials requires both subject-matter and pedagogical expertise. Evaluators should be well versed in the Standards (www.corestandards.org/Math) for all grades in which materials are being evaluated. This includes understanding the Major Work of the grade (www.achievethecore/focus), the Supporting and Additional work, how the content fits into the progressions in the Standards (www.achievethecore.org/progressions), and the expectations of the Standards with respect to conceptual understanding, procedural skill and fluency, and application. Evaluators also should be familiar with the substantial instructional Shifts (http:// www.corestandards.org/other-resources/key-shifts-in-mathematics/) of Focus, Coherence and Rigor that are listed above.

Getting Started
Prior to Evaluation

Assemble all of the materials necessary for the evaluation. It is essential for evaluators to have materials for all grades covered by the program, as some criteria cannot be rated without having access to each grade. In addition, each evaluator should have a

Non-Negotiable 1: Materials must reflect the content architecture of the Standards by not assessing the topics named* before the grade level where they first appear in the Standards.

NN 1 If Metric 1A was rated as Meets, then rate Non-Negotiable 1 as Meets. If Metric 1A was rated as Does Not Meet, then rate Non- Negotiable 1 as Does Not Meet. Check the final rating.

Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion.**(Reviewer only.)**

Strength- the questions are well broken out in each standard. The teacher can ask from easy to hard questions.

Weakness- there is a lot of navigation that needs to be learned and with time will get easier

Before moving to Non-Negotiable 2, record the final Meets or Does Not Meet rating in the Evaluation Summary.

(Reviewer only.)

_X__Meets

____Does Not Meet

Strengths/Weaknesses:

Directions for Non-Negotiable 2

Focus and Coherence

Non-Negotiable 2:

Focus and Coherence

Materials must focus coherently on the Major Work of the grade in a way that is consistent with the progressions in the Standards.

Focus and coherence are the two major evidence-based design principles of the Common Core State Standards for Mathematics (CCSSM, p. 3). Focus is necessary in order to fulfill the ambitious promise the states have made to their students by adopting the Standards: greater achievement at the college and career ready level; greater depth of understanding of mathematics; and a rich classroom environment in which reasoning, sense-making, applications, and a range of mathematical practices flourish. In simpler terms, a mile-wide, inch-deep curriculum translates to less time per topic. Less time means less depth and moving on without many students. Thus, materials must focus coherently on the Major Work of the grade in a way that is consistent with the progressions in the Standards.

Required Materials

- Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf)
- Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)
- Focus by Grade Level for the grade being evaluated (www.achievethecore.org/focus)
- From the materials being evaluated: teacher guides, student texts and workbooks

Rating this Criterion:

Non-Negotiable 2 is rated as Meets or Does Not Meet.

To rate Non-Negotiable 2, first rate metrics 2A–2H. Each of these eight metrics must be rated as Meets in order for Non-Negotiable 2 to be rated as Meets. Rate each metric 2A-2H as Meets or Does Not Meet/Insufficient Evidence. If the evidence examined shows that the Criterion is met, then mark the Criterion Meets. If the evidence examined shows that the Criterion is not met—or if there is insufficient evidence to make a determination—then mark the Criterion as Does Not Meet/Insufficient Evidence. Support all ratings with evidence.

Metric NN2A:

In each grade K–8, students and teachers using the materials as designed devote the large majority of time to the Major Work of the grade.

How to Find the Evidence:

Familiarize yourself with the Major Work of the grade being evaluated (see the Focus by Grade Level documents.)

Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, lessons, homework assignments, and assessments. (Evaluate both student and teacher materials.)

Consider time spent on the Major Work of the grade and judge qualitatively whether students and teachers using the materials as designed will devote the large majority of time to the Major Work of the grade.

For context, read Criterion #1 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013)

Evidence-

Major clusters are in expressions, functions, and geometry.

Standards are all of geometry for major cluster And 8.EE.1 and 2 for expressions

Major clusters covered at least 80 % of the time

(Reviewer only.)

__X__Meets

____Does Not Meet/

Insufficient Evidence

Metric NN2B: **Supporting [illegible]k, where present, enhances focus and coherence simultaneously by also engaging students in the Major Work of the grade.** **How to Find the Evidence:** Familiarize yourself with the Major Work and Supporting Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate chapters and lessons that focus on Supporting Work. NOTE: Example of evaluating this Criterion might include looking at whether materials for K–5 generally treat data displays as an occasion for solving grade-level word problems using the four operations (e.g., see 3.MD.B.3); or whether materials for grade 7 take advantage of opportunities to use probability to support ratios, proportions, and percentages. For context, read Criterion #3 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** The other standa[illegible]covered that are supporting work are used by this work to reinforce and build up to the major work. Some of it is laying the groundwork.	**(Reviewer only.)** **__X__Meets** **____Does Not Meet/** **Insufficient Evidence**
Metric NN2C: **Materials base content progressions on the grade-by-grade progressions in the Standards. Content from previous or future grades does not unduly interfere with or displace on-grade-level content.** **How to Find the Evidence:** Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, and lessons in both student and teacher materials. NOTE: In some cases it may be possible that aligned materials might address some aspects of a topic in a strategic way before or after the grade level in which the topic is central in the Standards' progressions; for example, a curriculum author might purposefully choose to explore adding fractions with unlike denominators in a way appropriate to grade four, recognizing that this work is not really required until the next grade. However, any such purposeful discrepancies in content progressions should enhance the required learning in each grade; not unduly interfere with or displace grade-level content; and be clearly aimed at helping students meet the Standards as written rather than effectively rewriting the progressions in the Standards. And in all cases, note that Non-Negotiable 1 must be met for materials to be aligned. For context, read Criterion #5a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** The flow of the material stays within the grade level work for 8th grade and adheres well to the standards. No extraneous material viewed from previous or future grades.	**(Reviewer only.)** **_X__Meets** **____Does Not Meet/** **Insufficient Evidence**

Metric NN2D: **Materials gi[illegible]ll students extensive work with on-grade-level problems.** **How to Find the Evidence:** Evaluate both student and teacher materials. If the materials provide resources for differentiated learning, consider whether lower-performing students have opportunities to engage with grade-level problems. Also consider whether higher-performing students are given opportunities to learn current grade-level content in greater depth. For context, read Criterion #5b in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** The teacher can s[illegible]ect various assignment at different complexity levels to engage all students. In geometry an assessment can be formed using different problems for different levels of student ability. This can be formative and give a teacher feedback on how all students are doing	**(Reviewer only.)** **__X__Meets** **____Does Not Meet/ Insufficient Evidence**
Metric NN2E: **Materials relate on-grade-level concepts explicitly to prior knowledge from earlier grades.** **How to Find the Evidence:** Evaluate both student and teacher materials. NOTE: Examples of evaluating this Criterion might include looking at the way the materials extend basic ideas of place value across the decimal point; or the role that properties of operations play when the materials extend arithmetic beyond whole numbers to fractions, variables, and expressions. More generally, cluster headings in the Standards sometimes signal key moments where reorganizing and extending previous knowledge is important in order to accommodate new knowledge (e.g., see cluster headings that use the phrase "Apply and extend previous understanding"). For context, read Criterion #5c in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Each assignment is laid out in relation to the standard for that grade level. A teacher can check standards from earlier grade levels to ensure continuity	**(Reviewer only.)** **__X__Meets** **____Does Not Meet/ Insufficient Evidence**
Metric NN2F: **Review of material from previous grades is clearly identified as such to the teacher, and teacher and students can see what their specific responsibility is for the current year.** **How to Find the Evidence:** Evaluate the table of contents, but do not stop there; also evaluate units, chapters, lessons, homework assignments and assessments. (Evaluate both student and teacher materials.) Identify any content from previous grades and check whether it is identified as such. For context, read Criterion #5a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** What the program calls the content suite is marked as to which standard it follows. So if any review is done, that standard will appear with that question.	**(Reviewer only.)** **__X__Meets** **____Does Not Meet/ Insufficient Evidence**

Metric NN2G: **Materials include learning objectives that are visibly shaped by CCSSM cluster headings.** **How to Find the Evidence:** Select several clusters from the Major Work in the grade being evaluated. Evaluate teacher and student materials in relation to these clusters. For context, read Criterion #6a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** The breakdown for each assignment shows the heading and how they relate to the clusters. No question for an assignment or assessment are present with cluster heading information	**(Reviewer only.)** **__X__Meets** **____Does Not Meet/** **Insufficient Evidence**
Metric NN2H: **Materials include problems and activities that serve to connect two or more clusters in a domain, or two or more domains in a grade, in cases where these connections are natural and important.** **How to Find the Evidence:** In the grade being evaluated, choose two or more clusters or two or more domains for which connections are natural and important. Evaluate the units, chapters, and lessons that deal with the chosen topics, looking for problems and activities that serve to connect the chosen clusters or domains. NOTE: An example of evaluating this Criterion might include looking at whether problems in grade 4 sometimes or often involve students applying their developing computation skills (detailed in domain NBT) in the context of solving word problems (detailed in domain OA). For context, read Criterion #6b in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** An example would be working with Pythagorean theorem and solving functions and equations. Steps involved are similar and are covered in every major cluster.	**(Reviewer only.)** **_X__Meets** **____Does Not Meet/** **Insufficient Evidence**

Non-Negotiable 2:

Focus and Coherence

Materials must focus coherently on the Major Work of the grade in a way that is consistent with the progressions in the Standards.

NN 2 If all Metrics 2A – 2H were rated as Meets, then rate Non-Negotiable 2 as Meets. If one or more Metric was rated Does Not Meet/Insufficient Evidence, then rate Non-Negotiable 2 as Does Not Meet. Check the final rating.
Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)**

Strength- the work focuses on all exercises and problems relating back to the standards. The supporting work provides the stepping stones to the major work.
The work relates all clusters throughout the program.

Weakness- the material has to be put together by the teacher for each individual, while it can be done it may require much planning and could cause someone not to sue it as efficiently as designed

Before moving to Alignment Criterion 1, record the final Meets or Does Not Meet rating in the Evaluation Summary.

(Reviewer only.)

__X__Meets

____Does Not Meet

Strengths/Weaknesses:

Now continue by evaluating the Alignment Criterion 1 for Rigor and Balance.

Directions for Alignment Criterion 1

Rigor and Balance

Alignment Criterion 1: Rigor and Balance

Materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.

The Standards set expectations for attention to all three aspects of rigor: conceptual understanding, procedural skill and fluency, and applications. Thus, materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.

Required Materials

- Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf)
- Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)
- Focus by Grade Level for the grade being evaluated (achievethecore.org/focus)
- Situation Types for the Operations in Word Problems (achievethecore.org/situation-types)
- From the materials being evaluated: teacher guides, student texts and workbooks

Rating this Criterion:

Alignment Criterion 1 is rated as Meets or Does Not Meet.

To rate Alignment Criterion 1, first rate metrics 1A, 1B, and 1C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). For each metric, guiding questions are provided to aid in gathering evidence.

Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 1 if the materials rate 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as rigor and balance, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.

Metric AC1A:

The materials support the development of students' conceptual understanding of key mathematical concepts, especially where called for in specific content Standards or cluster headings.

How to Find the Evidence:

Select one or more cluster(s) or Standard(s) from the Major Work for the grade being evaluated that relate specifically conceptual understanding to use throughout the questions associated with this metric. NOTE: Some examples of clusters or Standards that call for conceptual understanding include: K.OA.A.1, (1.NBT.B, 1.NBT.C), (2.NBT.A, 2.NBT.B), (3.OA.A.1, 3.OA.A.2), 4.NF.A, (4.NBT.A, 4.NBT.B), 5.NF.B, (5.NBT.A, 5.NBT.B), 6.RP.A, 6.EE.A.3, 7.NS.A, 7.EE.A, 8.EE.B, 8.F.A, 8.G.A

Clusters or Standards grouped by parentheses are closely connected and could be analyzed together.

For context, read Criterion #4a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).

-Choose a cluster/Standard from the Major Work that is aligned to each aspect of rigor and use it to evaluate these metrics. It is most helpful if the same clusters/Standards are chosen for all of the programs being evaluated. (Guidance in choosing clusters/Standards is included in "How to Find the Evidence".)

Use the questions for AC Metric 1A to evaluate Metric 1A. Record evidence for each question and rate Metric 1A.

_X__Meets (2)

____Partially Meets (1)

____Does Not Meet (0)

Is conceptual understanding attended to thoroughly where the Standards set explicit expectations for understanding or interpreting? Evaluate lessons, chapter/unit assessments and homework assignments, paying attention to work aligned to Standards that explicitly call for understanding or interpreting. NOTE: Examples of evaluating this Criterion might include looking at how well the multi-digit addition and subtraction algorithms are developed and explained on the basis of place value and properties of operations; or how well the multi-digit multiplication and division algorithms are developed and explained on the basis of place value and properties of operations; or how well solving equations is presented and explained as a process of reasoning.	**Evidence-** A good example is the standards FOR Expressions and equations where all are conceptual The assignments cover all of the conceptual standards in this standard as shown by the standard being included on each question in the assignment. When finding the square root they give examples showing that finding the principal square root is sometimes the only one that makes sense in the context of a problem.	
Do the materials feature high-quality conceptual problems and conceptual discussion questions? Evaluate lessons, chapter/unit assessments, and homework assignments. NOTE: Example of conceptual problems might include such questions as "Find a number greater than 1/5 and less than 1/4," or "If the divisor does not change and the dividend increases, what happens to the quotient?"	**Evidence-** The material features good concept problems in a review of the material. In Compare proportions the preview of the bops shows good discussion problems for concepts and is just an example of the rest.	
Do the materials feature opportunities to identify correspondences across mathematical representations? Evaluate lessons, chapter/unit assessments and homework assignments. NOTE: Examples of evaluating this Criterion might include looking at whether students are supported in identifying correspondences among: the verbal description of a situation, the diagrams that distill its mathematical features, and the equations that model it; or equivalent forms of numbers (e.g., 3 and 6/2) and the number line; or rational number operations and representations of them via models such as the vector model; or the expression that defines a function and the graph that shows the relationship.	**Evidence-** This work has borrowed ideas from a work called progressions and integrated the models into the problems to help students. They also use Learn zillion videos which tie across standards and use representations in a great way	

Metric AC1B: **The materials are designed so that students attain the fluencies and procedural skills required by the Standards.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Major Work for the grade being evaluated that relate specifically to fluency and procedural skill to use throughout the questions associated with this metric. NOTE: Some examples of Standards that call for procedural skill and fluency include: K.OA.A.5, 1.OA.C.6, 2.OA.B.2, 2.NBT.B.5, 3.OA.C.7, 3.NBT.A.2, 4.NBT.B.4, 5.NBT.B.5, 6.NS.B.2, and 6.NS.B.3, 6.EE.A, 7.NS.A, 7.EE.A.1,7.EE.B.4a, 8.EE.C.7, 8.EE.C.8b For context, read Criterion #4b in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).		**Use the questions for Metric 1B to evaluate Metric 1 B. Record evidence for each question and rate Metric 1B.** **(Reviewer only.)** **__X__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Is progress toward fluency and procedural skill interwoven with students' developing conceptual understanding of the operations in question? Evaluate lessons, chapter/unit assessments, daily routines, and homework assignments for evidence that the development of fluency and procedural skill is supported by conceptual understanding.	**Evidence-** The assignments are well aligned with the standards and use math vocabulary to question and explain answers. Students get much practice to develop fluency	
Are purely procedural problems and exercises present that include cases in which opportunistic strategies are valuable and generic cases that require efficient algorithms present? Evaluate lessons, chapter/unit assessments, daily routines, and homework assignments. NOTE: Examples of problems in which opportunistic strategies are valuable might include the sum 698 + 240 or the system x + y = 1, 2x + 2y = 3. Examples of generic cases that require efficient algorithms might include the sum 8767+2286 or the system 6y + x = x + 3, – x = 1 + 2y.	**Evidence-** The material features good concept problems in a review of the material. In Compare proportions the preview of the bops shows good discussion problems for concepts and is just an example of the rest There is a mix in each assignment of problems and exercises	
Do the materials in grades K–6 provide repeated practice toward attainment of fluency Standards? Evaluate lessons, daily routines, and homework assignments for evidence of repeated practice toward attainment of the following K–6 Standards that set an explicit expectation of fluent (accurate and reasonably fast) computation: K.OA.A.5, 1.OA.C.6, 2.OA.B.2, 2.NBT.B.5, 3.OA.C.7, 3.NBT.A.2, 4.NBT.B.4, 5.NBT.B.5, 6.NS.B.2, 6.NS.B.3.	**Evidence-** Not applicable for 7th grade.	

Metric AC1C: **The materials are designed so that teachers and students spend sufficient time working with engaging applications, without losing focus on the Major Work of each grade.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Major Work for the grade being evaluated that relate specifically application to use throughout the questions associated with this metric. NOTE: Some examples of clusters or Standards that call for application include: K.OA.A.2, 1.OA.A, 2.OA.A, 3.OA.A.3, 3.OA.D.8, 4.OA.A.3, 4.NF.B.3d, 4.NF.B.4c, 5.NF.B.6, 5.NF.B.7c, 6.RP.A.3, 6.NS.A.1, 6.EE.B.7, 6.EE.C.9, 7.RP.A, 7.NS.A.3, 7.EE.B.3, 8.EE.C.8c, 8.F.B For context, read Criterion #4c in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** With each assignment using the standards as a guide, the major clusters are covered at least 85 percent of the time.	**Use the questions for Metric 1C to evaluate Metric 1C. Record evidence for each question and rate Metric 1C.** **(Reviewer only.)** **__X__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Are there are single- and multi-step contextual problems, including non-routine problems, that develop the mathematics of the grade, afford opportunities for practice, and engage students in problem solving? Do the problems attend thoroughly to those places in the content Standards where expectations for multi-step and real-world problems are explicit? Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** The assignments are varied in each standard to provide exercises and problems that require more than one step to complete. These problems challenge students and help them meet the math practice standards.	
Do application problems particularly stress applying the Major Work of the grade? Evaluate lessons, chapter/unit assessments, and homework assignments. NOTE: Examples of evaluating this Criterion might include looking at: how well, by the end of grade 2, students using the materials as designed can represent and solve a full range of one-step addition and subtraction word problems; or how well, by the end of grade 3, students using the materials as designed can represent and solve a full range of one-step multiplication and division word problems; or how well these basic situation types for each operation are carried coherently across the grades, (e.g., with fractions and algebraic expressions); or, in all grades, whether the problems connect concepts, Standards, and domains in ways that are natural and important. For a list of situation types for one-step addition, subtraction, multiplication, and division problems, see Situation Types for the Operations in Word Problems	**Evidence-** Again the problems in the assignments apply the major work and stress appropriate terminology and procedures to accomplish the solution.	

Does modeling build slowly across K–8, with applications that are relatively simple in earlier grades and when students are encountering new content? In grades 6–8, do the problems begin to provide opportunities for students to make their own assumptions or simplifications in order to model a situation mathematically? Read Standard for Mathematical Practice 4, Model with Mathematics. Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** There are videos associated with various lessons to help build understanding and problem solving skills.	

Alignment Criterion 1: Rigor and Balance

Materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.

AC1 Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 out of 6 points, the Criterion has not been met. Check the final rating.
Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)**

Strength- repetition and carryover from standards are attained in this work.

Before moving to Alignment Criterion 2, record the final Meets or Does Not Meet rating in the Evaluation Summary.

(Reviewer only.)

_X__Meets

____Does Not Meet

Strengths/Weaknesses:

Directions for Alignment Criterion 2

Standards for Mathematical Practice

Alignment Criterion 2: Standards for Mathematical Practice

Materials must demonstrate authentic connections between content Standards and practice Standards.

The Standards require that designers of instructional materials connect the mathematical practices to mathematical content in instruction. Thus, materials must demonstrate authentic connections between content Standards and practice Standards.

Required Materials:

- Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf)
- Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)
- Focus by Grade Level for the grade being evaluated (www.achievethecore.org/focus)
- From the materials being evaluated: teacher guides, student texts and workbooks

Rating this Criterion

Alignment Criterion 2 is rated as Meets or Does Not Meet.

To rate Alignment Criterion 2, first rate metrics 2A, 2B, and 2C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). For each metric, guiding questions are provided to aid in gathering evidence.

Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 2 if the materials earn 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as mathematical practices, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.

Metric AC2A: **Materials address the practice Standards in such a way as to enrich the Major Work of the grade; practices strengthen the focus on Major Work instead of detracting from it, in both teacher and student materials.** **How to Find the Evidence:** Familiarize yourself with the Major Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate teacher and student materials for evidence that the mathematical practices support and connect to the focus of the grade. NOTE: Examples of evaluating this Criterion might include looking at whether, in grades K–5, students using the materials are supported to look for and express regularity in repeated reasoning about the addition table, the multiplication table, the properties of operations, the relationship between addition and subtraction or multiplication and division, and the place value system; or whether, in grades 6–8, students using the materials are supported to look for and express regularity in repeated reasoning about proportional relationships and linear functions. For context, read Criterion #8 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013).	**Evidence-** Attending to precision can be seen in assignments in expressions and equations. Working with exponents and fractions and using commas appropriately In statistics and probability modeling and constructing arguments are explored.	**(Reviewer only.)** **_X__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Metric AC2B: **Materials attend to the full meaning of each practice Standard.** **How to Find the Evidence:** For context, read Criterion #7 and Criterion #9 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).		**Use the questions for Metric 2B to evaluate Metric 2B. Record evidence for each question and rate Metric 2B.** **(Reviewer only.)** **__X__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Over the course of any given year of instruction, is each mathematical practice Standard meaningfully present in the form of assignments, activities, or problems that stimulate students to develop the habits of mind described in the practice Standard? Evaluate lessons, chapter/ unit assessments, and homework assignments for evidence of each mathematical practice being meaningfully present in instruction.	**Evidence-** The practice standards can be explained in each lesson by the teacher and guide the students in achieving them	
Do the materials treat the practice Standards as developing across grades or grade bands? Are the practice Standards in early grades appropriately simple? Do they display an arc of growing sophistication across the grades?	**Evidence-** Each grade does become more complex in the reasoning required and the problems that are performed	

Are there teacher-directed materials that explain the role of the practice Standards in the classroom and in students' mathematical development? Are alignments to practice Standards accurate?	**Evidence-** Each bop has a get help and next step area that acts as the teacher for the student	
Metric AC2C: **Materials support the Standards' emphasis on mathematical reasoning.** **How to Find the Evidence:** For context, read Criterion #10 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).		**Use the questions for Metric 2C to evaluate Metric 2C. Record evidence for each question and rate Metric 2C.** **(Reviewer only.)** **__X__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Do the materials support students in constructing viable arguments and critiquing the arguments of others concerning grade-level mathematics that is detailed in the content Standards? Read Standard for Mathematical Practice 3. Evaluate teacher and student materials to ensure that students are given opportunities to reason with grade-level mathematics.	**Evidence-** When the student answers a question wrong, the tutorial breaks the argument down for the student and requires them to reason through the solution with the tutorial.	
Do the materials support students in producing not only answers and solutions, but also, in a grade-appropriate way, arguments, explanations, diagrams, mathematical models, etc., especially in the Major Work of the grade? Familiarize yourself with the Major Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate teacher and student materials, to understand the types of work students are expected to produce.	**Evidence-** In several bops models are used for the students to solve problems. In Statistics and probabilities, students are asked to use graphs to construct and answer	
Do materials explicitly attend to the specialized language of mathematics? Is the language of argument, problem solving, and mathematical explanations taught rather than assumed? Evaluate teacher and student materials, paying attention to how mathematical language is taught. NOTE: Examples of evaluating this Criterion might include looking at whether students are supported in: basing arguments on definitions; using the method of providing a counterexample; or recognizing that examples alone do not establish a general statement.	**Evidence-** Throughout the bops, the question are asked using proper math terminology. The questions are based on videos and if an answer is not correct, the tutorial explicitly breaks the problem down.	

Alignment Criterion 2:
Standards for Mathematical Practice

Materials must demonstrate authentic connections between content Standards and practice Standards.

AC2 Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 out of 6 points, the Criterion has not been met. Check the final rating.
Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion.
(Reviewer only.)
Strength- the material is great at providing explanations and definitions for each section

Weakness- students are not taught how to construct models, they are presented for review.

Before moving to Alignment Criterion 3, record the final Meets or Does Not Meet rating in the Evaluation Summary.

(Reviewer only.)

_X__Meets

____Does Not Meet

Strengths/Weaknesses:

Alignment Criterion 3:
Access to the Standards for All Students

Materials must provide supports for English Language Learners and other special populations.

Because Standards are for all students, alignment requires thoughtful support to ensure all students are able to meet the Standards. Thus, aligned materials must provide supports for English Language Learners and other special populations.

Required Materials:

- Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf)
- Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)
- From the materials being evaluated: teacher guides, student texts and workbooks

Rating this Criterion:
Alignment Criterion 3 is rated as Meets or Does Not Meet.

To rate Alignment Criterion 3, first rate metrics 3A, 3B, and 3C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points).

Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 3 if the materials earn 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as support for special population, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.

Metric AC3A:
Support for English Language Learners and other special populations is thoughtful and helps those students meet the same Standards as all other students. The language in which problems are posed is carefully considered.

How to Find the Evidence:
Evaluate teacher and student materials, paying attention to supports offered for special populations.

Evidence-
Visuals are very evident throughout the lessons. These can be used by the teacher to show what the language is saying in the problem.
The presentation in each problem is eye catching and includes more than just words but color and activity for the eyes.

Reviewer only.)

_X__Meets (2)

____Partially Meets (1)

____Does Not Meet (0)

Metric AC3B: **Materials pr[illegible]e appropriate level and type of scaffolding, differentiation, intervention, and support for a broad range of learners with gradual removal of supports, when needed, to allow students to demonstrate their mathematical understanding independently.** **How to Find the Evidence:** Evaluate teacher and student materials, paying attention to whether materials provide differentiation that will lead all learners to engage with on-grade-level content.	**Evidence-** When the student answers a question wrong, the tutorial breaks the argument down for the student and requires them to reason through the solution with the tutorial. Each bop has a get help and next step area that acts as the teacher for the student.	**Reviewer only.)** **__X__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Metric AC3C: **Design of lessons recommends and facilitates a mix of instructional approaches for a variety of learners such as using multiple representations (e.g., including models, using a range of questions, checking for understanding, flexible grouping, pair-share).** **How to Find the Evidence:** Evaluate teacher materials, noting instructional approaches suggested for whole class and differentiated lessons and activities.	**Evidence-** The questions are presented as "explain the situation", multiple choice, modeling. Questions are diverse enough to ensure a thorough understanding of the material	**Reviewer only.)** **_X__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Alignment Criterion 3: **Access to the Standards for All Students** **Materials must provide supports for English Language Learners and other special populations.** **AC3** Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 points, the Criterion has not been met. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion.**(Reviewer only.)** Strength- Access is provided for all students, with training even English Language learners can access the problems. Weakness- the visuals in the problem may initially be overwhelming for a student to navigate. **Move to the Evaluation Summary and record the final Meets or Does Not Meet rating .**		**(Reviewer only.)** **_X__Meets** **____Does Not Meet** **Strengths/Weaknesses:**

Once an evaluation for alignment to the Shifts and major features of the CCSS has been conducted using Sections 1-3, it's important to evaluate for overall quality and best practices. A starting list of Indicators of Quality are suggested below. States, districts and others evaluating instructional materials are encouraged to add to this list to ensure materials reflect local contexts. For background information on some of the Indicators of Quality in this section, refer to pp.18–21 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).

Indicators of Quality	**Evidence- Give specific examples.**	**Rating: (Reviewers only.)**
1. Lessons are thoughtfully structured and support the teacher in leading the class through the learning paths at hand, with active participation by all students in their own learning and in the learning of their classmates.	**Evidence-** Lessons are very well planned and the teacher can modify as needed to help the whole class or individual students. There are also preplanned assignments	**(Reviewer only.)** **____X__ Yes** **_____ No**
2. The underlying design of the materials includes both problems and exercises. (In solving problems, students learn new mathematics, whereas in working exercises, students apply what they have already learned to build mastery.) Each problem or exercise has a purpose. **NOTE: This Criterion does not require that the problems and exercises be labeled as such.**	**Evidence-** The assignment are varied in each standard to provide exercises and problems that require more than one step to complete. These problems challenge students and help them meet the math practice standards.	**(Reviewer only.)** **__X___ Yes** **_____ No**
3. Design of assignments is not haphazard: exercises are given in intentional sequences in order to strengthen students' mathematical understanding.	**Evidence-** The assignments are designed to follow the standards in the order of how they appear. In statistics construct and interpret scatter plots comes before describe data patterns and best line of fit.	**(Reviewer only.)** **__X___ Yes** **_____ No**
4. There are separate teacher materials that support and **reward teacher study including, but not limited to: discussion of the mathematics of the units and the mathematical point of each lesson as it relates to the organizing concepts of the unit, discussion on student ways of thinking and anticipating a variety of students responses, guidance on lesson flow, guidance on questions that prompt students thinking, and discussion of desired mathematical behaviors being elicited among students.**	**Evidence-** There appear to be no separate material for teachers but they can study ahead of the lessons to anticipate student questions.	**(Reviewer only.)** **_____ Yes** **____X_ No**

5. Manipulatives suggested in the materials are faithful representations of the mathematical objects they represent and are connected to written methods.	**Evidence-** The material uses graphs number lines and other models to represent ideas and help solve problems. The question is alongside the model.	**(Reviewer only.)** **__X__ Yes** **_____ No**
6. Materials include a variety of curriculum-embedded assessments. Examples include pre-, formative, summative, and self-assessment resources.	**Evidence-** The material gives teachers the ability to design assessments for the whole class and also for each individual student if needed. In the curriculum itself assessments in the form of questions can provide good formative information for the teacher.	**(Reviewer only.)** **___X__ Yes** **_____ No**
7. Assessments contain aligned rubrics, answer keys, and scoring guidelines that provide sufficient guidance for interpreting student performance.	**Evidence-** The answers to the assessments are in the questions themselves and students can review the argument for the correct response to determine performance.	**(Reviewer only.)** **___X___ Yes** **_____ No**
8. Materials assess student proficiency using methods that are accessible and unbiased, including the use of course-level language in student prompts.	**Evidence-** The problems are accessible to all students on the program. Each student can access the course on their own computer and work on the problems.	**(Reviewer only.)** **____X__ Yes** **_____ No**
9. Materials are carefully evaluated by qualified individuals, whose names are listed, in an effort to ensure freedom from mathematical errors and course-level appropriateness.	**Evidence-** All of the guides are written by Cindy Bryant, LearnBop's Director of Learning. Cindy is a veteran math teacher, former member of the NCTM Board of Directors, former state K–12 Math Director in Missouri, and a Presidential Awardee. Pulled from the website.	**(Reviewer only.)** **__X____ Yes** **_____ No**

10. The visual design supports students in engaging thoughtfully with the subject. Navigation through the text is clear.	**Evidence-** Visually the program has a nice blend of graphs, tables, and words to stimulate the mind for the problem.	**(Reviewer only.)** **__X____ Yes** **_____ No**
11. The materials engage parents in appropriate ways. For example, homework assignments in elementary grades, consist of routine problems, practice with getting answers, and fluency-building exercises that parents can easily support.	**Evidence-** Parents can access the work their child is doing and work alongside the program to help the children learn the material.	**(Reviewer only.)** **__X___ Yes** **_____ No**

Reviewer IMET Evaluation Summary Title/Level: _Learnbop_____

Publisher: __learnbop/fuel education Copyright: ____NA____ ISBN:_____NA_

Reviewer ID # _____SDF_____Date Review Completed:_3/1/2016_____

Non-Negotiable Criteria- Each Non-Negotiable must be met in order for the Non-Negotiable Alignment Criteria to be met overall.	
Non-Negotiable 1: Freedom from Obstacles to Focus **___X___ Meets** **_____ Does Not Meet**	**Non- Negotiable 2: Focus and Coherence** **___X__ Meets** **_____ Does Not Meet**
Non-Negotiable Overall: **___X__ Meets _____ Does Not Meet**	

Alignment Criteria- Each Alignment Criterion must be met with a sufficient number of points in order for Alignment Criteria to be labeled as "Meets" overall. The more points the materials receive on the Alignment Criteria, the better they are aligned.

Alignment Criterion 1: Rigor and Balance	**Alignment Criterion 2: Standards of Mathematical Practice**	**Alignment Criterion 3: Access to Standards for All Learners**
Points: __6__ of 6 possible. **(Materials must receive at least 5 of 6 points to align.)** **___X___ Meets** **_____ Does Not Meet**	**Points: _6___ of 6 possible.** **(Materials must receive at least 5 of 6 points to align.)** **__X____ Meets** **_____ Does Not Meet**	**Points: _6___ of 6 possible.** **(Materials must receive at least 5 of 6 points to align.)** **__X____ Meets** **_____ Does Not Meet**
Alignment Criteria Overall: **___X__ Meets _____ Does Not Meet**		

If the materials meet both Non-Negotiables and relevant Alignment Criterion, they are aligned to the Shifts and major features of the Core Standards. **the materials meet every Non-Negotiable and Alignment Criterion? __X___ Yes _____ No**

What are the specific areas of strength and weakness based on this evaluation? Publishers or others modifying or developing assessments can use this information to make improvements and/or to remedy gaps in the alignment of assessment materials.

The strength of this program is that it is highly modifiable by the teacher to fit classes and individuals as they need the help. The program is easily accessible for the parents to help their children.

The weakness may be that the teacher will have to work hand in hand with the student to learn how to work the problems available.

2015-16 Mathematics Interim Review Recommendation & Summary

Publisher Name:	LearnBop/Fueled Education
Title:	LearnBop
ISBN #	N/A
Grade Level(s) or Course:	9-12
Reviewer ID:	KD, JT, LC, MN

RECOMMENDED AS:

_____**Core Mathematics Program-** a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials. Substantial evidence clearly supports the designation of this program as Core.

_____**Other Mathematics Program-** a program that substantially, but partially, meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for supplemental materials. Substantial evidence clearly supports the designation of this program as Other.

____X____**Component Mathematics Program-** a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs. Substantial evidence clearly supports the designation of this program as Component.

_____**Intervention Program-** a program designed and intended to target and support students' specific needs. Substantial evidence clearly supports the designation of this program as Intervention.

_____ **Does not meet criteria** for recommendation as a Curricular Material or Online Resource for Mathematics.

EVIDENCE SUMMARY:

FOCUS-

LearnBop is a program designed to meet most of the CCSS. LearnBop spends the majority of the time addressing most of the Widely Applicable Prerequisites (WAP), however there are some WAP not addressed. The following standards are not covered: F.LE.1c, A.REI.10, S.IC.1, A.SEE.4, A.APR.5, 7. These standards will need to be supplemented by the classroom teacher. All content in the LearnBop curriculum is based on the content specified in the CCSS.

COHERENCE-

Standards within the HS LearnBop program have extended the concepts from middle school math. The program allows the teacher to assign "bops" to the students to allow them to work through material in a cohesive manner.

RIGOR-

CONCEPTUAL UNDERSTANDING-

MATHEMATICAL PRACTICES-

ACCESSIBILITY OF STANDARDS TO ALL STUDENTS-

OTHER:

- Evaluation Form adapted from Instructional Materials Evaluation Toolkit (IMET).

The IMET was developed by Student Achievement Partners. Educators may use or adapt. http://creativecommons.org/licenses/by/3.0/ Download this tool at http://achievethecore.org/IMET

Assemble all of the materials necessary for the evaluation. It is essential for evaluators to have materials for all grades covered by the program, as some crit[illegible] cannot be rated without having access to each grade. In a[illegible]ion, each evaluator should have a reference copy of the Co[illegible]n Core State Standards for Mathematics (CCSSM) and the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).

Before conducting the evaluation itself, it is important to develop a protocol for the evaluation process. The protocol should include having evaluators study the Publishers' Criteria and the IMET. It will also be helpful for evaluators to get a sense of each program overall before beginning the process. At a minimum, this would include reading the front matter of the text, looking at the table of contents and paging through multiple chapters.

Sections 1-3 below should be completed to produce a comprehensive picture of the strengths and weaknesses of the materials under evaluation. Information about areas in need of improvement or supplementation should be shared with internal and external stakeholders.

Navigating the Tool

Begin with Section 1: Non-Negotiable Alignment Criteria

- The Non-Negotiable Alignment Criteria must each be met in full for materials to be considered aligned to the Shifts and the major features of the Common Core State Standards. Each Non-Negotiable Alignment Criterion has one or more metrics associated with it; every one of these metrics must be met in order for the criterion as a whole to be met.

- Examine the relevant materials and use evidence to rate the materials against each criterion and its associated metric(s).

- Record and explain the evidence upon which the rating is based.

Continue to Section 2: Alignment Criteria

- The Alignment Criteria must each be met for materials to be considered aligned to the Shifts and the major features of the Common Core State Standards. Each Alignment Criterion has one or more metric associated with it; a specific number of these metrics must be met or partially met in order for the criterion as a whole to be met.

- Examine the materials in relation to these criteria, assigning each metric a point value. Rate the criterion as "Meets" or "Does Not Meet" based on the number of points assigned. The more points the materials receive on the alignment Criteria, the better they are aligned.

- Record and explain the evidence upon which the rating is based.

Proceed to Section 4: Indicators of Quality

- Indicators of Quality are important considerations that will help evaluators better understand the overall quality of instructional materials. These considerations are not criteria for alignment to the CCSS, but they provide valuable information about additional program characteristics. Evaluators may want to add their own indicators to the examples provided.

Directions for Non-Negotiable 1 **Focus and Coherence**		
Criterion	**Evidence- Give specific examples.**	**Rating: (Reviewer only.)**

Non-Negotiable 1: Focus and Coherence- Materials must focus coherently on the Widely Applicable Prerequisites in a way that is consistent with the progressions in the Standards. Focus and coherence are the two major evidence-based design principles of the Common Core State Standards for Mathematics (CCSSM, p. 3). Focus is necessary in order to fulfill the ambitious promise the states have made to their students by adopting the Standards: greater achievement at the college and career-ready level; greater depth of understanding of mathematics; and a rich classroom environment in which reasoning, sense-making, applications, and a range of mathematical practices flourish. In high school courses, narrowing and deepening the curriculum creates a structure that ties topics together. Thus, materials must focus coherently on the Widely Applicable Prerequisites in a way that is consistent with the progressions in the Standards.	Focus and coherence are the two major evidence-based design principles of the Common Core State Standards for Mathematics (CCSSM, p. 3). Focus is necessary in order to fulfill the ambitious promise the states have made to their students by adopting the Standards: greater achievement at the college and career-ready level; greater depth of understanding of mathematics; and a rich classroom environment in which reasoning, sense-making, applications, and a range of mathematical practices flourish. In high school courses, narrowing and deepening the curriculum creates a structure that ties topics together. Thus, materials must focus coherently on the Widely Applicable Prerequisites in a way that is consistent with the progressions in the Standards. **Required Materials:** • Common Core State Standards for Mathematics (www.corestandards.org/wpcontent/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_HS_Spring_2013_FINAL1.pdf) • Widely Applicable Prerequisites for College and Careers (http://achievethecore.org/prerequisites) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion**: Non-Negotiable 1 is rated as Meets or Does Not Meet. To rate Non-Negotiable 1, first rate Metrics 1A–1H. Each of these eight metrics must be rated as Meets in order for Non-Negotiable 1 to be rated as Meets. Rate each metric 1A–1H as Meets or Does Not Meet/Insufficient Evidence. If the evidence examined shows that the Criterion is met, then mark the Criterion as Meets. If the evidence examined shows that the Criterion is not met—or if there is insufficient evidence to make a determination—then mark the Criterion as Does Not Meet/Insufficient Evidence. Support all ratings with evidence.

Metric NN1A:

In any s[illegible]e course, students spend at least 50% of their time on Widely Applicable Prerequisites.

How to Find the Evidence:

Familiarize yourself with the Widely Applicable Prerequisites. Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, lessons, homework assignments, and assessments. (Evaluate both student and teacher materials.)

Consider time spent on the Widely Applicable Prerequisites and judge qualitatively whether students and teachers using the materials as designed will devote the majority of time to the Widely Applicable Prerequisites

For context, read Criterion #1 in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).

Evidence-

The majority of the time is sp[illegible]pecifically on the widely acceptable prerequisites, however, there are some tha[illegible]not covered and will need to be supplemented by the classroom teacher. The following prerequisites are missing:

- F-LE-1c
- A-REI-10
- SIC-1
- A-SSE-4
- A-APR-5, 7

Please see the analysis below of the information provided by LEARNBOP through the roadmap for HS Number and Quantity as compared to the standards in the widely acceptable prerequisites.

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LearnBop RoadMap		CCSS	
Cluster	**Standards**	**Number & Quantity Standards**	**Widely Acceptable Prerequisite**
Quantities Part 1	Convert Units (HSN-Q.A.1-1)	1. Use units in a way to understand problems and to guide the solution of multi-step problems; choose and interpret the scale and the origin in graphs and data displays.	N-RN, Real Numbers: Both clusters in this domain contain widely applicable prerequisites. N-Q*, Quantities: Every standard in this domain is a widely applicable prerequisite. Note, this domain is especially important in the high school content standards overall as a widely applicable prerequisite.
	Interpret Graphs (HSN-Q.A.1-3)	1. Use units in a way to understand problems and to guide the solution of multi-step problems; choose and interpret the scale and the origin in graphs and data displays.	
The Real Number System	Define Exponents (HSN-RN.A.1)	1. Explain how the definition of the meaning of rational exponents follow from extending the properties of integer exponents to those values, allowing for a notation for radicals in terms of rational exponents.	
	Rewrite Expressions (HSN-RN.A.2)	2. Rewrite expressions involving radicals and rational exponents using the properties of exponents.	
	Explain Rationality of Computations (HSN-RN.B.3)	3. Explain why the sum or product of two rational numbers is rational; that the sum of a rational number and an irrational number is irrational; and that the product of a nonzero rational number and an irrational number is irrational.	
Quantities Part 2	Choose/Interpret Units (HSN-Q.A.1-2)	1. Use units in a way to understand problems and to guide the solution of multi-step problems; choose and interpret the scale and the origin in graphs and data displays. 2. Define appropriate quantities for the purpose of descriptive modeling.	
The Complex Number System	Express Complex Numbers (HSN-CN.A.1	1. Know there is a complex number i such that $i^2 = -1$ and every complex number has the form a + bi with a and b real.	
	Add/Subtract/Multiply Complex Numbers (HSN-CN.A.2)	2. Use the relation $i^2 = -1$ and the communicative, associative, and distributive properties to add, subtract, and multiply complex numbers.	
	Solve Quadratic Equations with Complex Solutions (HSN-CN.C.7)	7. Solve quadratic equations with real coefficients that have complex solutions.	

___ ___**Meets**

___x_**Does Not Meet**
Insufficient Evidence

Metric NN1B: **Student work in Geometry involves significant work with applications/modeling and problems that use algebra skills.** **How to Find the Evidence:** Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, lessons, homework assignments, and assessments. (Evaluate both student and teacher materials. NOTE: Since Geometry contains relatively fewer Widely Applicable Prerequisites, this Criterion is important to help foster students' college and career readiness. Problems that use algebra skills might include, for example, algebraic geometry problems in a coordinate setting, or problems of measurement involving unknown quantities.	**Evidence-** The program addresses cluster standards in Geometry in the HS-Geometry lessons. See below for number of concepts in each category: HS-Geometry Circles Congruence Expressing Geometric Properties with Equations Geometric Measurement and Dimension Modeling with Geometry Similarity, Right Triangles, & Trigonometry Examples of algebraic content included in the Geometry lessons are: Deriving circle equations, finding circle center and radius given by an equation, deriving parabola equations, etc.	**__x__Meets** **____Does Not Meet Insufficient Evidence**
Metric NN1C: **There are problems at a level of sophistication appropriate to high school (beyond mere review of middle school topics) that involve the application of knowledge and skills from grades 6-8.** **How to Find the Evidence:** Evaluate lessons, chapter/unit assessments, and homework assignments. NOTE: Problems should include application of the following topics from grades 6-8: • Ratios and proportional relationships. • Percentage and unit conversions, e.g., in the context of complex measurement problems involving quantities with derived or compound units (such as mg/mL, kg/ m3, acre-feet, etc.). • Basic function concepts, e.g., by interpreting the features of a graph in the context of an applied problem. • Concepts and skills of geometric measurement e.g., when analyzing a diagram or schematic. • Concepts and skills of basic statistics and probability (see grades 6–8.SP) • Performing rational number arithmetic fluently. For context, read Table 1 on Page 8 of the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** Standards are more complex and have built upon those from 6-8. Higher level math concepts within the categories are often neglected specifically if the standard has the (+) sign in the CCSS's. LearnBop does offer the following concepts in Statistics and Probability, which would be applicable for some students, also these are higher level concepts within **Functions:** -Interpreting functions -Trigonometry Functions -Linear, Quadratic, and Exponential Models **Statistics and probability:** -Using probability to make Decisions This program would be more appropriate for Algebra I, Geometry, and Algebra II (although some widely applicable prerequisites were missing and would need to be supplemented).	**_x___Meets** **____Does Not Meet Insufficient Evidence**

Metric NN1D: **Materials base courses on the content specified in the Standards.** **How to Find the Evidence:** Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, and lessons in both student and teacher materials. For context, read Criterion #3a in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** LearnBop presents materials in format of a BOP which is linked to a domain, cluster, and standard. Bops are fairly easy identify which standard they belong to as they are clearly identified. Some standards are broken down differently than the CCSS, but are relatively easy to match to the appropriate standard in the CCSS. Students are able to see domains and clusters using the roadmap option on the main menu of their screen. Teachers are able to individually assign content standards or individual standards for students to work on. Materials appear to be aligned closely, but do not cover all of the standards listed in CCSS but do cover the majority of the widely applicable prerequisites. LearnBop course content misses the following standards, according to the course content as provided in the teacher's log in: • F-LE-1c • A-REI-10 • SIC-1 • A-SSE-4 • A-APR-5, 7	**__x__Meets** **____Does Not Meet Insufficient Evidence**
Metric NN1E: **Materials give all students extensive work with course-level problems.** **How to Find the Evidence:** Evaluate both student and teacher materials. If the materials provide resources for differentiated learning, consider whether lower-performing students have opportunities to engage with course-level problems. Also consider whether higher-performing students are given opportunities to learn current course-level content in greater depth. For context, read Criterion #3b in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** As a component program, students would receive instruction through the main curriculum and use this program as a supplement to the primary instruction. Learnbop provides course-level problems in Algebra I, Geometry, and basic Algebra II. Teachers can assign intervention based on student performance on assessments and other course content. Learnbop automatically can assign interventions based on student performance on assessments. Learnbop provides a gradual increase of difficulty in questions embedded within the Bops and assessments. Students who need remediation are able to receive interventions as necessary. This provides differentiation for students at a variety of levels. This program would not be beneficial for students in special population (i.e. ELL, Sp.Ed., 504) who require accommodations with audio. Learnbop should not be used as the primary source of instruction.	**__x__Meets** **__ __Does Not Meet Insufficient Evidence**
Metric NN1F: **Materials relate course-level concepts explicitly to prior knowledge from earlier grades or courses. The materials are designed so that prior knowledge becomes reorganized and extended to accommodate the new knowledge.** **How to Find the Evidence:** Evaluate student and teacher materials, looking for problems that involve extending the knowledge learned in earlier grades and courses. NOTE: An example of evaluating this Criterion might be to look at whether materials connect the equation of a circle with the distance formula and the Pythagorean theorem. For context, read Criterion #3c in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** According to the program's content catalog, skills build upon one another as specified and required by the CCSS. Standards are clearly identified and are used to organize the content of the LearnBop program. For example in grade 8 students are required to provide linear equations (8.EE.C.7a) and then solve linear equations (8.EE.C.8b-1). In High School Algebra, students are required to create one variable linear equations/inequalities (HSA-CED.A.1-1). This provides a natural progression from solving to creating linear equations, and then continues to progress towards creating multi-variable linear equations.	**__x__Meets** **____Does Not Meet Insufficient Evidence**

Metric NN1G:

Material include learning objectives that are visibly shaped by CCSSM cluster and domain headings.

How to Find the Evidence:

Select several clusters from the course being evaluated.

Evaluate teacher and student materials in relation to these clusters.

For context, read Criterion #4a in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).

Evidence-

According to the table of co the content is broken down by grade level and then by concept (domain) bu not necessarily in order according to the CCSS. Obviously, the content can be organized and assigned in the order the teacher sees best fit. There seems to be a minor difference in the layout of the standards and content presented in the program. Not all of the standards in each conceptual categories are addressed with this program, specifically those standards marked with a (+) in the CCSS as necessary for higher level mathematics. Please see evidence (only a snapshot) taken from both the LEARNBOP Content Catalog and the CCSS for HS Algebra for comparison below:

Number of 'Bops'	LEARNBOP HS Algebra	CCSS HS Algebra
	HSA-APR.A Perform arithmetic operations on polynomials. (2)	**Perform arithmetic operations on polynomials**
24 Bops	Polynomial Computation Lin/Quad/Exp Students will be able to add, subtract, multiply polynomials (linear, quadratic, and exponential)	**1. Understand that polynomials form a system of analogous to the integers, namely, they are closed under operations of addition, subtraction, and multiplication; add, subtract, and multiply polynomials.**
16 Bops	Polynomial Computation Beyond Quadratic - Students will be able to add, subtract, and multiply polynomials (beyond quadratic)	
	HSA-APR.B Understand the relationship between zeros and factors of polynomials. (2)	**Understand the relationship between zeros and factors of polynomials**
5 Bops	Know/Apply the Remainder Theorem - students will be able to know and apply the Remainder Theorem	**2. Know and apply the remainder theorem: for a polynomial p(x) and a number a, the remainder on division by x-a is p(a) =0 if and only if (x-a) is a factor of p(x).**
15 Bops	Identify/Use Zeros of Polynomials - Students will identify zeros of polynomials when suitable factorizations are available, and use the zeros to construct a rough graph of the function defined by the polynomials	**3. Identify zeros of polynomials when suitable factorizations are available, and use the zeros to construct a rough graph of the function define by the polynomial.**
	HSA-APR.C Use polynomial identities to solve problems.	**Use polynomial identities to solve problems**
8 Bops	Use Polynomial Identities to Describe Numerical Relationships - students will be able to prove polynomial identities and use them to describe numerical relationships.	**4. Prove polynomial identities and use them to describe numerical relationships. For example, the polynomial identify $(x^2 + y^2)^2 = (x^2 - y^2)^2 + (2xy)^2$ can be used to generate Pythagorean triples.**
		5. (+) Know and apply the Binomial Theorem for the expansion of $(x + y)^n$ in powers of x and y for a positive integer n, where x and y are any numbers, with coefficients determined for example by Pascal's Triangle.

__x__Meets

____Does Not Meet Insufficient Evidence

Metric NN1H:

Materials include problems and activities that serve to connect two or more clusters in a domain, or two or more domains in a category, or two or more categories, in cases where these connections are natural and important.

How to Find the Evidence:

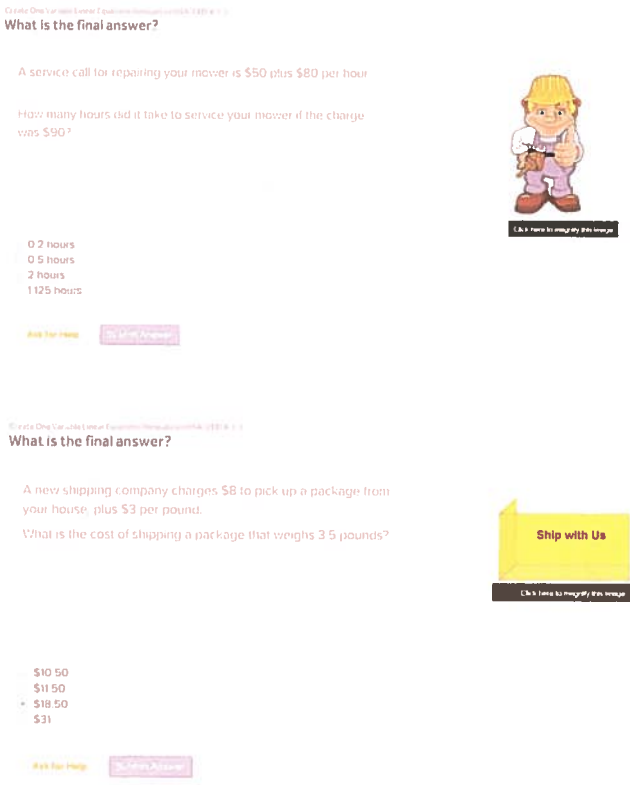
In the course being evaluated, choose two or more clusters, two or more domains, or two or more categories for which connections are natural and important.

Evaluate the units, chapters, and lessons that deal with the chosen topics, looking for problems and activities that serve to connect the chosen clusters or domains. NOTE: An example of evaluating this Criterion might be to look at whether materials include problems in which students analyze a situation by building a function, graphing it, and using it to create and solve an equation.

For context, read Criterion #4b in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).

Evidence-

In the problems examined with A-CED and A-REI.11 standards and clusters, LEARNBOP connected both clusters by requiring the student to be able to write equations and then solve them in the given questions. Please see evidence below:



In the event that a student misses a question, the program will walk the student through each step of the problem to work towards answering the question correctly. Students are able to see each cluster and standard being addressed in each of the steps of the problem solving. See evidence below:

__x__Meets

____Does Not Meet Insufficient Evidence

Non-Negotiable 1: Focus and Coherence- Materials must focus coherently on the Widely Applicable Prerequisites in a way that is consistent with the progressions in the Standards.

Metric NN 1: If all metrics 1A–1H were rated as Meets, then rate Non-Negotiable 1 as Meets. If one or more metrics were rated as Does Not Meet/Insufficient Evidence, then rate Non-Negotiable 1 as Does Not Meet. Check the final rating.
Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)**

Before moving to Alignment Criterion 1, record the final Meets or Does Not Meet rating in the Evaluation Summary.

____Meets

__x__Does Not Meet

Strengths/Weaknesses:

Strengths - Majority of time was spent working on widely applicable pre-requisites, problems were appropriate for high school algebra I, Geometry, and basic Algebra II, course content was based in the standards and have the ability to address multiple standards at once.

Weaknesses – Program does not meet all of the widely applicable pre-requisites (see NN1A), content is not accessible for ALL students, lacks ability to provide intrinsic accommodations for special populations (specifically students in Sp.Ed. or ELL), requires ALL students to be strong readers.

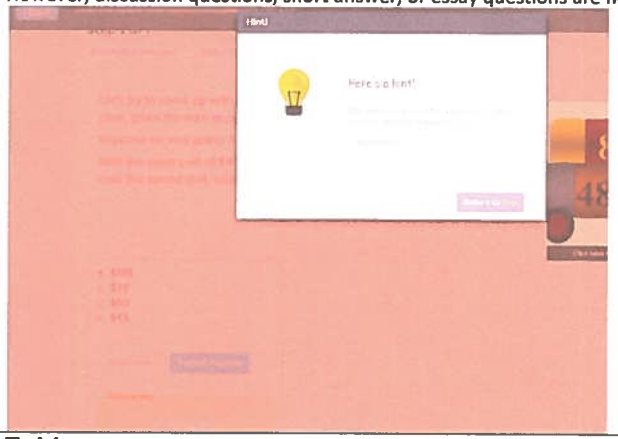
Now continue by evaluating Alignment Criterion 1 for Rigor and Balance.

Directions for Alignment Criterion 1

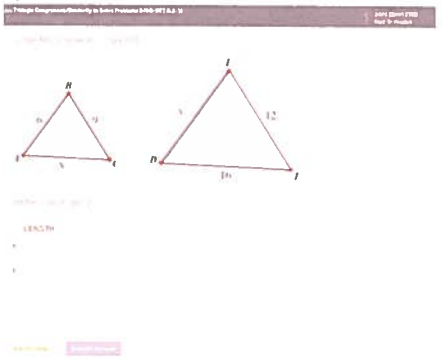
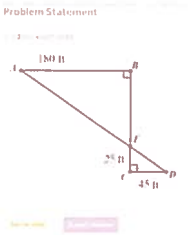
Rigor and Balance

Alignment Criterion 1: **Rigor and Balance- Materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.** The Standards set expectations for attention to all three aspects of rigor: conceptual understanding, procedural skill and fluency, and applications. Thus, materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.	The Standards set expectations for attention to all three aspects of rigor: conceptual understanding, procedural skill and fluency, and applications. Thus, materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations. • Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_HS_Spring_2013_FINAL1.pdf) • Widely Applicable Prerequisites for College and Careers (http://achievethecore.org/prerequisites) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion:** Alignment Criterion 1 is rated Meets or Does Not Meet. To rate Alignment Criterion 1, first rate metrics 1A, 1B, and 1C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). For each metric, guiding questions are provided to aid in gathering evidence. Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 1 if the materials rate 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as rigor and balance, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.
AC Metric 1A: **The materials support the development of students' conceptual understanding of key mathematical concepts, especially where called for in specific content Standards or cluster headings.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Widely Applicable Prerequisites that relate specifically to conceptual understanding to use throughout the questions associated with this metric. NOTE: Some examples of clusters or Standards that call for conceptual understanding include: N-RN.A.1, A-APR.B, A-REI.A.1, A-REI.D.10, A.REI.D.11, F.IF.A.1, F-LE.A.1, G.SRT.A.2, G-SRT.C.6, S-ID.C.7 For context, read Criterion #2a in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	• Choose a cluster/Standard from the Widely Applicable Prerequisites that is aligned to each aspect of rigor and use it to evaluate these metrics. It is most helpful if the same clusters and Standards are chosen for all of the programs being evaluated. (Guidance in choosing clusters/Standards is included in "How to Find the Evidence" below.)	**Use the questions for AC Metric 1A to evaluate Metric 1A. Record evidence for each question and rate Metric 1A.** **____Meets (2)** **__x__Partially Meets (1)** **____Does Not Meet (0)**

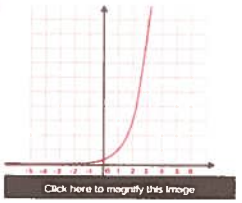
Is conceptual understanding attended to thoroughly where the Standards explicit expectations for understanding or interpreting? Evaluate lessons, chapter/unit assessments and homework assignments, paying attention to work aligned to Standards that explicitly call for understanding or interpreting.	**Evidence-** According to the Content Cata e program highlights a number of the conceptual standards in the high school programs. The course content is broken down by domain. The following is an example of **A.REI.1 Explain each step in solving a simple equation as follows from the equality of numbers asserted at the previous step, starting from the assumption that the original equation has a solution. Construct a viable argument to justify a solution method.** Justify each step in solving the following the equation $2x - 3 = \frac{1}{2}(x + 4)$ i. $4x - 6 = x + 4$ ii. $3x - 6 = 4$ iii. $3x = 10$ iv. $x = \frac{10}{3}$ Steps in Solving Equations i. (b); ii. (c); iii. (c); iv. (d) i. (a); ii. (b); iii. (c); iv. (d) i. (a); ii. (b); iii. (b); iv. (f) i. (d); ii. (b); iii. (b); iv. (f) When answered incorrectly, the program walks you through each step of the problem with assistance available (click hint). Words/phrases like justify, support, determine, analyze, which of the following is true, etc. are used in questions. If a student misses the question multiple times an instructional video appears (when available) to explain or provide similar examples and how to solve the problems.	

Do the materials feature high-quality conceptual problems and conceptual discussion questions? Evaluate lessons, chapter/unit assessments, and homework assignments. NOTE: Examples of conceptual problems might include such questions as "What is the maximum value of the function f(t) = 5 – t2 ?" or "Is √2 a polynomial? How about ½(x + √2)+ ½ (-x + √2)?"	**Evidence-** The program does provide numerous attempts for students to practice and learn with conceptual problems, however, it is lacking conceptual discussion questions. The majority of the questions are presented in multiple choice format, and learners have the ability to be given hints if they are unsure of the answer or steps to find the answer. According to the website advertising the program, the following question formats are available: fill-in-the-blank, drag-and-drop, multi-select, shading, true/false, graph plotting, and sorting. However, discussion questions, short answer, or essay questions are not present. 	
Do the materials feature opportunities to identify correspondences across mathematical representations? Evaluate lessons, chapter/unit assessments and homework assignments. NOTE: An example of evaluating this metric might include looking at whether materials support students in identifying correspondences among the expression that defines a function, the graph that shows the relationship, and the behavior of the phenomenon being modeled (if any).	**Evidence-** LearnBop does provides additional practice of understanding for students across mathematical representations, however the questions are not linked. Students are not able to connect multiple representations of concepts together, because one question appears at a time within the program. Below is an example of one question asking students to utilize a mathematical representation to find a solution. x y 1 -4 2 3 4 7 6 -1	

AC Metric 1B: **The materials are designed so that students attain the fluencies and procedural skills required by the Standards.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Widely Applicable Prerequisites that relate specifically to fluency and procedural skill to use throughout the questions associated with this metric. NOTE: Some examples of Standards that call for procedural skill and fluency include: A-SSE.A.1b, A-SSE.2, A-APR.A.1, A-APR.C.6, F-BF.B.3, G-GPE.B.4, G-GPE.B.5, G-GPE.B.7, G-CO.A.1, **G-SRT.B.5** For context, read Criterion #2b in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).		**Use the questions for AC Metric 1B to evaluate Metric 1B. Record evidence for each question and rate Metric 1B.** **__x__Meets (2)** **__ __Partially Meets (1)** **____Does Not Meet (0)**

Is progress toward fluency and procedural skill interwoven with the stude developing conceptual understanding of the skills in question? Evaluate lessons, chapter/unit assessments, daily routines, and homework assignments for evidence that the development of fluency and procedural skill is supported by conceptual understanding.	**Evidence-** Learnbop provides students w e ability to practice skills and develop conceptual fluency. Procedural skills are int woven with questions aimed at conceptual understanding. The following question addresses CCSS G-SRT.B.5., and demonstrates procedural skill interwoven with conceptual understanding: Question 2  Students are expected to have a general conceptual understanding of similarity in order to accurately set up a proportional relationship to solve for the unknown side length of the given triangle. Question 2  Due to the set up of LearnBop's program, students get lots of practice on skills and skill building. The program does not offer instructional videos on every topic, therefore there is not really an introduction to all skills being assessed. This is intended for supplemental use rather than curriculum to teach new skills and lead instruction.	

Are purely procedural problems and exercises present that include ca[illegible]n which opportunistic strategies are valuable and generic cases that require efficient and general procedures present? Evaluate lessons, chapter/unit assessments, daily routines, and homework assignments. NOTE: Problems in which opportunistic strategies are valuable might include such examples as solving x2 + 5 = 49 + 5 or (3x − 2)2 = 6x − 4. Generic cases that require efficient and general procedures might include such problems as solving c + 8 – c2 = 3(c – 1)2 − 5).	**Evidence-** Learnbop provides purely proc[illegible]l problems and exercises which can be seen in Bops which require students to solve one step and multi-step equations within the Algebra domain.	
AC Metric 1C: **The materials are designed so that teachers and students spend sufficient time working with engaging applications, without losing focus on the Widely Applicable Prerequisites.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Widely Applicable Prerequisites that relate specifically to application to use throughout the questions associated with this metric. NOTE: Some examples of clusters or Standards that call for application include: N-Q.A, A-SSE.B.3, **A-REI.D.11**, F-IF.B, F-IF.C.7, F-BF.A.1, G-SRT.C.8, S-ID.A.2, S-IC.A.1 For context, read Criterion #2c in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).		**Use the questions for AC Metric 1C to evaluate Metric 1C. Record evidence for each question and rate Metric 1C.** **_x___Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Are there single- and multi-step contextual problems, including non-routine problems, that develop the mathematics of the course, afford opportunities for practice, and engage students in problem solving? Do the problems attend thoroughly to those places in the content Standards where expectations for multi-step and real-world problems are explicit? Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** Learnbop provides the student access to single and multi-step problems, although they are presented in single screen format. Students are able to access a larger number of practice problem, since this program is set up to be used as a component curriculum. Word problems are present and include multiple steps.	

Do applicating problems particularly stress applying the Widely Applicabl requisites? Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** Application problems stress ap the widely applicable prerequisites. In evaluating A.REI.D.11, the problems stress pplying the widely applicable prerequisites. Questions pertaining to this bop, focused on approximating system solutions by graphing. This required students to utilize their knowledge from many of the standards included in the widely-applicable pre-requisites including but not limited to: REI-B-3, REI-C-5,6,7.	
Are there ample opportunities for students to engage with modeling problems? Do materials require students to use both individual parts of the modeling cycle as well as the full modeling cycle? Read the pages on High School—Modeling in the Standards for Mathematics (pp. 72 and 73). Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** Learnbop provides the opportunity for students to engage with modeling problems. In this particular standard within the widely acceptable prerequisites, students are expected to be able to connect the graph with the appropriate equation. Graph Multi-Variable Equations (Exp) HSA.CED.A.2 2a-Exp What is the final answer? Which of the following equations represents the graph if **the scale for the y-axis is 3**? A. $y = 3^x$ B. $y = 3x + 1$ C. $y = \frac{1}{3} \cdot 3^x$ D. $y = x^3$  Click here to magnify this image A B C D Ask for Help Submit Answer	

Alignment Criterion 1: Materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations. AC 1: Materials must earn at least 5 of 6 points to meet this Alignment Criterion. If materials earn less than 5 points, the Criterion has not been met. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)** **Before moving to Alignment Criterion 2, record the final Meets or Does Not Meet rating in the Evaluation Summary.**		**__x __Meets (5/6)** **__ __Does Not Meet** **Strengths/Weaknesses:** **Strengths** - Program provides single and multi-step conceptual problems, the widely applicable prerequisites are stressed with application problems, program provides students with ample opportunities to engage with modeling problems. **Weaknesses** - Due to nature of this program, students are required to answer questions in a variety of formats that does not include conceptual discussion questions.
Alignment Criterion 2: **Standards for Mathematical Practice- Materials must demonstrate authentic connections between content Standards and practice Standards.** The Standards require that designers of instructional materials connect the mathematical practices to mathematical content in instruction. Thus, materials must demonstrate authentic connections between content Standards and practice Standards.	The Standards require that designers of instructional materials connect the mathematical practices to mathematical content in instruction. Thus, materials must demonstrate authentic connections between content Standards and practice Standards. **Required Materials**: • Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_HS_Spring_2013_FINAL1.pdf) • Widely Applicable Prerequisites for College and Careers (http://achievethecore.org/prerequisites) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion:** Alignment Criterion 2 is rated as Meets or Does Not Meet. To rate Alignment Criterion 2, first rate metrics 2A, 2B, and 2C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). For each metric, guiding questions are provided to aid in gathering evidence. Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 2 if the materials rate 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as mathematical practices, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.

AC Metric 2A: **Materials address the practice Standards in such a way as to enrich the Widely Applicable Prerequisites; practices strengthen the focus of the course instead of detracting from it, in both teacher and student materials.** **How to Find the Evidence:** Familiarize yourself with the Widely Applicable Prerequisites. Evaluate teacher and student materials for evidence that the mathematical practices support and connect to the focus of the course. NOTE: An example of evaluating this Criterion might include looking at whether materials use regularity in repeated reasoning to illuminate formal algebra as well as functions, particularly recursive definitions of functions. For context, read Criterion #6 in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** MP1 - Learnbop is set up in a [illegible]hat students are required to persevere in problem solving. Students are guided th[illegible]gh BOPS and practice problems. When students answer incorrectly, they are guided step by step through the problem and provided ample opportunities for understanding and problem solving. MP2 - Students are expected to be able to reason abstractly and quantitatively. MP3 - Students are expected to answer questions correctly and meet the requirements of the mastery threshhold, however, students are to work independently. Therefore they are unable to really delve into this practice standard. MP4 - Modeling is available in particular questions throughout the program. Students are required to utilize the tools provided within each question, which is often a visual representation that they must interpret in order to solve the problem accurately. MP5 - Students are provided with the tools required to solve each individual question. Graphs, charts, tables, and other visual representations are given to the student with the question they may pertain to. Students are not required to think strategically of the tools that they should use, because the tool is provided for them as it is embedded in each question's screen. MP6 - Accuracy of the solutions does require an awareness and precision. Questions that require students to input answers using numbers, letter, equations, or formulas require students to be precise. For example, an answer was 30.27, but the only answer approved by the system was 30.3 - precision in rounding was necessary in order for the student to answer the question correctly and be able to count that Bop for mastery. MP7- Students are expected to look for and make use of structure. LearnBop provides students with the ability to practice skills with repetition of similar questions. MP8-With the repetitive nature of the Bops and questions, students are able to look for repeated reasoning.	**____Meets (2)** **__x__Partially Meets (1)** **____Does Not Meet (0)**
AC Metric 2B: **Materials attend to the full meaning of each practice Standard.** **How to Find the Evidence:** For context, read Criterion #7 in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).		**Use the questions for AC Metric 2B to evaluate Metric 2B. Record evidence for each question and rate Metric 2B.** **____Meets (2)** **__x__Partially Meets (1)** **____Does Not Meet (0)**
Over the course of any given year of instruction, is each mathematical practice Standard meaningfully present in the form of assignments, activities, or problems that stimulate students to develop the habits of mind described in the practice Standard? Evaluate lessons, chapter/ unit assessments, and homework assignments for evidence of each mathematical practice being meaningfully present in instruction.	**Evidence-** Although the majority of mathematical practice standards are addressed utilizing this program, not all of the standards are presented. Students are not given the opportunity to critique the reasoning of others since it is primarily an independent program. Students also are given the tools they need to complete each bop and questions, they are not required to use appropriate tool strategically since they are embedded within the question. Mathematical practices are not identified clearly for teachers, nor are they used consistently throughout the program.	

Are teacher-directed materials that explain the role of the practice Standards in the classroom and in students' mathematical development included? Are alignments to practice Standards accurate? Evaluate teacher materials, paying attention to explanations of the role of the practice Standards in the classroom and in students' mathematical development. Evaluate documents aligning lessons to practice Standards for accuracy. NOTE: Examples to look for when evaluating this metric might include the following: a highly scaffolded problem should not be aligned to MP.1; or a problem that directs a student to use a calculator should not be aligned to MP.5; or a problem about merely extending a pattern should not be aligned to MP.8.	**Evidence-** Teacher log in's do provide access to the course content as well as the ability to assign content, assessments, and interventions. The course content does align with the core standards, and LearnBop has made the alignment very visible to students and teachers. Practice standards were not clearly identified, however, it was evident that some of them were being addressed throughout the program.	
AC Metric 2C: **Materials support the Standards' emphasis on mathematical reasoning.** **How to Find the Evidence:** For context, read Criterion #8 in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).		**Use the questions for AC Metric 2C to evaluate Metric 2C. Record evidence for each question and rate Metric 2C.** **____Meets (2)** **____Partially Meets (1)** **__x__Does Not Meet (0)**
Do the materials support students in constructing viable arguments and critiquing the arguments of others concerning course-level mathematics that is detailed in the content Standards? Read Standard for Mathematical Practice 3. Evaluate teacher and student materials to ensure that students are given opportunities to reason with grade-level mathematics.	**Evidence-** Learnbop is set up as an individual student program. It is constructed to be done independently, therefore students are not given the opportunity to critique the arguments of others.	
Do the materials support students in producing not only answers and solutions, but also, in a course-appropriate way, arguments, explanations, diagrams, mathematical models, etc., especially in the Widely Applicable Prerequisites? Familiarize yourself with the Widely Applicable Prerequisites. Evaluate teacher and student materials to understand the types of work students are expected to produce.	**Evidence-** Students are expected to complete questions by producing answers and solutions, which are presented in a variety of formats. Formats include but are not limited to: multiple choice, true/false, select all that apply, graphing, and matching. These do include some mathematical modeling through the use of graphs, charts, and diagrams. Students are not required to give arguments or explanations to defend or explain their mathematical reasoning.	

Do materials explicitly attend to the specialized language of mathematics, the language of argument, problem solving, and mathematical explanations taught rather than assumed? Evaluate teacher and student materials, paying attention to how mathematical language is taught. NOTE: An example of evaluating this Criterion might include looking at whether students are supported in: basing arguments on definitions; using the method of providing a counter example; or recognizing that examples alone do not establish a general statement.	**Evidence-** Since this is a supplemental program, the language is not taught but expected (at least for the majority) to be known. There are instructional videos which support learning, however do not necessarily teach new concepts or mathematical terminology.	
Alignment Criterion 2: Materials must demonstrate authentic connections between content Standards and practice Standards. **AC 2:** Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 points, the Criterion has not been met. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewers only.)** **Before moving to Alignment Criterion 3, record the final Meets or Does Not Meet rating in the Evaluation Summary.**		**____Meets** **__x__Does Not Meet (2/6)** **Strengths/Weaknesses:** **Strengths** – A majority of the mathematical practice standards are being presented. **Weaknesses** - Not all of the math practice standards are being covered, Students are not given the opportunity to critique other students work due to the independent nature of this program, students are expected to produce answers and solutions because this is not necessarily an interactive program where the student is engaging with peers or a teacher, program is intended for students to have a good grasp on the skills being covered - new language/concept is not being taught

Alignment Criterion 3: **Access the Standards for All Students- Materials must provide supports for English Language Learners and other special populations.** Because Standards are for all students, alignment requires thoughtful support to ensure all students are able to meet the Standards. Thus, aligned materials must provide supports for English Language Learners and other special populations.	Because Standards are for all students, alignment requires thoughtful support to ensure all students are able to meet the Standards. Thus, aligned materials must provide supports for English Language Learners and other special populations. **Required Materials:** • Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math Publishers_Criteria_HS_Spring_2013_FINAL1.pdf) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion:** Alignment Criterion 3 is rated Meets or Does Not Meet. To rate Alignment Criterion 3, first rate metrics 3A, 3B, and 3C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 3 if the materials rate 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as support for special population, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.
AC Metric 3A: **Support for English Language Learners and other special populations is thoughtful and helps those students meet the same Standards as all other students. The language in which problems are posed is carefully considered.** **How to Find the Evidence:** Evaluate teacher and student materials, paying attention to supports offered for special populations.	**Evidence-** Interventions are available at all grade levels. The program provides visual representations of mathematics when appropriate, and the tools necessary to solve the problems are embedded in the question screen. Visuals are grade level appropriate and can be useful in solving the problems. Instructional videos are available for some of the standards and questions; however, not all contain instructional videos. Instructional videos contain audio and visual. Bops do not contain an audio component; therefore students are required to have strong reading skills. Therefore special populations (i.e. ELL and Special Education) who require audio accommodations to fulfill federally mandated modifications/accommodations would not be able to access this curriculum without a human reader. There are no teacher materials regarding supports for diverse learners.	**____Meets (2)** **_x___Partially Meets (1)** **____Does Not Meet (0)**

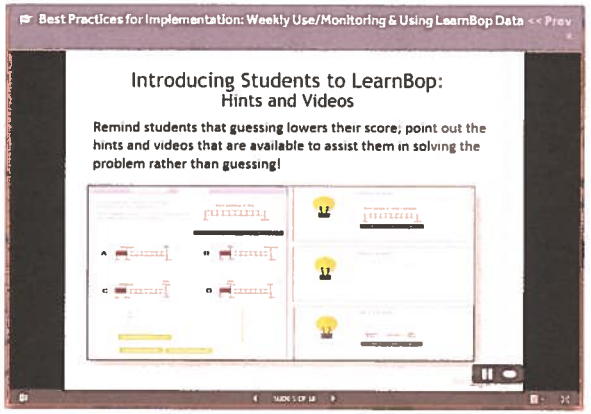
AC Metric 3B:

Materials provide appropriate level and type of scaffolding, differentiation, intervention, and support for a broad range of learners with gradual removal of supports, when needed, to allow students to demonstrate their mathematical understanding independently.

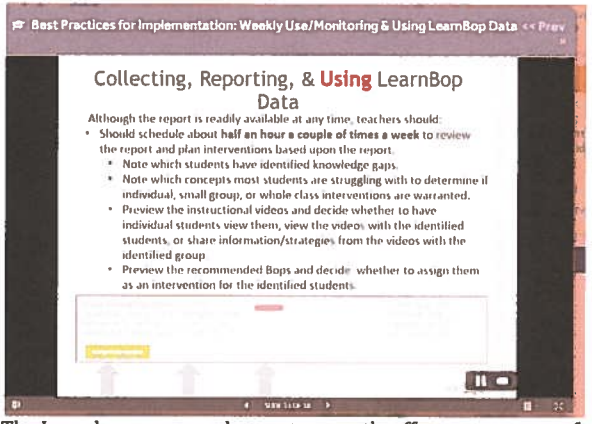
How to Find the Evidence:

Evaluate teacher and student materials, paying attention to whether materials provide differentiation that will lead all learners to engage with on-grade-level content.

Evidence- Interventions are available for students who are not making adequate progress. Teachers can utilize the intervention tab within the dashboard to identify students who are having difficulty and have gaps that need remediation. Students are able to access optional hints and instructional videos to provide support for content they are not as comfortable with - this is optional and is dependent upon student initiation. LearnBop does contain instructional videos, however, they are not present for every standard.



Interventions can be assigned by the classroom teachers after careful analysis of the data. The program automatically identifies missing prerequisites, so it will recommend interventions - but they must be assigned by the teacher. Interventions are recommended when a student has made at least 3 attempts on the concept and has not shown improvement or the student has not mastered the concept by the assigned due date.



The Learnbop program does not currently offer any resources for non-English speaking students other than what is available for all students. The instructional videos do offer audio, however, there is not an overall audio component, which could impact students in special education who may utilize this program.

Students in TAG programs could benefit from the individualized nature of the program.

____Meets (2)

__x__Partially Meets (1)

____Does Not Meet (0)

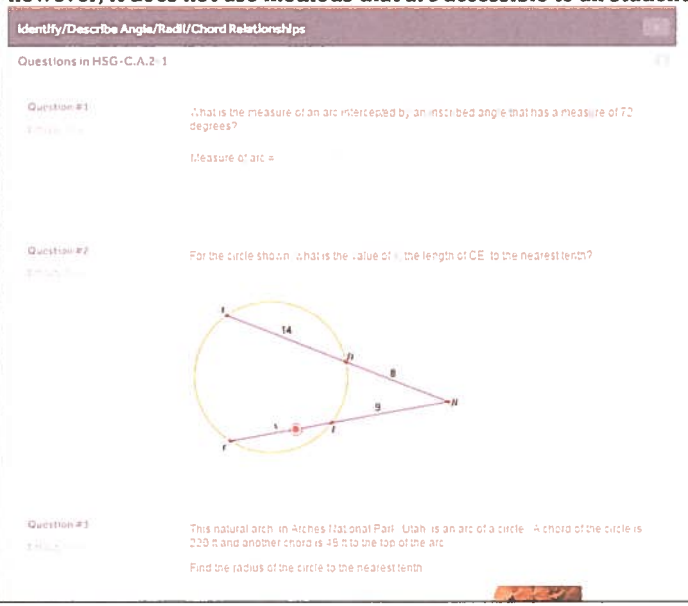
AC Metric 3C: **Design lessons recommends and facilitates a mix of instructional approaches for a variety of learners such as using multiple representations (e.g., including models, using a range of questions, checking for understanding, flexible grouping, pair-share).** **How to Find the Evidence:** Evaluate teacher materials, noting instructional approaches suggested for whole class and differentiated lessons and activities.	**Evidence-** The program provides instructional videos and bops in question answer formats. This does not facilitate a variety of instructional approaches for a variety of learners.	**____Meets (2)** **____Partially Meets (1)** **_x___Does Not Meet (0)**
Alignment Criterion 3: Materials must provide supports for English Language Learners and other special populations. AC 3 Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 points, the Criterion has not been met. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewers only.)** **Move to the Evaluation Summary and record the final Meets or Does Not Meet rating .**		**____Meets** **_x___Does Not Meet (2/6)** **Strengths/Weaknesses:** Strengths: Interventions are available as assigned by the teacher or automatically assigned by the program when deficits are apparent through the assessments and Bops. Instructional videos are available for certain standards and provide instructional support for remediation. Independent nature of the program provides highly motivated students access to individualized curriculum. Classrooms can be set up to have entire class assignments or provide students with more individualized assignments to meet their individual needs. Weaknesses: Program does not provide a variety of instructional approaches for a variety of learners. LearnBop provides minimal audio components to accommodate special populations with reading deficits.

Once an evaluation for alignment to the Shifts and major features of the CCSS has been conducted using Sections 1-3, it's important to evaluate for overall quality and best practices. A starting list of Indicators of Quality are suggested below. States, districts and others evaluating instructional materials are encouraged to add

to this list to ensure materials reflect local contexts. For background information on some of the Indicators of Quality in this section, refer to pp.16–18 in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).

Indicators of Quality	Evidence- Give specific examples.	Rating: (Reviewer only.)
1. Lessons are thoughtfully structured and support the teacher in leading the class through the learning paths at hand, with active participation by all students in their own learning and in the learning of their classmates.	**Evidence-** Lessons are structured based on the organization of the CCSS unless a teacher assigns them differently. Students work independently through the coursework as the teacher assigns, which gives the teacher a snapshot of student understanding and could be used as a formative assessment tool. Students can be actively involved in their own learning as the program requires independent student work. Teachers could assign BOPS to groups to assess learning, but students would be required to complete the BOP under one, individual student's log in. It would be the teacher's responsibility to incorporate LearnBop into group work, as the intention of Learnbop is to be primarily independent. Therefore, students would not naturally be participating actively in the learning of their classmates.	(Reviewer only.) _____ Yes ___ ___ No ?
2. The underlying design of the materials includes both problems and exercises. (In solving problems, students learn new mathematics, whereas in working exercises, students apply what they have already learned to build mastery.) Each problem or exercise has a purpose. **NOTE: This Criterion does not require that the problems and exercises be labeled as such.**	**Evidence-**The majority of the questions are exercises where students are practicing what they have already learned in order to build mastery. As the focus is supplemental, students should be taught the content using the primary source of curriculum, and this should be used to reinforce the learning.	(Reviewer only.) _____ Yes __x____ No
3. Design of assignments is not haphazard: exercises are given in intentional sequences in order to strengthen students' mathematical understanding.	**Evidence-** Assignments and exercises can follow the CCSS in an order appropriate for the grade and content, unless the teacher assigns them differently. Within the content catalog, some of the clusters are rearranged, but are still presented within the content. Again, teachers can assign the materials as they see best fit for the student's needs and abilities.	(Reviewer only.) __x____ Yes _____ No

4. There are separate teacher materials that support and reward teacher study including, but not limited to: discussion of the mathematics of the units and the mathematical point of each lesson as it relates to the organizing concepts of the unit, discussion on student ways of thinking and anticipating a variety of students responses, guidance on lesson flow, guidance on questions that prompt students thinking, and discussion of desired mathematical behaviors being elicited among students.	**Evidence-** Teachers are given log ins which provide access to the online program which gives access to classes, content catalogs, the ability to assign interventions, course content, bops for particular standards, help screens and reports. LearnBop does not provide a teacher's guide for instruction. The website is user-friendly, however it not intended to be used as the main form of instruction, but merely as a component. LearnBop provides an implementation guide, which provides resources for teachers in the areas of: the basics, class management, implementation best practices. The program does not provide specific guidance on lesson flow, guidance on questions that prompt students thinking, and discussion of desired mathematical behaviors being elicited among students.	(Reviewer only.) _____ Yes __x____ No
5. Manipulatives suggested in the materials are faithful representations of the mathematical objects they represent and are connected to written methods.	**Evidence-** No manipulatives are suggested in this program that are not provided in electronic format with the question that it pertains to. All graphs, charts, and diagrams are embedded in the program.	(Reviewer only.) ___x___ Yes _____ No
6. Materials include a variety of curriculum-embedded assessments. Examples include pre-, formative, summative, and self-assessment resources.	**Evidence-** There are pre-assessments available but only for the younger grades. Custom assessments can be created for high school content. Teachers can customize the threshold at which assignments based off of the assessments are created, for example - the default threshold of 80% means students with a score of less than 80% on a concept will be given an assignment to help them learn it. According to the evaluation done by the publisher, LearnBop has the capability of "assigning Comprehensive Assessments that were created by a team of Math education experts, these assessments will allow you to assess your students based on your grade level," however in the sample log in provided, we were unable to locate these pre-made assessments. Formative assessments are included within the BOPS, if a student misses the question multiple times, it requires them to break down the question into multiple steps. Learnbop provides hints and the ability to watch the instructional video provided to reteach the concept or content. There are not self-assessment resources available in this program.	(Reviewer only.) __x____ Yes _____ No
7. Assessments contain aligned rubrics, answer keys, and scoring guidelines that provide sufficient guidance for interpreting student performance.	**Evidence-** Assessments can be created by the teacher to incorporate clusters and standards as he/she may feel would be best suited for the class and content they were studying. Answer keys and scoring guidelines for the assessments were unable to be located within the program. Assessments are scored automatically by the system. Teachers are able to see individual students' progress and how successful they were on each assignment, bop, and assessment, and assign interventions as necessary.	(Reviewer only.) ___x___ Yes _____ No

8. Materials assess student proficiency using methods that are accessible and unbiased, including the use of course-level language in student prompts.	**Evidence-** There are assessments included in the program. Below are the questions from the assessment for standard Questions in HSG-C.A.2-1. The assessment gives a variety of questions from various difficulty levels (this assessment contains 3 questions one from each difficulty level: easy, medium, hard). Language is easy to understand and mathematically focused. This may pose some difficulty to students who are ELL or Sp.ed. who have difficulty reading, since there is not an audio component. The LearnBop program does assess student proficiency, however, it does not use methods that are accessible to all students. 	**(Reviewer only.)** _____ **Yes** ___x___ **No**
9. Materials are carefully evaluated by qualified individuals, whose names are listed, in an effort to ensure freedom from mathematical errors and course-level appropriateness.	**Evidence-** None are listed. Customer support is available via email through the Learn Bop program for both teacher and student. The evaluation completed by the publisher lists a qualified individual who oversees assignments of authors and grade level content, however, we could not locate this within the program or website.	**(Reviewer only.)** _____ **Yes** __x____ **No**
10. The visual design supports students in engaging thoughtfully with the subject. Navigation through the text is clear.	**Evidence-** Graphics are included and some may be a bit elementary for High School students. Navigation through the program is easy and user-friendly. Questions that involve graphics have them available and are able to enlarge if needed.	**(Reviewer only.)** ___x___ **Yes** _____ **No**

Reviewer IMET Evaluation Summary **Title/Level:** LearnBOP/Fuel Education Grades 9-12

Publisher: LearnBop **Copyright:** NA **ISBN:** NA

Reviewer ID # ___JT_____ **Date Review Completed:** ___2016_____

Non-Negotiable Criteria-The Non-Negotiable must be met in order for the Non-Negotiable Alignment Criteria to be met overall.		
Non- Negotiable 1: Focus and Coherence _____ **Meets** __x___ **Does Not Meet**		
Non-Negotiable Overall: _____ **Meets** __x___ **Does Not Meet**		
Alignment Criteria- Each Alignment Criterion must be met with a sufficient number of points in order for Alignment Criteria to be labeled as "Meets" overall. The more points the materials receive on the Alignment Criteria, the better they are aligned.		
Alignment Criterion 1: Rigor and Balance **Points: __5___ of 6 possible.** **(Materials must receive at least 5 of 6 points to align.)** _____ **Meets** ___x____ **Does Not Meet**	**Alignment Criterion 2: Standards of Mathematical Practice** **Points: __2___ of 6 possible.** **(Materials must receive at least 5 of 6 points to align.)** _____ **Meets** ___x____ **Does Not Meet**	**Alignment Criterion 3: Access to Standards for All Learners** **Points: ___2__ of 6 possible.** **(Materials must receive at least 5 of 6 points to align.)** _____ **Meets** ___x____ **Does Not Meet**
Alignment Criteria Overall: _____ **Meets** ___x__ **Does Not Meet**		

If the materials meet the Non-Negotiable Criterion and each Alignment Criterion, they are aligned to the Shifts and major features of the Co Standards. **Do the materials meet every Non-Negoti e and Alignment Criterion? _____ Yes __x___ N**

What are the specific areas of strength and weakness based on this evaluation? Publishers or others modifying or developing assessments can use this information to make improvements and/or to remedy gaps in the alignment of assessment materials.

Strengths – Majority of time was spent working on widely applicable pre-requisites, problems were appropriate for high school algebra I, Geometry, and basic Algebra II, course content was based in the standards and have the ability to address multiple standards at once. A majority of the mathematical practice standards are being presented. Interventions are available as assigned by the teacher or automatically assigned by the program when deficits are apparent through the assessments and Bops. Instructional videos are available for certain standards and provide instructional support for remediation. Independent nature of the program provides highly motivated students access to individualized curriculum. Classrooms can be set up to have entire class assignments or provide students with more individualized assignments to meet their individual needs.

Weaknesses – Program does not meet all of the widely applicable pre-requisites (see NN1A), content is not accessible for ALL students, lacks ability to provide intrinsic accommodations for special populations (specifically students in Sp.Ed. or ELL), requires ALL students to be strong readers. Not all of the math practice standards are being covered, Students are not given the opportunity to critique other students work due to the independent nature of this program, students are expected to produce answers and solutions because this is not necessarily an interactive program where the student is engaging with peers or a teacher, program is intended for students to have a good grasp on the skills being covered - new language/concept is not being taught. Program does not provide a variety of instructional approaches for a variety of learners. LearnBop provides minimal audio components to accommodate special populations with reading deficits.

2015-16 Mathematics Interim Review Recommendation & Summary

Publisher Name:	The Math Learning Center
Title:	Bridges in Math - Kindergarten
ISBN #	978-1-60262-508-2
Grade Level(s) or Course:	Kindergarten
Reviewer ID:	~~KJ~~ RO

RECOMMENDED AS:

_____**Core Mathematics Program-** a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials. Substantial evidence clearly supports the designation of this program as Core.

_____**Other Mathematics Program-** a program that substantially, but partially, meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for supplemental materials. Substantial evidence clearly supports the designation of this program as Other.

__X__**Component Mathematics Program-** a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs. Substantial evidence clearly supports the designation of this program as Component.

_____**Intervention Program-** a program designed and intended to target and support students' specific needs. Substantial evidence clearly supports the designation of this program as Intervention.

__X__ **Does not meet criteria** for recommendation as a Curricular Material or Online Resource for Mathematics.

EVIDENCE SUMMARY:

FOCUS-

Assessment of Standards above the major work of kindergarten.

COHERENCE-

No cluster headings on lessons.

RIGOR-

Curriculum provided a rigorous expectation of students

CONCEPTUAL UNDERSTANDING-

Curriculum provides a variety of conceptual processes for students

MATHEMATICAL PRACTICES-

Does not provide consistent authentic connections between standards and practices.

ACCESSIBILITY OF STANDARDS TO ALL STUDENTS-

There is not ELL and special population support on ALL lessons in ALL units. They are lacking and difficult to find.

OTHER:

2015-16 Interim Mathematics Review

Mathematics Evaluation Tool Grades K-8

Publisher: The Math Learning Center

Title of Material: Bridges in Mathematics 2nd Ed. Kindergarten

Author: Matassa, Rubini, Robert, and Ruttle

ISBN #: 978-1-60262-508-2 **Copyright** 2016

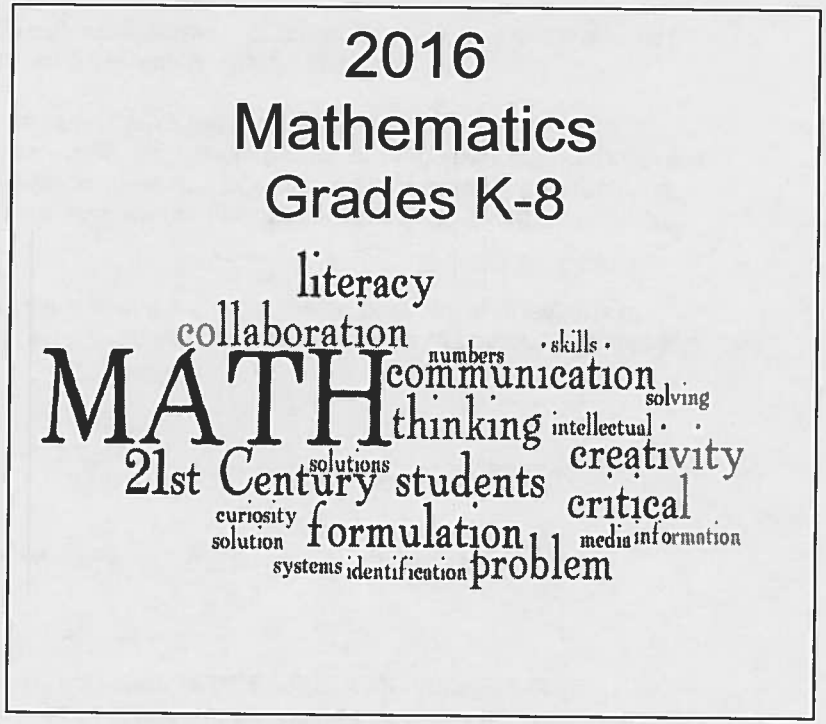
Reviewer ID: KS

Core Mathematics Program- a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Core.

Other Mathematics Program- a program that substantially, but partially, meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Other.

Component Mathematics Program- a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs.
Substantial evidence clearly supports the designation of this program as Component.

Intervention Program- a program designed and intended to target and support students' specific needs.
Substantial evidence clearly supports the designation of this program as Intervention.



- Evaluation Form adapted from Instructional Materials Evaluation Toolkit (IMET).

The IMET was developed by Student Achievement Partners. Educators may use or adapt. http://creativecommons.org/licenses/by/3.0/ Download this tool at http://achievethecore.org/IMET

Instructional Materials Evaluation Tool

Mathematics, Grades K-8

What Are the Purposes of the IMET?

This Math IMET is designed to help educators determine whether instructional materials are aligned to the Shifts and major features of the Common Core State Standards (CCSS). The substantial instructional Shifts (http://www.corestandards.org/other-resources/key-shifts-inmathematics/) at the heart of the Common Core State Standards are:

- **Focus** strongly where the Standards focus
- **Coherence**: Think across grades and link to major topics within the grade
- **Rigor**: In major topics, pursue conceptual understanding, procedural skill and fluency, and application with equal intensity.

The IMET draws directly from the following documents:

- Common Core State Standards for Mathematics (www.corestandards.org/Math)
- Publishers' Criteria for the Common Core State Standards in Mathematics grade K-8 (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)

When to use the IMET

1. Purchasing materials: Many factors go into local purchasing decisions. Alignment to the Standards is a critical factor to consider. This tool is designed to evaluate alignment of instructional materials to the Shifts and the major features of the CCSS. It also provides suggestions of additional indicators to consider in the materials evaluation and purchasing process.

2. Evaluating materials currently in use: The IMET can be used to analyze the degree of alignment of existing materials and help to highlight specific, concrete flaws in alignment. Even where materials and tools currently in use fail to meet one or more of these criteria, the pattern of failure is likely to be informative. States and districts can use the evaluation to create a thoughtful plan to modify or combine existing resources in such a way that students' actual learning experiences approach the focus, coherence, and rigor of the Standards.

3. Developing programs: Those developing new programs can use this tool as guidance for creating aligned curricula.
Please note this tool was designed for evaluating comprehensive curricula (including any supplemental or ancillary materials), but it was not designed for the evaluation of standalone supplemental materials.

Who Uses the IMET?

Evaluating instructional materials requires both subject-matter and pedagogical expertise. Evaluators should be well versed in the Standards (www.corestandards.org/Math) for all grades in which materials are being evaluated. This includes understanding the Major Work of the grade (www.achievethecore/focus), the Supporting and Additional work, how the content fits into the progressions in the Standards (www.achievethecore.org/progressions), and the expectations of the Standards with respect to conceptual understanding, procedural skill and fluency, and application. Evaluators also should be familiar with the substantial instructional Shifts (http:// www.corestandards.org/other-resources/key-shifts-in-mathematics/) of Focus, Coherence and Rigor that are listed above.

Getting Started

Prior to Evaluation

Assemble all of the materials necessary for the evaluation. It is essential for evaluators to have materials for all grades covered by the program, as some criteria cannot be rated without having access to each grade. In addition, each evaluator should have a reference copy of the Common Core State Standards for Mathematics (CCSSM) and the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013).

Instructional Materials Evaluation Tool
Mathematics, Grades K-8

What Are the Purposes of the IMET?
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- Common Core State Standards for Mathematics (www.corestandards.org/Math)
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Getting Started
Prior to Evaluation

Assemble all of the materials necessary for the evaluation. It is essential for evaluators to have materials for all grades covered by the program, as some criteria cannot be rated without having access to each grade. In addition, each evaluator should have a reference copy of the Common Core State Standards for Mathematics (CCSSM) and the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013).

Before conducting the evaluation itself, it is important to develop a protocol for the evaluation process. The protocol should include having evaluators study the Publishers' Criteria and the IMET. It will also be helpful for evaluators to get a sense of each program overall before beginning the process. At a minimum, this would include reading the front matter of the text, looking at the table of contents and paging through multiple chapters.

Sections 1-3 below should be completed to produce a comprehensive picture of the strengths and weaknesses of the materials under evaluation. Information about areas in need of improvement or supplementation should be shared with internal and external stakeholders.

Navigating the Tool

Begin with Section 1: Non-Negotiable Alignment Criteria

- The Non-Negotiable Alignment Criteria must each be met in full for materials to be considered aligned to the Shifts and the major features of the Common Core State Standards. Each Non-Negotiable Alignment Criterion has one or more metrics associated with it; every one of these metrics must be met in order for the criterion as a whole to be met.

- Examine the relevant materials and use evidence to rate the materials against each criterion and its associated metric(s).

- Record and explain the evidence upon which the rating is based.

Continue to Section 2: Alignment Criteria

- The Alignment Criteria must each be met for materials to be considered aligned to the Shifts and the major features of the Common Core State Standards. Each Alignment Criterion has one or more metric associated with it; a specific number of these metrics must be met or partially met in order for the criterion as a whole to be met.

- Examine the materials in relation to these criteria, assigning each metric a point value. Rate the criterion as "Meets" or "Does Note Meet" based on the number of points assigned. The more points the materials receive on the alignment Criteria, the better they are aligned.

- Record and explain the evidence upon which the rating is based.

Proceed to Section 4: Indicators of Quality

- Indicators of Quality are important considerations that will help evaluators better understand the overall quality of instructional materials. These considerations are not criteria for alignment to the CCSS, but they provide valuable information about additional program characteristics. Evaluators may want to add their own indicators to the examples provided.

Directions for Non-Negotiable 1

Freedom from Obstacles to Focus

Criterion	Evidence- Give specific examples.	Rating: (Reviewer only.)
Non-Negotiable 1: **Freedom from Obstacles to Focus** **Materials must reflect the content architecture of the Standards by not assessing the topics named before the grade level where they first appear in the Standards.** The Standards foster students' progress to algebra by focusing strongly on arithmetic. Consistent with this focus, certain topics from outside of arithmetic appear only in later grades. Thus, to be aligned, materials must reflect the content architecture of the Standards by not assessing the topics named before the grade level where they first appear in the Standards. In this criterion, "topics named" means the topics that are explicitly named in Metric 1A. No other topics should be added to the list in Metric 1A. (Note that other topics in the standards are addressed in criterion NN2.)	**Required Materials** • Common Core State Standards for Mathematics (www.corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf) • From the materials being evaluated: teacher guides and all assessment components	**Rating this Criterion:** Non-Negotiable 1 is rated as Meets or Does Not Meet. To rate Non-Negotiable 1, begin by rating Metric 1A. Since Metric 1A is the only metric for Non-Negotiable 1, the rating for Non-Negotiable 1 is the same as the rating for Metric 1A. If Metric 1A is rated as Does Not Meet, include evidence of when the named topic(s) is/are assessed. If the metric is rated as Meets, list the grade(s) examined in the evaluation.

Metric NN1A: **Materials reflect the basic architecture of the Standards by not assessing the listed topics before the grade level indicated.** • Probability, including chance, likely outcomes, probability models. (Introduced in the CCSSM in grade 7) • Statistical distributions, including center, variation, clumping, outliers, mean, median, mode, range, quartiles; and statistical association or trends, including two-way tables, bivariate measurement data, scatter plots, trend line, line of best fit, correlation. (Introduced in the CCSSM in grade 6) • Similarity, congruence, or geometric transformations. (Introduced in the CCSSM in grade 8) • Symmetry of shapes, including line/ reflection symmetry, rotational symmetry. (Introduced in the CCSSM in grade 4) **How to Find the Evidence:** Evaluate the table of contents, all chapter tests, all unit tests, and other such assessment components (including rubrics). For context, read Criterion #2 from the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013). NOTE: Grade alignments of other topics are addressed in Non-Negotiable 2, Focus and Coherence.) In this criterion, "topics named" means the topics that are explicitly named in Metric 1A. No other topics should be added to the list in Metric 1A. (Note that other topics in the standards are addressed in criterion NN2.)	**Evidence-** Curriculum does not assess the listed topics before grade level. HOWEVER: ***Curriculum assesses patterning in Unit 1 Work Places 1A; Assessment guide page 5. Curriculum states it "supports standard K.OA;" however this is outside the standards and inaccurate.	**(Reviewer only.)** **_X__Meets** **____Does Not Meet**
Non-Negotiable 1: Materials must reflect the content architecture of the Standards by not assessing the topics named* before the grade level where they first appear in the Standards. **NN 1** If Metric 1A was rated as Meets, then rate Non-Negotiable 1 as Meets. If Metric 1A was rated as Does Not Meet, then rate Non- Negotiable 1 as Does Not Meet. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion.**(Reviewer only.)** **Before moving to Non-Negotiable 2, record the final Meets or Does Not Meet rating in the Evaluation Summary.**		**(Reviewer only.)** **_X__Meets** **____Does Not Meet** **Strengths/Weaknesses:**

Directions for Non-Negotiable 2

Focus and Coherence

Non-Negotiable 2: **Focus and Coherence** **Materials must focus coherently on the Major Work of the grade in a way that is consistent with the progressions in the Standards.** Focus and coherence are the two major evidence-based design principles of the Common Core State Standards for Mathematics (CCSSM, p. 3). Focus is necessary in order to fulfill the ambitious promise the states have made to their students by adopting the Standards: greater achievement at the college and career ready level; greater depth of understanding of mathematics; and a rich classroom environment in which reasoning, sense-making, applications, and a range of mathematical practices flourish. In simpler terms, a mile-wide, inch-deep curriculum translates to less time per topic. Less time means less depth and moving on without many students. Thus, materials must focus coherently on the Major Work of the grade in a way that is consistent with the progressions in the Standards.	**Required Materials** • Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf) • Focus by Grade Level for the grade being evaluated (www.achievethecore.org/focus) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion:** Non-Negotiable 2 is rated as Meets or Does Not Meet. To rate Non-Negotiable 2, first rate metrics 2A–2H. Each of these eight metrics must be rated as Meets in order for Non-Negotiable 2 to be rated as Meets. Rate each metric 2A-2H as Meets or Does Not Meet/Insufficient Evidence. If the evidence examined shows that the Criterion is met, then mark the Criterion Meets. If the evidence examined shows that the Criterion is not met—or if there is insufficient evidence to make a determination—then mark the Criterion as Does Not Meet/Insufficient Evidence. Support all ratings with evidence.
Metric NN2A: **In each grade K–8, students and teachers using the materials as designed devote the large majority of time to the Major Work of the grade.** **How to Find the Evidence:** Familiarize yourself with the Major Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, lessons, homework assignments, and assessments. (Evaluate both student and teacher materials.) Consider time spent on the Major Work of the grade and judge qualitatively whether students and teachers using the materials as designed will devote the large majority of time to the Major Work of the grade. For context, read Criterion #1 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013)	Most of the curriculum has lessons related to the major works of Kindergarten. The rest of the lessons focus on supporting standards. Some Sessions under Skills & Concepts list skills as "supporting" a standard although the standard is not the focus. Example: • Unit 1 Module 4 Session 1, Skills & Concepts: Describe, copy, extend, and create simple repetitive patterns with up to 3 elements (ABAB, AABAAB, ABCABC, ABBCABBC and so on) (supports 1.OA)	**(Reviewer only.)** **_X__Meets** **____Does Not Meet/** **Insufficient Evidence**

Metric NN2B: **Supporting W[illegible]x, where present, enhances focus and coherence simultaneously by also engaging students in the Major Work of the grade.** **How to Find the Evidence:** Familiarize yourself with the Major Work and Supporting Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate chapters and lessons that focus on Supporting Work. NOTE: Example of evaluating this Criterion might include looking at whether materials for K–5 generally treat data displays as an occasion for solving grade-level word problems using the four operations (e.g., see 3.MD.B.3); or whether materials for grade 7 take advantage of opportunities to use probability to support ratios, proportions, and percentages. For context, read Criterion #3 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Materials have Sessi[illegible]where the focus is a combination of Supporting Work and Major Work of the grade simultaneously. Examples: • Unit 8 Module 2 Session 1: Frog Jump Measuring (Major Work: K.CC.1, K.CC.6) (Supporting Work: K.MD.2)	**(Reviewer only.)** **_X__Meets** **____Does Not Meet/ Insufficient Evidence**
Metric NN2C: **Materials base content progressions on the grade-by-grade progressions in the Standards. Content from previous or future grades does not unduly interfere with or displace on-grade-level content.** **How to Find the Evidence:** Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, and lessons in both student and teacher materials. NOTE: In some cases it may be possible that aligned materials might address some aspects of a topic in a strategic way before or after the grade level in which the topic is central in the Standards' progressions; for example, a curriculum author might purposefully choose to explore adding fractions with unlike denominators in a way appropriate to grade four, recognizing that this work is not really required until the next grade. However, any such purposeful discrepancies in content progressions should enhance the required learning in each grade; not unduly interfere with or displace grade-level content; and be clearly aimed at helping students meet the Standards as written rather than effectively rewriting the progressions in the Standards. And in all cases, note that Non-Negotiable 1 must be met for materials to be aligned. For context, read Criterion #5a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	Curriculum provides a Skills Across the Grade Levels page at the start of every unit. It lists the Major Skills/Concepts taught in the Unit for Kindergarten and the supporting standards from Kindergarten and the continued Standards in Grade 1. It is hard to read as it is, and it would be nice if each standard progression was shown across the grades instead of just listed.	**(Reviewer only.)** **_X__Meets** **____Does Not Meet/ Insufficient Evidence**

Metric NN2D: **Materials give students extensive work with on-grade-level problems.** **How to Find the Evidence:** Evaluate both student and teacher materials. If the materials provide resources for differentiated learning, consider whether lower-performing students have opportunities to engage with grade-level problems. Also consider whether higher-performing students are given opportunities to learn current grade-level content in greater depth. For context, read Criterion #5b in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	Materials provide work with problems that are on-grade-level. Differentiated Learning provided on most lessons for challenge students, ELL students, and students who need support. However, support is not provided for ALL learners on ALL lessons. A Differentiation chart can be found in the overview for every Unit detailing what support is offered for each Module and Session. **Number Corner MUST be implemented to meet NN2D.	**(Reviewer only.)** **_X__Meets** **____Does Not Meet/** **Insufficient Evidence**
Metric NN2E: **Materials relate on-grade-level concepts explicitly to prior knowledge from earlier grades.** **How to Find the Evidence:** Evaluate both student and teacher materials. NOTE: Examples of evaluating this Criterion might include looking at the way the materials extend basic ideas of place value across the decimal point; or the role that properties of operations play when the materials extend arithmetic beyond whole numbers to fractions, variables, and expressions. More generally, cluster headings in the Standards sometimes signal key moments where reorganizing and extending previous knowledge is important in order to accommodate new knowledge (e.g., see cluster headings that use the phrase "Apply and extend previous understanding"). For context, read Criterion #5c in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	Curriculum provides a Skills Across the Grade Levels page at the start of every unit. It lists the Major Skills/Concepts taught in the Unit for Kindergarten and the supporting standards from Kindergarten and the continued Standards in Grade 1. It is hard to read as it is, and it would be nice if each standard progression was shown across the grades instead of just listed. **Evidence-**	**(Reviewer only.)** **_X__Meets** **____Does Not Meet/** **Insufficient Evidence**
Metric NN2F: **Review of material from previous grades is clearly identified as such to the teacher, and teacher and students can see what their specific responsibility is for the current year.** **How to Find the Evidence:** Evaluate the table of contents, but do not stop there; also evaluate units, chapters, lessons, homework assignments and assessments. (Evaluate both student and teacher materials.) Identify any content from previous grades and check whether it is identified as such. For context, read Criterion #5a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	Each Session lists the Skills & Concepts for the Session.	**(Reviewer only.)** **_X__Meets** **____Does Not Meet/** **Insufficient Evidence**

Metric NN2G: **Materials include learning objectives that are visibly shaped by CCSSM cluster headings.** **How to Find the Evidence:** Select several clusters from the Major Work in the grade being evaluated. Evaluate teacher and student materials in relation to these clusters. For context, read Criterion #6a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	Learning objectives are not clearly stated within the Curriculum. A table of contents is outlined on the first page of the overview for each Unit. It outlines the main idea for each Module and lists the title of each Session. CCSSM cluster headings are not identified or listed in correlation to each Unit Module and Session. Each Session has a Summary that provides an overview of the lesson, but specific, direct, visible learning objectives are not stated.	**(Reviewer only.)** **_X_ Meets** **_ __Does Not Meet/ Insufficient Evidence**
Metric NN2H: **Materials include problems and activities that serve to connect two or more clusters in a domain, or two or more domains in a grade, in cases where these connections are natural and important.** **How to Find the Evidence:** In the grade being evaluated, choose two or more clusters or two or more domains for which connections are natural and important. Evaluate the units, chapters, and lessons that deal with the chosen topics, looking for problems and activities that serve to connect the chosen clusters or domains. NOTE: An example of evaluating this Criterion might include looking at whether problems in grade 4 sometimes or often involve students applying their developing computation skills (detailed in domain NBT) in the context of solving word problems (detailed in domain OA). For context, read Criterion #6b in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	Materials adequately connect two or more clusters in a domain or two or more domains in Grade One.	**(Reviewer only.)** **_X__Meets** **____Does Not Meet/ Insufficient Evidence**
Non-Negotiable 2: **Focus and Coherence** **Materials must focus coherently on the Major Work of the grade in a way that is consistent with the progressions in the Standards.** NN 2 If all Metrics 2A – 2H were rated as Meets, then rate Non-Negotiable 2 as Meets. If one or more Metric was rated Does Not Meet/Insufficient Evidence, then rate Non-Negotiable 2 as Does Not Meet. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)** **Before moving to Alignment Criterion 1, record the final Meets or Does Not Meet rating in the Evaluation Summary.**		**(Reviewer only.)** **X Meets** **__ Does Not Meet** **Strengths/Weaknesses:**

Now continue by evaluating the Alignment Criterion 1 for Rigor and Balance.

Directions for Alignment Criterion 1

Rigor and Balance

Alignment Criterion 1: Rigor and Balance

Materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.

The Standards set expectations for attention to all three aspects of rigor: conceptual understanding, procedural skill and fluency, and applications. Thus, materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.

Required Materials

- Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf)
- Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)
- Focus by Grade Level for the grade being evaluated (achievethecore.org/focus)
- Situation Types for the Operations in Word Problems (achievethecore.org/situation-types)
- From the materials being evaluated: teacher guides, student texts and workbooks

Rating this Criterion:

Alignment Criterion 1 is rated as Meets or Does Not Meet.

To rate Alignment Criterion 1, first rate metrics 1A, 1B, and 1C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). For each metric, guiding questions are provided to aid in gathering evidence.

Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 1 if the materials rate 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as rigor and balance, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.

Metric AC1A:

The materials support the development of students' conceptual understanding of key mathematical concepts, especially where called for in specific content Standards or cluster headings.

How to Find the Evidence:

Select one or more cluster(s) or Standard(s) from the Major Work for the grade being evaluated that relate specifically conceptual understanding to use throughout the questions associated with this metric. NOTE: Some examples of clusters or Standards that call for conceptual understanding include: K.OA.A.1, (1.NBT.B, 1.NBT.C), (2.NBT.A, 2.NBT.B), (3.OA.A.1, 3.OA.A.2), 4.NF.A, (4.NBT.A, 4.NBT.B), 5.NF.B, (5.NBT.A, 5.NBT.B), 6.RP.A, 6.EE.A.3, 7.NS.A, 7.EE.A, 8.EE.B, 8.F.A, 8.G.A

Clusters or Standards grouped by parentheses are closely connected and could be analyzed together.

For context, read Criterion #4a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).

-Choose a cluster/Standard from the Major Work that is aligned to each aspect of rigor and use it to evaluate these metrics. It is most helpful if the same clusters/Standards are chosen for all of the programs being evaluated. (Guidance in choosing clusters/Standards is included in "How to Find the Evidence".)

Use the questions for AC Metric 1A to evaluate Metric 1A. Record evidence for each question and rate Metric 1A.

____Meets (2)

_X__Partially Meets (1)

____Does Not Meet (0)

Is conceptual understanding attended to thoroughly where the Standards set ex expectations for understanding or interpreting? Evaluate lessons, chapter/unit assessments and homework assignments, paying attention to work aligned to Standards that explicitly call for understanding or interpreting. NOTE: Examples of evaluating this Criterion might include looking at how well the multi-digit addition and subtraction algorithms are developed and explained on the basis of place value and properties of operations; or how well the multi-digit multiplication and division algorithms are developed and explained on the basis of place value and properties of operations; or how well solving equations is presented and explained as a process of reasoning.	**Evidence-** Cluster headings were evident within the Modules and Sessions.	
Do the materials feature high-quality conceptual problems and conceptual discussion questions? Evaluate lessons, chapter/unit assessments, and homework assignments. NOTE: Example of conceptual problems might include such questions as "Find a number greater than 1/5 and less than 1/4," or "If the divisor does not change and the dividend increases, what happens to the quotient?"	**Evidence-** Curriculum provides high-quality conceptual problems and discussion questions.	
Do the materials feature opportunities to identify correspondences across mathematical representations? Evaluate lessons, chapter/unit assessments and homework assignments. NOTE: Examples of evaluating this Criterion might include looking at whether students are supported in identifying correspondences among: the verbal description of a situation, the diagrams that distill its mathematical features, and the equations that model it; or equivalent forms of numbers (e.g., 3 and 6/2) and the number line; or rational number operations and representations of them via models such as the vector model; or the expression that defines a function and the graph that shows the relationship.	**Evidence-** Curriculum provides many opportunities to identify correspondences across mathematical representations.	
Metric AC1B: **The materials are designed so that students attain the fluencies and procedural skills required by the Standards.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Major Work for the grade being evaluated that relate specifically to fluency and procedural skill to use throughout the questions associated with this metric. NOTE: Some examples of Standards that call for procedural skill and fluency include: K.OA.A.5, 1.OA.C.6, 2.OA.B.2, 2.NBT.B.5, 3.OA.C.7, 3.NBT.A.2, 4.NBT.B.4, 5.NBT.B.5, 6.NS.B.2, and 6.NS.B.3, 6.EE.A, 7.NS.A, 7.EE.A.1,7.EE.B.4a, 8.EE.C.7, 8.EE.C.8b For context, read Criterion #4b in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).		**Use the questions for Metric 1B to evaluate Metric 1 B. Record evidence for each question and rate Metric 1B.** **(Reviewer only.)** **_X__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**

Is progress toward fluency and procedural skill interwoven with students' develo conceptual understanding of the operations in question? Evaluate lessons, chapter/unit assessments, daily routines, and homework assignments for evidence that the development of fluency and procedural skill is supported by conceptual understanding.	**Evidence-** Procedural skills and fl cy skills are combined throughout the curriculum.	
Are purely procedural problems and exercises present that include cases in which opportunistic strategies are valuable and generic cases that require efficient algorithms present? Evaluate lessons, chapter/unit assessments, daily routines, and homework assignments. NOTE: Examples of problems in which opportunistic strategies are valuable might include the sum 698 + 240 or the system x + y = 1, 2x + 2y = 3. Examples of generic cases that require efficient algorithms might include the sum 8767+2286 or the system 6y + x = x + 3, – x = 1 + 2y.	**Evidence-** A variety of problems can be found throughout the Bridges Curriculum and Number Corner. Strategies with tools can be found throughout the curriculum as well as some practice exercises.	
Do the materials in grades K–6 provide repeated practice toward attainment of fluency Standards? Evaluate lessons, daily routines, and homework assignments for evidence of repeated practice toward attainment of the following K–6 Standards that set an explicit expectation of fluent (accurate and reasonably fast) computation: K.OA.A.5, 1.OA.C.6, 2.OA.B.2, 2.NBT.B.5, 3.OA.C.7, 3.NBT.A.2, 4.NBT.B.4, 5.NBT.B.5, 6.NS.B.2, 6.NS.B.3.	**Evidence-** Multiple strategies are provided for students to work with addition and subtraction fluency through 5. Although many strategies are taught to the students, there are not as many opportunities for the students to practice the strategies with pencil and paper.	
Metric AC1C: **The materials are designed so that teachers and students spend sufficient time working with engaging applications, without losing focus on the Major Work of each grade.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Major Work for the grade being evaluated that relate specifically application to use throughout the questions associated with this metric. NOTE: Some examples of clusters or Standards that call for application include: K.OA.A.2, 1.OA.A, 2.OA.A, 3.OA.A.3, 3.OA.D.8, 4.OA.A.3, 4.NF.B.3d, 4.NF.B.4c, 5.NF.B.6, 5.NF.B.7c, 6.RP.A.3, 6.NS.A.1, 6.EE.B.7, 6.EE.C.9, 7.RP.A, 7.NS.A.3, 7.EE.B.3, 8.EE.C.8c, 8.F.B For context, read Criterion #4c in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Curriculum works sufficiently with the major work of Kindergarten.	**Use the questions for Metric 1C to evaluate Metric 1C. Record evidence for each question and rate Metric 1C.** **(Reviewer only.)** **_X__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Are there are single- and multi-step contextual problems, including non-routine problems, that develop the mathematics of the grade, afford opportunities for practice, and engage students in problem solving? Do the problems attend thoroughly to those places in the content Standards where expectations for multi-step and real-world problems are explicit? Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** There are single and multi-step problems throughout the curriculum.	

Do application problems particularly stress applying the Major Work of the grade? Evaluate lessons, chapter/unit assessments, and homework assignments. NOTE: Examples of evaluating this Criterion might include looking at: how well, by the end of grade 2, students using the materials as designed can represent and solve a full range of one-step addition and subtraction word problems; or how well, by the end of grade 3, students using the materials as designed can represent and solve a full range of one-step multiplication and division word problems; or how well these basic situation types for each operation are carried coherently across the grades, (e.g., with fractions and algebraic expressions); or, in all grades, whether the problems connect concepts, Standards, and domains in ways that are natural and important. For a list of situation types for one-step addition, subtraction, multiplication, and division problems, see Situation Types for the Operations in Word Problems	**Evidence-** Curriculum works with application of the standards.	
Does modeling build slowly across K–8, with applications that are relatively simple in earlier grades and when students are encountering new content? In grades 6–8, do the problems begin to provide opportunities for students to make their own assumptions or simplifications in order to model a situation mathematically? Read Standard for Mathematical Practice 4, Model with Mathematics. Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** Modeling builds through the Kindergarten curriculum.	

Alignment Criterion 1: Rigor and Balance

Materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.

AC1 Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 out of 6 points, the Criterion has not been met. Check the final rating.
Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)**

Before moving to Alignment Criterion 2, record the final Meets or Does Not Meet rating in the Evaluation Summary.

(Reviewer only.)

_X__Meets

____Does Not Meet

Strengths/Weaknesses:

Cluster headings are not evident. Written practice should be more evident.

Directions for Alignment Criterion 2

Standards for Mathematical Practice

Alignment Criterion 2: Standards for Mathematical Practice

Materials must demonstrate authentic connections between content Standards and practice Standards.

The Standards require that designers of instructional materials connect the mathematical practices to mathematical content in instruction. Thus, materials must demonstrate authentic connections between content Standards and practice Standards.

Required Materials:

- Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf)
- Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)
- Focus by Grade Level for the grade being evaluated (www.achievethecore.org/focus)
- From the materials being evaluated: teacher guides, student texts and workbooks

Rating this Criterion

Alignment Criterion 2 is rated as Meets or Does Not Meet.

To rate Alignment Criterion 2, first rate metrics 2A, 2B, and 2C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). For each metric, guiding questions are provided to aid in gathering evidence.

Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 2 if the materials earn 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as mathematical practices, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.

Metric AC2A:

Materials address the practice Standards in such a way as to enrich the Major Work of the grade; practices strengthen the focus on Major Work instead of detracting from it, in both teacher and student materials.

How to Find the Evidence:

Familiarize yourself with the Major Work of the grade being evaluated (see the Focus by Grade Level documents.)

Evaluate teacher and student materials for evidence that the mathematical practices support and connect to the focus of the grade.

NOTE: Examples of evaluating this Criterion might include looking at whether, in grades K–5, students using the materials are supported to look for and express regularity in repeated reasoning about the addition table, the multiplication table, the properties of operations, the relationship between addition and subtraction or multiplication and division, and the place value system; or whether, in grades 6–8, students using the materials are supported to look for and express regularity in repeated reasoning about proportional relationships and linear functions.

For context, read Criterion #8 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013).

Evidence-

The Assessment guide provides a section on Assessing the Math Practices (Assessment Guide, Assessment Overview pages 15-22). This resource provides examples o how the Mathematical Practices may be applies by students and what the teacher can look for.

There is no further mention of the Mathematical Practices within the overviews of each Unit or Module. Practices are listed under the Skills and Concepts of each Session, but they are explicitly mentioned/taught within every Session to help guide the teacher.

(Reviewer only.)

____Meets (2)

_X__Partially Meets (1)

____Does Not Meet (0)

Metric AC2B: **Materials att[illegible] to the full meaning of each practice Standard.** **How to Find the Evidence:** For context, read Criterion #7 and Criterion #9 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).		**Use the questions for Metric 2B to evaluate Metric 2B. Record evidence for each que[illegible] and rate Metric 2B.** **(Reviewer only.)** **____Meets (2)** **_X__Partially Meets (1)** **____Does Not Meet (0)**
Over the course of any given year of instruction, is each mathematical practice Standard meaningfully present in the form of assignments, activities, or problems that stimulate students to develop the habits of mind described in the practice Standard? Evaluate lessons, chapter/ unit assessments, and homework assignments for evidence of each mathematical practice being meaningfully present in instruction.	**Evidence-** A detailed plan of how the mathematical practices are met throughout the curriculum is not provided. There is evidence of assessment of the practice standards in the Assessment Guide, but how they are meaningfully taught throughout the curriculum is difficult to determine.	
Do the materials treat the practice Standards as developing across grades or grade bands? Are the practice Standards in early grades appropriately simple? Do they display an arc of growing sophistication across the grades?	**Evidence-** No evidence is shown within the curriculum providing evidence of how the practice standards develop across grades within the curriculum. Each Session has mathematical practices listed on the Skills & Concepts part of the overview, but not every Session has a Math Practices in Action listed in the margin with teacher focus ideas.	
Are there teacher-directed materials that explain the role of the practice Standards in the classroom and in students' mathematical development? Are alignments to practice Standards accurate?	**Evidence-** Mathematical Practices are only located in the Assessment Guide for teachers to review. The Assessment Guide provides a section on Assessing the Math Practices (Assessment Guide, Assessment Overview pages 17-24). This resource provides examples of how the Mathematical Practices may be applied by students and what the teacher can look for. This does not provide an in depth explanation of how the practices should be developed within each Unit. Mathematical Practices may be listed on the Skills & Concepts of the Session overview, but are not always identified specifically within the lesson.	
Metric AC2C: **Materials support the Standards' emphasis on mathematical reasoning.** **How to Find the Evidence:** For context, read Criterion #10 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).		**Use the questions for Metric 2C to evaluate Metric 2C. Record evidence for each question and rate Metric 2C.** **(Reviewer only.)** **____Meets (2)**

Do the materials support students in constructing viable arguments and critiquing the arguments of others concerning grade-level mathematics that is detailed in the content Standards? Read Standard for Mathematical Practice 3. Evaluate teacher and student materials to ensure that students are given opportunities to reason with grade-level mathematics.	**Evidence-** Curriculum lists Mathematical Practice 3 as part of the Skill & Concepts, does not always provide the evidence or really ensure students are provided with opportunities to reason with grade level mathematics.	**_X__Partially Meets (1)** **____Does Not Meet (0)**
Do the materials support students in producing not only answers and solutions, but also, in a grade-appropriate way, arguments, explanations, diagrams, mathematical models, etc., especially in the Major Work of the grade? Familiarize yourself with the Major Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate teacher and student materials, to understand the types of work students are expected to produce.	**Evidence-** Curriculum supports students in producing grade-appropriate ways to work with a problem to find viable solutions. Diagrams, models, and explanations are used throughout the entire curriculum.	
Do materials explicitly attend to the specialized language of mathematics? Is the language of argument, problem solving, and mathematical explanations taught rather than assumed? Evaluate teacher and student materials, paying attention to how mathematical language is taught. NOTE: Examples of evaluating this Criterion might include looking at whether students are supported in: basing arguments on definitions; using the method of providing a counterexample; or recognizing that examples alone do not establish a general statement.	**Evidence-** Math Vocabulary is provided on the first page of the Session if there is new vocabulary for the students to learn. A definition is not provided within the lesson, but a reference to the Word Resource Cards is made. These did not come with the materials received, but can be found to print online. Mathematical Practices (if there are any within the Session) can be found in the margin of the Session.	

Alignment Criterion 2:
Standards for Mathematical Practice

Materials must demonstrate authentic connections between content Standards and practice Standards.

AC2 Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 out of 6 points, the Criterion has not been met. Check the final rating.
Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion.
(Reviewer only.)

Before moving to Alignment Criterion 3, record the final Meets or Does Not Meet rating in the Evaluation Summary.

(Reviewer only.)

____Meets

_X__Does Not Meet

Strengths/Weaknesses:

Mathematical Practices are not consistent across units and modules and sessions.

Alignment Criterion 3: **Access to the Standards for All Students** **Materials must provide supports for English Language Learners and other special populations.** Because Standards are for all students, alignment requires thoughtful support to ensure all students are able to meet the Standards. Thus, aligned materials must provide supports for English Language Learners and other special populations.	**Required Materials:** • Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion:** Alignment Criterion 3 is rated as Meets or Does Not Meet. To rate Alignment Criterion 3, first rate metrics 3A, 3B, and 3C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 3 if the materials earn 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as support for special population, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.
Metric AC3A: **Support for English Language Learners and other special populations is thoughtful and helps those students meet the same Standards as all other students. The language in which problems are posed is carefully considered.** **How to Find the Evidence:** Evaluate teacher and student materials, paying attention to supports offered for special populations.	**Evidence-** Materials do not provide an overview of intervention or differentiations for any student population within the Teachers Guide. Any intervention or differentiation strategies must be looked for within the Unit Module Sessions and not every Session has intervention or differentiation support.	**Reviewer only.)** **____Meets (2)** **____Partially Meets (1)** **_X__Does Not Meet (0)**
Metric AC3B: **Materials provide appropriate level and type of scaffolding, differentiation, intervention, and support for a broad range of learners with gradual removal of supports, when needed, to allow students to demonstrate their mathematical understanding independently.** **How to Find the Evidence:** Evaluate teacher and student materials, paying attention to whether materials provide differentiation that will lead all learners to engage with on-grade-level content.	**Evidence-** Materials do not provide an overview of intervention or differentiations for any student population within the Teachers Guide. Any intervention or differentiation strategies must be looked for within the Unit Module Sessions and not every Session has intervention or differentiation support. Some information on differentiation and intervention can be found in the Assessment Guide on pages27-32; but this is just a generic overview. In the Bridges Unit Assessment, support and intervention can be found at the start of the Assessments for each Unit, it is not specific to Modules or Sessions however. There is a note on the top of page 3 of the Bridges Unit Assessments stating that the Bridges Intervention volumes include re-teaching and practice activities and games. This would need to be purchased to provide more comprehensive intervention and differentiation strategies/support.	**Reviewer only.)** **____Meets (2)** **_X__Partially Meets (1)** **____Does Not Meet (0)**

Metric AC3C: **Design of lessons recommends and facilitates a mix of instructional approaches for a variety of learners such as using multiple representations (e.g., including models, using a range of questions, checking for understanding, flexible grouping, pair-share).** **How to Find the Evidence:** Evaluate teacher materials, noting instructional approaches suggested for whole class and differentiated lessons and activities.	**Evidence-** Teacher directed activities for Sessions called Problems & Investigations. These activities provide a teacher directed lesson and then move to Work Place activities. Work Places provides opportunities for students to work with partners/small group; it's hard to determine how long the Work Places stay the same, when they change, with what frequency, etc. Differentiation is not provided for every Session within the Teachers Guide.	**Reviewer only.)** **____Meets (2)** **_X__Partially Meets (1)** **____Does Not Meet (0)**
Alignment Criterion 3: **Access to the Standards for All Students** **Materials must provide supports for English Language Learners and other special populations.** **AC3** Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 points, the Criterion has not been met. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion.**(Reviewer only.)** **Move to the Evaluation Summary and record the final Meets or Does Not Meet rating.**		**(Reviewer only.)** **____Meets** **_X__Does Not Meet** **Strengths/Weaknesses:** Curriculum provides many instructional approaches for student; with opportunities for whole group, small group, and peer learning. Instructional support for ALL learners is not provided for EVERY lesson. Instructional support, differentiation and ELL support are not explicitly provided for all situations.

Once an evaluation for alignment to the Shifts and major features of the CCSS has been conducted using Sections 1-3, it's important to evaluate for overall quality and best practices. A starting list of Indicators of Quality are suggested below. States, districts and others evaluating instructional materials are encouraged to add to this list to ensure materials reflect local contexts. For background information on some of the Indicators of Quality in this section, refer to pp.18–21 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).

Indicators of Quality	**Evidence- Give specific examples.**	**Rating: (Reviewers only.)**

1. Lessons are thoughtfully structured and support the teacher in leading the class through the learning paths at hand, with active participation by all students in their own learning and in the learning of their classmates.	**Evidence-** Curriculum provides a step by step sequence to each Session. Leaves little room for deviation or student inquiry. Math vocabulary seems like an afterthought, no direct definition is given to students. Lessons seem to underestimate the ability/credibility of the teacher and give them word for word instructions to follow. It is hard to know where to find all the materials for the lesson, some of it will be in the Teacher Materials, some in the Student Book, Home Connect, and Assessment Guide. Teacher must have the ability to make many copies as everything is only a blackline in the Unit Module Binders.	**(Reviewer only.)** _____ **Yes** __X__ **No**
2. The underlying design of the materials includes both problems and exercises. (In solving problems, students learn new mathematics, whereas in working exercises, students apply what they have already learned to build mastery.) Each problem or exercise has a purpose. **NOTE: This Criterion does not require that the problems and exercises be labeled as such.**	**Evidence-** Curriculum does not have both problems and exercises. Curriculum is lacking problems that encourage deeper thinking by students, problems that ask students to prove their work or explain how they came to their answer. There is a large amount of time spent on Work Places (individual work) games that provide some practice exercises.	**(Reviewer only.)** _____ **Yes** __X__ **No**
3. Design of assignments is not haphazard: exercises are given in intentional sequences in order to strengthen students' mathematical understanding.	**Evidence-** Curriculum seems to be disjointed and lacking a flow from one Session to the next. Example: • Unit 1 Module 1: Focus is classroom routines • Unit 1 Module 2: Focus is 5-frames • Unit 1 Module 3: Focus is 10-frames • Unit 1 Module 4: Focus is patterning The overview of each module does not provide Common Core Standards or Mathematical Practices covered in the Sessions.	**(Reviewer only.)** _____ **Yes** __X__ **No**
4. There are separate teacher materials that support and reward teacher study including, but not limited to: discussion of the mathematics of the units and the mathematical point of each lesson as it relates to the organizing concepts of the unit, discussion on student ways of thinking and anticipating a variety of students responses, guidance on lesson flow, guidance on questions that prompt students thinking, and discussion of desired mathematical behaviors being elicited among students.	**Evidence-** Each unit is provided with a brief overview of the Modules and an outline of the Sessions for each Module. Mathematical Background, Teaching Tips, Skills Across Grade Levels, Assessments and Differentiation information is provide.	**(Reviewer only.)** __X__ **Yes** _____ **No**

5. Manipulatives suggested in the materials are faithful representations of the mathematical objects they represent and are connected to written methods.	**Evidence-** The materials kits would need to be purchased to fully implement this program. Many of the Sessions require manipulatives that teachers may not have access to in their classrooms.	**(Reviewer only.)** __X___ **Yes** _____ **No**
6. Materials include a variety of curriculum-embedded assessments. Examples include pre-, formative, summative, and self-assessment resources.	**Evidence-** Materials provide observation assessments and assessments are listed in the Module Sessions, but you have to go searching for the assessment in the Assessment Guide binder.	**(Reviewer only.)** _X___ **Yes** _____ **No**
7. Assessments contain aligned rubrics, answer keys, and scoring guidelines that provide sufficient guidance for interpreting student performance.	**Evidence-** Materials do not provide answer keys for checkpoints in the Unit Module, it usually will be found in the Assessment Guide, Bridges Unit Assessments, in the corresponding Unit, Module, Session. Rubrics and answer keys provide good scoring guidelines but do not provide differentiation lessons to provide for struggling students.	**(Reviewer only.)** _X____ **Yes** _____ **No**
8. Materials assess student proficiency using methods that are accessible and unbiased, including the use of course-level language in student prompts.	**Evidence-** Assessments (Checkpoints) are outlined within Unit Modules. • Unit 1 Module 2 Session 5: Teacher Materials T6; Assessment spreadsheet provided. • Unit 6 Module 2 Session 4: Assessment listed but materials must be found in the Assessment Guide page 65 of Bridges Unit Assessments. Assessments are unbiased and follow the language of the materials.	**(Reviewer only.)** __X___ **Yes** _____ **No**
9. Materials are carefully evaluated by qualified individuals, whose names are listed, in an effort to ensure freedom from mathematical errors and course-level appropriateness.	**Evidence-** There are multiple author, contributing authors, editors, advisors, etc. listed on the Credits and Acknowledgment page of Unit 1. Materials do not list support from the National Science Foundation or any other accreditation.	**(Reviewer only.)** __X___ **Yes** _____ **No**

10. The visual design supports students in engaging thoughtfully with the subject. Navigation through the text is clear.	**Evidence-** The visual design of the materials is not engaging for students. There is no color to any activities, the few graphics are boring and lack visual appeal to Kindergarten students. There are no student workbook pages until Unit 6, teacher must make copies of all Teach Master, Student Workbook, and Home Connection pages. Some pages have too much text, not age appropriate, too many pictures/drawings and not enough practice. Examples: • Unit 7 Module 4 Session 3; Teacher Master has directions that are not student friendly, practice is short and above grade level standards. Outline for each Module of a Unit is stated on the first page of each Module. Each Module has Sessions (lessons) for each day of the Module. An overview of the Module Sessions is included at that start of each Module. Sessions (Lessons) are hard to read and understand the flow of the lessons there are not estimated times for sessions. Each session does not have support for all learners.	**(Reviewer only.)** **_____ Yes** **__X___ No**
11. The materials engage parents in appropriate ways. For example, homework assignments in elementary grades, consist of routine problems, practice with getting answers, and fluency-building exercises that parents can easily support.	**Evidence-** Homework can be found in the Home Connections tab of each Module of every Unit. There are no letters to parents to inform them of the concepts and processes for mathematics that are being taught within the Teacher's Guide; Family Letters can only be found online. There is an assumption of supplies that will be available in the home to complete the Home Connection homework. Examples: • Unit 2 Module 3 Session 3 Home Connection; Assumption is made that students will have access to toothpicks to complete homework. • Unit 7 Module 3 Session 2 Home Connection; Assumption is made that students will have access to measuring cups and various containers pictured on page 189.	**(Reviewer only.)** **_X____ Yes** **_____ No**

Reviewer IMET Evaluation Summary **Title/Level:** Bridges in Mathematics - Kindergarten

Publisher: The Math Learning Center **Copyright: 2016** **ISBN:** 978-1-60260-508-2

Reviewer ID # ___KJ_____RO_____ **Date Review Completed:** March 8, 2016

Non-Negotiable Criteria- Each Non-Negotiable must be met in order for the Non-Negotiable Alignment Criteria to be met overall.	
Non-Negotiable 1: Freedom from Obstacles to Focus __X___ **Meets** _____ **Does Not Meet**	**Non- Negotiable 2: Focus and Coherence** _ X_ **Meets** _ **Does Not Meet**
Non-Negotiable Overall: __X__ **Meets** _ ___ **Does Not Meet**	
Alignment Criteria- Each Alignment Criterion must be met with a sufficient number of points in order for Alignment Criteria to be labeled as "Meets" overall. The more points the materials receive on the Alignment Criteria, the better they are aligned.	

Alignment Criterion 1: Rigor and Balance	Alignment Criterion 2: Standards of Mathematical Practice	Alignment Criterion 3: Access to Standards for All Learners
Points: __5__ of 6 possible. **(Materials must receive at least 5 of 6 points to align.)** **__X___ Meets** **_____ Does Not Meet**	**Points: _3___ of 6 possible.** **(Materials must receive at least 5 of 6 points to align.)** **_____ Meets** **___X___ Does Not Meet**	**Points: _2___ of 6 possible.** **(Materials must receive at least 5 of 6 points to align.)** **_____ Meets** **__X____ Does Not Meet**

Alignment Criteria Overall:

_____ Meets **__X__ Does Not Meet**

If the materials meet both Non-Negotiables and relevant Alignment Criterion, they are aligned to the Shifts and major features of the Core Standards. **Do the materials meet every Non-Negotiable and Alignment Criterion? _____ Yes __X__ No**

What are the specific areas of strength and weakness based on this evaluation? Publishers or others modifying or developing assessments can use this information to make improvements and/or to remedy gaps in the alignment of assessment materials.

Strength:

Curriculum has a consistent format and many learning through play activities.

Weakness:

Curriculum is hard to navigate and not teacher friendly. On-line materials are difficult to navigate, not hyperlinks to units, modules, sessions, etc.

Lots of teacher prep for workplaces and lot of copying (teacher will need a large copy budget just for math curriculum).

Differentiation for ELL, Support and Challenge are evident, but difficult to find and provide very weak and minimal support.

Cluster heading objectives are not visible throughout each lesson, module, or unit.

2015-16 Mathematics Interim Review Recommendation & Summary

Publisher Name:	The Math Learning Center
Title:	Bridges in Mathematics Second Edition 1st grade
ISBN #	978-1-60262-332-3
Grade Level(s) or Course:	Frykholm, Fisher, Mattasa, and Roberts
Reviewer ID:	KS 20

RECOMMENDED AS:

_____**Core Mathematics Program-** a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials. Substantial evidence clearly supports the designation of this program as Core.

___X___**Other Mathematics Program-** a program that substantially, but partially, meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for supplemental materials. Substantial evidence clearly supports the designation of this program as Other.

_____**Component Mathematics Program-** a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs. Substantial evidence clearly supports the designation of this program as Component.

_____**Intervention Program-** a program designed and intended to target and support students' specific needs. Substantial evidence clearly supports the designation of this program as Intervention.

___X___ **Does not meet criteria** for recommendation as a Curricular Material or Online Resource for Mathematics.

EVIDENCE SUMMARY:

FOCUS-

Assessment of standards above the major work of Grade 1.

COHERENCE-

No cluster headings on lessons.

RIGOR-

Curriculum provided a rigiorns expectation of students.

CONCEPTUAL UNDERSTANDING-

Curriculum provides a variety of conceptual processes for students to use.

MATHEMATICAL PRACTICES-

Does not provide consistent authentic connections between standards and practices.

ACCESSIBILITY OF STANDARDS TO ALL STUDENTS-

There is not ELL and Special population support on ALL lessons in ALL units.

OTHER: Lacking and difficult to find.

2[illegible]-16 Interim Mathematics Review

Mathematics Evaluation Tool Grades K-8

Publisher: The Math Learning Center

Title of Material: Borders in Mathematics 2nd Ed. 1st Grade

Author: Fryholm, Fisher, Mattasa, & Roberts

ISBN #: 978-1-60262-332-3 **Copyright** 2016

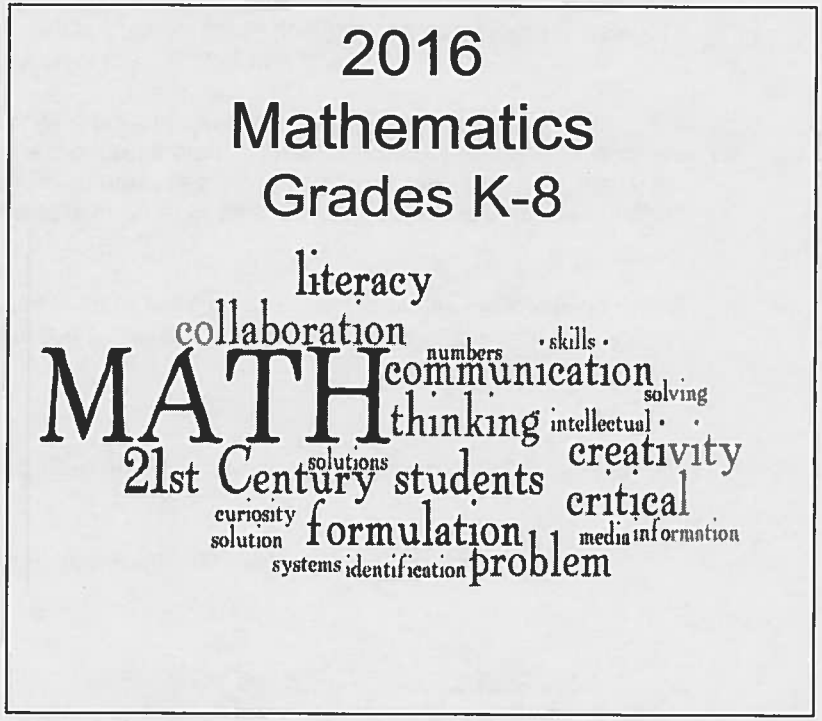
Reviewer ID: KF RB

Core Mathematics Program- a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Core.

Other Mathematics Program- a program that substantially, but partially, meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Other.

Component Mathematics Program- a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs.
Substantial evidence clearly supports the designation of this program as Component.

Intervention Program- a program designed and intended to target and support students' specific needs.
Substantial evidence clearly supports the designation of this program as Intervention.



- Evaluation Form adapted from Instructional Materials Evaluation Toolkit (IMET).

The IMET was developed by Student Achievement Partners. Educators may use or adapt. http://creativecommons.org/licenses/by/3.0/ Download this tool at http://achievethecore.org/IMET

Instructional Materials Evaluation Tool

Mathematics, Grades K-8

What Are the Purposes of the IMET?

This Math IMET is designed to help educators determine whether instructional materials are aligned to the Shifts and major features of the Common Core State Standards (CCSS). The substantial instructional Shifts (http://www.corestandards.org/other-resources/key-shifts-inmathematics/) at the heart of the Common Core State Standards are:

- **Focus** strongly where the Standards focus
- **Coherence**: Think across grades and link to major topics within the grade
- **Rigor**: In major topics, pursue conceptual understanding, procedural skill and fluency, and application with equal intensity.

The IMET draws directly from the following documents:

- Common Core State Standards for Mathematics (www.corestandards.org/Math)
- Publishers' Criteria for the Common Core State Standards in Mathematics grade K-8 (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)

When to use the IMET

1. Purchasing materials: Many factors go into local purchasing decisions. Alignment to the Standards is a critical factor to consider. This tool is designed to evaluate alignment of instructional materials to the Shifts and the major features of the CCSS. It also provides suggestions of additional indicators to consider in the materials evaluation and purchasing process.

2. Evaluating materials currently in use: The IMET can be used to analyze the degree of alignment of existing materials and help to highlight specific, concrete flaws in alignment. Even where materials and tools currently in use fail to meet one or more of these criteria, the pattern of failure is likely to be informative. States and districts can use the evaluation to create a thoughtful plan to modify or combine existing resources in such a way that students' actual learning experiences approach the focus, coherence, and rigor of the Standards.

3. Developing programs: Those developing new programs can use this tool as guidance for creating aligned curricula.
Please note this tool was designed for evaluating comprehensive curricula (including any supplemental or ancillary materials), but it was not designed for the evaluation of standalone supplemental materials.

Who Uses the IMET?

Evaluating instructional materials requires both subject-matter and pedagogical expertise. Evaluators should be well versed in the Standards (www.corestandards.org/Math) for all grades in which materials are being evaluated. This includes understanding the Major Work of the grade (www.achievethecore/focus), the Supporting and Additional work, how the content fits into the progressions in the Standards (www.achievethecore.org/progressions), and the expectations of the Standards with respect to conceptual understanding, procedural skill and fluency, and application. Evaluators also should be familiar with the substantial instructional Shifts (http:// www.corestandards.org/other-resources/key-shifts-in-mathematics/) of Focus, Coherence and Rigor that are listed above.

Getting Started

Prior to Evaluation

Assemble all of the materials necessary for the evaluation. It is essential for evaluators to have materials for all grades covered by the program, as some criteria cannot be rated without having access to each grade. In addition, each evaluator should have a reference copy of the Common Core State Standards for Mathematics (CCSSM) and the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013).

2015-16 Interim Mathematics Review

Mathematics Evaluation Tool Grades K-8

Publisher: The Math Learning Center

Title of Material: Bridges in Mathematics Second Edition, 1st Grade

Author: Frykholm, Fisher, Mattasa, and Roberts

ISBN #: 978-1-60262-332-3 **Copyright** 2016

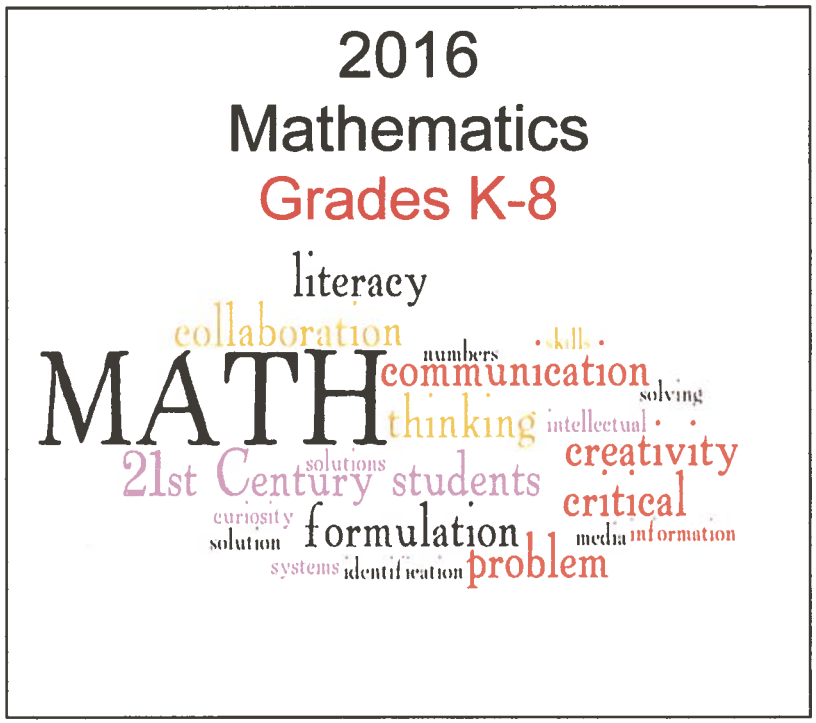
Reviewer ID: _____

Core Mathematics Program- a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Core.

Other Mathematics Program- a program that substantially, but partially, meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Other.

Component Mathematics Program- a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs.
Substantial evidence clearly supports the designation of this program as Component.

Intervention Program- a program designed and intended to target and support students' specific needs.
Substantial evidence clearly supports the designation of this program as Intervention.



- Evaluation Form adapted from Instructional Materials Evaluation Toolkit (IMET).

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Instructional Materials Evaluation Tool
Mathematics, Grades K-8

What Are the Purposes of the IMET?
This Math IMET is designed to help educators determine whether instructional materials are aligned to the Shifts and major features of the Common Core State Standards (CCSS). The substantial instructional Shifts (http://www.corestandards.org/other-resources/key-shifts-inmathematics/) at the heart of the Common Core State Standards are:
- **Focus** strongly where the Standards focus
- **Coherence**: Think across grades and link to major topics within the grade
- **Rigor**: In major topics, pursue conceptual understanding, procedural skill and fluency, and application with equal intensity.

The IMET draws directly from the following documents:
- Common Core State Standards for Mathematics (www.corestandards.org/Math)
- Publishers' Criteria for the Common Core State Standards in Mathematics grade K-8 (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)

When to use the IMET
1. Purchasing materials: Many factors go into local purchasing decisions. Alignment to the Standards is a critical factor to consider. This tool is designed to evaluate alignment of instructional materials to the Shifts and the major features of the CCSS. It also provides suggestions of additional indicators to consider in the materials evaluation and purchasing process.

2. Evaluating materials currently in use: The IMET can be used to analyze the degree of alignment of existing materials and help to highlight specific, concrete flaws in alignment. Even where materials and tools currently in use fail to meet one or more of these criteria, the pattern of failure is likely to be informative. States and districts can use the evaluation to create a thoughtful plan to modify or combine existing resources in such a way that students' actual learning experiences approach the focus, coherence, and rigor of the Standards.

3. Developing programs: Those developing new programs can use this tool as guidance for creating aligned curricula.
Please note this tool was designed for evaluating comprehensive curricula (including any supplemental or ancillary materials), but it was not designed for the evaluation of standalone supplemental materials.

Who Uses the IMET?
Evaluating instructional materials requires both subject-matter and pedagogical expertise. Evaluators should be well versed in the Standards (www.corestandards.org/Math) for all grades in which materials are being evaluated. This includes understanding the Major Work of the grade (www.achievethecore/focus), the Supporting and Additional work, how the content fits into the progressions in the Standards (www.achievethecore.org/progressions), and the expectations of the Standards with respect to conceptual understanding, procedural skill and fluency, and application. Evaluators also should be familiar with the substantial instructional Shifts (http:// www.corestandards.org/other-resources/key-shifts-in-mathematics/) of Focus, Coherence and Rigor that are listed above.

Getting Started
Prior to Evaluation

Assemble all of the materials necessary for the evaluation. It is essential for evaluators to have materials for all grades covered by the program, as some criteria cannot be rated without having access to each grade. In addition, each evaluator should have a reference copy of the Common Core State Standards for Mathematics (CCSSM) and the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013).

Before conducting the evaluation itself, it is important to develop a protocol for the evaluation process. The protocol should include having evaluators study the Publishers' Criteria and the IMET. It will also be helpful for evaluators to get a sense of each program overall before beginning the process. At a minimum, this would include reading the front matter of the text, looking at the table of contents and paging through multiple chapters.

Sections 1-3 below should be completed to produce a comprehensive picture of the strengths and weaknesses of the materials under evaluation. Information about areas in need of improvement or supplementation should be shared with internal and external stakeholders.

Navigating the Tool

Begin with Section 1: Non-Negotiable Alignment Criteria

- The Non-Negotiable Alignment Criteria must each be met in full for materials to be considered aligned to the Shifts and the major features of the Common Core State Standards. Each Non-Negotiable Alignment Criterion has one or more metrics associated with it; every one of these metrics must be met in order for the criterion as a whole to be met.

- Examine the relevant materials and use evidence to rate the materials against each criterion and its associated metric(s).

- Record and explain the evidence upon which the rating is based.

Continue to Section 2: Alignment Criteria

- The Alignment Criteria must each be met for materials to be considered aligned to the Shifts and the major features of the Common Core State Standards. Each Alignment Criterion has one or more metric associated with it; a specific number of these metrics must be met or partially met in order for the criterion as a whole to be met.

- Examine the materials in relation to these criteria, assigning each metric a point value. Rate the criterion as "Meets" or "Does Note Meet" based on the number of points assigned. The more points the materials receive on the alignment Criteria, the better they are aligned.

- Record and explain the evidence upon which the rating is based.

Proceed to Section 4: Indicators of Quality

- Indicators of Quality are important considerations that will help evaluators better understand the overall quality of instructional materials. These considerations are not criteria for alignment to the CCSS, but they provide valuable information about additional program characteristics. Evaluators may want to add their own indicators to the examples provided.

Directions for Non-Negotiable 1

Freedom from Obstacles to Focus

Criterion	Evidence- Give specific examples.	Rating: (Reviewer only.)
Non-Negotiable 1: **Freedom from Obstacles to Focus** **Materials must reflect the content architecture of the Standards by not assessing the topics named before the grade level where they first appear in the Standards.** The Standards foster students' progress to algebra by focusing strongly on arithmetic. Consistent with this focus, certain topics from outside of arithmetic appear only in later grades. Thus, to be aligned, materials must reflect the content architecture of the Standards by not assessing the topics named before the grade level where they first appear in the Standards. In this criterion, "topics named" means the topics that are explicitly named in Metric 1A. No other topics should be added to the list in Metric 1A. (Note that other topics in the standards are addressed in criterion NN2.)	**Required Materials** • Common Core State Standards for Mathematics (www.corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf) • From the materials being evaluated: teacher guides and all assessment components	**Rating this Criterion:** Non-Negotiable 1 is rated as Meets or Does Not Meet. To rate Non-Negotiable 1, begin by rating Metric 1A. Since Metric 1A is the only metric for Non-Negotiable 1, the rating for Non-Negotiable 1 is the same as the rating for Metric 1A. If Metric 1A is rated as Does Not Meet, include evidence of when the named topic(s) is/are assessed. If the metric is rated as Meets, list the grade(s) examined in the evaluation.

Metric.NN1A: **Materials re[illegible] the basic architecture of the Standards by not assessing the listed topics before the grade level indicated.** • Probability, including chance, likely outcomes, probability models. (Introduced in the CCSSM in grade 7) • Statistical distributions, including center, variation, clumping, outliers, mean, median, mode, range, quartiles; and statistical association or trends, including two-way tables, bivariate measurement data, scatter plots, trend line, line of best fit, correlation. (Introduced in the CCSSM in grade 6) • Similarity, congruence, or geometric transformations. (Introduced in the CCSSM in grade 8) • Symmetry of shapes, including line/ reflection symmetry, rotational symmetry. (Introduced in the CCSSM in grade 4) **How to Find the Evidence:** Evaluate the table of contents, all chapter tests, all unit tests, and other such assessment components (including rubrics). For context, read Criterion #2 from the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013). NOTE: Grade alignments of other topics are addressed in Non-Negotiable 2, Focus and Coherence.) In this criterion, "topics named" means the topics that are explicitly named in Metric 1A. No other topics should be added to the list in Metric 1A. (Note that other topics in the standards are addressed in criterion NN2.)	Curriculum does not assess the listed topics before grade level. HOWEVER: Materials include assessments that should not be assessed in Grade 1 • Unit 8 Module 2 Session 4 Checkpoint Question #3: Assessment includes addition of three whole numbers greater than 20. Grade 1 Standard (1.OA.2): Solve word problems that call for addition of three whole numbers whose sum is less than or equal to 20. • Unit 7 Module 3 Session 5 Assessment Question #1: Scoring Guide states: Identifies and records the value of points on a number line given visual and number clues; Materials relate it to Standard 1.NBT.1. Common Core State Standard 1.NBT.1 reads as: Count to 120, starting at any number less than 120. In this range, read and write numerals and represent a number of objects with a written numeral.	**(Reviewer only.)** **_X__Meets** **____Does Not Meet**

Non-Negotiable 1: Materials must reflect the content architecture of the Standards by not assessing the topics named* before the grade level where they first appear in the Standards.

NN 1 If Metric 1A was rated as Meets, then rate Non-Negotiable 1 as Meets. If Metric 1A was rated as Does Not Meet, then rate Non- Negotiable 1 as Does Not Meet. Check the final rating.

Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion.**(Reviewer only.)**

Before moving to Non-Negotiable 2, record the final Meets or Does Not Meet rating in the Evaluation Summary.

(Reviewer only.)

_X__Meets

____Does Not Meet

Strengths/Weaknesses:

Each Unit Module has various assessments that do meet the major work of Grade 1; however there are assessments that assess standards above the major works of Grade 1.

Directions for Non-Negotiable 2

Focus and Coherence

Non-Negotiable 2:
Focus and Coherence

Materials must focus coherently on the Major Work of the grade in a way that is consistent with the progressions in the Standards.

Focus and coherence are the two major evidence-based design principles of the Common Core State Standards for Mathematics (CCSSM, p. 3). Focus is necessary in order to fulfill the ambitious promise the states have made to their students by adopting the Standards: greater achievement at the college and career ready level; greater depth of understanding of mathematics; and a rich classroom environment in which reasoning, sense-making, applications, and a range of mathematical practices flourish. In simpler terms, a mile-wide, inch-deep curriculum translates to less time per topic. Less time means less depth and moving on without many students. Thus, materials must focus coherently on the Major Work of the grade in a way that is consistent with the progressions in the Standards.

Required Materials

- Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf)
- Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)
- Focus by Grade Level for the grade being evaluated (www.achievethecore.org/focus)
- From the materials being evaluated: teacher guides, student texts and workbooks

Rating this Criterion:

Non-Negotiable 2 is rated as Meets or Does Not Meet.

To rate Non-Negotiable 2, first rate metrics 2A–2H. Each of these eight metrics must be rated as Meets in order for Non-Negotiable 2 to be rated as Meets. Rate each metric 2A-2H as Meets or Does Not Meet/Insufficient Evidence. If the evidence examined shows that the Criterion is met, then mark the Criterion Meets. If the evidence examined shows that the Criterion is not met—or if there is insufficient evidence to make a determination—then mark the Criterion as Does Not Meet/Insufficient Evidence. Support all ratings with evidence.

Metric.NN2A: **In each grade 1–8, students and teachers using the materials as designed devote the large majority of time to the Major Work of the grade.** **How to Find the Evidence:** Familiarize yourself with the Major Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, lessons, homework assignments, and assessments. (Evaluate both student and teacher materials.) Consider time spent on the Major Work of the grade and judge qualitatively whether students and teachers using the materials as designed will devote the large majority of time to the Major Work of the grade. For context, read Criterion #1 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013)	Curriculum has roughly 78% of lessons related to the four major works of Grade 1. The rest of the lessons focus on supporting standards. Four of the eight units focus on Major Cluster Operations and Algebraic Thinking; Two units focus on Major Cluster Number and Operations in Base Ten; One unit focuses on additional cluster Geometry; Two Modules of one unit are spent on Major Cluster Measure lengths indirectly and by iterating length units, the other two Modules focus on additional and supporting standards. Some Sessions under Skills & Concepts list skills as "supporting" a standard although the standard is not the focus. Example: • Unit 4 Module 2 Session 2, Skills & Concepts: Recognize and extend number patterns (supports 1.OA) 1.OA.1-2: Represent and solve problems involving addition and subtraction, 1.OA3-4: Understand and apply properties of operations and the relationship between addition and subtraction, 1.OA.5-6: Add and subtract within 20, 1.OA.7-8: Work with addition and subtraction equations. • Unit 7 Module Session 5, Skills & Concepts: Count by 5's and 10's to 100 (supports 1.NBT) 1.NTB.1: Extend the counting sequence, 1.NBT.2-3: Understand place value, 1.NBT.4-6: Use place value understanding and properties of operations to add and subtract.	**(Reviewer only.)** **_X__Meets** **____Does Not Meet/** **Insufficient Evidence**

Metric NN2B: **Supporting Work, where present, enhances focus and coherence simultaneously by also engaging students in the Major Work of the grade.** **How to Find the Evidence:** Familiarize yourself with the Major Work and Supporting Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate chapters and lessons that focus on Supporting Work. NOTE: Example of evaluating this Criterion might include looking at whether materials for K–5 generally treat data displays as an occasion for solving grade-level word problems using the four operations (e.g., see 3.MD.B.3); or whether materials for grade 7 take advantage of opportunities to use probability to support ratios, proportions, and percentages. For context, read Criterion #3 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Materials have Sessions where the focus is a combination of Supporting Work and Major Work of the grade simultaneously. Examples: • Unit 6 Module 4 Session 1: Graphing penguins (Major Work: 1.MD.2) and Compare the data (Supporting Work: 1.MD.4)	**(Reviewer only.)** **_X__Meets** **____Does Not Meet/** **Insufficient Evidence**
Metric NN2C: **Materials base content progressions on the grade-by-grade progressions in the Standards. Content from previous or future grades does not unduly interfere with or displace on-grade-level content.** **How to Find the Evidence:** Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, and lessons in both student and teacher materials. NOTE: In some cases it may be possible that aligned materials might address some aspects of a topic in a strategic way before or after the grade level in which the topic is central in the Standards' progressions; for example, a curriculum author might purposefully choose to explore adding fractions with unlike denominators in a way appropriate to grade four, recognizing that this work is not really required until the next grade. However, any such purposeful discrepancies in content progressions should enhance the required learning in each grade; not unduly interfere with or displace grade-level content; and be clearly aimed at helping students meet the Standards as written rather than effectively rewriting the progressions in the Standards. And in all cases, note that Non-Negotiable 1 must be met for materials to be aligned. For context, read Criterion #5a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	Curriculum provides a Skills Across the Grade Levels page at the start of every unit. It lists the Major Skills/Concepts taught in the Unit for Grade 1 and the supporting standards from Kindergarten and the continued Standards in Grade 2. It is hard to read as it is, and it would be nice if each standard progression was shown across the grades instead of just listed. **Evidence-** • Unit 1 Introduction page v • Unit 2 Introduction page vi-vii • Unit 3 Introduction page iv-v • Unit 4 Introduction page iv-v • Unit 5 Introduction page ix • Unit 6 Introduction page v • Unit 7 Introduction page vi • Unit 8 Introduction page x	**(Reviewer only.)** **_X__Meets** **____Does Not Meet/** **Insufficient Evidence**

Metric NN2D: **Materials gi[illegible]l students extensive work with on-grade-level problems.** **How to Find the Evidence:** Evaluate both student and teacher materials. If the materials provide resources for differentiated learning, consider whether lower-performing students have opportunities to engage with grade-level problems. Also consider whether higher-performing students are given opportunities to learn current grade-level content in greater depth. For context, read Criterion #5b in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	Materials provide work with problems that are on-grade-level. Differentiated L[illegible]ning provided on most lessons for challenge students, ELL students, and students who need support. However, support is not provided for ALL learners on ALL lessons. A Differentiation chart can be found in the overview for every Unit detailing what support is offered for each Module and Session. **Evidence-** • Unit 4 page vi: Differentiation chart for the unit. • Unit 4 Module 2 Session 5: TG pages 23-28 & TM pages T4-T6 provide examples of on-grade-level problems. **Number Corner MUST be implemented to meet NN2D.	**(Reviewer only.)** **_X__Meets** **____Does Not Meet/** **Insufficient Evidence**
Metric NN2E: **Materials relate on-grade-level concepts explicitly to prior knowledge from earlier grades.** **How to Find the Evidence:** Evaluate both student and teacher materials. NOTE: Examples of evaluating this Criterion might include looking at the way the materials extend basic ideas of place value across the decimal point; or the role that properties of operations play when the materials extend arithmetic beyond whole numbers to fractions, variables, and expressions. More generally, cluster headings in the Standards sometimes signal key moments where reorganizing and extending previous knowledge is important in order to accommodate new knowledge (e.g., see cluster headings that use the phrase "Apply and extend previous understanding"). For context, read Criterion #5c in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	Curriculum provides a Skills Across the Grade Levels page at the start of every unit. It lists the Major Skills/Concepts taught in the Unit for Grade 1 and the supporting standards from Kindergarten. **Evidence-** • Unit 1 Introduction page v • Unit 2 Introduction page vi-vii • Unit 3 Introduction page iv-v • Unit 4 Introduction page iv-v • Unit 5 Introduction page ix • Unit 6 Introduction page v • Unit 7 Introduction page vi • Unit 8 Introduction page x	**(Reviewer only.)** **_X__Meets** **____Does Not Meet/** **Insufficient Evidence**
Metric NN2F: **Review of material from previous grades is clearly identified as such to the teacher, and teacher and students can see what their specific responsibility is for the current year.** **How to Find the Evidence:** Evaluate the table of contents, but do not stop there; also evaluate units, chapters, lessons, homework assignments and assessments. (Evaluate both student and teacher materials.) Identify any content from previous grades and check whether it is identified as such. For context, read Criterion #5a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	Each Session lists the Skills & Concepts for the Session and include review of previous grades standards. **Evidence-** • Unit 1 Module 2 Session 1: Skills & Concepts Review of K.CC.4a and K.CC.5 • Unit 1 Module 2 Session 3: Skills & Concepts Review of K.CC while working on Grade 1 standard 1.OA.6	**(Reviewer only.)** **_X__Meets** **____Does Not Meet/** **Insufficient Evidence**

Metric NN2G: **Materials include learning objectives that are visibly shaped by CCSSM cluster headings.** **How to Find the Evidence:** Select several clusters from the Major Work in the grade being evaluated. Evaluate teacher and student materials in relation to these clusters. For context, read Criterion #6a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	Learning objectives are not clearly stated within the Curriculum. A table of contents is outlined on the first page of the overview for each Unit. It outlines the main idea for each Module and lists the title of each Session. CCSSM cluster headings are not identified or listed in correlation to each Unit Module and Session. Each Session has a Summary that provides an overview of the lesson, but specific, direct, visible learning objectives are not stated. **Evidence-** • Unit 6 Overview: Module 1: Story Problems for Basic Addition & Subtraction; Module 2: Combinations & Story Problems; Module 3: Solving for the Unknown in Penguin Stories; Module 4: Measuring & Comparing Emperor & Little Blue Penguins. • Unit 7 Module 3 Session 1: Summary: "This session and next, students bring a bit of comfort and civilization their forest paths by adding fence sections, benches, and potted plants. Fence sections come in lengths of 10 steps benches in lengths of 5 steps, and flowerpots in lengths of 1 step. After the teacher introduces the idea, students work in pairs to find different combinations of these items that total 10 steps."	**(Reviewer only.)** **_X_ Meets** **_____Does Not Meet/** **Insufficient Evidence**
Metric NN2H: **Materials include problems and activities that serve to connect two or more clusters in a domain, or two or more domains in a grade, in cases where these connections are natural and important.** **How to Find the Evidence:** In the grade being evaluated, choose two or more clusters or two or more domains for which connections are natural and important. Evaluate the units, chapters, and lessons that deal with the chosen topics, looking for problems and activities that serve to connect the chosen clusters or domains. NOTE: An example of evaluating this Criterion might include looking at whether problems in grade 4 sometimes or often involve students applying their developing computation skills (detailed in domain NBT) in the context of solving word problems (detailed in domain OA). For context, read Criterion #6b in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	Materials adequately connect two or more clusters in a domain or two or more domains in Grade One. **Evidence-** • Unit 7 Module 3 Session 2: Combines the following standards: 1.OA.1-3, 1.OA.6, and 1.MD.2. • Unit 6 Module 1 Session 2: Combines the following standards: 1.OA.1, 1.OA.5-8, and 1.NBT.2b • Unit 4 Module 2 Session 2: Combines the following standards: 1.NBT.1 and 1.MD.4	**(Reviewer only.)** **_X_ Meets** **_____Does Not Meet/** **Insufficient Evidence**

Non-Negotiable 2:

Focus and Coherence

Materials must focus coherently on the Major Work of the grade in a way that is consistent with the progressions in the Standards.

NN 2 If all Metrics 2A – 2H were rated as Meets, then rate Non-Negotiable 2 as Meets. If one or more Metric was rated Does Not Meet/Insufficient Evidence, then rate Non-Negotiable 2 as Does Not Meet. Check the final rating.
Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)**

Before moving to Alignment Criterion 1, record the final Meets or Does Not Meet rating in the Evaluation Summary.

(Reviewer only.)

X **Meets**

es Not Meet

Strengths/Weaknesses:

Now continue by evaluating the Alignment Criterion 1 for Rigor and Balance.

Directions for Alignment Criterion 1

Rigor and Balance

Alignment Criterion 1: Rigor and Balance

Materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.

The Standards set expectations for attention to all three aspects of rigor: conceptual understanding, procedural skill and fluency, and applications. Thus, materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.

Required Materials

- Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf)
- Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)
- Focus by Grade Level for the grade being evaluated (achievethecore.org/focus)
- Situation Types for the Operations in Word Problems (achievethecore.org/situation-types)
- From the materials being evaluated: teacher guides, student texts and workbooks

Rating this Criterion:

Alignment Criterion 1 is rated as Meets or Does Not Meet.

To rate Alignment Criterion 1, first rate metrics 1A, 1B, and 1C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). For each metric, guiding questions are provided to aid in gathering evidence.
Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 1 if the materials rate 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as rigor and balance, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.

Metric AC1A: **The materials support the development of students' conceptual understanding of key mathematical concepts, especially where called for in specific content Standards or cluster headings.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Major Work for the grade being evaluated that relate specifically conceptual understanding to use throughout the questions associated with this metric. NOTE: Some examples of clusters or Standards that call for conceptual understanding include: K.OA.A.1, (1.NBT.B, 1.NBT.C), (2.NBT.A, 2.NBT.B), (3.OA.A.1, 3.OA.A.2), 4.NF.A, (4.NBT.A, 4.NBT.B), 5.NF.B, (5.NBT.A, 5.NBT.B), 6.RP.A, 6.EE.A.3, 7.NS.A, 7.EE.A, 8.EE.B, 8.F.A, 8.G.A Clusters or Standards grouped by parentheses are closely connected and could be analyzed together. For context, read Criterion #4a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	-Choose a cluster/Standard from the Major Work that is aligned to each aspect of rigor and use to evaluate these metrics. It is most helpful if the same clusters/Standards are chosen for all of the programs being evaluated. (Guidance in choosing clusters/Standards is included in "How to Find the Evidence".)	**Use the questions for AC Metric 1A to evaluate Metric 1A. Record evidence for each question and rate Metric 1A.** **____Meets (2)** **_X__Partially Meets (1)** **____Does Not Meet (0)**
Is conceptual understanding attended to thoroughly where the Standards set explicit expectations for understanding or interpreting? Evaluate lessons, chapter/unit assessments and homework assignments, paying attention to work aligned to Standards that explicitly call for understanding or interpreting. NOTE: Examples of evaluating this Criterion might include looking at how well the multi-digit addition and subtraction algorithms are developed and explained on the basis of place value and properties of operations; or how well the multi-digit multiplication and division algorithms are developed and explained on the basis of place value and properties of operations; or how well solving equations is presented and explained as a process of reasoning.	**Evidence-** Cluster headings were not evident within the Modules and Sessions.	
Do the materials feature high-quality conceptual problems and conceptual discussion questions? Evaluate lessons, chapter/unit assessments, and homework assignments. NOTE: Example of conceptual problems might include such questions as "Find a number greater than 1/5 and less than 1/4," or "If the divisor does not change and the dividend increases, what happens to the quotient?"	**Evidence-** Curriculum provides high-quality conceptual problems and discussion questions. • Unit 8 Module 1 Session 1 page 4	

Do the materials feature opportunities to identify correspondences across mathem representations? Evaluate lessons, chapter/unit assessments and homework assignments. NOTE: Examples of evaluating this Criterion might include looking at whether students are supported in identifying correspondences among: the verbal description of a situation, the diagrams that distill its mathematical features, and the equations that model it; or equivalent forms of numbers (e.g., 3 and 6/2) and the number line; or rational number operations and representations of them via models such as the vector model; or the expression that defines a function and the graph that shows the relationship.	**Evidence-** Curriculum provides m opportunities to identify correspondences across mathematical representations. • Unit 8 Module 3 Session 3: Building Gliders.	
Metric AC1B: **The materials are designed so that students attain the fluencies and procedural skills required by the Standards.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Major Work for the grade being evaluated that relate specifically to fluency and procedural skill to use throughout the questions associated with this metric. NOTE: Some examples of Standards that call for procedural skill and fluency include: K.OA.A.5, 1.OA.C.6, 2.OA.B.2, 2.NBT.B.5, 3.OA.C.7, 3.NBT.A.2, 4.NBT.B.4, 5.NBT.B.5, 6.NS.B.2, and 6.NS.B.3, 6.EE.A, 7.NS.A, 7.EE.A.1,7.EE.B.4a, 8.EE.C.7, 8.EE.C.8b For context, read Criterion #4b in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).		**Use the questions for Metric 1B to evaluate Metric 1 B. Record evidence for each question and rate Metric 1B.** **(Reviewer only.)** **_X__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Is progress toward fluency and procedural skill interwoven with students' developing conceptual understanding of the operations in question? Evaluate lessons, chapter/unit assessments, daily routines, and homework assignments for evidence that the development of fluency and procedural skill is supported by conceptual understanding.	**Evidence-** Procedural skills and fluency skills are combined throughout the curriculum.	
Are purely procedural problems and exercises present that include cases in which opportunistic strategies are valuable and generic cases that require efficient algorithms present? Evaluate lessons, chapter/unit assessments, daily routines, and homework assignments. NOTE: Examples of problems in which opportunistic strategies are valuable might include the sum 698 + 240 or the system x + y = 1, 2x + 2y = 3. Examples of generic cases that require efficient algorithms might include the sum 8767+2286 or the system 6y + x = x + 3, – x = 1 + 2y.	**Evidence-** A variety of problems can be found throughout the Bridges Curriculum and Number Corner. Strategies with tools can be found throughout the curriculum as well as some practice exercises.	

Do the materials in grades K–6 provide repeated practice toward attainment of fluency Standards? Evaluate lessons, daily routines, and homework assignments for evidence of repeated practice toward attainment of the following K–6 Standards that set an explicit expectation of fluent (accurate and reasonably fast) computation: K.OA.A.5, 1.OA.C.6, 2.OA.B.2, 2.NBT.B.5, 3.OA.C.7, 3.NBT.A.2, 4.NBT.B.4, 5.NBT.B.5, 6.NS.B.2, 6.NS.B.3.	**Evidence-** Multiple strategies are provided for students to work with addition and subtraction fluency through 10. Although many strategies are taught to the students, there are not as many opportunities for the students to practice the strategies with pencil and paper.	
Metric AC1C: **The materials are designed so that teachers and students spend sufficient time working with engaging applications, without losing focus on the Major Work of each grade.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Major Work for the grade being evaluated that relate specifically application to use throughout the questions associated with this metric. NOTE: Some examples of clusters or Standards that call for application include: K.OA.A.2, 1.OA.A, 2.OA.A, 3.OA.A.3, 3.OA.D.8, 4.OA.A.3, 4.NF.B.3d, 4.NF.B.4c, 5.NF.B.6, 5.NF.B.7c, 6.RP.A.3, 6.NS.A.1, 6.EE.B.7, 6.EE.C.9, 7.RP.A, 7.NS.A.3, 7.EE.B.3, 8.EE.C.8c, 8.F.B For context, read Criterion #4c in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Curriculum works sufficiently with the major work of grade 1.	**Use the questions for Metric 1C to evaluate Metric 1C. Record evidence for each question and rate Metric 1C.** **(Reviewer only.)** **_X__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Are there are single- and multi-step contextual problems, including non-routine problems, that develop the mathematics of the grade, afford opportunities for practice, and engage students in problem solving? Do the problems attend thoroughly to those places in the content Standards where expectations for multi-step and real-world problems are explicit? Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** There are single and multi-step problems throughout the curriculum.	
Do application problems particularly stress applying the Major Work of the grade? Evaluate lessons, chapter/unit assessments, and homework assignments. NOTE: Examples of evaluating this Criterion might include looking at: how well, by the end of grade 2, students using the materials as designed can represent and solve a full range of one-step addition and subtraction word problems; or how well, by the end of grade 3, students using the materials as designed can represent and solve a full range of one-step multiplication and division word problems; or how well these basic situation types for each operation are carried coherently across the grades, (e.g., with fractions and algebraic expressions); or, in all grades, whether the problems connect concepts, Standards, and domains in ways that are natural and important. For a list of situation types for one-step addition, subtraction, multiplication, and division problems, see Situation Types for the Operations in Word Problems	**Evidence-** Curriculum works with application of the standards.	

Does modeling build slowly across K–8, with applications that are relatively simple in earlier grades and when students are encountering new content? In grades 6–8, do the problems begin to provide opportunities for students to make their own assumptions or simplifications in order to model a situation mathematically? Read Standard for Mathematical Practice 4, Model with Mathematics. Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** Modeling builds throughout the Grade 1 curriculum. • Unit 1: Students are using tools to work with numbers through 10. • Unit 2: Students begin to write equations and use tools to work with numbers through 10.	

Alignment Criterion 1: Rigor and Balance

Materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.

AC1 Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 out of 6 points, the Criterion has not been met. Check the final rating.
Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)**

Before moving to Alignment Criterion 2, record the final Meets or Does Not Meet rating in the Evaluation Summary.

(Reviewer only.)

_X__Meets

____Does Not Meet

Strengths/Weaknesses:

Curriculum cluster headings are not evident. Written practice should be more evident.

Directions for Alignment Criterion 2

Standards for Mathematical Practice

Alignment Criterion 2: Standards for Mathematical Practice

Materials must demonstrate authentic connections between content Standards and practice Standards.

The Standards require that designers of instructional materials connect the mathematical practices to mathematical content in instruction. Thus, materials must demonstrate authentic connections between content Standards and practice Standards.

Required Materials:

• Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf)

• Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)

• Focus by Grade Level for the grade being evaluated (www.achievethecore.org/focus)

• From the materials being evaluated: teacher guides, student texts and workbooks

Rating this Criterion

Alignment Criterion 2 is rated as Meets or Does Not Meet.

To rate Alignment Criterion 2, first rate metrics 2A, 2B, and 2C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). For each metric, guiding questions are provided to aid in gathering evidence.
Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 2 if the materials earn 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as mathematical practices, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.

Metric AC2A: **Materials address the practice Standards in such a way as to enrich the Major Work of the grade; practices strengthen the focus on Major Work instead of detracting from it, in both teacher and student materials.** **How to Find the Evidence:** Familiarize yourself with the Major Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate teacher and student materials for evidence that the mathematical practices support and connect to the focus of the grade. NOTE: Examples of evaluating this Criterion might include looking at whether, in grades K–5, students using the materials are supported to look for and express regularity in repeated reasoning about the addition table, the multiplication table, the properties of operations, the relationship between addition and subtraction or multiplication and division, and the place value system; or whether, in grades 6–8, students using the materials are supported to look for and express regularity in repeated reasoning about proportional relationships and linear functions. For context, read Criterion #8 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013).	**Evidence-** The Assessment Guide provides a section on Assessing the Math Practices (Assessment Guide, Assessment Overview pages 17-24). This resource provides examples of how the Mathematical Practices may be applied by student and what the teacher can look for. There is no further mention of the Mathematical Practices within the overviews of each Unit or Module. Practices are listed under the Skills and Concepts of each Session, but they are explicitly mentioned/taught within every Session to help guide the teacher. Examples: • Unit 1 Module 2 Session 3: Math Practices in Action MP.7 on page 13 • Unit 5 Module 1 Session 5: MP.1 and MP.7 are listed in the Skills and Concepts of the Session but nowhere else.	**(Reviewer only.)** **____Meets (2)** **_X__Partially Meets (1)** **____Does Not Meet (0)**
Metric AC2B: **Materials attend to the full meaning of each practice Standard.** **How to Find the Evidence:** For context, read Criterion #7 and Criterion #9 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).		**Use the questions for Metric 2B to evaluate Metric 2B. Record evidence for each question and rate Metric 2B.** **(Reviewer only.)** **____Meets (2)** **_X__Partially Meets (1)** **____Does Not Meet (0)**
Over the course of any given year of instruction, is each mathematical practice Standard meaningfully present in the form of assignments, activities, or problems that stimulate students to develop the habits of mind described in the practice Standard? Evaluate lessons, chapter/ unit assessments, and homework assignments for evidence of each mathematical practice being meaningfully present in instruction.	**Evidence-** A detailed plan of how the mathematical practices are met throughout the curriculum is not provided. There is evidence of assessment of the practice standards in the Assessment Guide, but how they are meaningfully taught throughout the curriculum is difficult to determine.	

Do the materials treat the practice Standards as developing across grades or grade bands? Are the practice Standards in early grades appropriately simple? Do they display an arc of growing sophistication across the grades?	**Evidence-** No evidence is shown in the curriculum providing evidence of how the practice standards develop across grades within the curriculum. Each Session has mathematical practices listed on the Skills & Concepts part of the overview, but not every Session has a Math Practices in Action listed in the margin with teacher focus ideas. • Unit 1 Module 2 Session 3: MP.7 on page 13 • Unit 1 Module 2 Session 5: No Mathematical Practices specifically referenced within the Session although MP.5 & MP.7 are listed on the Skills & Concepts.	
Are there teacher-directed materials that explain the role of the practice Standards in the classroom and in students' mathematical development? Are alignments to practice Standards accurate?	**Evidence-** Mathematical Practices are only located in the Assessment Guide for teachers to review. The Assessment Guide provides a section on Assessing the Math Practices (Assessment Guide, Assessment Overview pages 17-24). This resource provides examples of how the Mathematical Practices may be applied by student and what the teacher can look for. This does not provide an in depth explanation of how the practices should be developed within each Unit. Mathematical Practices may be listed on the Skills & Concepts of the Session overview, but are not always identified specifically within the lesson. • Unit 1 Module 2 Session 3: MP.7 on page 13 • Unit 1 Module 2 Session 5: No Mathematical Practices specifically referenced within the Session although MP.5 & MP.7 are listed on the Skills & Concepts.	
Metric AC2C: **Materials support the Standards' emphasis on mathematical reasoning.** **How to Find the Evidence:** For context, read Criterion #10 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).		**Use the questions for Metric 2C to evaluate Metric 2C. Record evidence for each question and rate Metric 2C.** **(Reviewer only.)** **____Meets (2)** **_X__Partially Meets (1)** **____Does Not Meet (0)**
Do the materials support students in constructing viable arguments and critiquing the arguments of others concerning grade-level mathematics that is detailed in the content Standards? Read Standard for Mathematical Practice 3. Evaluate teacher and student materials to ensure that students are given opportunities to reason with grade-level mathematics.	**Evidence-** Curriculum lists Mathematical Practice 3 as part of the Skill & Concepts, does not always provide the evidence or really ensure students are provided with opportunities to reason with grade level mathematics.	

Do the materials support students in producing not only answers and solutions, but also in a grade-appropriate way, arguments, explanations, diagrams, mathematical models, etc., especially in the Major Work of the grade? Familiarize yourself with the Major Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate teacher and student materials, to understand the types of work students are expected to produce.	**Evidence-** Curriculum supports students in producing grade-appropriate ways to work with a problem to find viable solutions. Diagrams, models, and explanations are used throughout the entire curriculum.	
Do materials explicitly attend to the specialized language of mathematics? Is the language of argument, problem solving, and mathematical explanations taught rather than assumed? Evaluate teacher and student materials, paying attention to how mathematical language is taught. NOTE: Examples of evaluating this Criterion might include looking at whether students are supported in: basing arguments on definitions; using the method of providing a counterexample; or recognizing that examples alone do not establish a general statement.	**Evidence-** Math Vocabulary is provided on the first page of the Session if there is new vocabulary for the students to learn. A definition is not provided within the lesson, but a reference to the Word Resource Cards is made. These did not come with the materials received, but can be found to print online. • Unit 5 Module 4 Session 1: Vocabulary is listed on page 3, however a specific definition is not given within the lesson. Mathematical Practices (if there are any within the Session) can be found in the margin of the Session. • Unit 1 Module 2 Session 3: MP.7 on page 13 • Unit 1 Module 2 Session 5: No Mathematical Practices specifically referenced within the Session although MP.5 & MP.7 are listed on the Skills & Concepts.	

Alignment Criterion 2:
Standards for Mathematical Practice

Materials must demonstrate authentic connections between content Standards and practice Standards.

AC2 Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 out of 6 points, the Criterion has not been met. Check the final rating.
Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion.
(Reviewer only.)

Before moving to Alignment Criterion 3, record the final Meets or Does Not Meet rating in the Evaluation Summary.

(Reviewer only.)

____Meets

_X__Does Not Meet

Strengths/Weaknesses:

Mathematical Practices are not consistent across Units, Modules and Sessions.

Alignment Criterion 3: **Access to the Standards for All Students** **Materials must provide supports for English Language Learners and other special populations.** Because Standards are for all students, alignment requires thoughtful support to ensure all students are able to meet the Standards. Thus, aligned materials must provide supports for English Language Learners and other special populations.	**Required Materials:** • Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion:** Alignment Criterion 3 is rated as M[illegible]r Does Not Meet. To rate Alignment Criterion 3, first rate metrics 3A, 3B, and 3C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 3 if the materials earn 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as support for special population, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.
Metric AC3A: **Support for English Language Learners and other special populations is thoughtful and helps those students meet the same Standards as all other students. The language in which problems are posed is carefully considered.** **How to Find the Evidence:** Evaluate teacher and student materials, paying attention to supports offered for special populations.	**Evidence-** Materials do not provide an overview of intervention or differentiations for any student population within the Teachers Guide. Any intervention or differentiation strategies must be looked for within the Unit Module Sessions and not every Session has intervention or differentiation support. • Unit 8 Module 1 Sessions 1-4: No strategies for differentiation, intervention or ELL students • Unit 1 Module 2 Sessions 1-3: Challenge and support intervention questions/strategies are provided; No ELL support strategies given.	**Reviewer only.)** **____Meets (2)** **____Partially Meets (1)** **_X__Does Not Meet (0)**

Metric AC3B: **Materials provide appropriate level and type of scaffolding, differentiation, intervention, and support for a broad range of learners with gradual removal of supports, when needed, to allow students to demonstrate their mathematical understanding independently.** **How to Find the Evidence:** Evaluate teacher and student materials, paying attention to whether materials provide differentiation that will lead all learners to engage with on-grade-level content.	**Evidence-** Materials do not provide an overview of intervention or differentiations for any student population within the Teachers Guide. Any intervention or differentiation strategies must be looked for within the Unit Module Sessions and not every Session has intervention or differentiation support. • Unit 8 Module 1 Sessions 1-4: No strategies for differentiation, intervention or ELL students • Unit 1 Module 2 Sessions 1-3: Challenge and support intervention questions/strategies are provided; No ELL support strategies given. Some information on differentiation and intervention can be found in the Assessment Guide on pages27-32; but this is just a generic overview. In the Bridges Unit Assessment, support and intervention can be found at the start of the Assessments for each Unit, it is not specific to Modules or Sessions however. There is a note on the top of page 3 of the Bridges Unit Assessments stating that the Bridges Intervention volumes include re-teaching and practice activities and games. This would need to be purchased to provide more comprehensive intervention and differentiation strategies/support.	Reviewer only.) **____Meets (2)** **_X__Partially Meets (1)** **____Does Not Meet (0)**
Metric AC3C: **Design of lessons recommends and facilitates a mix of instructional approaches for a variety of learners such as using multiple representations (e.g., including models, using a range of questions, checking for understanding, flexible grouping, pair-share).** **How to Find the Evidence:** Evaluate teacher materials, noting instructional approaches suggested for whole class and differentiated lessons and activities.	**Evidence-** Teacher directed activities for Sessions called Problems & Investigations. These activities provide a teacher directed lesson and then move to Work Place activities. Work Places provides opportunities for students to work with partners/small group; it's hard to determine how long the Work Places stay the same, when they change, with what frequency, etc. Differentiation is not provided for every Session within the Teachers Guide. • Unit 5 Module 1 Session 1: No ELL support, or differentiation for other students is provided within the Teachers Guide. • Unit 7 Module 4 Sessions 1-3: No ELL support or differentiation for other students is provided within the Teachers Guide.	Reviewer only.) **____Meets (2)** **_X__Partially Meets (1)** **____Does Not Meet (0)**

Alignment Criterion 3: Access to the Standards for All Students **Materials must provide supports for English Language Learners and other special populations.** AC3 Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 points, the Criterion has not been met. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion.**(Reviewer only.)** **Move to the Evaluation Summary and record the final Meets or Does Not Meet rating .**	**(Reviewer only.)** **____Meets** **_X__Does Not Meet** **Strengths/Weaknesses:** Curriculum provides many instructional approaches for students; with opportunities for whole group, small group, and peer learning. Instructional support for ALL learners is not provided on EVERY lesson. Instructional support, differentiation and ELL support are not explicitly provided for all situations.

Once an evaluation for alignment to the Shifts and major features of the CCSS has been conducted using Sections 1-3, it's important to evaluate for overall quality and best practices. A starting list of Indicators of Quality are suggested below. States, districts and others evaluating instructional materials are encouraged to add to this list to ensure materials reflect local contexts. For background information on some of the Indicators of Quality in this section, refer to pp.18–21 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).

Indicators of Quality	Evidence- Give specific examples.	Rating: (Reviewers only.)
1. Lessons are thoughtfully structured and support the teacher in leading the class through the learning paths at hand, with active participation by all students in their own learning and in the learning of their classmates.	**Evidence-** Curriculum provides a step by step sequence to each Session. Leaves little room for deviation or student inquiry. Math vocabulary seems like an afterthought, no direct definition is given to students. Lessons seem to underestimate the ability/credibility of the teacher and give them word for word instructions to follow (this will be great for first year teachers, or teachers working with the program for the first time). It is hard to know where to find all the materials for the lesson, some of it will be in the Teacher Materials, some in the Student Book, Home Connect, and Assessment Guide. Teacher must have the ability to make many copies as everything is only a blackline in the Unit Module Binders.	**(Reviewer only.)** **_____ Yes** **__X___ No**

2. The underlying design of the materials includes both problems and exercises. (In solving problems, students learn new mathematics, whereas in working exercises, students apply what they have already learned to build mastery.) Each problem or exercise has a purpose. **NOTE: This Criterion does not require that the problems and exercises be labeled as such.**	**Evidence-** Curriculum is lacking problems that encourage deeper thinking by students, problems that ask students to prove their work or explain how they came to their answer. There is a large amount of time spent on Work Places (individual work) games that provide some practice exercises.	**(Reviewer only.)** **_____ Yes** **__X___ No**
3. Design of assignments is not haphazard: exercises are given in intentional sequences in order to strengthen students' mathematical understanding.	**Evidence-** There is a lack of cohesiveness to the units and modules. There is no major idea or standard mentioned at the start of each unit to help identify what the students will be working on. Below each Unit heading and Module headings are listed. It is difficult to understand what the main idea/major work is for many units and the modules. • Unit 1: Numbers All Around Us; working with numbers through 10, classroom routines, and math models. • Unit 2: Developing Strategies with Dice & Dominoes; working with subitizing, counting on strategies, and the equal sign. • Unit 3: Adding, Subtracting, Counting & Comparing; single-digit sums, tens & teens, equations, place value understanding. • Unit 4: Leapfrogs on the Number Line; Adding and subtracting on a number line, jumping by 5's and 10's, measuring, comparing subtracting with penguins. • Unit 5: Geometry: 2-diminsional shapes, 3-diminsional shapes, putting shapes together & taking them apart, sorting & graphing shapes. • Unit 6: Figure the Facts with Penguins; story problems for basic addition and subtraction, combinations & story problems, solving for the unknown, measuring & comparing emperor and little blue penguins. • Unit 7: One Hundred & Beyond: Grouping sticks & bundles beyond one hundred. Hansel & Gretel's Path on the Number line, Adding and Subtraction 2-digit numbers, place value with money. • Unit 8: Changes, Changes; Time & duration, patterns, structure & change, measurement & data, measuring our growth.	**(Reviewer only.)** **_____ Yes** **__X___ No**

4. There are separate teacher materials that support and reward further study including, but not limited to: discussion of the mathematics of the units and the mathematical point of each lesson as it relates to the organizing concepts of the unit, discussion on student ways of thinking and anticipating a variety of students responses, guidance on lesson flow, guidance on questions that prompt students thinking, and discussion of desired mathematical behaviors being elicited among students.	**Evidence-** Each unit is provided with a brief overview of the Modules and an outline of the Sessions for each Module. Mathematical Background, Teaching Tips, Skills Across Grade Levels, Assessments and Differentiation information is provide. Example: • Unit 5 Overview: TG pages i-xi	**(Reviewer only.)** __X___ **Yes** _____ **No**
5. Manipulatives suggested in the materials are faithful representations of the mathematical objects they represent and are connected to written methods.	**Evidence-** The materials kits would need to be purchased to fully implement this program. Many of the Sessions require manipulatives that teachers may not have access to in their classrooms.	**(Reviewer only.)** __X___ **Yes** _____ **No**
6. Materials include a variety of curriculum-embedded assessments. Examples include pre-, formative, summative, and self-assessment resources.	**Evidence-** Materials provide observation assessments and assessments are listed in the Module Sessions, but you have to go searching for the assessment in the Assessment Guide binder.	**(Reviewer only.)** _X____ **Yes** _____ **No**
7. Assessments contain aligned rubrics, answer keys, and scoring guidelines that provide sufficient guidance for interpreting student performance.	**Evidence-** Materials do not provide answer keys for checkpoints in the Unit Module, it usually will be found in the Assessment Guide, Bridges Unit Assessments, in the corresponding Unit, Module, Session. Rubrics and answer keys provide good scoring guidelines but do not provide differentiation lessons to provide for struggling students.	**(Reviewer only.)** __X___ **Yes** _____ **No**
8. Materials assess student proficiency using methods that are accessible and unbiased, including the use of course-level language in student prompts.	**Evidence-** Assessments (Checkpoints) are outlined within Unit Modules Overviews. • Unit 4 Module 2 Session 5: Teacher Materials T4-T6; Assessment Guide pages 37-39 • Unit 5 Module 2 Session 5: Teacher Materials T6-T7; Assessment Guide pages 49-51 Assessments are unbiased and follow the language of the materials.	**(Reviewer only.)** _X____ **Yes** _____ **No**

9. Materials are carefully evaluated by qualified individuals, whose names are listed, in an effort to ensure freedom from mathematical errors and course-level appropriateness.	**Evidence-** There are multiple authors, contributing authors, editors, advisors, etc. listed on the Credits and Acknowledgment page of Unit 1. Materials do not list support from the National Science Foundation or any other accreditation.	**(Reviewer only.)** **__X___ Yes** **_____ No**
10. The visual design supports students in engaging thoughtfully with the subject. Navigation through the text is clear.	**Evidence-** The visual design of the materials is not engaging for students. There is no color to any activities, the few graphics are boring and lack visual appeal to Grade 1 students. Teacher must make copies of all Teach Master, Student Workbook, and Home Connection pages. Some pages have too much text, not age appropriate, too many pictures/drawings and not enough practice. Examples: • Unit 7 Module 3 Session 1; Student Book has directions that are not student friendly, practice is short and above grade level standards. Outline for each Module of a Unit is stated on the first page of each Module. Each Module has Sessions (lessons) for each day of the Module. An overview of the Module Sessions is included at that start of each Module. Sessions (Lessons) are hard to read and understand the flow of the lessons there are not estimated times for sessions. Each session does not have support for ALL learners.	**(Reviewer only.)** **_____ Yes** **__X___ No**

11. The materials engage parents in appropriate ways. For example, homework assignments in elementary grades, consist of routine problems, practice with getting answers, and fluency-building exercises that parents can easily support.	**Evidence-** Homework can be found in the Home Connections tab of each Module of every Unit. There are no letters to parents to inform them of the concepts and processes for mathematics that are being taught within the Teacher's Guide; Family Letters can only be found online. There is an assumption of supplies that will be available in the home to complete the Home Connection homework. Home Connections does not have a consistent layout to provide parents and students with the feeling of understanding when working on Home Connections. Directions on Home Connections are not very detailed and the text is not always Grade 1 appropriate (students could not read the directions on their own). Examples: • Unit 8 Module 3 Session 5 Home Connection; Assumption is made that students will have access to personal photos, drawings, or magazines. • Unit 4 Module 4 Session 5 Home Connection; Directions are too hard for Grade 1 students to complete on their own.	**(Reviewer only.)** **_____ Yes** **__X___ No**

Reviewer IMET Evaluation Summary **Title/Level:** The Math Learning Center

Publisher: Bridges in Mathematics Second Edition, 1st Grade **Copyright:** 2016 **ISBN:** 978-1-60262-332-3

Reviewer ID # KJ RO **Date Review Completed:** March 8, 2016

Non-Negotiable Criteria- Each Non-Negotiable must be met in order for the Non-Negotiable Alignment Criteria to be met overall.

Non-Negotiable 1: Freedom from Obstacles to Focus	Non- Negotiable 2: Focus and Coherence
X Meets	X Meets
_____ Does Not Meet	___ Does Not Meet

Non-Negotiable Overall:

X **Meets** ___ **Does Not Meet**

Alignment Criteria- Each Alignment Criterion must be met with a sufficient number of points in order for Alignment Criteria to be labeled as "Meets" overall. The more points the materials receive on the Alignment Criteria, the better they are aligned.

Alignment Criterion 1: Rigor and Balance	Alignment Criterion 2: Standards of Mathematical Practice	Alignment Criterion 3: Access to Standards for All Learners
Points: 5 of 6 possible. (Materials must receive at least 5 of 6 points to align.)	Points: 3 of 6 possible. (Materials must receive at least 5 of 6 points to align.)	Points: 2 of 6 possible. (Materials must receive at least 5 of 6 points to align.)
X Meets	_____ Meets	_____ Meets
_____ Does Not Meet	X Does Not Meet	X Does Not Meet

Alignment Criteria Overall:

____ **Meets** X **Does Not Meet**

If the materials meet both Non-Negotiables and relevant Alignment Criterion, they are aligned to the Shifts and major features of the Core Standards. **Do the materials meet every Non-Negotiable and Alignment Criterion? ____ Yes _X___ No**

What are the specific areas of strength and weakness based on this evaluation? Publishers or others modifying or developing assessments can use this information to make improvements and/or to remedy gaps in the alignment of assessment materials.

This curriculum feels like you are trying to implement two different curriculums at one time with Bridges and Number Corner. The binders are cumbersome and not very durable (they come open or don't close correctly); the online materials are difficult to manage and maneuver through.

Each Unit should have a main idea that ties to the standards or major work of the grade; the modules within the unit should have standards that are being taught within the Sessions listed in the overview.

Strength:

Curriculum has a consistent format and many learning through play activities.

Weakness:

Curriculum is hard to navigate and not teacher friendly. On-line materials are difficult to navigate, not hyperlinks to units, modules, sessions, etc.

Lots of teacher prep for workplaces and lot of copying (teacher will need a large copy budget just for math curriculum).

Differentiation for ELL, Support and Challenge are evident, but difficult to find and provide very weak and minimal support.

Cluster heading objectives are not visible throughout each lesson, module, or unit.

2015-16 Mathematics Interim Review Recommendation & Summary

Publisher Name:	The Math Learning Center
Title:	Bridges, 2nd grade
ISBN #	
Grade Level(s) or Course:	2
Reviewer ID:	VF and DD

RECOMMENDED AS:

_____**Core Mathematics Program-** a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials. Substantial evidence clearly supports the designation of this program as Core.

_____**Other Mathematics Program-** a program that substantially, but partially, meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for supplemental materials. Substantial evidence clearly supports the designation of this program as Other.

__X__**Component Mathematics Program-** a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs. Substantial evidence clearly supports the designation of this program as Component.

_____**Intervention Program-** a program designed and intended to target and support students' specific needs. Substantial evidence clearly supports the designation of this program as Intervention.

__X__ **Does not meet criteria** for recommendation as a Curricular Material or Online Resource for Mathematics.

EVIDENCE SUMMARY:

FOCUS-

COHERENCE-

RIGOR-

CONCEPTUAL UNDERSTANDING-

MATHEMATICAL PRACTICES- AC – see next page

ACCESSIBILITY OF STANDARDS TO ALL STUDENTS- AC3 see next page

OTHER:

Alignment Criterion 2 does not meet the Criterion because students are asked multiple times in each chapter and unit to make connections in math via math talk, vocabulary, written explanations and other. This program does not use or teach additional tables and properties, which is a major work in second grade.

Alignment Criterion 3: access to the standards for all students.

This program is lacking in teaching ELL and practice for ELL students. The number of EL practices ranged from 3 to 14 in 20 lessons. The advanced student practice was limited and incomplete.

2015-16 Interim Mathematics Review

Mathematics Evaluation Tool Grades K-8

Publisher: The math Learning Center

Title of Material: Bridges 2nd Grade

Author: Baker, Chandler, Fisher, Harris Cooke

ISBN #: 978-1602625112 **Copyright** 2016

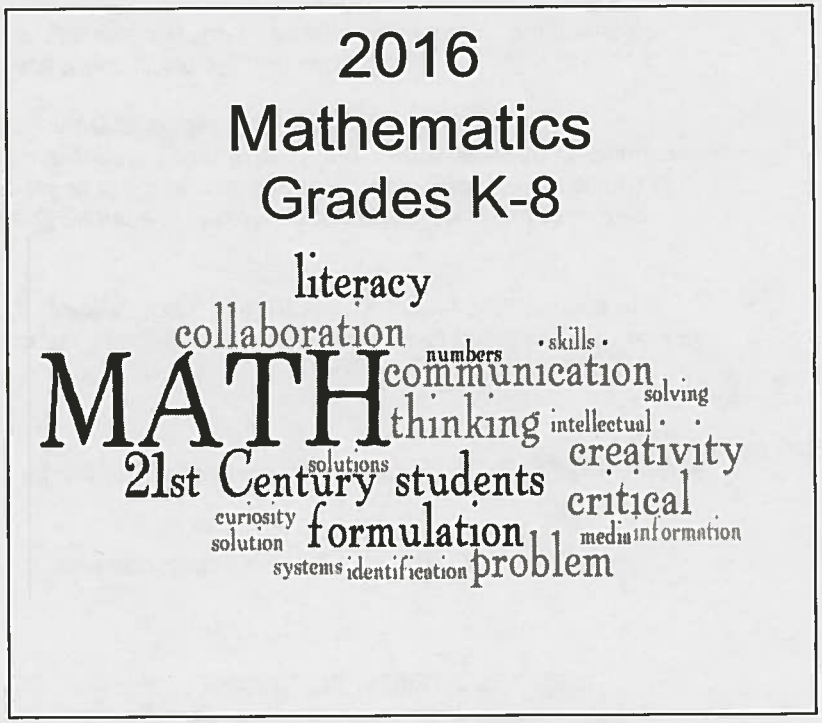
Reviewer ID: DD & VE

Core Mathematics Program- a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Core.

Other Mathematics Program- a program that substantially, but partially, meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Other.

Component Mathematics Program- a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs.
Substantial evidence clearly supports the designation of this program as Component.

Intervention Program- a program designed and intended to target and support students' specific needs.
Substantial evidence clearly supports the designation of this program as Intervention.



- Evaluation Form adapted from Instructional Materials Evaluation Toolkit (IMET).

The IMET was developed by Student Achievement Partners. Educators may use or adapt. http://creativecommons.org/licenses/by/3.0/ Download this tool at http://achievethecore.org/IMET

Instructional Materials Evaluation Tool
Mathematics, Grades K-8

What Are the Purposes of the IMET?
This Math IMET is designed to help educators determine whether instructional materials are aligned to the Shifts and major features of the Common Core State Standards (CCSS). The substantial instructional Shifts (http://www.corestandards.org/other-resources/key-shifts-inmathematics/) at the heart of the Common Core State Standards are:
- **Focus** strongly where the Standards focus
- **Coherence**: Think across grades and link to major topics within the grade
- **Rigor**: In major topics, pursue conceptual understanding, procedural skill and fluency, and application with equal intensity.

The IMET draws directly from the following documents:
- Common Core State Standards for Mathematics (www.corestandards.org/Math)
- Publishers' Criteria for the Common Core State Standards in Mathematics grade K-8 (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)

When to use the IMET
1. Purchasing materials: Many factors go into local purchasing decisions. Alignment to the Standards is a critical factor to consider. This tool is designed to evaluate alignment of instructional materials to the Shifts and the major features of the CCSS. It also provides suggestions of additional indicators to consider in the materials evaluation and purchasing process.

2. Evaluating materials currently in use: The IMET can be used to analyze the degree of alignment of existing materials and help to highlight specific, concrete flaws in alignment. Even where materials and tools currently in use fail to meet one or more of these criteria, the pattern of failure is likely to be informative. States and districts can use the evaluation to create a thoughtful plan to modify or combine existing resources in such a way that students' actual learning experiences approach the focus, coherence, and rigor of the Standards.

3. Developing programs: Those developing new programs can use this tool as guidance for creating aligned curricula.
Please note this tool was designed for evaluating comprehensive curricula (including any supplemental or ancillary materials), but it was not designed for the evaluation of standalone supplemental materials.

Who Uses the IMET?
Evaluating instructional materials requires both subject-matter and pedagogical expertise. Evaluators should be well versed in the Standards (www.corestandards.org/Math) for all grades in which materials are being evaluated. This includes understanding the Major Work of the grade (www.achievethecore/focus), the Supporting and Additional work, how the content fits into the progressions in the Standards (www.achievethecore.org/progressions), and the expectations of the Standards with respect to conceptual understanding, procedural skill and fluency, and application. Evaluators also should be familiar with the substantial instructional Shifts (http:// www.corestandards.org/other-resources/key-shifts-in-mathematics/) of Focus, Coherence and Rigor that are listed above.

Getting Started
Prior to Evaluation

Assemble all of the materials necessary for the evaluation. It is essential for evaluators to have materials for all grades covered by the program, as some criteria cannot be rated without having access to each grade. In addition, each evaluator should have a reference copy of the Common Core State Standards for Mathematics (CCSSM) and the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013).

2015-16 Interim Mathematics Review

Mathematics Evaluation Tool Grades K-8

Publisher: The Math Learning Center

Title of Material: Bridges, Second Grade

Author: Jeff Frykholm

ISBN #: _____ **Copyright:** 2016

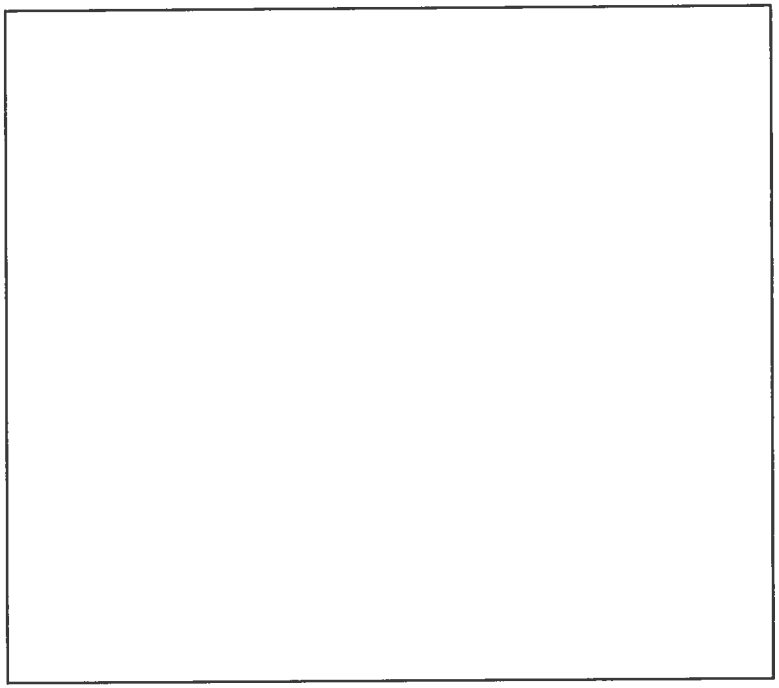
Reviewer ID: VF and DD

Core Mathematics Program- a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Core.

Other Mathematics Program- a program that substantially, but partially, meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Other.

Component Mathematics Program- a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs.
Substantial evidence clearly supports the designation of this program as Component.

Intervention Program- a program designed and intended to target and support students' specific needs.
Substantial evidence clearly supports the designation of this program as Intervention.



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Instructional Materials Evaluation Tool

Mathematics, Grades K-8

What Are the Purposes of the IMET?

This Math IMET is designed to help educators determine whether instructional materials are aligned to the Shifts and major features of the Common Core State Standards (CCSS). The substantial instructional Shifts (http://www.corestandards.org/other-resources/key-shifts-inmathematics/) at the heart of the Common Core State Standards are:

- **Focus** strongly where the Standards focus
- **Coherence**: Think across grades and link to major topics within the grade
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When to use the IMET

1. Purchasing materials: Many factors go into local purchasing decisions. Alignment to the Standards is a critical factor to consider. This tool is designed to evaluate alignment of instructional materials to the Shifts and the major features of the CCSS. It also provides suggestions of additional indicators to consider in the materials evaluation and purchasing process.

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Please note this tool was designed for evaluating comprehensive curricula (including any supplemental or ancillary materials), but it was not designed for the evaluation of standalone supplemental materials.

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Evaluating instructional materials requires both subject-matter and pedagogical expertise. Evaluators should be well versed in the Standards (www.corestandards.org/Math) for all grades in which materials are being evaluated. This includes understanding the Major Work of the grade (www.achievethecore/focus), the Supporting and Additional work, how the content fits into the progressions in the Standards (www.achievethecore.org/progressions), and the expectations of the Standards with respect to conceptual understanding, procedural skill and fluency, and application. Evaluators also should be familiar with the substantial instructional Shifts (http:// www.corestandards.org/other-resources/key-shifts-in-mathematics/) of Focus, Coherence and Rigor that are listed above.

Getting Started

Prior to Evaluation

Assemble all of the materials necessary for the evaluation. It is essential for evaluators to have materials for all grades covered by the program, as some criteria cannot be rated without having access to each grade. In addition, each evaluator should have a reference copy of the Common Core State Standards for Mathematics (CCSSM) and the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013).

Before conducting the evaluation itself, it is important to develop a protocol for the evaluation process. The protocol should include having evaluators study the Publishers' Criteria and the IMET. It will also be helpful for evaluators to get a sense of each program overall before beginning the process. At a minimum, this would include reading the front matter of the text, looking at the table of contents and paging through multiple chapters.

Sections 1-3 below should be completed to produce a comprehensive picture of the strengths and weaknesses of the materials under evaluation. Information about areas in need of improvement or supplementation should be shared with internal and external stakeholders.

Navigating the Tool

Begin with Section 1: Non-Negotiable Alignment Criteria

- The Non-Negotiable Alignment Criteria must each be met in full for materials to be considered aligned to the Shifts and the major features of the Common Core State Standards. Each Non-Negotiable Alignment Criterion has one or more metrics associated with it; every one of these metrics must be met in order for the criterion as a whole to be met.
- Examine the relevant materials and use evidence to rate the materials against each criterion and its associated metric(s).
- Record and explain the evidence upon which the rating is based.

Continue to Section 2: Alignment Criteria

- The Alignment Criteria must each be met for materials to be considered aligned to the Shifts and the major features of the Common Core State Standards. Each Alignment Criterion has one or more metric associated with it; a specific number of these metrics must be met or partially met in order for the criterion as a whole to be met.
- Examine the materials in relation to these criteria, assigning each metric a point value. Rate the criterion as "Meets" or "Does Note Meet" based on the number of points assigned. The more points the materials receive on the alignment Criteria, the better they are aligned.
- Record and explain the evidence upon which the rating is based.

Proceed to Section 4: Indicators of Quality

- Indicators of Quality are important considerations that will help evaluators better understand the overall quality of instructional materials. These considerations are not criteria for alignment to the CCSS, but they provide valuable information about additional program characteristics. Evaluators may want to add their own indicators to the examples provided.

Directions for Non-Negotiable 1

Freedom from Obstacles to Focus

Criterio	Evidence- Give s cific examples.	Rating: (Reviewer only.)
Non-Negotiable 1: **Freedom from Obstacles to Focus** **Materials must reflect the content architecture of the Standards by not assessing the topics named before the grade level where they first appear in the Standards.** The Standards foster students' progress to algebra by focusing strongly on arithmetic. Consistent with this focus, certain topics from outside of arithmetic appear only in later grades. Thus, to be aligned, materials must reflect the content architecture of the Standards by not assessing the topics named before the grade level where they first appear in the Standards. In this criterion, "topics named" means the topics that are explicitly named in Metric 1A. No other topics should be added to the list in Metric 1A. (Note that other topics in the standards are addressed in criterion NN2.)	**Required Materials** • Common Core State Standards for Mathematics (www.corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf) • From the materials being evaluated: teacher guides and all assessment components	**Rating this Criterion:** Non-Negotiable 1 is rated as Meets or Does Not Meet. To rate Non-Negotiable 1, begin by rating Metric 1A. Since Metric 1A is the only metric for Non-Negotiable 1, the rating for Non-Negotiable 1 is the same as the rating for Metric 1A. If Metric 1A is rated as Does Not Meet, include evidence of when the named topic(s) is/are assessed. If the metric is rated as Meets, list the grade(s) examined in the evaluation.
Metric NN1A: **Materials reflect the basic architecture of the Standards by not assessing the listed topics before the grade level indicated.** • Probability, including chance, likely outcomes, probability models. (Introduced in the CCSSM in grade 7) • Statistical distributions, including center, variation, clumping, outliers, mean, median, mode, range, quartiles; and statistical association or trends, including two-way tables, bivariate measurement data, scatter plots, trend line, line of best fit, correlation. (Introduced in the CCSSM in grade 6) • Similarity, congruence, or geometric transformations. (Introduced in the CCSSM in grade 8) • Symmetry of shapes, including line/ reflection symmetry, rotational symmetry. (Introduced in the CCSSM in grade 4) **How to Find the Evidence:** Evaluate the table of contents, all chapter tests, all unit tests, and other such assessment components (including rubrics). For context, read Criterion #2 from the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013). NOTE: Grade alignments of other topics are addressed in Non-Negotiable 2, Focus and Coherence.) In this criterion, "topics named" means the topics that are explicitly named in Metric 1A. No other topics should be added to the list in Metric 1A. (Note that other topics in the standards are addressed in criterion NN2.)	**Evidence-** **After reviewing all units in the curriculum, specifically the data and geometry units, I found no evidence of any of these items being assessed in the second grade curriculum. Symmetry is taught in Unit 6, module 4, but it is not assessed.**	**(Reviewer only.)** **Yes! ____ Meets** **____Does Not Meet**

Non-Negotiable 1: Materials must reflect the content and architecture of the Standards by not assessing the topics named* before the grade level where they first appear in the Standards.

NN 1 If Metric 1A was rated as Meets, then rate Non-Negotiable 1 as Meets. If Metric 1A was rated as Does Not Meet, then rate Non- Negotiable 1 as Does Not Meet. Check the final rating.

Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)**

Before moving to Non-Negotiable 2, record the final Meets or Does Not Meet rating in the Evaluation Summary.

(Reviewer only.)

Yes!____Meets

____Does Not Meet

Strengths/Weaknesses:

All units appear to align with the CCSS for second grade standards. I found no evidence that topics were assessed before introduced in the grade level.

Directions for Non-Negotiable 2

Focus and Coherence

Non-Negotiable 2:

Focus and Coherence

Materials must focus coherently on the Major Work of the grade in a way that is consistent with the progressions in the Standards.

Focus and coherence are the two major evidence-based design principles of the Common Core State Standards for Mathematics (CCSSM, p. 3). Focus is necessary in order to fulfill the ambitious promise the states have made to their students by adopting the Standards: greater achievement at the college and career ready level; greater depth of understanding of mathematics; and a rich

Required Materials

- Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf)
- Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)
- Focus by Grade Level for the grade being evaluated (www.achievethecore.org/focus)
- From the materials being evaluated: teacher guides, student texts and workbooks

Rating this Criterion:
Non-Negotiable 2 is rated as Meets or Does Not Meet.

To rate Non-Negotiable 2, first rate metrics 2A–2H. Each of these eight metrics must be rated as Meets in order for Non-Negotiable 2 to be rated as Meets. Rate each metric 2A-2H as Meets or Does Not Meet/Insufficient Evidence. If the evidence examined shows that the Criterion is met, then mark the Criterion Meets. If the evidence examined shows that the Criterion is not met—or if there is insufficient evidence to make a determination—then mark the Criterion as Does Not Meet/Insufficient Evidence. Support all ratings with evidence.

classroom environment in which reasoning, sense-making, applications, and a range of mathematical practices flourish. In simpler terms, a mile-wide, inch-deep curriculum translates to less time per topic. Less time means less depth and moving on without many students. Thus, materials must focus coherently on the Major Work of the grade in a way that is consistent with the progressions in the Standards.		
Metric NN2A: **In each grade K–8, students and teachers using the materials as designed devote the large majority of time to the Major Work of the grade.** **How to Find the Evidence:** Familiarize yourself with the Major Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, lessons, homework assignments, and assessments. (Evaluate both student and teacher materials.) Consider time spent on the Major Work of the grade and judge qualitatively whether students and teachers using the materials as designed will devote the large majority of time to the Major Work of the grade. For context, read Criterion #1 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013)	**Evidence-** **There are five major cluster is second grade math. This curriculum spends 19 out of 32 modules specifically on these clusters as shown below.** This is difficult to fully calculate because many of these major work concepts are intertwined and taught in other units, just not a specific unit or module focus of its own. **-Understand place value:** Unit 2 (module 1) Place Value & Measurement Unit 5 (module 1, 2, 3) Place Value to One Thousand Unit 8 (Module 1) place value & 3-digit computation **- Use place value understanding and properties of operations to add and subtract** **- Represent and solve problems involving addition and subtraction** **- Add and subtract within 20 (CCSS says 100 and 1000)** Unit 1 (module 2, 3, 4) Figure the Facts Unit 2 (module 2, 3) Place Value & Measurement Unit 3 (module 1, 2, 3) Addition and Subtraction Within One Hundred Unit 7 (Module 3) adding & subtracting 3-digit numbers Unit 7 (Module 4) writing & solving story problems *Unit 8 (Module 1) place value & 3-digit computation **- Measure and estimate lengths in standard units** Unit 4 (module 1, 2, 3) Measurement **- Relate addition and subtraction to length (weak)** Unit 2, Module 3, Session 6 - turning vines into ropes Unit 4, Module 3, Session 3 - twice as tall Unit 4, Module 4 (addition and subtraction is in all of these measurement problems solving sessions)	**(Reviewer only.)** **Yes ____Meets** **____Does Not Meet/** **Insufficient Evidence**

Metric N **Supporting Work, where present, enhances focus and coherence simultaneously by also engaging students in the Major Work of the grade.** **How to Find the Evidence:** Familiarize yourself with the Major Work and Supporting Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate chapters and lessons that focus on Supporting Work. NOTE: Example of evaluating this Criterion might include looking at whether materials for K–5 generally treat data displays as an occasion for solving grade-level word problems using the four operations (e.g., see 3.MD.B.3); or whether materials for grade 7 take advantage of opportunities to use probability to support ratios, proportions, and percentages. For context, read Criterion #3 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** **Supporting clusters are sufficiently covered by units and they support the major clusters of second grade.** **- Work with time and money** **Unit 5, Module 2: Place Value with Money** Students are taught to intertwine money concepts with place value concepts through the entire Unit 5 Place Value to One Thousand unit. **- Work with equal groups of objects to gain foundations for multiplication** **Unit 2, Module 4: thinking in Twos** **Unit 4, Module 4: thinking in Threes** Students are working with skip counting, arrays, repeated addition, and equal groups of twos and threes respectively to build foundations for multiplication. **- Represent and interpret data** **Unit 1, Module 1: Sorting and Graphing** **Unit 3, Module 4: data & the many colors project** **Unit 8, Module 2, 3, 4: Collecting & Analyzing Data** Students are using addition and subtraction to answer problems based on graphs. **- Reason with shapes and their attributes** **Unit 6, Modules 1, 2, 3: Geometry** Students are counting and adding within 20 to sort shapes based on number of sides.	**(Reviewer only.)** **Yes ____Meets** **____Does Not Meet/** **Insufficient Evidence**
Metric NN2C: **Materials base content progressions on the grade-by-grade progressions in the Standards. Content from previous or future grades does not unduly interfere with or displace on-grade-level content.** **How to Find the Evidence:** Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, and lessons in both student and teacher materials. NOTE: In some cases it may be possible that aligned materials might address some aspects of a topic in a strategic way before or after the grade level in which the topic is central in the Standards' progressions; for example, a curriculum author might purposefully choose to explore adding fractions with unlike denominators in a way appropriate to grade four, recognizing that this work is not really required until the next grade. However, any such purposeful discrepancies in content progressions should enhance the required learning in each grade; not unduly interfere with or displace grade-level content; and be clearly aimed at helping students meet the Standards as	**Evidence-** **After thoroughly reviewing the curriculum, I found no discrepancies in the content progression that unduly interfered with grade level content.** **There were a couple times where further grade level concepts were strategically placed, such as area and arrays, in the appropriate geometry unit that build a base for third grade multiplication and area standards.**	**(Reviewer only.)** **Yes ____Meets** **____Does Not Meet/** **Insufficient Evidence**

written rath[illegible]n effectively rewriting the progressions in the Standards. And in all cases, note that Non-Negotiable 1 must be met for materials to be aligned. For context, read Criterion #5a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).		
Metric NN2D: **Materials give all students extensive work with on-grade-level problems.** **How to Find the Evidence:** Evaluate both student and teacher materials. If the materials provide resources for differentiated learning, consider whether lower-performing students have opportunities to engage with grade-level problems. Also consider whether higher-performing students are given opportunities to learn current grade-level content in greater depth. For context, read Criterion #5b in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** • **Each lesson of each unit contains on-grade level problems to solve through investigations, manipulative, and work places that align with the skills stated in the CCSS.** • **Many, but not all of the lessons, in the unit contains an assessment and differentiation guide, of suggestions for what to do in certain situations for support and challenge. They don't necessarily provide formal differentiations, they are more just quick things to say or have a student do with the whole class on grade-level work.**	**(Reviewer only.)** **Yes ____Meets** **____Does Not Meet/** **Insufficient Evidence**
Metric NN2E: **Materials relate on-grade-level concepts explicitly to prior knowledge from earlier grades.** **How to Find the Evidence:** Evaluate both student and teacher materials. NOTE: Examples of evaluating this Criterion might include looking at the way the materials extend basic ideas of place value across the decimal point; or the role that properties of operations play when the materials extend arithmetic beyond whole numbers to fractions, variables, and expressions. More generally, cluster headings in the Standards sometimes signal key moments where reorganizing and extending previous knowledge is important in order to accommodate new knowledge (e.g., see cluster headings that use the phrase "Apply and extend previous understanding"). For context, read Criterion #5c in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** **There are no cluster headings in second grade that specifically state for students to "apply and extend previous understanding."** **Each unit contains a "Skills across the grade level" chart showing the major skills and concepts addresses in that unit and provides a quick snapshot of the skills that were addressed in Grade 1, elsewhere in grade 2, and looking ahead to grade 3.** Example, p. iv in Unit 5 shows that standard 2.NBT.1 'demonstrate an understanding that the digits in a 3-digit number represent amounts of hundreds, tens, and ones' is: Grade 1: introduced Grade 2: Mastered in this Unit 5 (as well as unit 2, 3, 8) Grade 3: reviewed, practiced, or extended to higher levels	**(Reviewer only.)** **Yes ____Meets** **____Does Not Meet/** **Insufficient Evidence**
Metric NN2F: **Review of material from previous grades is clearly identified as such to the teacher, and teacher and students can see what their specific responsibility is for the current year.** **How to Find the Evidence:** Evaluate the table of contents, but do not stop there; also evaluate units, chapters, lessons, homework assignments and assessments. (Evaluate both student and teacher materials.) Identify any content from previous grades and check whether it is identified as such. For context, read Criterion #5a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** **There are no cluster headings in second grade that specifically state for students to "apply and extend previous understanding."** **Each unit contains a "Skills across the grade level" chart showing the major skills and concepts addresses in that unit and provides a quick snapshot of the skills that were addressed in Grade 1, elsewhere in grade 2, and looking ahead to grade 3.** Example, p. iv in Unit 5 shows that standard 2.NBT.1 'demonstrate an understanding that the digits in a 3-digit	**(Reviewer only.)** **Yes ____Meets** **____Does Not Meet/** **Insufficient Evidence**

	number represent ar ts of hundreds, tens, and ones' is: Grade 1: introduced Grade 2: Mastered in this Unit 5 (as well as unit 2, 3, 8) Grade 3: reviewed, practiced, or extended to higher levels **In addition, there is an assessment map in the assessment guide that shows where each CCSS is assessed and is shaded to show which unit the student assessment the student is expected to master the specific standard by in second grade. (p.11-15)**	
Metric NN2G: **Materials include learning objectives that are visibly shaped by CCSSM cluster headings.** **How to Find the Evidence:** Select several clusters from the Major Work in the grade being evaluated. Evaluate teacher and student materials in relation to these clusters. For context, read Criterion #6a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** **Each lesson begins with a summary and a skills & concepts section. The summary gives teachers a blurb of what is taught in the session. The skills & concepts give a break down the the CCSS cluster headings and the mathematical practices used in this session. It doesn't point to one specific standard as the focus, just a list of all the standards being touched on, whether the focus/main thing of the lesson or not. For example Unit 5, Module 1, session 3 states that the skills and concepts covered** - **2.NBT.1** - **2.NBT.2** - **2.NBT.3** - **2.NBT.7** - **2.MP.3** - **2.MP.6**	**(Reviewer only.)** **Yes ____Meets** **____Does Not Meet/** **Insufficient Evidence**
Metric NN2H: **Materials include problems and activities that serve to connect two or more clusters in a domain, or two or more domains in a grade, in cases where these connections are natural and important.** **How to Find the Evidence:** In the grade being evaluated, choose two or more clusters or two or more domains for which connections are natural and important. Evaluate the units, chapters, and lessons that deal with the chosen topics, looking for problems and activities that serve to connect the chosen clusters or domains. NOTE: An example of evaluating this Criterion might include looking at whether problems in grade 4 sometimes or often involve students applying their developing computation skills (detailed in domain NBT) in the context of solving word problems (detailed in domain OA). For context, read Criterion #6b in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** **Example of a connection between clusters in a domain:** In unit 1, figure the facts, students spend time in the OA cluster "Add and subtract within 20." Then it naturally moves students into the OA cluster "work with equal groups of objects to gain foundations for multiplication" by counting equals groups, arrays, and using repeated addition in unit 2, module 4 and unit 4, module 4. Students must use their add and subtract within 20 skills in order to work with equal groups. **Example of a connection between domains:** Students spend a module in unit 1 learning '2-digit subtraction' in the cluster "use addition and subtraction within 100 to solve one- and two-step word problems…" in the Operation and Algebraic Thinking Domain. Then, students use these addition concepts in unit 4, module 4 to "use addition and subtraction within 100 to solve word problems involving lengths…" in the Measurement and	**(Reviewer only.)** **Yes ____Meets** **____Does Not Meet/** **Insufficient Evidence**

	Data Domain.	
Non-Negotiable 2: **Focus and Coherence** **Materials must focus coherently on the Major Work of the grade in a way that is consistent with the progressions in the Standards.** **NN 2** If all Metrics 2A – 2H were rated as Meets, then rate Non-Negotiable 2 as Meets. If one or more Metric was rated Does Not Meet/Insufficient Evidence, then rate Non-Negotiable 2 as Does Not Meet. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)** **Before moving to Alignment Criterion 1, record the final Meets or Does Not Meet rating in the Evaluation Summary.**		**(Reviewer only.)** **Yes ____Meets** **____Does Not Meet** **Strengths/Weaknesses:** **There is multiple evidence, as outlined above, that this programs focuses on the major work of second grade and the CCSS.**

Now continue by evaluating the Alignment Criterion 1 for Rigor and Balance.

Directions for Alignment Criterion 1

Rigor and Balance

Alignment Criterion 1: Rigor and Balance **Materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.** The Standards set expectations for attention to all three aspects of rigor: conceptual understanding, procedural skill and fluency, and applications. Thus, materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.	**Required Materials** • Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf) • Focus by Grade Level for the grade being evaluated (achievethecore.org/focus) • Situation Types for the Operations in Word Problems (achievethecore.org/situation-types) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion:** Alignment Criterion 1 is rated as Meets or Does Not Meet. To rate Alignment Criterion 1, first rate metrics 1A, 1B, and 1C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). For each metric, guiding questions are provided to aid in gathering evidence. Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 1 if the materials rate 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as rigor and balance, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.
Metric AC1A: **The materials support the development of students' conceptual understanding of key mathematical concepts, especially where called for in specific content Standards or cluster headings.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Major Work for the grade being evaluated that relate specifically conceptual understanding to use throughout the questions associated with this metric. NOTE: Some examples of clusters or Standards that call for conceptual understanding include: K.OA.A.1, (1.NBT.B, 1.NBT.C), (2.NBT.A, 2.NBT.B), (3.OA.A.1, 3.OA.A.2), 4.NF.A, (4.NBT.A, 4.NBT.B), 5.NF.B, (5.NBT.A, 5.NBT.B), 6.RP.A, 6.EE.A.3, 7.NS.A, 7.EE.A, 8.EE.B, 8.F.A, 8.G.A Clusters or Standards grouped by parentheses are closely connected and could be analyzed together. For context, read Criterion #4a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	-Choose a cluster/Standard from the Major Work that is aligned to each aspect of rigor and use it to evaluate these metrics. It is most helpful if the same clusters/Standards are chosen for all of the programs being evaluated. (Guidance in choosing clusters/Standards is included in "How to Find the Evidence".)	**Use the questions for AC Metric 1A to evaluate Metric 1A. Record evidence for each question and rate Metric 1A.** **Yes____Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**

Is conceptu[illegible]erstanding attended to thoroughly where the Standards set explicit expectations for understanding or interpreting? Evaluate lessons, chapter/unit assessments and homework assignments, paying attention to work aligned to Standards that explicitly call for understanding or interpreting. NOTE: Examples of evaluating this Criterion might include looking at how well the multi-digit addition and subtraction algorithms are developed and explained on the basis of place value and properties of operations; or how well the multi-digit multiplication and division algorithms are developed and explained on the basis of place value and properties of operations; or how well solving equations is presented and explained as a process of reasoning.	**Evidence-** **- 2.NBT "<u>Understand</u> that the three digits of a three-digit number represent amounts of hundreds, tens, and ones…"** Unit 2, Module 1 Unit 2, Module 2 Unit 2, Module 3 Unit 5, Module 1 Unit 5, Module 3	
Do the materials feature high-quality conceptual problems and conceptual discussion questions? Evaluate lessons, chapter/unit assessments, and homework assignments. NOTE: Example of conceptual problems might include such questions as "Find a number greater than 1/5 and less than 1/4," or "If the divisor does not change and the dividend increases, what happens to the quotient?"	**Evidence-** For example, unit 5, module 1, session 3 has a question where students are told that 999 + 1 and 500 + 500 are two different ways to make 1,000. Students must then show several other ways to make 1,000. They can use addition, subtraction, and even more than two addends.	
Do the materials feature opportunities to identify correspondences across mathematical representations? Evaluate lessons, chapter/unit assessments and homework assignments. NOTE: Examples of evaluating this Criterion might include looking at whether students are supported in identifying correspondences among: the verbal description of a situation, the diagrams that distill its mathematical features, and the equations that model it; or equivalent forms of numbers (e.g., 3 and 6/2) and the number line; or rational number operations and representations of them via models such as the vector model; or the expression that defines a function and the graph that shows the relationship.	**Evidence-** For example, unit 5, module 1, session 5 has questions where students must write the number shown from a place value diagram and then write its hundreds, tens, and ones equivalents and also in expanded form.	
Metric AC1B: **The materials are designed so that students attain the fluencies and procedural skills required by the Standards.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Major Work for the grade being evaluated that relate specifically to fluency and procedural skill to use throughout the questions associated with this metric. NOTE: Some examples of Standards that call for procedural skill and fluency include: K.OA.A.5, 1.OA.C.6, 2.OA.B.2, 2.NBT.B.5, 3.OA.C.7, 3.NBT.A.2, 4.NBT.B.4, 5.NBT.B.5, 6.NS.B.2, and 6.NS.B.3, 6.EE.A, 7.NS.A, 7.EE.A.1,7.EE.B.4a, 8.EE.C.7, 8.EE.C.8b For context, read Criterion #4b in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).		**Use the questions for Metric 1B to evaluate Metric 1 B. Record evidence for each question and rate Metric 1B.** **(Reviewer only.)** **Yes ____Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**

Is progress[illegible]d fluency and procedural skill interwoven with students' developing conceptual understanding of the operations in question? Evaluate lessons, chapter/unit assessments, daily routines, and homework assignments for evidence that the development of fluency and procedural skill is supported by conceptual understanding.	**Evidence-** **2.OA.2 <u>Fluently</u> add and subtract within 20 using mental strategies.** Unit 1 covers 'figure the facts,' teaches mental math strategies such as double facts, doubles plus or minus one (p.iii unit 1) **2.NBT.5 <u>Fluently</u> add and subtract within 100 using strategies based on place value, properties of operations, and/or the relationship between addition and subtraction.** Unit 3 'Addition & Subtraction within One Hundred' teaches addition and subtraction within one hundred using strategies such as subtracting on the number line	
Are purely procedural problems and exercises present that include cases in which opportunistic strategies are valuable and generic cases that require efficient algorithms present? Evaluate lessons, chapter/unit assessments, daily routines, and homework assignments. NOTE: Examples of problems in which opportunistic strategies are valuable might include the sum 698 + 240 or the system $x + y = 1$, $2x + 2y = 3$. Examples of generic cases that require efficient algorithms might include the sum 8767+2286 or the system $6y + x = x + 3$, $-x = 1 + 2y$.	**Evidence-** Yes, I checked several of the lessons in the chapters listed above, and they had purely procedural problems where students could use strategies to solve. For example, unit 1 'figure the facts' module 2 has students using a number rack and double facts to visualize and solve 4+4.	
Do the materials in grades K–6 provide repeated practice toward attainment of fluency Standards? Evaluate lessons, daily routines, and homework assignments for evidence of repeated practice toward attainment of the following K–6 Standards that set an explicit expectation of fluent (accurate and reasonably fast) computation: K.OA.A.5, 1.OA.C.6, 2.OA.B.2, 2.NBT.B.5, 3.OA.C.7, 3.NBT.A.2, 4.NBT.B.4, 5.NBT.B.5, 6.NS.B.2, 6.NS.B.3.	**Evidence-** The lessons all appear to have repeated practice. For example, unit 1, module 2 has a practice page where students use figure the facts strategies to solve 11 problems for students to solve to practice that lesson's concept. Some, but not all sessions have repeated practice homework. *Note, there are several more resources for additional practice that come in a Number Concepts pack - which is an additional program used to supplement Bridges.	
Metric AC1C: **The materials are designed so that teachers and students spend sufficient time working with engaging applications, without losing focus on the Major Work of each grade.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Major Work for the grade being evaluated that relate specifically application to use		**Use the questions for Metric 1C to evaluate Metric 1C. Record evidence for each question and rate Metric 1C.** **(Reviewer only.)** **Yes ____Meets (2)**

throughout questions associated with this metric. NOTE: Some examples of clusters or Standards that call for application include: K.OA.A.2, 1.OA.A, 2.OA.A, 3.OA.A.3, 3.OA.D.8, 4.OA.A.3, 4.NF.B.3d, 4.NF.B.4c, 5.NF.B.6, 5.NF.B.7c, 6.RP.A.3, 6.NS.A.1, 6.EE.B.7, 6.EE.C.9, 7.RP.A, 7.NS.A.3, 7.EE.B.3, 8.EE.C.8c, 8.F.B For context, read Criterion #4c in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).		____**Partially Meets (1)** ____**Does Not Meet (0)**
Are there are single- and multi-step contextual problems, including non-routine problems, that develop the mathematics of the grade, afford opportunities for practice, and engage students in problem solving? Do the problems attend thoroughly to those places in the content Standards where expectations for multi-step and real-world problems are explicit? Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** There are specific problem solving tasks in these locations. Unit 3, Module 3, Session 4 (single & multi-step) Unit 3, Module 3, Session 5 (single & multi-step) Unit 5, Module 3, Session 4 (single-step) Unit 7, Module 1, Session 1 (multi-step) Unit 7, Module 3, Session 3 (single & multi-step) There are also problem solving task in the Number Corner program that is a supplement to bridges.	
Do application problems particularly stress applying the Major Work of the grade? Evaluate lessons, chapter/unit assessments, and homework assignments. NOTE: Examples of evaluating this Criterion might include looking at: how well, by the end of grade 2, students using the materials as designed can represent and solve a full range of one-step addition and subtraction word problems; or how well, by the end of grade 3, students using the materials as designed can represent and solve a full range of one-step multiplication and division word problems; or how well these basic situation types for each operation are carried coherently across the grades, (e.g., with fractions and algebraic expressions); or, in all grades, whether the problems connect concepts, Standards, and domains in ways that are natural and important. For a list of situation types for one-step addition, subtraction, multiplication, and division problems, see Situation Types for the Operations in Word Problems	**Evidence-** All the specific problem solving tasks from above, have students adding, subtracting, and use place value concepts, which are the major works of second grade.	
Does modeling build slowly across K–8, with applications that are relatively simple in earlier grades and when students are encountering new content? In grades 6–8, do the problems begin to provide opportunities for students to make their own assumptions or simplifications in order to model a situation mathematically? Read Standard for Mathematical Practice 4, Model with Mathematics. Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** I viewed the progress of modeling in addition and subtraction. In second grade, they begin with using the number rack with colored beads to show doubles, counting up and down, tens facts, as well as other addition within 20 facts. It then builds into 2-digit and then further on 3-digit addition and subtraction with place value blocks and number line.	
Alignment Criterion 1: **Rigor and Balance** **Materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.**		**(Reviewer only.)** **Yes ____Meets** **____Does Not Meet**

AC1 Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 out of 6 points, the Criterion has not been met. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)** **Before moving to Alignment Criterion 2, record the final Meets or Does Not Meet rating in the Evaluation Summary.**	**Strengths/Weaknesses:** This program meets all requirements for Alignment Criterion 2.

Directions for Alignment Criterion 2

Standards for Mathematical Practice

Alignment Criterion 2: Standards for Mathematical Practice **Materials must demonstrate authentic connections between content Standards and practice Standards.** The Standards require that designers of instructional materials connect the mathematical practices to mathematical content in instruction. Thus, materials must demonstrate authentic connections between content Standards and practice Standards.	**Required Materials:** • Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf) • Focus by Grade Level for the grade being evaluated (www.achievethecore.org/focus) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion** Alignment Criterion 2 is rated as Meets or Does Not Meet. To rate Alignment Criterion 2, first rate metrics 2A, 2B, and 2C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). For each metric, guiding questions are provided to aid in gathering evidence. Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 2 if the materials earn 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as mathematical practices, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.

Metric AC **Materials address the practice Standards in such a way as to enrich the Major Work of the grade; practices strengthen the focus on Major Work instead of detracting from it, in both teacher and student materials.** **How to Find the Evidence:** Familiarize yourself with the Major Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate teacher and student materials for evidence that the mathematical practices support and connect to the focus of the grade. NOTE: Examples of evaluating this Criterion might include looking at whether, in grades K–5, students using the materials are supported to look for and express regularity in repeated reasoning about the addition table, the multiplication table, the properties of operations, the relationship between addition and subtraction or multiplication and division, and the place value system; or whether, in grades 6–8, students using the materials are supported to look for and express regularity in repeated reasoning about proportional relationships and linear functions. For context, read Criterion #8 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013).	**Evidence-** **addition table** not found – big weak spot **multiplication table** (not found in second grade, but not a major work) **the properties of operations** No specific Lessons found – big weak spot **the relationship between addition and subtraction** not found - big weak spot **The relationship between multiplication and division** (not found in second grade, but not a major work) **Other:** Students use number rack, tens frames, and other models/materials to practice the major work.	**(Reviewer only.)** **____Meets (2)** **Yes ____Partially Meets (1)** **____Does Not Meet (0)**
Metric AC2B: **Materials attend to the full meaning of each practice Standard.** **How to Find the Evidence:** For context, read Criterion #7 and Criterion #9 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).		**Use the questions for Metric 2B to evaluate Metric 2B. Record evidence for each question and rate Metric 2B.** **(Reviewer only.)** **Yes! ____Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Over the course of any given year of instruction, is each mathematical practice Standard meaningfully present in the form of assignments, activities, or problems that stimulate students to develop the habits of mind described in the practice Standard? Evaluate lessons, chapter/ unit assessments, and homework assignments for evidence of each mathematical practice being meaningfully present in instruction.	**Evidence-** The full language of the standards is emphasized through the whole year and are specifically marked in the skills & concepts section at the beginning of each session. In addition to this, there are specific 'bigger' problem solving tasks (unit 3, module 3)(unit 7, module 1) that have students fully dive into numerous mathematical practices in order to complete a mathematical task. This is actually much stronger if you include the number corners program (December calendar grid workout)	

Do the materials treat the practice Standards as developing across grades or grade bands? Are the practice Standards in early grades appropriately simple? Do they display an arc of growing sophistication across the grades?	**Evidence-** From what I can tell, yes, the practice standards are grade appropriate. For example, the problem from unit 3, module 3 noted above has students 'attending to precision' and 'make sense of problems and persevere in solving them" in order accurately solve the presents and parcel problems. Students will need to communicate their thinking in written form and verbally during this problem. This is developmentally appropriate for second graders to solve this problem.	
Are there teacher-directed materials that explain the role of the practice Standards in the classroom and in students' mathematical development? Are alignments to practice Standards accurate?	**Evidence-** The mathematical practice standards are fully explained in (approximately the 4th page in) the grade 2 overview at the beginning of unit 1, as well as page 19-23 in the assessment guide.	
Metric AC2C: **Materials support the Standards' emphasis on mathematical reasoning.** **How to Find the Evidence:** For context, read Criterion #10 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).		**Use the questions for Metric 2C to evaluate Metric 2C. Record evidence for each question and rate Metric 2C.** **(Reviewer only.)** **____Meets (2)** **Yes ____Partially Meets (1)** **____Does Not Meet (0)**
Do the materials support students in constructing viable arguments and critiquing the arguments of others concerning grade-level mathematics that is detailed in the content Standards? Read Standard for Mathematical Practice 3. Evaluate teacher and student materials to ensure that students are given opportunities to reason with grade-level mathematics.	**Evidence-** Unit 4,module 4, session 4 has students writing explanations in response to questions about thinking in threes. Unit 7, Module 2, Session 4 has students writing an explanation to describe patterns they noticed when ants were sharing cookies. There are many times when students are asked to give reasons, explain their thinking, and/or write an explanation of their work. However, I did not find where students had to critique the arguments or explanations of others.	
Do the materials support students in producing not only answers and solutions, but also, in a grade-appropriate way, arguments, explanations, diagrams, mathematical models, etc., especially in the Major Work of the grade? Familiarize yourself with the Major Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate teacher and student materials, to understand the types of work students are expected to produce.	**Evidence-** Yes, I have stated several times above where students are asked write explanations, as well as use models to solve problems. Specific example, in unit 1, module 1, session 5, students must solve the problem, then use mathematical models or diagrams and/or words to explain what they did to solve the addition problem.	
Do materials explicitly attend to the specialized language of mathematics? Is the language of argument, problem solving, and mathematical explanations taught rather than assumed? Evaluate teacher and student materials, paying attention to how mathematical language is taught. NOTE: Examples of evaluating this Criterion might include looking at whether students are supported in: basing arguments on definitions; using the method of providing a counterexample; or recognizing that	**Evidence-** The language of mathematics via the vocabulary is taught at the beginning of each session. There are plenty of times students are asked to make write an explanation. However, I did not find where students are specifically taught how to write an argument or explanation.	

examples a[illegible]o not establish a general statement.		
Alignment Criterion 2: **Standards for Mathematical Practice** **Materials must demonstrate authentic connections between content Standards and practice Standards.** **AC2** Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 out of 6 points, the Criterion has not been met. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)** **Before moving to Alignment Criterion 3, record the final Meets or Does Not Meet rating in the Evaluation Summary.**		**(Reviewer only.)** **____Meets** **NO ____Does Not Meet** **Strengths/Weaknesses:** **There are multiple times in each unit/chapter where students are asked to make connections in math via math talk, vocabulary, written explanations and so on. However, the program is lacking in using/teaching addition tables and properties, which is a major work in second grade.**
Alignment Criterion 3: **Access to the Standards for All Students** **Materials must provide supports for English Language Learners and other special populations.** Because Standards are for all students, alignment requires thoughtful support to ensure all students are able to meet the Standards. Thus, aligned materials must provide supports for English Language Learners and other special populations.	**Required Materials:** • Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion:** Alignment Criterion 3 is rated as Meets or Does Not Meet. To rate Alignment Criterion 3, first rate metrics 3A, 3B, and 3C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 3 if the materials earn 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as support for special population, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.

Metric AC **Support for English Language Learners and other special populations is thoughtful and helps those students meet the same Standards as all other students. The language in which problems are posed is carefully considered.** **How to Find the Evidence:** Evaluate teacher and student materials, paying attention to supports offered for special populations.	**Evidence-** In some, but not all sessions, there is a chart that includes information on adaptations to support the ELL students (in the teacher's masters). Example: Unit 2 The following sessions have an ELL guide: module 1, session 2 module 2, session 4 module 3, session 3 module 4 - none This is 3/20 sessions that have an ELL support guide.	**Reviewer only.)** **____Meets (2)** **Yes ____Partially Meets (1)** **____Does Not Meet (0)**
Metric AC3B: **Materials provide appropriate level and type of scaffolding, differentiation, intervention, and support for a broad range of learners with gradual removal of supports, when needed, to allow students to demonstrate their mathematical understanding independently.** **How to Find the Evidence:** Evaluate teacher and student materials, paying attention to whether materials provide differentiation that will lead all learners to engage with on-grade-level content.	**Evidence-** In some sessions there is a guide for differentiation - offering ideas for support and challenge. There is also the ELL supports described above. I couldn't find any intervention materials.	**Reviewer only.)** **____Meets (2)** **Yes ____Partially Meets (1)** **____Does Not Meet (0)**
Metric AC3C: **Design of lessons recommends and facilitates a mix of instructional approaches for a variety of learners such as using multiple representations (e.g., including models, using a range of questions, checking for understanding, flexible grouping, pair-share).** **How to Find the Evidence:** Evaluate teacher materials, noting instructional approaches suggested for whole class and differentiated lessons and activities.	**Evidence-** The addition and subtraction as well as the place value units that I focused my time on evaluating had multiple opportunities for hands-on lessons by modeling with manipulatives and models such as counters, squares, ten frames number bonds, and place value blocks. The work place section in each module offers small group and pair work.	**Reviewer only.)** **Yes ____Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Alignment Criterion 3: **Access to the Standards for All Students** **Materials must provide supports for English Language Learners and other special populations.**		**(Reviewer only.)** **____Meets** **NO ____Does Not Meet** **Strengths/Weaknesses:**

AC3 Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 points, the Criterion has not been met. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion.**(Reviewer only.)** **Move to the Evaluation Summary and record the final Meets or Does Not Meet rating .**	The program is lacking in ELL and differentiation support.

Once an evaluation for alignment to the Shifts and major features of the CCSS has been conducted using Sections 1-3, it's important to evaluate for overall quality and best practices. A starting list of Indicators of Quality are suggested below. States, districts and others evaluating instructional materials are encouraged to add to this list to ensure materials reflect local contexts. For background information on some of the Indicators of Quality in this section, refer to pp.18–21 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).

Indicators of Quality	**Evidence- Give specific examples.**	**Rating: (Reviewers only.)**
1. Lessons are thoughtfully structured and support the teacher in leading the class through the learning paths at hand, with active participation by all students in their own learning and in the learning of their classmates.	**Evidence-** **Each lesson is broken into a numbered list with instruction to the teacher on how to guide and support his/her students through the learning paths.**	**(Reviewer only.)** **Yes_____ Yes** **_____ No**
2. The underlying design of the materials includes both problems and exercises. (In solving problems, students learn new mathematics, whereas in working exercises, students apply what they have already learned to build mastery.) Each problem or exercise has a purpose. **NOTE: This Criterion does not require that the problems and exercises be labeled as such.**	**Evidence-** **Each lesson has guided instruction, as well as independent problems for students to solve based on new information learned.**	**(Reviewer only.)** **Yes _____ Yes** **_____ No**
3. Design of assignments is not haphazard: exercises are given in intentional sequences in order to strengthen students' mathematical understanding.	**Evidence-** **The design of assignments seems to have an intentional sequence. It's a bit difficult to see because this program does not have the normal list of discrete skills. Many things are intertwined and mixed in with other skills.**	**(Reviewer only.)** **Yes _____ Yes** **_____ No**
4. There are separate teacher materials that support and **reward teacher study including, but not limited to: discussion of the mathematics of the units and the**	**Evidence-** **Each chapter comes with a teacher book. The teacher book contains some of the following items as**	**(Reviewer only.)** **Yes _____ Yes**

mathema point of each lesson as it relates to the organizing concepts of the unit, discussion on student ways of thinking and anticipating a variety of students responses, guidance on lesson flow, guidance on questions that prompt students thinking, and discussion of desired mathematical behaviors being elicited among students.	information to/for the her: - guidance on lesson flow (per lesson) - suggestions for ELL, support, and challenge - math talk prompts - common error alerts - vocabulary - work centers	_____ No
5. Manipulatives suggested in the materials are faithful representations of the mathematical objects they represent and are connected to written methods.	Evidence- This program uses an abundance of manipulatives and they are faithful and accurate representative of the methods taught. Please note: this program could NOT be used without the purchase of numerous manipulatives and supplies for the classroom.	(Reviewer only.) Yes _____ Yes _____ No
6. Materials include a variety of curriculum-embedded assessments. Examples include pre-, formative, summative, and self-assessment resources.	Evidence- Each unit contains a pre, mid, and post test summative assessment. In addition, lessons contain suggestions and tables for formative assessments during instruction and work place (centers).	(Reviewer only.) Yes _____ Yes _____ No
7. Assessments contain aligned rubrics, answer keys, and scoring guidelines that provide sufficient guidance for interpreting student performance.	Evidence- The pre and post summative assessments mentioned above each have a scoring guide that shows teachers how to score (points) as well as designate a proficiency level.	(Reviewer only.) Yes _____ Yes _____ No
8. Materials assess student proficiency using methods that are accessible and unbiased, including the use of course-level language in student prompts.	Evidence- Based on the tests I reviewed, the assessments in the chapters are accessible and unbiased and the student at this grade level should be able to understand the language used in student prompts.	(Reviewer only.) Yes _____ Yes _____ No
9. Materials are carefully evaluated by qualified individuals, whose names are listed, in an effort to ensure freedom from mathematical errors and course-level appropriateness.	Evidence- The author and consulting mathematics editor of this program are both listed with their credentials and they appear to be qualified to write a math program. Other authors and editors are listed, but without their credentials.	(Reviewer only.) Yes _____ Yes

		_____ No
10. The visual design supports students in engaging thoughtfully with the subject. Navigation through the text is clear.	**Evidence-** **The student work is visually appealing with clear text. There are graphs, pictures, models, and so on used to support students learning.**	**(Reviewer only.)** **Yes _____ Yes** **_____ No**
11. The materials engage parents in appropriate ways. For example, homework assignments in elementary grades, consist of routine problems, practice with getting answers, and fluency-building exercises that parents can easily support.	**Evidence-** **There is homework included in this program that contains routine problems, extra practice, and fluency-building exercises.**	**(Reviewer only.)** **Yes _____ Yes** **_____ No**

Reviewer MET Evaluation Summary **Title/Level: Bridges Second Grade**

Publisher: The Math Learning Center **Copyright: 2016** **ISBN:_____**

Reviewer ID # VF and DD **Date Review Completed: 2/27/2016**

Non-Negotiable Criteria- Each Non-Negotiable must be met in order for the Non-Negotiable Alignment Criteria to be met overall.	
Non-Negotiable 1: Freedom from Obstacles to Focus **Yes! _____ Meets** **_____ Does Not Meet**	**Non- Negotiable 2: Focus and Coherence** **Yes! _____ Meets** **_____ Does Not Meet**
Non-Negotiable Overall: **Yes! _____ Meets** **_____ Does Not Meet**	

Alignment Criteria- Each Alignment Criterion must be met with a sufficient number of points in order for Alignment Criteria to be labeled as "Meets" overall. The more points the materials receive on the Alignment Criteria, the better they are aligned.		
Alignment Criterion 1: Rigor and Balance **Points: 6 of 6 possible.** **(Materials must receive at least 5 of 6 points to align.)** **Yes _____ Meets** **_____ Does Not Meet**	**Alignment Criterion 2: Standards of Mathematical Practice** **Points: 4 of 6 possible.** **(Materials must receive at least 5 of 6 points to align.)** **_____ Meets** **No _____ Does Not Meet**	**Alignment Criterion 3: Access to Standards for All Learners** **Points: 4 of 6 possible.** **(Materials must receive at least 5 of 6 points to align.)** **_____ Meets** **No _____ Does Not Meet**
Alignment Criteria Overall: **_____ Meets** **No _____ Does Not Meet**		

If the materials meet both Non-Negotiables and relevant Alignment Criterion, they are aligned to the Shifts and major features of the Core Standards. **Do the materials meet every Non-Negotiable and Alignment Criterion? _____ Yes NO! _____ No**

What are the specific areas of strength and weakness based on this evaluation? Publishers or others modifying or developing assessments can use this information to make improvements and/or to remedy gaps in the alignment of assessment materials.

This program meets every non-negotiable. However, it is lacking in some addition support (such as the addition tables and addition properties). Additionally, the ELL and differentiation support is severely lacking. Furthermore, the organization of the program is cumbersome and this program could not be implemented without the purchase of manipulatives and supplies.

emailed IMET

2015-16 Mathematics Interim Review Recommendation & Summary

Publisher Name:	The Math Learning Center
Title:	Bridges,
ISBN #	
Grade Level(s) or Course:	3rd grade
Reviewer ID:	VF ~~LBD~~

RECOMMENDED AS:

_____**Core Mathematics Program-** a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials. Substantial evidence clearly supports the designation of this program as Core.

_____**Other Mathematics Program-** a program that substantially, but partially, meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for supplemental materials. Substantial evidence clearly supports the designation of this program as Other.

__X__**Component Mathematics Program-** a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs. Substantial evidence clearly supports the designation of this program as Component.

_____**Intervention Program-** a program designed and intended to target and support students' specific needs. Substantial evidence clearly supports the designation of this program as Intervention.

__X__ **Does not meet criteria** for recommendation as a Curricular Material or Online Resource for Mathematics.

Instructional Materials Evaluation Tool
Mathematics, Grades K-8

What Are the Purposes of the IMET?
This Math IMET is designed to help educators determine whether instructional materials are aligned to the Shifts and major features of the Common Core State Standards (CCSS). The substantial instructional Shifts (http://www.corestandards.org/other-resources/key-shifts-inmathematics/) at the heart of the Common Core State Standards are:
- **Focus** strongly where the Standards focus
- **Coherence**: Think across grades and link to major topics within the grade
- **Rigor**: In major topics, pursue conceptual understanding, procedural skill and fluency, and application with equal intensity.

The IMET draws directly from the following documents:
- Common Core State Standards for Mathematics (www.corestandards.org/Math)
- Publishers' Criteria for the Common Core State Standards in Mathematics grade K-8 (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)

When to use the IMET
1. Purchasing materials: Many factors go into local purchasing decisions. Alignment to the Standards is a critical factor to consider. This tool is designed to evaluate alignment of instructional materials to the Shifts and the major features of the CCSS. It also provides suggestions of additional indicators to consider in the materials evaluation and purchasing process.

2. Evaluating materials currently in use: The IMET can be used to analyze the degree of alignment of existing materials and help to highlight specific, concrete flaws in alignment. Even where materials and tools currently in use fail to meet one or more of these criteria, the pattern of failure is likely to be informative. States and districts can use the evaluation to create a thoughtful plan to modify or combine existing resources in such a way that students' actual learning experiences approach the focus, coherence, and rigor of the Standards.

3. Developing programs: Those developing new programs can use this tool as guidance for creating aligned curricula.
Please note this tool was designed for evaluating comprehensive curricula (including any supplemental or ancillary materials), but it was not designed for the evaluation of standalone supplemental materials.

Who Uses the IMET?
Evaluating instructional materials requires both subject-matter and pedagogical expertise. Evaluators should be well versed in the Standards (www.corestandards.org/Math) for all grades in which materials are being evaluated. This includes understanding the Major Work of the grade (www.achievethecore/focus), the Supporting and Additional work, how the content fits into the progressions in the Standards (www.achievethecore.org/progressions), and the expectations of the Standards with respect to conceptual understanding, procedural skill and fluency, and application. Evaluators also should be familiar with the substantial instructional Shifts (http:// www.corestandards.org/other-resources/key-shifts-in-mathematics/) of Focus, Coherence and Rigor that are listed above.

Getting Started
Prior to Evaluation

Assemble all of the materials necessary for the evaluation. It is essential for evaluators to have materials for all grades covered by the program, as some criteria cannot be rated without having access to each grade. In addition, each evaluator should have a reference copy of the Common Core State Standards for Mathematics (CCSSM) and the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013).

Before conducting the evaluation itself, it is important to develop a protocol for the evaluation process. The protocol should include having evaluators study the Publishers' Criteria and the IMET. It will also be helpful for evaluators to get a sense of each program overall before beginning the process. At a minimum, this would include reading the front matter of the text, looking at the table of contents and paging through multiple chapters.

Sections 1-3 below should be completed to produce a comprehensive picture of the strengths and weaknesses of the materials under evaluation. Information about areas in need of improvement or supplementation should be shared with internal and external stakeholders.

Navigating the Tool

Begin with Section 1: Non-Negotiable Alignment Criteria

- The Non-Negotiable Alignment Criteria must each be met in full for materials to be considered aligned to the Shifts and the major features of the Common Core State Standards. Each Non-Negotiable Alignment Criterion has one or more metrics associated with it; every one of these metrics must be met in order for the criterion as a whole to be met.

- Examine the relevant materials and use evidence to rate the materials against each criterion and its associated metric(s).

- Record and explain the evidence upon which the rating is based.

Continue to Section 2: Alignment Criteria

- The Alignment Criteria must each be met for materials to be considered aligned to the Shifts and the major features of the Common Core State Standards. Each Alignment Criterion has one or more metric associated with it; a specific number of these metrics must be met or partially met in order for the criterion as a whole to be met.

- Examine the materials in relation to these criteria, assigning each metric a point value. Rate the criterion as "Meets" or "Does Note Meet" based on the number of points assigned. The more points the materials receive on the alignment Criteria, the better they are aligned.

- Record and explain the evidence upon which the rating is based.

Proceed to Section 4: Indicators of Quality

- Indicators of Quality are important considerations that will help evaluators better understand the overall quality of instructional materials. These considerations are not criteria for alignment to the CCSS, but they provide valuable information about additional program characteristics. Evaluators may want to add their own indicators to the examples provided.

Directions for Non-Negotiable 1

Freedom from Obstacles to Focus

Criterion	Evidence- Give specific examples.	Rating: (Reviewer only.)
Non-Negotiable 1: **Freedom from Obstacles to Focus** **Materials must reflect the content architecture of the Standards by not assessing the topics named before the grade level where they first appear in the Standards.** The Standards foster students' progress to algebra by focusing strongly on arithmetic. Consistent with this focus, certain topics from outside of arithmetic appear only in later grades. Thus, to be aligned, materials must reflect the content architecture of the Standards by not assessing the topics named before the grade level where they first appear in the Standards. In this criterion, "topics named" means the topics that are explicitly named in Metric 1A. No other topics should be added to the list in Metric 1A. (Note that other topics in the standards are addressed in criterion NN2.)	**Required Materials** • Common Core State Standards for Mathematics (www.corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf) • From the materials being evaluated: teacher guides and all assessment components	**Rating this Criterion:** Non-Negotiable 1 is rated as Meets or Does Not Meet. To rate Non-Negotiable 1, begin by rating Metric 1A. Since Metric 1A is the only metric for Non-Negotiable 1, the rating for Non-Negotiable 1 is the same as the rating for Metric 1A. If Metric 1A is rated as Does Not Meet, include evidence of when the named topic(s) is/are assessed. If the metric is rated as Meets, list the grade(s) examined in the evaluation.
Metric NN1A: **Materials reflect the basic architecture of the Standards by not assessing the listed topics before the grade level indicated.** • Probability, including chance, likely outcomes, probability models. (Introduced in the CCSSM in grade 7) • Statistical distributions, including center, variation, clumping, outliers, mean, median, mode, range, quartiles; and statistical association or trends, including two-way tables, bivariate measurement data, scatter plots, trend line, line of best fit, correlation. (Introduced in the CCSSM in grade 6) • Similarity, congruence, or geometric transformations. (Introduced in the CCSSM in grade 8) • Symmetry of shapes, including line/ reflection symmetry, rotational symmetry. (Introduced in the CCSSM in grade 4) **How to Find the Evidence:** Evaluate the table of contents, all chapter tests, all unit tests, and other such assessment components (including rubrics). For context, read Criterion #2 from the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013). NOTE: Grade alignments of other topics are addressed in Non-Negotiable 2, Focus and Coherence.)	**Evidence-** **After reviewing all units in the curriculum, specifically the data and geometry units, I found no evidence of any of these items being assessed in the third grade curriculum.**	**(Reviewer only.)** **Yes! ____ Meets** **____Does Not Meet**

In this criterion, "topics named" means the topics that are explicitly named in Metric 1A. No other topics should be added to the list in Metric 1A. (Note that other topics in the standards are addressed in criterion NN2.)		
Non-Negotiable 1: Materials must reflect the content architecture of the Standards by not assessing the topics named* before the grade level where they first appear in the Standards. **NN 1** If Metric 1A was rated as Meets, then rate Non-Negotiable 1 as Meets. If Metric 1A was rated as Does Not Meet, then rate Non- Negotiable 1 as Does Not Meet. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)** **Before moving to Non-Negotiable 2, record the final Meets or Does Not Meet rating in the Evaluation Summary.**		**(Reviewer only.)** **Yes!____Meets** **____Does Not Meet** **Strengths/Weaknesses:** **All units appear to align with the CCSS for third grade standards. I found no evidence that topics were assessed before introduced in the grade level.**

Directions for Non-Negotiable 2

Focus and Coherence

Non-Negotiable 2: **Focus and Coherence** **Materials must focus coherently on the Major Work of the grade in a way that is consistent with the progressions in the Standards.** Focus and coherence are the two major evidence-based design principles of the Common Core State Standards for Mathematics (CCSSM, p. 3). Focus is necessary in	**Required Materials** • Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf) • Focus by Grade Level for the grade being evaluated (www.achievethecore.org/focus)	**Rating this Criterion:** Non-Negotiable 2 is rated as Meets or Does Not Meet. To rate Non-Negotiable 2, first rate metrics 2A–2H. Each of these eight metrics must be rated as Meets in order for Non-Negotiable 2 to be rated as Meets. Rate each metric 2A-2H as Meets or Does Not Meet/Insufficient Evidence. If the evidence examined shows that the Criterion is met, then mark the Criterion Meets. If the evidence examined shows that the Criterion is not met—or if there is insufficient evidence to make a determination—then mark the Criterion as Does Not Meet/Insufficient Evidence. Support all ratings with evidence.

order to fulfill the ambitious promise the states have made to their students by adopting the Standards: greater achievement at the college and career ready level; greater depth of understanding of mathematics; and a rich classroom environment in which reasoning, sense-making, applications, and a range of mathematical practices flourish. In simpler terms, a mile-wide, inch-deep curriculum translates to less time per topic. Less time means less depth and moving on without many students. Thus, materials must focus coherently on the Major Work of the grade in a way that is consistent with the progressions in the Standards.	• From the materials evaluated: teacher guides, student texts and workbooks	
Metric NN2A: **In each grade K–8, students and teachers using the materials as designed devote the large majority of time to the Major Work of the grade.** **How to Find the Evidence:** Familiarize yourself with the Major Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, lessons, homework assignments, and assessments. (Evaluate both student and teacher materials.) Consider time spent on the Major Work of the grade and judge qualitatively whether students and teachers using the materials as designed will devote the large majority of time to the Major Work of the grade. For context, read Criterion #1 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013)	**Evidence-** **There are six major cluster in third grade math. This curriculum spends 19 out of 32 modules specifically on these clusters as shown below.** This is difficult to fully calculate because many of these major work concepts are intertwined and taught in other units, just not a specific unit or module focus of its own. **-Represent and solve problems involving multiplication and division** **- Understand properties of multiplication and the relationship between multiplication and division** **- Multiply and divide within 100:** Unit 2, Module 1: Multiplication in Context Unit 2, Module 2: Multiplying with Arrays & Number Lines Unit 2, Module 3: Ratio Tables & the Multiplication Table Unit 5, Module 1: Linking Multiplication & Division Unit 5, Module 2: Multiplication & Division Families Unit 5, Module 3: Division Practice Unit 7, Module 1: Multiplication beyond the basics Unit 7, Module 2: one-by-two digit multiplication **- Develop understanding of fractions as numbers:** Unit 4, Module 3: Fractions as Fair Shares Unit 4, Module 4: Fractions on a Line Plot Unit 6, Module 4: Shapes & Fractions Unit 7, Module 3: Fractions as parts of a whole & parts of a set Unit 7, Module 4: Fractions at Work **- Solve problems involving measurement and estimation of intervals of time, liquid volumes, and masses of objects:** Unit 4, Module 1: Measuring Time & Mass	**(Reviewer only.)** **Yes ____Meets** **____Does Not Meet/** **Insufficient Evidence**

	Unit 4, Module 2: Mea[illegible]e volume **- Geometric measurement: understand concepts of area and relate area to multiplication and to addition:** Unit 5, Module 4: Introducing Area Unit 6, Module 3: Perimeter & Area **- Solve problems involving the four operations, and identify and explain patterns in arithmetic (pulled into various lessons from various units)** Unit 1 Module 4: Story Problems & Strategies Unit 2, Module 4: Story Problems with Graphs & Multiple Operations	
Metric NN2B: **Supporting Work, where present, enhances focus and coherence simultaneously by also engaging students in the Major Work of the grade.** **How to Find the Evidence:** Familiarize yourself with the Major Work and Supporting Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate chapters and lessons that focus on Supporting Work. NOTE: Example of evaluating this Criterion might include looking at whether materials for K–5 generally treat data displays as an occasion for solving grade-level word problems using the four operations (e.g., see 3.MD.B.3); or whether materials for grade 7 take advantage of opportunities to use probability to support ratios, proportions, and percentages. For context, read Criterion #3 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** **Supporting clusters are sufficiently covered by units and they support the major clusters of third grade.** **- Represent and Interpret Data:** Unit 8, Modules 1-4: Data Collection & Analysis **- Reason with shapes and their attributes** Unit 6, Module 1: Investigating Polygons Unit 6, Module 2: Quadrilaterals	**(Reviewer only.)** **Yes ____Meets** **____Does Not Meet/** **Insufficient Evidence**
Metric NN2C: **Materials base content progressions on the grade-by-grade progressions in the Standards. Content from previous or future grades does not unduly interfere with or displace on-grade-level content.** **How to Find the Evidence:** Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, and lessons in both student and teacher materials. NOTE: In some cases it may be possible that aligned materials might address some aspects of a topic in a strategic way before or after the grade level in which the topic is central in the Standards' progressions; for example, a curriculum author might purposefully choose to explore adding fractions with unlike denominators in a way appropriate to grade four, recognizing that this work is not really required until the next grade. However, any such purposeful	**Evidence-** **After thoroughly reviewing the curriculum, I found discrepancies in the content progression that unduly interfered with grade level content.** **In Unit 7, Module 2, it has the students completing one-digit-by two digit multiplication. It is spending the entire module two multiplication such as 4x33, 4x25, 16x14, and so on when the third grade standard is multiply one-digit whole number by mutlipes of 10 in the range of 10-90 (e.g., 9x80, 5x60) (3.NBT.3). The module doesn't focus on the multiples of 10, it's actually a 4th grade standard 4.NBT.5 multiply a 2-digit whole number by a 1-digit whole number. It assessing**	**(Reviewer only.)** **____Meets** **No _____Does Not Meet/** **Insufficient Evidence**

discrepancies. Content progressions should enhance the required learning in each grade; not unduly interfere with or displace grade-level content; and be clearly aimed at helping students meet the Standards as written rather than effectively rewriting the progressions in the Standards. And in all cases, note that Non-Negotiable 1 must be met for materials to be aligned. For context, read Criterion #5a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**on this 4th grade standard as well.**	
Metric NN2D: **Materials give all students extensive work with on-grade-level problems.** **How to Find the Evidence:** Evaluate both student and teacher materials. If the materials provide resources for differentiated learning, consider whether lower-performing students have opportunities to engage with grade-level problems. Also consider whether higher-performing students are given opportunities to learn current grade-level content in greater depth. For context, read Criterion #5b in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** • **Each lesson of each unit contains on-grade level problems to solve through investigations, manipulative, and work places that align with the skills stated in the CCSS.** • **Many, but not all of the lessons, in the unit contains an assessment and differentiation guide, of suggestions for what to do in certain situations for support and challenge. They don't necessarily provide formal differentiations, they are more just quick things to say or have a student do with the whole class on grade-level work.**	**(Reviewer only.)** **Yes ____Meets** **____Does Not Meet/** **Insufficient Evidence**
Metric NN2E: **Materials relate on-grade-level concepts explicitly to prior knowledge from earlier grades.** **How to Find the Evidence:** Evaluate both student and teacher materials. NOTE: Examples of evaluating this Criterion might include looking at the way the materials extend basic ideas of place value across the decimal point; or the role that properties of operations play when the materials extend arithmetic beyond whole numbers to fractions, variables, and expressions. More generally, cluster headings in the Standards sometimes signal key moments where reorganizing and extending previous knowledge is important in order to accommodate new knowledge (e.g., see cluster headings that use the phrase "Apply and extend previous understanding"). For context, read Criterion #5c in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** **There are no cluster headings in third grade that specifically state for students to "apply and extend previous understanding."** **Each unit contains a "Skills across the grade level" chart showing the major skills and concepts addresses in that unit and provides a quick snapshot of the skills that were addressed in Grade 2, elsewhere in grade 3, and looking ahead to grade 4.** Example, p. vii in Unit 7 shows that standard 3.OA.7 'fluently multiply with products to 100 using strategies ' is: Grade 1: not addressed Grade 2: Developed in this Unit 5 (as well as unit 2, 3, 8) Grade 3: reviewed, practiced, or extended to higher levels	**(Reviewer only.)** **Yes ____Meets** **____Does Not Meet/** **Insufficient Evidence**
Metric NN2F: **Review of material from previous grades is clearly identified as such to the teacher, and teacher and students can see what their specific responsibility is for the current year.** **How to Find the Evidence:** Evaluate the table of contents, but do not stop there; also evaluate units, chapters, lessons, homework assignments and assessments. (Evaluate both student and teacher materials.) Identify any content from previous grades and check whether it is identified as such.	**Evidence-** **There are no cluster headings in third grade that specifically state for students to "apply and extend previous understanding."** **Each unit contains a "Skills across the grade level" chart showing the major skills and concepts addresses in that unit and provides a quick snapshot of the skills that were addressed in Grade 2, elsewhere in grade 3,**	**(Reviewer only.)** **Yes ____Meets** **____Does Not Meet/** **Insufficient Evidence**

For context, [illegible] Criterion #5a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**and looking ahead t[illegible]ade 4.** Example, p. vii in Unit 7 shows that standard 3.OA.7 'fluently multiply with products to 100 using strategies ' is: Grade 1: not addressed Grade 2: Developed in this Unit 5 (as well as unit 2) Grade 3: reviewed, practiced, or extended to higher levels **In addition, there is an assessment map in the assessment guide that shows where each CCSS is assessed and is shaded to show which unit the student assessment the student is expected to master the specific standard by in third grade. (p.11-16)**	
Metric NN2G: **Materials include learning objectives that are visibly shaped by CCSSM cluster headings.** **How to Find the Evidence:** Select several clusters from the Major Work in the grade being evaluated. Evaluate teacher and student materials in relation to these clusters. For context, read Criterion #6a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** **Each lesson begins with a summary and a skills & concepts section. The summary gives teachers a blurb of what is taught in the session. The skills & concepts give a break down the the CCSS cluster headings and the mathematical practices used in this session. It doesn't point to one specific standard as the focus, just a list of all the standards being touched on, whether the focus/main thing of the lesson or not. For example Unit 4, Module 1, session 2 states that the skills and concepts covered** - **3.MD.1** - **3.MP.6** - **3.MP.8**	**(Reviewer only.)** **Yes ____Meets** **____Does Not Meet/** **Insufficient Evidence**
Metric NN2H: **Materials include problems and activities that serve to connect two or more clusters in a domain, or two or more domains in a grade, in cases where these connections are natural and important.** **How to Find the Evidence:** In the grade being evaluated, choose two or more clusters or two or more domains for which connections are natural and important. Evaluate the units, chapters, and lessons that deal with the chosen topics, looking for problems and activities that serve to connect the chosen clusters or domains. NOTE: An example of evaluating this Criterion might include looking at whether problems in grade 4 sometimes or often involve students applying their developing computation skills (detailed in domain NBT) in the context of solving word problems (detailed in domain OA). For context, read Criterion #6b in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** **Example of a connection between clusters in a domain:** In unit 2, module 2, multiplying with arrays and number lines, students spend time in the OA cluster "fluently multiply and divide within 100 using strategies" by counting equals groups, using repeated addition, and skip counting on a number line, and modeling with Arrays. Then it naturally moves students into the OA cluster "Represent and solve problems involving multiplication and division" by having students use the multiplication strategies in lessons unit 2, module 2 to solve problems in unit 5, module 1. **Example of a connection between domains:** Student spend unit 2, module 2 'multiplying with arrays' in the cluster "represent and solve problems involving multiplication and division" in the Operation and Algebraic Thinking Domain. Then, students use these array concepts to understand, measure, model, and problem solve with area in unit 5, module 4 which is in the "Geometric measurement: understand concepts of area and relate area	**(Reviewer only.)** **Yes ____Meets** **____Does Not Meet/** **Insufficient Evidence**

	to multiplication and t[illegible]dition" cluster of the Measurement and Data Domain.	
Non-Negotiable 2: **Focus and Coherence** **Materials must focus coherently on the Major Work of the grade in a way that is consistent with the progressions in the Standards.** **NN 2** If all Metrics 2A – 2H were rated as Meets, then rate Non-Negotiable 2 as Meets. If one or more Metric was rated Does Not Meet/Insufficient Evidence, then rate Non-Negotiable 2 as Does Not Meet. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)** **Before moving to Alignment Criterion 1, record the final Meets or Does Not Meet rating in the Evaluation Summary.**	**(Reviewer only.)** **____Meets** **No____Does Not Meet** **Strengths/Weaknesses:** **There is multiple evidence, as outlined above, that this programs focuses on the major work of third grade and the CCSS. However, it spends an entire module on a 4th grade standard and doesn't focus enough time on the similar third grade standard.**

Now continue by evaluating the Alignment Criterion 1 for Rigor and Balance.

Directions for Alignment Criterion 1

Rigor and Balance

Alignment Criterion 1: Rigor and Balance **Materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.** The Standards set expectations for attention to all three aspects of rigor: conceptual understanding, procedural skill and fluency, and applications. Thus, materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.	**Required Materials** • Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf) • Focus by Grade Level for the grade being evaluated (achievethecore.org/focus) • Situation Types for the Operations in Word Problems (achievethecore.org/situation-types) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion:** Alignment Criterion 1 is rated as Meets or Does Not Meet. To rate Alignment Criterion 1, first rate metrics 1A, 1B, and 1C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). For each metric, guiding questions are provided to aid in gathering evidence. Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 1 if the materials rate 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as rigor and balance, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.
Metric AC1A: **The materials support the development of students' conceptual understanding of key mathematical concepts, especially where called for in specific content Standards or cluster headings.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Major Work for the grade being evaluated that relate specifically conceptual understanding to use throughout the questions associated with this metric. NOTE: Some examples of clusters or Standards that call for conceptual understanding include: K.OA.A.1, (1.NBT.B, 1.NBT.C), (2.NBT.A, 2.NBT.B), (3.OA.A.1, 3.OA.A.2), 4.NF.A, (4.NBT.A, 4.NBT.B), 5.NF.B, (5.NBT.A, 5.NBT.B), 6.RP.A, 6.EE.A.3, 7.NS.A, 7.EE.A, 8.EE.B, 8.F.A, 8.G.A Clusters or Standards grouped by parentheses are closely connected and could be analyzed together. For context, read Criterion #4a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	-Choose a cluster/Standard from the Major Work that is aligned to each aspect of rigor and use it to evaluate these metrics. It is most helpful if the same clusters/Standards are chosen for all of the programs being evaluated. (Guidance in choosing clusters/Standards is included in "How to Find the Evidence".)	**Use the questions for AC Metric 1A to evaluate Metric 1A. Record evidence for each question and rate Metric 1A.** **Yes____Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**

Is conceptual understanding attended to thoroughly where the Standards set explicit expectations for understanding or interpreting? Evaluate lessons, chapter/unit assessments and homework assignments, paying attention to work aligned to Standards that explicitly call for understanding or interpreting. NOTE: Examples of evaluating this Criterion might include looking at how well the multi-digit addition and subtraction algorithms are developed and explained on the basis of place value and properties of operations; or how well the multi-digit multiplication and division algorithms are developed and explained on the basis of place value and properties of operations; or how well solving equations is presented and explained as a process of reasoning.	**Evidence-** **- 3.OA "<u>Understand</u> properties of multiplication and the relationship between multiplication and division** Unit 5, Module 1 Linking multiplication and division Unit 5, Module 2 Multiplication & Division Fact Families **-3.NBT "Use place value <u>understanding</u> and properties of operations to perform multi-digit arithmetic."** Unit 3, Multi-digit addition and subtraction **3.NF "Develop <u>understanding</u> of fractions as numbers."** Unit 4, Module 3 Fractions as Fair Shares Unit 4, Module 4 Fractions on a Line Plot Unit 6, Module 4 Shapes and Fractions **3.MD "Geometric measurement: <u>understand</u> concepts of area and relate area to multiplication and to addition."** Unit 2, Module 2 - multiplying with arrays Unit 4, Module 4 - introducing area Unit 6, Module 3 - Perimeter & Area	
Do the materials feature high-quality conceptual problems and conceptual discussion questions? Evaluate lessons, chapter/unit assessments, and homework assignments. NOTE: Example of conceptual problems might include such questions as "Find a number greater than 1/5 and less than 1/4," or "If the divisor does not change and the dividend increases, what happens to the quotient?"	**Evidence-** For example, unit 4, module 3, session 3 has a question where students are told that a certain shape is ½ of the whole shape, Students have to draw what the whole shape could look like, and find more than one solution.	

Do the materials feature opportunities to identify correspondences across mathematical representations? Evaluate lessons, chapter/unit assessments and homework assignments. NOTE: Examples of evaluating this Criterion might include looking at whether students are supported in identifying correspondences among: the verbal description of a situation, the diagrams that distill its mathematical features, and the equations that model it; or equivalent forms of numbers (e.g., 3 and 6/2) and the number line; or rational number operations and representations of them via models such as the vector model; or the expression that defines a function and the graph that shows the relationship.	**Evidence-** For example, unit 4, module 3, session 5, students use a double number line to mark fractions as well as its equivalents.	
Metric AC1B: **The materials are designed so that students attain the fluencies and procedural skills required by the Standards.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Major Work for the grade being evaluated that relate specifically to fluency and procedural skill to use throughout the questions associated with this metric. NOTE: Some examples of Standards that call for procedural skill and fluency include: K.OA.A.5, 1.OA.C.6, 2.OA.B.2, 2.NBT.B.5, 3.OA.C.7, 3.NBT.A.2, 4.NBT.B.4, 5.NBT.B.5, 6.NS.B.2, and 6.NS.B.3, 6.EE.A, 7.NS.A, 7.EE.A.1,7.EE.B.4a, 8.EE.C.7, 8.EE.C.8b For context, read Criterion #4b in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).		**Use the questions for Metric 1B to evaluate Metric 1 B. Record evidence for each question and rate Metric 1B.** **(Reviewer only.)** **Yes ____Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Is progress toward fluency and procedural skill interwoven with students' developing conceptual understanding of the operations in question? Evaluate lessons, chapter/unit assessments, daily routines, and homework assignments for evidence that the development of fluency and procedural skill is supported by conceptual understanding.	**Evidence-** **3.OA.7 <u>Fluently</u> multiply and divide within 100** Unit 2, 5, 7 all cover multiplication and division, giving students strategies to fluently multiply and divide. **3.NBT.2 <u>Fluently</u> add and subtract within 1000** Unit and 3 both cover addition and subtraction with 1000, giving students patterns and strategies to fluently add and subtract.	
Are purely procedural problems and exercises present that include cases in which opportunistic strategies are valuable and generic cases that require efficient algorithms present? Evaluate lessons, chapter/unit assessments, daily routines, and homework assignments. NOTE: Examples of problems in which opportunistic strategies are valuable might include the sum 698 + 240 or the system x + y = 1, 2x + 2y = 3. Examples of generic cases that require efficient algorithms might include the sum 8767+2286 or the system 6y + x = x + 3, – x = 1 + 2y.	**Evidence-** Yes, I checked several of the lessons in the chapters listed above, and they had purely procedural problems where students could use strategies to solve. For example, students are taught the strategy of doubling as not only a subtraction strategy, but a multiplying by 2 strategy.	

Do the materials for grades K–6 provide repeated practice toward attainment of fluency Standards? Evaluate lessons, daily routines, and homework assignments for evidence of repeated practice toward attainment of the following K–6 Standards that set an explicit expectation of fluent (accurate and reasonably fast) computation: K.OA.A.5, 1.OA.C.6, 2.OA.B.2, 2.NBT.B.5, 3.OA.C.7, 3.NBT.A.2, 4.NBT.B.4, 5.NBT.B.5, 6.NS.B.2, 6.NS.B.3.	**Evidence-** The lessons all appear to have repeated practice. For example, unit 5, module 3 has a practice page where students use multiplication strategies to solve 32 problems for students to solve to practice that lesson's concept. Some, but not all sessions have repeated practice homework. *Note, there are several more resources for additional practice that come in a Number Concepts pack - which is an additional program used to supplement Bridges.	
Metric AC1C: **The materials are designed so that teachers and students spend sufficient time working with engaging applications, without losing focus on the Major Work of each grade.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Major Work for the grade being evaluated that relate specifically application to use throughout the questions associated with this metric. NOTE: Some examples of clusters or Standards that call for application include: K.OA.A.2, 1.OA.A, 2.OA.A, 3.OA.A.3, 3.OA.D.8, 4.OA.A.3, 4.NF.B.3d, 4.NF.B.4c, 5.NF.B.6, 5.NF.B.7c, 6.RP.A.3, 6.NS.A.1, 6.EE.B.7, 6.EE.C.9, 7.RP.A, 7.NS.A.3, 7.EE.B.3, 8.EE.C.8c, 8.F.B For context, read Criterion #4c in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).		**Use the questions for Metric 1C to evaluate Metric 1C. Record evidence for each question and rate Metric 1C.** **(Reviewer only.)** **Yes ____Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Are there are single- and multi-step contextual problems, including non-routine problems, that develop the mathematics of the grade, afford opportunities for practice, and engage students in problem solving? Do the problems attend thoroughly to those places in the content Standards where expectations for multi-step and real-world problems are explicit? Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** There are specific problem solving tasks in these locations. Unit 1, Module 4, Session 4 (single) Unit 3, Module 2, Session 1 (single) Unit 3, Module 4, Session 4 (single-step) Unit 7, Module 1, Session 3 (multi-step) Unit 7, Module 2, Session 4 (multi-step) There are also problem solving task in the Number Corner program that is a supplement to bridges.	
Do application problems particularly stress applying the Major Work of the grade? Evaluate lessons, chapter/unit assessments, and homework assignments. NOTE: Examples of evaluating this Criterion might include looking at: how well, by the end of grade 2, students using the materials as designed can represent and solve a full range of one-step addition and subtraction word problems; or how well, by the end of grade 3, students using the materials as designed can represent and solve a full range of one-step multiplication and division word problems; or how well these basic situation types for each operation are carried coherently across the grades, (e.g., with fractions and algebraic expressions); or, in all grades, whether the problems connect concepts, Standards, and domains in ways that are natural and important. For a list of situation types for one-step addition, subtraction, multiplication, and division problems, see	**Evidence-** Most of the problem solving tasks from above, have students multiplying and dividing, which are the major works of third grade.	

Situation Ty[illegible] the Operations in Word Problems		
Does modeling build slowly across K–8, with applications that are relatively simple in earlier grades and when students are encountering new content? In grades 6–8, do the problems begin to provide opportunities for students to make their own assumptions or simplifications in order to model a situation mathematically? Read Standard for Mathematical Practice 4, Model with Mathematics. Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** I viewed the progress of modeling in fractions. They begin by modeling fractions in third grade as fair shares. They - in the very next lesson - sort those fractions and order them from least to greatest, which is faster than I'm use to introducing comparing and ordering fractions. They then model fractions with pattern blocks, on the number line, and further into fractions as parts of a whole and set, using egg cartons.	

Alignment Criterion 1: Rigor and Balance

Materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.

AC1 Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 out of 6 points, the Criterion has not been met. Check the final rating.
Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)**

Before moving to Alignment Criterion 2, record the final Meets or Does Not Meet rating in the Evaluation Summary.

(Reviewer only.)

Yes ____Meets

____Does Not Meet

Strengths/Weaknesses:

Directions for Alignment Criterion 2

Standards for Mathematical Practice

Alignment Criterion 2: Standards for Mathematical Practice

Materials must demonstrate authentic connections between content Standards and practice Standards.

Required Materials:

- Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf)
- Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)

Rating this Criterion
Alignment Criterion 2 is rated as Meets or Does Not Meet.
To rate Alignment Criterion 2, first rate metrics 2A, 2B, and 2C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). For each metric, guiding questions are provided to aid in gathering evidence.
Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all

The Standards require that designers of instructional materials connect the mathematical practices to mathematical content in instruction. Thus, materials must demonstrate authentic connections between content Standards and practice Standards.	• Focus by Grade Level for the grade being evaluated (www.achievethecore.org/focus) • From the materials being evaluated: teacher guides, student texts and workbooks	three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 2 if the materials earn 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as mathematical practices, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.
Metric AC2A: **Materials address the practice Standards in such a way as to enrich the Major Work of the grade; practices strengthen the focus on Major Work instead of detracting from it, in both teacher and student materials.** **How to Find the Evidence:** Familiarize yourself with the Major Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate teacher and student materials for evidence that the mathematical practices support and connect to the focus of the grade. NOTE: Examples of evaluating this Criterion might include looking at whether, in grades K–5, students using the materials are supported to look for and express regularity in repeated reasoning about the addition table, the multiplication table, the properties of operations, the relationship between addition and subtraction or multiplication and division, and the place value system; or whether, in grades 6–8, students using the materials are supported to look for and express regularity in repeated reasoning about proportional relationships and linear functions. For context, read Criterion #8 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013).	**Evidence-** **addition table** Unit 1, Module 1, Session 4 & 5 Plus it has students working on a subtraction table in Unit 1, Module 2, Sessions 1 & 2 **multiplication table** Unit 2, Module 3 **the properties of operations** unit 7, module 5 has some lessons on the distributive and associative property, although for the distributive property, it is using multiplication out of the 4th grade standards, not 3rd (one-digit by two-digit multiplication) **the relationship between addition and subtraction** not found - not a major work in 3rd grade **The relationship between multiplication and division** Unit 5, module 1 & 2: linking multiplication & division; multiplication & division fact families **Other:** Students use number lines, arrays, and ratio table to multiply.	**(Reviewer only.)** **____Meets (2)** **Yes ____Partially Meets (1)** **____Does Not Meet (0)**
Metric AC2B: **Materials attend to the full meaning of each practice Standard.** **How to Find the Evidence:** For context, read Criterion #7 and Criterion #9 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).		**Use the questions for Metric 2B to evaluate Metric 2B. Record evidence for each question and rate Metric 2B.** **(Reviewer only.)** **Yes! ____Meets (2)**

Over the co[illegible] any given year of instruction, is each mathematical practice Standard meaningfully present in the form of assignments, activities, or problems that stimulate students to develop the habits of mind described in the practice Standard? Evaluate lessons, chapter/ unit assessments, and homework assignments for evidence of each mathematical practice being meaningfully present in instruction.	**Evidence-** The full language of the standards is emphasized through the whole year and are specifically marked in the skills & concepts section at the beginning of each session. In addition to this, there are specific 'bigger' problem solving tasks (unit 3, module 3, session 4)(unit 6, module 3, session 2) that have students fully dive into numerous mathematical practices in order to complete a mathematical task. This is actually much stronger if you include the number corners program (September calendar grid workout)	**____Partially Meets (1)** **____Does Not Meet (0)**
Do the materials treat the practice Standards as developing across grades or grade bands? Are the practice Standards in early grades appropriately simple? Do they display an arc of growing sophistication across the grades?	**Evidence-** The practice standards are grade appropriate. For example, the problem from unit 6, module 3 noted above has students 'look for and make use of structure,' 'construct viable arguments,' 'model with mathematics,' and 'make sense of problems and persevere in solving them" in order accurately solve create tale to seat exactly 20 friends. They have to find more than one solution, use square tiles, and create a chart to share their information. This is developmentally appropriate for a third grader to do.	
Are there teacher-directed materials that explain the role of the practice Standards in the classroom and in students' mathematical development? Are alignments to practice Standards accurate?	**Evidence-** The mathematical practice standards are fully explained in (approximately the 4th page in) the grade 3 overview at the beginning of unit 1, as well as page 18-20 in the assessment guide.	
Metric AC2C: **Materials support the Standards' emphasis on mathematical reasoning.** **How to Find the Evidence:** For context, read Criterion #10 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).		**Use the questions for Metric 2C to evaluate Metric 2C. Record evidence for each question and rate Metric 2C.** **(Reviewer only.)** **____Meets (2)**
Do the materials support students in constructing viable arguments and critiquing the arguments of others concerning grade-level mathematics that is detailed in the content Standards? Read Standard for Mathematical Practice 3. Evaluate teacher and student materials to ensure that students are given opportunities to reason with grade-level mathematics.	**Evidence-** Unit 2,module 1, session 2 has students writing explanations in response to multiplication questions, such as 'explain how you can use 2x8 to find 4x8.'. Unit 4, Module 3, Session 3 has students writing an explanation to describe how they know pattern block fractions. For example, if the hexagon is 1, the triangle is ___ because_____. There are many times when students are asked to give reasons, explain their thinking, and/or write an explanation of their work. However, I did not find where students had to specifically/formally critique the arguments or explanations of others, other than in everyday class discuss.	**Yes ____Partially Meets (1)** **____Does Not Meet (0)**

Do the materials support students in producing not only answers and solutions, but also, in a grade-appropriate way, arguments, explanations, diagrams, mathematical models, etc., especially in the Major Work of the grade? Familiarize yourself with the Major Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate teacher and student materials, to understand the types of work students are expected to produce.	**Evidence-** Yes, I have stated several times above where students are asked write explanations, as well as use models to solve problems. Specific example, in unit 2, module 1, session 2, students must solve the problem by using an array model and an equation, and then words to explain what they did to solve the multiplication problem..	
Do materials explicitly attend to the specialized language of mathematics? Is the language of argument, problem solving, and mathematical explanations taught rather than assumed? Evaluate teacher and student materials, paying attention to how mathematical language is taught. NOTE: Examples of evaluating this Criterion might include looking at whether students are supported in: basing arguments on definitions; using the method of providing a counterexample; or recognizing that examples alone do not establish a general statement.	**Evidence-** The language of mathematics via the vocabulary is taught at the beginning of each session. There are plenty of times students are asked to make write an explanation. <u>However, I did not find where students are specifically taught how to write an argument or explanation.</u>	
Alignment Criterion 2: **Standards for Mathematical Practice** **Materials must demonstrate authentic connections between content Standards and practice Standards.** **AC2** Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 out of 6 points, the Criterion has not been met. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)** **Before moving to Alignment Criterion 3, record the final Meets or Does Not Meet rating in the Evaluation Summary.**		**(Reviewer only.)** **Yes ____Meets** **NO ____Does Not Meet** **Strengths/Weaknesses:**
Alignment Criterion 3: **Access to the Standards for All Students** **Materials must provide supports for English Language Learners and other special populations.** Because Standards are for all students, alignment	**Required Materials:** • Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion:** Alignment Criterion 3 is rated as Meets or Does Not Meet. To rate Alignment Criterion 3, first rate metrics 3A, 3B, and 3C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 3 if the materials earn 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as support for

requires th[illegible]ntful support to ensure all students are able to meet the Standards. Thus, aligned materials must provide supports for English Language Learners and other special populations.		special population, while at the same tim[illegible]suring that no single metric can receive a rating of ze[illegible] and be aligned to the Shifts and major features of the CCSSM.
Metric AC3A: **Support for English Language Learners and other special populations is thoughtful and helps those students meet the same Standards as all other students. The language in which problems are posed is carefully considered.** **How to Find the Evidence:** Evaluate teacher and student materials, paying attention to supports offered for special populations.	**Evidence-** In some, but not all sessions, there is a chart that includes information on adaptations to support the ELL students (in the teacher's masters). Example: Unit 2 The following sessions have an ELL guide: module 1, session 1, 5, 6 module 2, session 1-5 module 3, session 1, 4 module 4 - 1-4 This is 14/20 sessions that have an ELL support guide in one unit. Some units have even less ELL support, for example, Unit 7 only has 3/20 ELL supports.	**Reviewer only.)** **____Meets (2)** **Yes ____Partially Meets (1)** **____Does Not Meet (0)**
Metric AC3B: **Materials provide appropriate level and type of scaffolding, differentiation, intervention, and support for a broad range of learners with gradual removal of supports, when needed, to allow students to demonstrate their mathematical understanding independently.** **How to Find the Evidence:** Evaluate teacher and student materials, paying attention to whether materials provide differentiation that will lead all learners to engage with on-grade-level content.	**Evidence-** In some, but not all, sessions there is a guide for differentiation - offering ideas for support and challenge. There is also the ELL supports described above. I couldn't find any intervention materials.	**Reviewer only.)** **____Meets (2)** **Yes ____Partially Meets (1)** **____Does Not Meet (0)**
Metric AC3C: **Design of lessons recommends and facilitates a mix of instructional approaches for a variety of learners such as using multiple representations (e.g., including models, using a range of questions, checking for understanding, flexible grouping, pair-share).** **How to Find the Evidence:** Evaluate teacher materials, noting instructional approaches suggested for whole class and differentiated lessons and activities.	**Evidence-** The multiplication and division as well as the fraction units that I focused my time on evaluating had multiple opportunities for hands-on lessons by modeling with manipulatives and models such as number lines, arrays, equal groups, paper-cut fractions, and pattern blocks. The work place section in each module offers small group and pair work.	**Reviewer only.)** **Yes ____Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**

Alignment Criterion 3: **Access to the Standards for All Students** **Materials must provide supports for English Language Learners and other special populations.** **AC3** Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 points, the Criterion has not been met. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion.**(Reviewer only.)** **Move to the Evaluation Summary and record the final Meets or Does Not Meet rating .**	**(Reviewer only.)** **____Meets** **NO ____Does Not Meet** **Strengths/Weaknesses:**

Once an evaluation for alignment to the Shifts and major features of the CCSS has been conducted using Sections 1-3, it's important to evaluate for overall quality and best practices. A starting list of Indicators of Quality are suggested below. States, districts and others evaluating instructional materials are encouraged to add to this list to ensure materials reflect local contexts. For background information on some of the Indicators of Quality in this section, refer to pp.18–21 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).

Indicators of Quality	**Evidence- Give specific examples.**	**Rating: (Reviewers only.)**
1. Lessons are thoughtfully structured and support the teacher in leading the class through the learning paths at hand, with active participation by all students in their own learning and in the learning of their classmates.	**Evidence-** **Each lesson is broken into a numbered list with instruction to the teacher on how to guide and support his/her students through the learning paths.**	**(Reviewer only.)** **Yes_____ Yes** **_____ No**
2. The underlying design of the materials includes both problems and exercises. (In solving problems, students learn new mathematics, whereas in working exercises, students apply what they have already learned to build mastery.) Each problem or exercise has a purpose. **NOTE: This Criterion does not require that the problems and exercises be labeled as such.**	**Evidence-** **Each lesson has guided instruction, as well as independent problems for students to solve based on new information learned.**	**(Reviewer only.)** **Yes _____ Yes** **_____ No**

3. Design assignments is not haphazard: exercises are given in intentional sequences in order to strengthen students' mathematical understanding.	Evidence- The design of assignments seems to have an intentional sequence. It's a bit difficult to see because this program does not have the normal list of discrete skills. Many things are intertwined and mixed in with other skills.	(Reviewer only.) Yes _____ Yes _____ No
4. There are separate teacher materials that support and reward teacher study including, but not limited to: discussion of the mathematics of the units and the mathematical point of each lesson as it relates to the organizing concepts of the unit, discussion on student ways of thinking and anticipating a variety of students responses, guidance on lesson flow, guidance on questions that prompt students thinking, and discussion of desired mathematical behaviors being elicited among students.	Evidence- Each chapter comes with a teacher book. The teacher book contains some of the following items as information to/for the teacher: - guidance on lesson flow (per lesson) - suggestions for ELL, support, and challenge - math talk prompts - common error alerts - vocabulary - work centers	(Reviewer only.) Yes _____ Yes _____ No
5. Manipulatives suggested in the materials are faithful representations of the mathematical objects they represent and are connected to written methods.	Evidence- This program uses an abundance of manipulatives and they are faithful and accurate representative of the methods taught. Please note: this program could NOT be used without the purchase of numerous manipulative and supplies for the classroom.	(Reviewer only.) Yes _____ Yes _____ No
6. Materials include a variety of curriculum-embedded assessments. Examples include pre-, formative, summative, and self-assessment resources.	Evidence- Each unit contains a pre, mid, and post test summative assessment. In addition, lessons contain suggestions and tables for formative assessments during instruction and work place (centers). Even tables for students to evaluate their own work.	(Reviewer only.) Yes _____ Yes _____ No
7. Assessments contain aligned rubrics, answer keys, and scoring guidelines that provide sufficient guidance for interpreting student performance.	Evidence- The pre and post summative assessments mentioned above each have a scoring guide that shows teachers how to score (points) as well as designate a proficiency level.	(Reviewer only.) Yes _____ Yes _____ No

8. Materials assess student proficiency using methods that are accessible and unbiased, including the use of course-level language in student prompts.	**Evidence-** **Based on the tests I reviewed, the assessments in the chapters are accessible and unbiased and the student at this grade level should be able to understand the language used in student prompts.**	**(Reviewer only.)** **Yes _____ Yes** **_____ No**
9. Materials are carefully evaluated by qualified individuals, whose names are listed, in an effort to ensure freedom from mathematical errors and course-level appropriateness.	**Evidence-** **The author and consulting mathematics editor of this program are both listed with their credentials and they appear to be qualified to write a math program. Other authors and editors are listed, but without their credentials.**	**(Reviewer only.)** **Yes _____ Yes** **_____ No**
10. The visual design supports students in engaging thoughtfully with the subject. Navigation through the text is clear.	**Evidence-** **The student work is visually appealing with clear text. There are graphs, pictures, models, and so on used to support students learning.**	**(Reviewer only.)** **Yes _____ Yes** **_____ No**
11. The materials engage parents in appropriate ways. For example, homework assignments in elementary grades, consist of routine problems, practice with getting answers, and fluency-building exercises that parents can easily support.	**Evidence-** **There is homework included in this program that contains routine problems, extra practice, and fluency-building exercises.**	**(Reviewer only.)** **Yes _____ Yes** **_____ No**

Reviewer IMET Evaluation Summary **Title/Level: Bridges Third Grade**

Publisher: The Math Learning Center **Copyright: 2016** **ISBN:_____**

Reviewer ID # VF and DD **Date Review Completed: 2/27/2016**

Non-Negotiable Criteria- Each Non-Negotiable must be met in order for the Non-Negotiable Alignment Criteria to be met overall.	
Non-Negotiable 1: Freedom from Obstacles to Focus **Yes _____ Meets** **_____ Does Not Meet**	**Non- Negotiable 2: Focus and Coherence** **_____ Meets** **NO _____ Does Not Meet**
Non-Negotiable Overall: **_____ Meets NO _____ Does Not Meet**	

Alignment Criteria- Each Alignment Criterion must be met with a sufficient number of points in order for Alignment Criteria to be labeled as "Meets" overall. The more points the materials receive on the Alignment Criteria, the better they are aligned.		
Alignment Criterion 1: Rigor and Balance **Points: 6 of 6 possible.** **(Materials must receive at least 5 of 6 points to align.)** **Yes _____ Meets** **_____ Does Not Meet**	**Alignment Criterion 2: Standards of Mathematical Practice** **Points: 4 of 6 possible.** **(Materials must receive at least 5 of 6 points to align.)** **_____ Meets** **NO _____ Does Not Meet**	**Alignment Criterion 3: Access to Standards for All Learners** **Points: 4 of 6 possible.** **(Materials must receive at least 5 of 6 points to align.)** **_____ Meets** **NO _____ Does Not Meet**
Alignment Criteria Overall: **_____ Meets NO _____ Does Not Meet**		

If the materials meet both Non-Negotiables and relevant Alignment Criteria, they are aligned to the Shifts and major features of the Core Standards. **Do the materials meet every Non-Negotiable and Alignment Criterion? _____ Yes NO _____ No**

What are the specific areas of strength and weakness based on this evaluation? Publishers or others modifying or developing assessments can use this information to make improvements and/or to remedy gaps in the alignment of assessment materials.

This program meets most of the components of a core program, however it teaches and assesses above grade level material, and it is also lacking in ELL and differentiation support. Furthermore, the organization of the materials in binder is cumbersome and districts must purchase many additional manipulatives and supplies in order to fully implement.

2015-16 Mathematics Interim Review Recommendation & Summary

Publisher Name:	The Math Learning Center
Title:	Bridges in Mathematics - Second Edition, Grade 4
ISBN #	978-1-60262-572-9
Grade Level(s) or Course:	4
Reviewer ID:	AM & DB

RECOMMENDED AS:

X **Core Mathematics Program-** a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials. Substantial evidence clearly supports the designation of this program as Core.

✓ **Other Mathematics Program-** a program that substantially, but partially, meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for supplemental materials. Substantial evidence clearly supports the designation of this program as Other.

_____ **Component Mathematics Program-** a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs. Substantial evidence clearly supports the designation of this program as Component.

_____ **Intervention Program-** a program designed and intended to target and support students' specific needs. Substantial evidence clearly supports the designation of this program as Intervention.

_____ **Does not meet criteria** for recommendation as a Curricular Material or Online Resource for Mathematics.

EVIDENCE SUMMARY:

FOCUS- Materials focus on major works, includes pre-d post assessments, growth checks throughout

COHERENCE- Each unit begins with an introduction of mathematical content. Assessment map in Assessment guide

RIGOR- Students continually work on fluency, applying that to real-world contextual problems.

CONCEPTUAL UNDERSTANDING-
Students solve problem in context and apply learned concepts to real world contextual problems.

MATHEMATICAL PRACTICES-
Standard mathematical practices are integrated and explicitly tied to the activities.

ACCESSIBILITY OF STANDARDS TO ALL STUDENTS-
Lessons contain multiple differentiation options to address the needs of a broad range of learners

OTHER:

2015-16 Interim Mathematics Review

Mathematics Evaluation Tool Grades K-8

Publisher: The Math Learning Center

Title of Material: Bridges in Mathematics Second Edition, Grade 4

Author: Baker, Chandler, Fisher, Harris & Montague

ISBN #: 978-1-60262-512-9 **Copyright** 2016

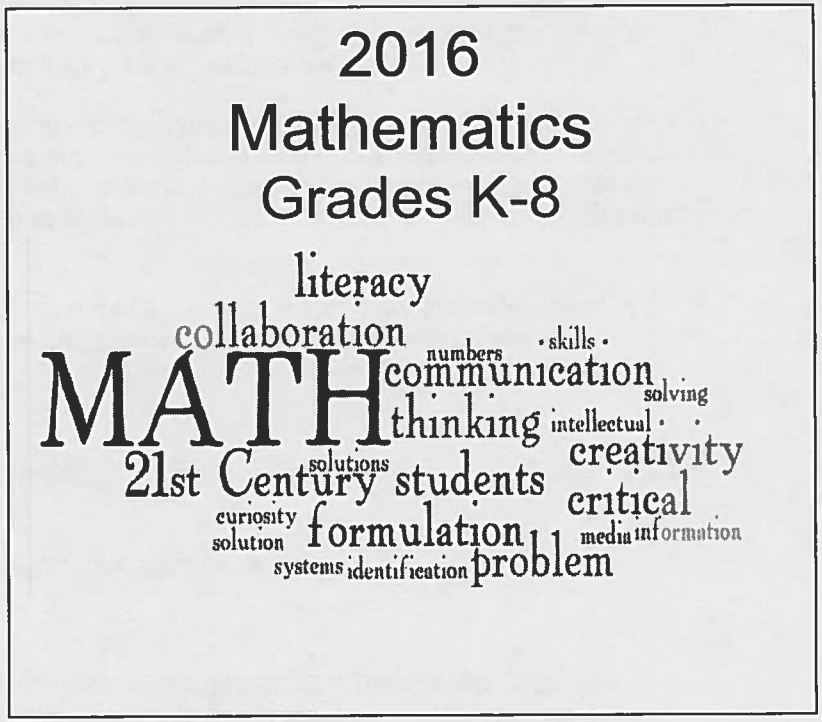
Reviewer ID: AM & DB

Core Mathematics Program- a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Core.

Other Mathematics Program- a program that substantially, but partially, meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Other.

Component Mathematics Program- a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs.
Substantial evidence clearly supports the designation of this program as Component.

Intervention Program- a program designed and intended to target and support students' specific needs.
Substantial evidence clearly supports the designation of this program as Intervention.



- Evaluation Form adapted from Instructional Materials Evaluation Toolkit (IMET).

The IMET was developed by Student Achievement Partners. Educators may use or adapt. http://creativecommons.org/licenses/by/3.0/ Download this tool at http://achievethecore.org/IMET

Instructional Materials Evaluation Tool

Mathematics, Grades K-8

What Are the Purposes of the IMET?

This Math IMET is designed to help educators determine whether instructional materials are aligned to the Shifts and major features of the Common Core State Standards (CCSS). The substantial instructional Shifts (http://www.corestandards.org/other-resources/key-shifts-inmathematics/) at the heart of the Common Core State Standards are:

- **Focus** strongly where the Standards focus
- **Coherence**: Think across grades and link to major topics within the grade
- **Rigor**: In major topics, pursue conceptual understanding, procedural skill and fluency, and application with equal intensity.

The IMET draws directly from the following documents:

- Common Core State Standards for Mathematics (www.corestandards.org/Math)
- Publishers' Criteria for the Common Core State Standards in Mathematics grade K-8 (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)

When to use the IMET

1. Purchasing materials: Many factors go into local purchasing decisions. Alignment to the Standards is a critical factor to consider. This tool is designed to evaluate alignment of instructional materials to the Shifts and the major features of the CCSS. It also provides suggestions of additional indicators to consider in the materials evaluation and purchasing process.

2. Evaluating materials currently in use: The IMET can be used to analyze the degree of alignment of existing materials and help to highlight specific, concrete flaws in alignment. Even where materials and tools currently in use fail to meet one or more of these criteria, the pattern of failure is likely to be informative. States and districts can use the evaluation to create a thoughtful plan to modify or combine existing resources in such a way that students' actual learning experiences approach the focus, coherence, and rigor of the Standards.

3. Developing programs: Those developing new programs can use this tool as guidance for creating aligned curricula.
Please note this tool was designed for evaluating comprehensive curricula (including any supplemental or ancillary materials), but it was not designed for the evaluation of standalone supplemental materials.

Who Uses the IMET?

Evaluating instructional materials requires both subject-matter and pedagogical expertise. Evaluators should be well versed in the Standards (www.corestandards.org/Math) for all grades in which materials are being evaluated. This includes understanding the Major Work of the grade (www.achievethecore/focus), the Supporting and Additional work, how the content fits into the progressions in the Standards (www.achievethecore.org/progressions), and the expectations of the Standards with respect to conceptual understanding, procedural skill and fluency, and application. Evaluators also should be familiar with the substantial instructional Shifts (http:// www.corestandards.org/other-resources/key-shifts-in-mathematics/) of Focus, Coherence and Rigor that are listed above.

Getting Started

Prior to Evaluation

Assemble all of the materials necessary for the evaluation. It is essential for evaluators to have materials for all grades covered by the program, as some criteria cannot be rated without having access to each grade. In addition, each evaluator should have a reference copy of the Common Core State Standards for Mathematics (CCSSM) and the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013).

Before conducting the evaluation itself, it is important to develop a protocol for the evaluation process. The protocol should include having evaluators study the Publishers' Criteria and the IMET. It will also be helpful for evaluators to get a sense of each program overall before beginning the process. At a minimum, this would include reading the front matter of the text, looking at the table of contents and paging through multiple chapters.

Sections 1-3 below should be completed to produce a comprehensive picture of the strengths and weaknesses of the materials under evaluation. Information about areas in need of improvement or supplementation should be shared with internal and external stakeholders.

Navigating the Tool

Begin with Section 1: Non-Negotiable Alignment Criteria

- The Non-Negotiable Alignment Criteria must each be met in full for materials to be considered aligned to the Shifts and the major features of the Common Core State Standards. Each Non-Negotiable Alignment Criterion has one or more metrics associated with it; every one of these metrics must be met in order for the criterion as a whole to be met.

- Examine the relevant materials and use evidence to rate the materials against each criterion and its associated metric(s).

- Record and explain the evidence upon which the rating is based.

Continue to Section 2: Alignment Criteria

- The Alignment Criteria must each be met for materials to be considered aligned to the Shifts and the major features of the Common Core State Standards. Each Alignment Criterion has one or more metric associated with it; a specific number of these metrics must be met or partially met in order for the criterion as a whole to be met.

- Examine the materials in relation to these criteria, assigning each metric a point value. Rate the criterion as "Meets" or "Does Note Meet" based on the number of points assigned. The more points the materials receive on the alignment Criteria, the better they are aligned.

- Record and explain the evidence upon which the rating is based.

Proceed to Section 4: Indicators of Quality

- Indicators of Quality are important considerations that will help evaluators better understand the overall quality of instructional materials. These considerations are not criteria for alignment to the CCSS, but they provide valuable information about additional program characteristics. Evaluators may want to add their own indicators to the examples provided.

Directions for Non-Negotiable 1

Freedom from Obstacles to Focus

Criterion	Evidence- Give specific examples.	Rating: (Reviewer only.)
Non-Negotiable 1: **Freedom from Obstacles to Focus** **Materials must reflect the content architecture of the Standards by not assessing the topics named before the grade level where they first appear in the Standards.** The Standards foster students' progress to algebra by focusing strongly on arithmetic. Consistent with this focus, certain topics from outside of arithmetic appear only in later grades. Thus, to be aligned, materials must reflect the content architecture of the Standards by not assessing the topics named before the grade level where they first appear in the Standards. In this criterion, "topics named" means the topics that are explicitly named in Metric 1A. No other topics should be added to the list in Metric 1A. (Note that other topics in the standards are addressed in criterion NN2.)	**Required Materials** • Common Core State Standards for Mathematics (www.corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf) • From the materials being evaluated: teacher guides and all assessment components	**Rating this Criterion:** Non-Negotiable 1 is rated as Meets or Does Not Meet. To rate Non-Negotiable 1, begin by rating Metric 1A. Since Metric 1A is the only metric for Non-Negotiable 1, the rating for Non-Negotiable 1 is the same as the rating for Metric 1A. If Metric 1A is rated as Does Not Meet, include evidence of when the named topic(s) is/are assessed. If the metric is rated as Meets, list the grade(s) examined in the evaluation.

Metric NN1A: **Materials reflect the basic architecture of the Standards by not assessing the listed topics before the grade level indicated.** • Probability, including chance, likely outcomes, probability models. (Introduced in the CCSSM in grade 7) • Statistical distributions, including center, variation, clumping, outliers, mean, median, mode, range, quartiles; and statistical association or trends, including two-way tables, bivariate measurement data, scatter plots, trend line, line of best fit, correlation. (Introduced in the CCSSM in grade 6) • Similarity, congruence, or geometric transformations. (Introduced in the CCSSM in grade 8) • Symmetry of shapes, including line/ reflection symmetry, rotational symmetry. (Introduced in the CCSSM in grade 4) **How to Find the Evidence:** Evaluate the table of contents, all chapter tests, all unit tests, and other such assessment components (including rubrics). For context, read Criterion #2 from the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013). NOTE: Grade alignments of other topics are addressed in Non-Negotiable 2, Focus and Coherence.) In this criterion, "topics named" means the topics that are explicitly named in Metric 1A. No other topics should be added to the list in Metric 1A. (Note that other topics in the standards are addressed in criterion NN2.)	**Evidence-** • Content + practice standards. • assessments included grade level standards • growth checks within units (check points). • Symmetry - unit 3	**(Reviewer only.)** X **Meets** ____ **Does Not Meet**
Non-Negotiable 1: Materials must reflect the content architecture of the Standards by not assessing the topics named* before the grade level where they first appear in the Standards. **NN 1** If Metric 1A was rated as Meets, then rate Non-Negotiable 1 as Meets. If Metric 1A was rated as Does Not Meet, then rate Non- Negotiable 1 as Does Not Meet. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion.**(Reviewer only.)** **Before moving to Non-Negotiable 2, record the final Meets or Does Not Meet rating in the Evaluation Summary.**		**(Reviewer only.)** X **Meets** ____ **Does Not Meet** **Strengths/Weaknesses:** S • pre & post assessments S • growth checks W • post assessment doesn't always match pre-assessment pre-assess covers more material

Directions for Non-Negotiable 2

Focus and Coherence

Non-Negotiable 2:

Focus and Coherence

Materials must focus coherently on the Major Work of the grade in a way that is consistent with the progressions in the Standards.

Focus and coherence are the two major evidence-based design principles of the Common Core State Standards for Mathematics (CCSSM, p. 3). Focus is necessary in order to fulfill the ambitious promise the states have made to their students by adopting the Standards: greater achievement at the college and career ready level; greater depth of understanding of mathematics; and a rich classroom environment in which reasoning, sense-making, applications, and a range of mathematical practices flourish. In simpler terms, a mile-wide, inch-deep curriculum translates to less time per topic. Less time means less depth and moving on without many students. Thus, materials must focus coherently on the Major Work of the grade in a way that is consistent with the progressions in the Standards.

Required Materials

- Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf)
- Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)
- Focus by Grade Level for the grade being evaluated (www.achievethecore.org/focus)
- From the materials being evaluated: teacher guides, student texts and workbooks

Rating this Criterion:

Non-Negotiable 2 is rated as Meets or Does Not Meet.

To rate Non-Negotiable 2, first rate metrics 2A–2H. Each of these eight metrics must be rated as Meets in order for Non-Negotiable 2 to be rated as Meets. Rate each metric 2A-2H as Meets or Does Not Meet/Insufficient Evidence. If the evidence examined shows that the Criterion is met, then mark the Criterion Meets. If the evidence examined shows that the Criterion is not met—or if there is insufficient evidence to make a determination—then mark the Criterion as Does Not Meet/Insufficient Evidence. Support all ratings with evidence.

Metric NN2A:
In each grade K–8, students and teachers using the materials as designed devote the large majority of time to the Major Work of the grade.

How to Find the Evidence:

Familiarize yourself with the Major Work of the grade being evaluated (see the Focus by Grade Level documents.)

Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, lessons, homework assignments, and assessments. (Evaluate both student and teacher materials.)

Consider time spent on the Major Work of the grade and judge qualitatively whether students and teachers using the materials as designed will devote the large majority of time to the Major Work of the grade.

For context, read Criterion #1 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013)

Evidence-

- major works/clusters focus instruction and practice - more than 85%.
  (+,-, place value, fractions, multiplication & division of multi-digit #'s)
- cross domain - (word problems involving measurement.

(Reviewer only.)

X **Meets**

____ **Does Not Meet/ Insufficient Evidence**

Metric NN2B: **Supporting [illegible]k, where present, enhances focus and coherence simultaneously by also engaging students in the Major Work of the grade.** **How to Find the Evidence:** Familiarize yourself with the Major Work and Supporting Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate chapters and lessons that focus on Supporting Work. NOTE: Example of evaluating this Criterion might include looking at whether materials for K–5 generally treat data displays as an occasion for solving grade-level word problems using the four operations (e.g., see 3.MD.B.3); or whether materials for grade 7 take advantage of opportunities to use probability to support ratios, proportions, and percentages. For context, read Criterion #3 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** • Supporting clusters support major clusters • progression of learning is evident · students move from enactive, to iconic, then symbolic • unit to module to daily lessons. • all units/modules include contextual problems	(Reviewer only.) __X__ **Meets** ____ **Does Not Meet/ Insufficient Evidence**
Metric NN2C: **Materials base content progressions on the grade-by-grade progressions in the Standards. Content from previous or future grades does not unduly interfere with or displace on-grade-level content.** **How to Find the Evidence:** Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, and lessons in both student and teacher materials. NOTE: In some cases it may be possible that aligned materials might address some aspects of a topic in a strategic way before or after the grade level in which the topic is central in the Standards' progressions; for example, a curriculum author might purposefully choose to explore adding fractions with unlike denominators in a way appropriate to grade four, recognizing that this work is not really required until the next grade. However, any such purposeful discrepancies in content progressions should enhance the required learning in each grade; not unduly interfere with or displace grade-level content; and be clearly aimed at helping students meet the Standards as written rather than effectively rewriting the progressions in the Standards. And in all cases, note that Non-Negotiable 1 must be met for materials to be aligned. For context, read Criterion #5a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** • Begin year with review & move through progression (re • Chart at beginning of each unit shows standards introduced. • Beginning 4th grade · revisit arrays, build upon for larger numbers moving from enactive, to iconic & then symbolic.	(Reviewer only.) __X__ **Meets** ____ **Does Not Meet/ Insufficient Evidence**

Metric NN2D: **Materials give all students extensive work with on-grade-level problems.** **How to Find the Evidence:** Evaluate both student and teacher materials. If the materials provide resources for differentiated learning, consider whether lower-performing students have opportunities to engage with grade-level problems. Also consider whether higher-performing students are given opportunities to learn current grade-level content in greater depth. For context, read Criterion #5b in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** • each unit has chart with suggestions for support, challenge & ELL, aims with home connection for differentiation. • "Work Place" individual practice to improve skills / small group activities	(Reviewer only.) X Meets ____Does Not Meet/ Insufficient Evidence
Metric NN2E: **Materials relate on-grade-level concepts explicitly to prior knowledge from earlier grades.** **How to Find the Evidence:** Evaluate both student and teacher materials. NOTE: Examples of evaluating this Criterion might include looking at the way the materials extend basic ideas of place value across the decimal point; or the role that properties of operations play when the materials extend arithmetic beyond whole numbers to fractions, variables, and expressions. More generally, cluster headings in the Standards sometimes signal key moments where reorganizing and extending previous knowledge is important in order to accommodate new knowledge (e.g., see cluster headings that use the phrase "Apply and extend previous understanding"). For context, read Criterion #5c in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** • Multi-digit multiplication/div. in six out of 8 units. • Mult & dividing major instr in units 2 & 6. • Progression is evident as strategies introduced in previous grade levels - used as an introduction then moved through progression.	(Reviewer only.) X Meets ____Does Not Meet/ Insufficient Evidence
Metric NN2F: **Review of material from previous grades is clearly identified as such to the teacher, and teacher and students can see what their specific responsibility is for the current year.** **How to Find the Evidence:** Evaluate the table of contents, but do not stop there; also evaluate units, chapters, lessons, homework assignments and assessments. (Evaluate both student and teacher materials.) Identify any content from previous grades and check whether it is identified as such. For context, read Criterion #5a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** • Does not promote simply reviewing then marginally extending Unit 1 Intro "Review of key x/÷ skills & concepts from grade 3 include ...." then explains 4th grade expectations • Assessment guide provides progression of standards	(Reviewer only.) X Meets ____Does Not Meet/ Insufficient Evidence

Metric NN2G: **Materials include learning objectives that are visibly shaped by CCSSM cluster headings.** **How to Find the Evidence:** Select several clusters from the Major Work in the grade being evaluated. Evaluate teacher and student materials in relation to these clusters. For context, read Criterion #6a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** . Each unit begins w/ introduction of mathematical content. - instructional sequence - examples - skills across grade level • Assessment map in Section 2 1) Assessment guide-(progression of standards	(Reviewer only.) X Meets ____Does Not Meet/ Insufficient Evidence
Metric NN2H: **Materials include problems and activities that serve to connect two or more clusters in a domain, or two or more domains in a grade, in cases where these connections are natural and important.** **How to Find the Evidence:** In the grade being evaluated, choose two or more clusters or two or more domains for which connections are natural and important. Evaluate the units, chapters, and lessons that deal with the chosen topics, looking for problems and activities that serve to connect the chosen clusters or domains. NOTE: An example of evaluating this Criterion might include looking at whether problems in grade 4 sometimes or often involve students applying their developing computation skills (detailed in domain NBT) in the context of solving word problems (detailed in domain OA). For context, read Criterion #6b in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** • Each session + number corners correlated to the content standards - domains are clustered. • Unit 4 - covers NBT, MD & OA - contextual problems include measurement with multiplication to solve.	(Reviewer only.) X Meets ____Does Not Meet/ Insufficient Evidence
Non-Negotiable 2: **Focus and Coherence** **Materials must focus coherently on the Major Work of the grade in a way that is consistent with the progressions in the Standards.** **NN 2** If all Metrics 2A – 2H were rated as Meets, then rate Non-Negotiable 2 as Meets. If one or more Metric was rated Does Not Meet/Insufficient Evidence, then rate Non-Negotiable 2 as Does Not Meet. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)** **Before moving to Alignment Criterion 1, record the final Meets or Does Not Meet rating in the Evaluation Summary.**		(Reviewer only.) X Meets ____Does Not Meet **Strengths/Weaknesses:** • lacking (at time) sufficient practice in student wkbk before moving to independent • Strengths- corners connect within clusters and across domains

Now continue by evaluating the Alignment Criterion 1 for Rigor and Balance.

Directions for Alignment Criterion 1

Rigor and Balance

Alignment Criterion 1: Rigor and Balance **Materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.** The Standards set expectations for attention to all three aspects of rigor: conceptual understanding, procedural skill and fluency, and applications. Thus, materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.	**Required Materials** • Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf) • Focus by Grade Level for the grade being evaluated (achievethecore.org/focus) • Situation Types for the Operations in Word Problems (achievethecore.org/situation-types) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion:** Alignment Criterion 1 is rated as Meets or Does Not Meet. To rate Alignment Criterion 1, first rate metrics 1A, 1B, and 1C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). For each metric, guiding questions are provided to aid in gathering evidence. Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 1 if the materials rate 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as rigor and balance, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.
Metric AC1A: **The materials support the development of students' conceptual understanding of key mathematical concepts, especially where called for in specific content Standards or cluster headings.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Major Work for the grade being evaluated that relate specifically conceptual understanding to use throughout the questions associated with this metric. NOTE: Some examples of clusters or Standards that call for conceptual understanding include: K.OA.A.1, (1.NBT.B, 1.NBT.C), (2.NBT.A, 2.NBT.B), (3.OA.A.1, 3.OA.A.2), 4.NF.A, (4.NBT.A, 4.NBT.B), 5.NF.B, (5.NBT.A, 5.NBT.B), 6.RP.A, 6.EE.A.3, 7.NS.A, 7.EE.A, 8.EE.B, 8.F.A, 8.G.A Clusters or Standards grouped by parentheses are closely connected and could be analyzed together. For context, read Criterion #4a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	-Choose a cluster/Standard from the Major Work that is aligned to each aspect of rigor and use it to evaluate these metrics. It is most helpful if the same clusters/Standards are chosen for all of the programs being evaluated. (Guidance in choosing clusters/Standards is included in "How to Find the Evidence".)	**Use the questions for AC Metric 1A to evaluate Metric 1A. Record evidence for each question and rate Metric 1A.** **____Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**

Is conceptual understanding attended to thoroughly where the Standards set expectations for understanding or interpreting? Evaluate lessons, chapter/unit assessments and homework assignments, paying attention to work aligned to Standards that explicitly call for understanding or interpreting. NOTE: Examples of evaluating this Criterion might include looking at how well the multi-digit addition and subtraction algorithms are developed and explained on the basis of place value and properties of operations; or how well the multi-digit multiplication and division algorithms are developed and explained on the basis of place value and properties of operations; or how well solving equations is presented and explained as a process of reasoning.	**Evidence-** 4NF.A.1 - Unit 3, Module 1, Session 3, area models/ # lines Unit 3, module 1, session 6.	
Do the materials feature high-quality conceptual problems and conceptual discussion questions? Evaluate lessons, chapter/unit assessments, and homework assignments. NOTE: Example of conceptual problems might include such questions as "Find a number greater than 1/5 and less than 1/4," or "If the divisor does not change and the dividend increases, what happens to the quotient?"	**Evidence-** conceptual problems incorporated all units as well as #corners. • Math forums - Unit 1, Mod 1, Session 6 - students explain & critique	
Do the materials feature opportunities to identify correspondences across mathematical representations? Evaluate lessons, chapter/unit assessments and homework assignments. NOTE: Examples of evaluating this Criterion might include looking at whether students are supported in identifying correspondences among: the verbal description of a situation, the diagrams that distill its mathematical features, and the equations that model it; or equivalent forms of numbers (e.g., 3 and 6/2) and the number line; or rational number operations and representations of them via models such as the vector model; or the expression that defines a function and the graph that shows the relationship.	**Evidence-** Conceptual understanding present. presented with models & diagrams, expressions to show varies strategies for solving. • money, area models, number lines	
Metric AC1B: **The materials are designed so that students attain the fluencies and procedural skills required by the Standards.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Major Work for the grade being evaluated that relate specifically to fluency and procedural skill to use throughout the questions associated with this metric. NOTE: Some examples of Standards that call for procedural skill and fluency include: K.OA.A.5, 1.OA.C.6, 2.OA.B.2, 2.NBT.B.5, 3.OA.C.7, 3.NBT.A.2, 4.NBT.B.4, 5.NBT.B.5, 6.NS.B.2, and 6.NS.B.3, 6.EE.A, 7.NS.A, 7.EE.A.1,7.EE.B.4a, 8.EE.C.7, 8.EE.C.8b For context, read Criterion #4b in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).		**Use the questions for Metric 1B to evaluate Metric 1 B. Record evidence for each question and rate Metric 1B.** **(Reviewer only.)** **X Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**

Is progress toward fluency and procedural skill interwoven with students' developing conceptual understanding of the operations in question? Evaluate lessons, chapter/unit assessments, daily routines, and homework assignments for evidence that the development of fluency and procedural skill is supported by conceptual understanding.	**Evidence-** • Number corners computational fluency monthly • student book (daily practice) • Home connection- independent homework	
Are purely procedural problems and exercises present that include cases in which opportunistic strategies are valuable and generic cases that require efficient algorithms present? Evaluate lessons, chapter/unit assessments, daily routines, and homework assignments. NOTE: Examples of problems in which opportunistic strategies are valuable might include the sum 698 + 240 or the system x + y = 1, 2x + 2y = 3. Examples of generic cases that require efficient algorithms might include the sum 8767+2286 or the system 6y + x = x + 3, – x = 1 + 2y.	**Evidence-** • algorithms for adding and subtracting multi digit #'s through hundred thousand. • Independent work seems limited in time.	
Do the materials in grades K–6 provide repeated practice toward attainment of fluency Standards? Evaluate lessons, daily routines, and homework assignments for evidence of repeated practice toward attainment of the following K–6 Standards that set an explicit expectation of fluent (accurate and reasonably fast) computation: K.OA.A.5, 1.OA.C.6, 2.OA.B.2, 2.NBT.B.5, 3.OA.C.7, 3.NBT.A.2, 4.NBT.B.4, 5.NBT.B.5, 6.NS.B.2, 6.NS.B.3.	**Evidence-** • Number corners class practice for fluency • daily practice pages. • Home connections have monthly fluency practice	
Metric AC1C: **The materials are designed so that teachers and students spend sufficient time working with engaging applications, without losing focus on the Major Work of each grade.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Major Work for the grade being evaluated that relate specifically application to use throughout the questions associated with this metric. NOTE: Some examples of clusters or Standards that call for application include: K.OA.A.2, 1.OA.A, 2.OA.A, 3.OA.A.3, 3.OA.D.8, 4.OA.A.3, 4.NF.B.3d, 4.NF.B.4c, 5.NF.B.6, 5.NF.B.7c, 6.RP.A.3, 6.NS.A.1, 6.EE.B.7, 6.EE.C.9, 7.RP.A, 7.NS.A.3, 7.EE.B.3, 8.EE.C.8c, 8.F.B For context, read Criterion #4c in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Story problems in Number Corners • lessons include - whole group - small group - partner work - independent practice - hands-on activities	**Use the questions for Metric 1C to evaluate Metric 1C. Record evidence for each question and rate Metric 1C.** **(Reviewer only.)** X **Meets (2)** ____ **Partially Meets (1)** ____ **Does Not Meet (0)**
Are there are single- and multi-step contextual problems, including non-routine problems, that develop the mathematics of the grade, afford opportunities for practice, and engage students in problem solving? Do the problems attend thoroughly to those places in the content Standards where expectations for multi-step and real-world problems are explicit? Evaluate lessons, chapter/unit assessments, and homework assessments.	**Evidence-** • contextual story problems all units + assessments • Number corners- multi-step word problems.	

Do application problems particularly stress applying the Major Work of the grade? Evaluate lessons, chapter/unit assessments, and homework assignments. NOTE: Examples of evaluating this Criterion might include looking at: how well, by the end of grade 2, students using the materials as designed can represent and solve a full range of one-step addition and subtraction word problems; or how well, by the end of grade 3, students using the materials as designed can represent and solve a full range of one-step multiplication and division word problems; or how well these basic situation types for each operation are carried coherently across the grades, (e.g., with fractions and algebraic expressions); or, in all grades, whether the problems connect concepts, Standards, and domains in ways that are natural and important. For a list of situation types for one-step addition, subtraction, multiplication, and division problems, see Situation Types for the Operations in Word Problems	**Evidence-** • application problems reflect major work of the grade • curriculum focuses on students having a deep understanding • consistent practices with various strategies	
Does modeling build slowly across K–8, with applications that are relatively simple in earlier grades and when students are encountering new content? In grades 6–8, do the problems begin to provide opportunities for students to make their own assumptions or simplifications in order to model a situation mathematically? Read Standard for Mathematical Practice 4, Model with Mathematics. Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** • Modeling moves students through concrete → iconic → symbolic • fractions & decimals modeled with this pattern • real-life problems solved in multiple ways - drawings, charts, lists, equations	

Alignment Criterion 1: Rigor and Balance

Materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.

AC1 Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 out of 6 points, the Criterion has not been met. Check the final rating.
Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)**

Before moving to Alignment Criterion 2, record the final Meets or Does Not Meet rating in the Evaluation Summary.

(Reviewer only.)

X **Meets**

____ **Does Not Meet**

Strengths/Weaknesses:
quality of work on conceptual understanding
• opportunities to practice various strategies
• opportunities to offer students through progression of enactive → iconic → symbolic

Directions for Alignment Criterion 2

Standards for Mathematical Practice

Alignment Criterion 2: Standards for Mathematical Practice

Materials must demonstrate authentic connections between content Standards and practice Standards.

The Standards require that designers of instructional materials connect the mathematical practices to mathematical content in instruction. Thus, materials must demonstrate authentic connections between content Standards and practice Standards.

Required Materials:

- Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf)
- Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)
- Focus by Grade Level for the grade being evaluated (www.achievethecore.org/focus)
- From the materials being evaluated: teacher guides, student texts and workbooks

Rating this Criterion

Alignment Criterion 2 is rated as Meets or Does Not Meet.

To rate Alignment Criterion 2, first rate metrics 2A, 2B, and 2C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). For each metric, guiding questions are provided to aid in gathering evidence.

Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 2 if the materials earn 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as mathematical practices, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.

Metric AC2A:
Materials address the practice Standards in such a way as to enrich the Major Work of the grade; practices strengthen the focus on Major Work instead of detracting from it, in both teacher and student materials.

How to Find the Evidence:

Familiarize yourself with the Major Work of the grade being evaluated (see the Focus by Grade Level documents.)

Evaluate teacher and student materials for evidence that the mathematical practices support and connect to the focus of the grade.

NOTE: Examples of evaluating this Criterion might include looking at whether, in grades K–5, students using the materials are supported to look for and express regularity in repeated reasoning about the addition table, the multiplication table, the properties of operations, the relationship between addition and subtraction or multiplication and division, and the place value system; or whether, in grades 6–8, students using the materials are supported to look for and express regularity in repeated reasoning about proportional relationships and linear functions.

For context, read Criterion #8 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013).

Evidence-

- many examples of program coherence
- repeated reasoning > SMP
- use of structure

ex:

- multiplication w/arrays then ~~a~~connected to numbers
  Unit 2, Module 1, 5
- all lessons leads students to discussion
- Teacher Guide - Assessments - role of the teacher in using practices

(Reviewer only.)

X **Meets (2)**

____ **Partially Meets (1)**

____ **Does Not Meet (0)**

Metric AC2B: **Materials att[illegible] to the full meaning of each practice Standard.** **How to Find the Evidence:** For context, read Criterion #7 and Criterion #9 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).		**Use the questions for Metric 2B to evaluate Metric 2B. Record evidence for each q[illegible]tion and rate Metric 2B.** **(Reviewer only.)** ~~X~~ **Meets (2)** X **Partially Meets (1)** **____Does Not Meet (0)**
Over the course of any given year of instruction, is each mathematical practice Standard meaningfully present in the form of assignments, activities, or problems that stimulate students to develop the habits of mind described in the practice Standard? Evaluate lessons, chapter/ unit assessments, and homework assignments for evidence of each mathematical practice being meaningfully present in instruction.	**Evidence-** • each unit assess a number corner has a skills & concept list that includes a focus on 2 math practices • practices encourage rigor	
Do the materials treat the practice Standards as developing across grades or grade bands? Are the practice Standards in early grades appropriately simple? Do they display an arc of growing sophistication across the grades?	**Evidence-** • each lesson has a least one math practice • sidebar in teachers guide addres specific ways to address SMP	Note - not many practice standards addressed / identified in each unit.
Are there teacher-directed materials that explain the role of the practice Standards in the classroom and in students' mathematical development? Are alignments to practice Standards accurate?	**Evidence-** • information found in the grade level introduction of the Teachers Guide, and the assessment guide	
Metric AC2C: **Materials support the Standards' emphasis on mathematical reasoning.** **How to Find the Evidence:** For context, read Criterion #10 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).		**Use the questions for Metric 2C to evaluate Metric 2C. Record evidence for each question and rate Metric 2C.** **(Reviewer only.)** X **Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Do the materials support students in constructing viable arguments and critiquing the arguments of others concerning grade-level mathematics that is detailed in the content Standards? Read Standard for Mathematical Practice 3. Evaluate teacher and student materials to ensure that students are given opportunities to reason with grade-level mathematics.	**Evidence-** • multiple opportunities for reasoning decimal challenge - unit 3, mode 3 session 4 Assessment rubric - teachers can asses viable arguments.	
Do the materials support students in producing not only answers and solutions, but also, in a grade-appropriate way, arguments, explanations, diagrams, mathematical models, etc., especially in the Major Work of the grade? Familiarize yourself with the Major Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate teacher and student materials, to understand the types of work students are expected to produce.	**Evidence-** • multiple opportunities • ex: double digit multiplication - contextual problems focus students on producing arguments - Unit 8, Mod 2, Session 1	

Do materials explicitly attend to the specialized language of mathematics? Is the language of argument, problem solving, and mathematical explanations taught rather than assumed? Evaluate teacher and student materials, paying attention to how mathematical language is taught. NOTE: Examples of evaluating this Criterion might include looking at whether students are supported in: basing arguments on definitions; using the method of providing a counterexample; or recognizing that examples alone do not establish a general statement.	**Evidence-** • content vocabulary cards provided for sessions & number corner workout to develop math language	

Alignment Criterion 2:
Standards for Mathematical Practice

Materials must demonstrate authentic connections between content Standards and practice Standards.

AC2 Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 out of 6 points, the Criterion has not been met. Check the final rating.
Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion.
(Reviewer only.)

Before moving to Alignment Criterion 3, record the final Meets or Does Not Meet rating in the Evaluation Summary.

(Reviewer only.)

X **Meets**

____ **Does Not Meet**

Strengths/Weaknesses:

multiple opportunities for reason with conceptual problems

Alignment Criterion 3:
Access to the Standards for All Students

Materials must provide supports for English Language Learners and other special populations.

Because Standards are for all students, alignment requires thoughtful support to ensure all students are able to meet the Standards. Thus, aligned materials must provide supports for English Language Learners and other special populations.

Required Materials:

- Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf)
- Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)
- From the materials being evaluated: teacher guides, student texts and workbooks

Rating this Criterion:

Alignment Criterion 3 is rated as Meets or Does Not Meet.

To rate Alignment Criterion 3, first rate metrics 3A, 3B, and 3C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points).

Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 3 if the materials earn 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as support for special population, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.

Metric AC3A: **Support for [illegible]ish Language Learners and other special populations is thoughtful and helps those students meet the same Standards as all other students. The language in which problems are posed is carefully considered.** **How to Find the Evidence:** Evaluate teacher and student materials, paying attention to supports offered for special populations.	**Evidence-** • all materials offered in Spanish • no other language offered for ELL	Reviewer only.) ____Meets (2) __X__Partially Meets (1) ____Does Not Meet (0)
Metric AC3B: **Materials provide appropriate level and type of scaffolding, differentiation, intervention, and support for a broad range of learners with gradual removal of supports, when needed, to allow students to demonstrate their mathematical understanding independently.** **How to Find the Evidence:** Evaluate teacher and student materials, paying attention to whether materials provide differentiation that will lead all learners to engage with on-grade-level content.	**Evidence-** • differentiation for learners in Teacher's guide - scaffolding & Challenging • independent pace available through daily activities Note- not all lessons offer differentiation	Reviewer only.) __X__Meets (2) __X__Partially Meets (1) ____Does Not Meet (0)
Metric AC3C: **Design of lessons recommends and facilitates a mix of instructional approaches for a variety of learners such as using multiple representations (e.g., including models, using a range of questions, checking for understanding, flexible grouping, pair-share).** **How to Find the Evidence:** Evaluate teacher materials, noting instructional approaches suggested for whole class and differentiated lessons and activities.	**Evidence-** • lessons begin with concrete practice (small manipulatives) moving to iconic then symbolic • students work independently, partners, small group & whole group daily	Reviewer only.) __X__Meets (2) ____Partially Meets (1) ____Does Not Meet (0)

Alignment Criterion 3: **Access to the Standards for All Students** **Materials must provide supports for English Language Learners and other special populations.** **AC3** Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 points, the Criterion has not been met. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion.**(Reviewer only.)** **Move to the Evaluation Summary and record the final Meets or Does Not Meet rating .**	**(Reviewer only.)** ~~X~~ **Meets** X **Does Not Meet** **Strengths/Weaknesses:** W- only spanish option S- different on page available for each session - variety of strategies & modeling.

Once an evaluation for alignment to the Shifts and major features of the CCSS has been conducted using Sections 1-3, it's important to evaluate for overall quality and best practices. A starting list of Indicators of Quality are suggested below. States, districts and others evaluating instructional materials are encouraged to add to this list to ensure materials reflect local contexts. For background information on some of the Indicators of Quality in this section, refer to pp.18–21 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).

Indicators of Quality	**Evidence- Give specific examples.**	**Rating: (Reviewers only.)**
1. Lessons are thoughtfully structured and support the teacher in leading the class through the learning paths at hand, with active participation by all students in their own learning and in the learning of their classmates.	**Evidence-** • each session with actual items to guide teacher • easy to follow lesson • units have teacher guide, teacher copies, student books, home connection	**(Reviewer only.)** X **Yes** ____ **No**
2. The underlying design of the materials includes both problems and exercises. (In solving problems, students learn new mathematics, whereas in working exercises, students apply what they have already learned to build mastery.) Each problem or exercise has a purpose. **NOTE: This Criterion does not require that the problems and exercises be labeled as such.**	**Evidence-** • gradual release of accountability to students	**(Reviewer only.)** X **Yes** ____ **No**

3. Design of assignments is not haphazard: exercises are given in intentional sequences in order to strengthen students' mathematical understanding.	**Evidence-** • lesson begins with teacher led & move toward students' independence	**(Reviewer only.)** X **Yes** ____ **No**
4. There are separate teacher materials that support and reward teacher study including, but not limited to: discussion of the mathematics of the units and the mathematical point of each lesson as it relates to the organizing concepts of the unit, discussion on student ways of thinking and anticipating a variety of students responses, guidance on lesson flow, guidance on questions that prompt students thinking, and discussion of desired mathematical behaviors being elicited among students.	**Evidence-** • professional development provided • internet blog designed to help teachers with various issues • sample student responses • step by step directions • text sometimes wordy and difficult to follow	**(Reviewer only.)** X **Yes** ____ **No**
5. Manipulatives suggested in the materials are faithful representations of the mathematical objects they represent and are connected to written methods.	**Evidence-** great manipulatives - game boards, spinners, - for a class of 30	**(Reviewer only.)** X **Yes** ____ **No**
6. Materials include a variety of curriculum-embedded assessments. Examples include pre-, formative, summative, and self-assessment resources.	**Evidence-** Assessments include pre & post assessment, lesson check-ups, intervention assessments available	**(Reviewer only.)** X **Yes** ____ **No**
7. Assessments contain aligned rubrics, answer keys, and scoring guidelines that provide sufficient guidance for interpreting student performance.	**Evidence-** • All assessments include - answer key - rubric / scoring guide - student reflection sheet on pre-assessment	**(Reviewer only.)** X **Yes** ____ **No**
8. Materials assess student proficiency using methods that are accessible and unbiased, including the use of course-level language in student prompts.	**Evidence-** Questions align to practice contextual word problems after concrete tangible items to visualize & represent	**(Reviewer only.)** X **Yes** ____ **No**

9. Materials are carefully evaluated by qualified individuals, whose names are listed, in an effort to ensure freedom from mathematical errors and course-level appropriateness.	**Evidence-** names of creators and reviewers provided	**(Reviewer only.)** X **Yes** ____ **No**
10. The visual design supports students in engaging thoughtfully with the subject. Navigation through the text is clear.	**Evidence-** - Navigation through text is labeled well, easy to follow, explicit content	**(Reviewer only.)** X **Yes** ____ **No**
11. The materials engage parents in appropriate ways. For example, homework assignments in elementary grades, consist of routine problems, practice with getting answers, and fluency-building exercises that parents can easily support.	**Evidence-** - Homework always aligns to practice done in class. - home connections incorporated into curriculum twice a week.	**(Reviewer only.)** X **Yes** ____ **No**

Reviewer IMET Evaluation Summary **Title/Level:** Bridges. Grade 4

Publisher: The Math Learning Center **Copyright:** 2016 **ISBN:** 978-1-60262-512-9

Reviewer ID # AM & DB **Date Review Completed:** March 9, 2016

Non-Negotiable Criteria- Each Non-Negotiable must be met in order for the Non-Negotiable Alignment Criteria to be met overall.

Non-Negotiable 1: Freedom from Obstacles to Focus	Non- Negotiable 2: Focus and Coherence
X Meets	X Meets
_____ Does Not Meet	_____ Does Not Meet

Non-Negotiable Overall:

X **Meets** _____ **Does Not Meet**

Alignment Criteria- Each Alignment Criterion must be met with a sufficient number of points in order for Alignment Criteria to be labeled as "Meets" overall. The more points the materials receive on the Alignment Criteria, the better they are aligned.

Alignment Criterion 1: Rigor and Balance	Alignment Criterion 2: Standards of Mathematical Practice	Alignment Criterion 3: Access to Standards for All Learners
Points: 6 of 6 possible. (Materials must receive at least 5 of 6 points to align.)	Points: 5 of 6 possible. (Materials must receive at least 5 of 6 points to align.)	Points: 4 of 6 possible. (Materials must receive at least 5 of 6 points to align.)
X Meets	X Meets	~~X~~ Meets
_____ Does Not Meet	_____ Does Not Meet	X Does Not Meet

Alignment Criteria Overall:

~~X~~ **Meets** X **Does Not Meet**

If the materials meet both Non-Negotiables and relevant Alignment Criterion, they are aligned to the Shifts and major features of the Core Standards. **Do the materials meet every Non-Negotiable and Alignment Criterion?** ~~X~~ **Yes** X **No**

What are the specific areas of strength and weakness based on this evaluation? Publishers or others modifying or developing assessments can use this information to make improvements and/or to remedy gaps in the alignment of assessment materials.

Strengths-
- Number corners connect within clusters and across domains
- Progression of work from concrete to iconic to symbolic throughout units
- Conceptual/Real world multi-step problems throughout

Weaknesses:
- Insufficient practice in student workbooks
- Spanish is the only option for ELL.
- practice standards not sufficiently addressed.

2015-16 Mathematics Interim Review Recommendation & Summary

Publisher Name:	The Math Learning Center
Title:	Bridges in Mathematics Second Edition
ISBN #	Baker, Chandler, Fisher, Harris, Montgue, Rattle
Grade Level(s) or Course:	Grade 5
Reviewer ID:	AM & DB

RECOMMENDED AS:

Core Mathematics Program- a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials. Substantial evidence clearly supports the designation of this program as Core.

✓ **Other Mathematics Program-** a program that substantially, but partially, meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for supplemental materials. Substantial evidence clearly supports the designation of this program as Other.

_____ **Component Mathematics Program-** a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs. Substantial evidence clearly supports the designation of this program as Component.

_____ **Intervention Program-** a program designed and intended to target and support students' specific needs. Substantial evidence clearly supports the designation of this program as Intervention.

_____ **Does not meet criteria** for recommendation as a Curricular Material or Online Resource for Mathematics.

EVIDENCE SUMMARY:

FOCUS- materials focus on major works, includes pre & post assessments, growth checks throughout.

COHERENCE- Each unit begins with an introduction of mathematical content. Assessment map in assessment guide.

RIGOR- Students continually work in fluency, applying learned concepts to real-world contextual problems.

CONCEPTUAL UNDERSTANDING- Students solve problems in context and apply learned concepts to real world contextual problems.

MATHEMATICAL PRACTICES- Standard mathematical practices are integrated and explicitly tied to the activities.

ACCESSIBILITY OF STANDARDS TO ALL STUDENTS- lessons contain multiple differentiation options to address the needs of a broad range of learners.

OTHER:

2015-16 Interim Mathematics Review

Mathematics Evaluation Tool Grades K-8

Publisher: The Math Learning Center

Title of Material: Bridges in Mathematics Second Edition - Grade 5

Author: Baker, Chandler, Fisher, Harris, Montgue, Rutte

ISBN #: 978-1-60262-573-6 **Copyright** 2016

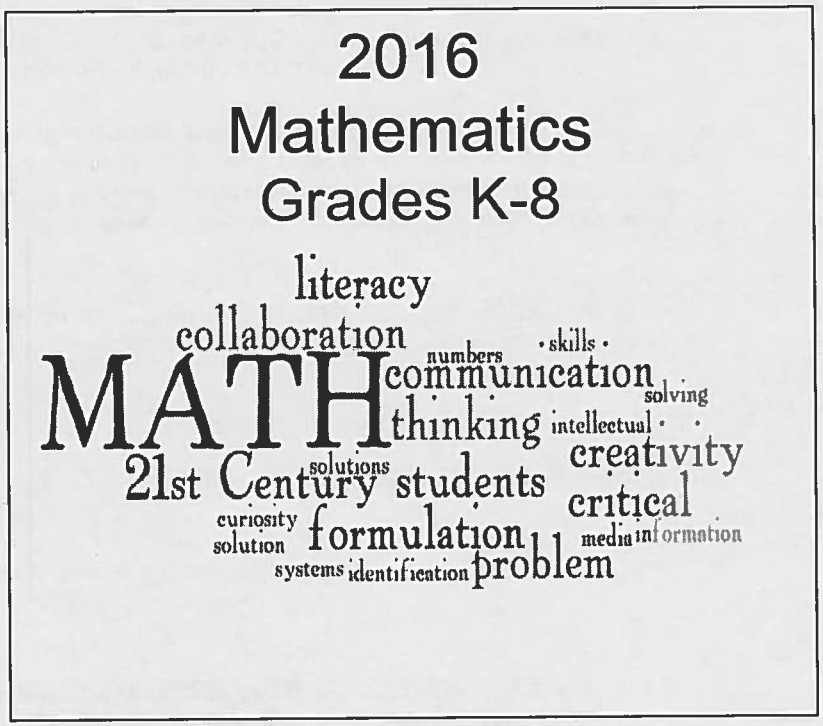
Reviewer ID: AM & DB

Core Mathematics Program- a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Core.

Other Mathematics Program- a program that substantially, but partially, meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Other.

Component Mathematics Program- a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs.
Substantial evidence clearly supports the designation of this program as Component.

Intervention Program- a program designed and intended to target and support students' specific needs.
Substantial evidence clearly supports the designation of this program as Intervention.



- Evaluation Form adapted from Instructional Materials Evaluation Toolkit (IMET).

The IMET was developed by Student Achievement Partners. Educators may use or adapt. http://creativecommons.org/licenses/by/3.0/ Download this tool at http://achievethecore.org/IMET

Instructional Materials Evaluation Tool

Mathematics, Grades K-8

What Are the Purposes of the IMET?

This Math IMET is designed to help educators determine whether instructional materials are aligned to the Shifts and major features of the Common Core State Standards (CCSS). The substantial instructional Shifts (http://www.corestandards.org/other-resources/key-shifts-inmathematics/) at the heart of the Common Core State Standards are:

- **Focus** strongly where the Standards focus
- **Coherence**: Think across grades and link to major topics within the grade
- **Rigor**: In major topics, pursue conceptual understanding, procedural skill and fluency, and application with equal intensity.

The IMET draws directly from the following documents:

- Common Core State Standards for Mathematics (www.corestandards.org/Math)
- Publishers' Criteria for the Common Core State Standards in Mathematics grade K-8 (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)

When to use the IMET

1. Purchasing materials: Many factors go into local purchasing decisions. Alignment to the Standards is a critical factor to consider. This tool is designed to evaluate alignment of instructional materials to the Shifts and the major features of the CCSS. It also provides suggestions of additional indicators to consider in the materials evaluation and purchasing process.

2. Evaluating materials currently in use: The IMET can be used to analyze the degree of alignment of existing materials and help to highlight specific, concrete flaws in alignment. Even where materials and tools currently in use fail to meet one or more of these criteria, the pattern of failure is likely to be informative. States and districts can use the evaluation to create a thoughtful plan to modify or combine existing resources in such a way that students' actual learning experiences approach the focus, coherence, and rigor of the Standards.

3. Developing programs: Those developing new programs can use this tool as guidance for creating aligned curricula.
Please note this tool was designed for evaluating comprehensive curricula (including any supplemental or ancillary materials), but it was not designed for the evaluation of standalone supplemental materials.

Who Uses the IMET?

Evaluating instructional materials requires both subject-matter and pedagogical expertise. Evaluators should be well versed in the Standards (www.corestandards.org/Math) for all grades in which materials are being evaluated. This includes understanding the Major Work of the grade (www.achievethecore/focus), the Supporting and Additional work, how the content fits into the progressions in the Standards (www.achievethecore.org/progressions), and the expectations of the Standards with respect to conceptual understanding, procedural skill and fluency, and application. Evaluators also should be familiar with the substantial instructional Shifts (http:// www.corestandards.org/other-resources/key-shifts-in-mathematics/) of Focus, Coherence and Rigor that are listed above.

Getting Started

Prior to Evaluation

Assemble all of the materials necessary for the evaluation. It is essential for evaluators to have materials for all grades covered by the program, as some criteria cannot be rated without having access to each grade. In addition, each evaluator should have a reference copy of the Common Core State Standards for Mathematics (CCSSM) and the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013).

Before conducting the evaluation itself, it is important to develop a protocol for the evaluation process. The protocol should include having evaluators study the Publishers' Criteria and the IMET. It will also be helpful for evaluators to get a sense of each program overall before beginning the process. At a minimum, this would include reading the front matter of the text, looking at the table of contents and paging through multiple chapters.

Sections 1-3 below should be completed to produce a comprehensive picture of the strengths and weaknesses of the materials under evaluation. Information about areas in need of improvement or supplementation should be shared with internal and external stakeholders.

Navigating the Tool

Begin with Section 1: Non-Negotiable Alignment Criteria

- The Non-Negotiable Alignment Criteria must each be met in full for materials to be considered aligned to the Shifts and the major features of the Common Core State Standards. Each Non-Negotiable Alignment Criterion has one or more metrics associated with it; every one of these metrics must be met in order for the criterion as a whole to be met.

- Examine the relevant materials and use evidence to rate the materials against each criterion and its associated metric(s).

- Record and explain the evidence upon which the rating is based.

Continue to Section 2: Alignment Criteria

- The Alignment Criteria must each be met for materials to be considered aligned to the Shifts and the major features of the Common Core State Standards. Each Alignment Criterion has one or more metric associated with it; a specific number of these metrics must be met or partially met in order for the criterion as a whole to be met.

- Examine the materials in relation to these criteria, assigning each metric a point value. Rate the criterion as "Meets" or "Does Note Meet" based on the number of points assigned. The more points the materials receive on the alignment Criteria, the better they are aligned.

- Record and explain the evidence upon which the rating is based.

Proceed to Section 4: Indicators of Quality

- Indicators of Quality are important considerations that will help evaluators better understand the overall quality of instructional materials. These considerations are not criteria for alignment to the CCSS, but they provide valuable information about additional program characteristics. Evaluators may want to add their own indicators to the examples provided.

Directions for Non-Negotiable 1

Freedom from Obstacles to Focus

Criterion	Evidence- Give specific examples.	Rating: (Reviewer only.)
Non-Negotiable 1: **Freedom from Obstacles to Focus** **Materials must reflect the content architecture of the Standards by not assessing the topics named before the grade level where they first appear in the Standards.** The Standards foster students' progress to algebra by focusing strongly on arithmetic. Consistent with this focus, certain topics from outside of arithmetic appear only in later grades. Thus, to be aligned, materials must reflect the content architecture of the Standards by not assessing the topics named before the grade level where they first appear in the Standards. In this criterion, "topics named" means the topics that are explicitly named in Metric 1A. No other topics should be added to the list in Metric 1A. (Note that other topics in the standards are addressed in criterion NN2.)	**Required Materials** • Common Core State Standards for Mathematics (www.corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf) • From the materials being evaluated: teacher guides and all assessment components	**Rating this Criterion:** Non-Negotiable 1 is rated as Meets or Does Not Meet. To rate Non-Negotiable 1, begin by rating Metric 1A. Since Metric 1A is the only metric for Non-Negotiable 1, the rating for Non-Negotiable 1 is the same as the rating for Metric 1A. If Metric 1A is rated as Does Not Meet, include evidence of when the named topic(s) is/are assessed. If the metric is rated as Meets, list the grade(s) examined in the evaluation.

Metric NN1A:
Materials reflect the basic architecture of the Standards by not assessing the listed topics before the grade level indicated.

- Probability, including chance, likely outcomes, probability models. (Introduced in the CCSSM in grade 7)
- Statistical distributions, including center, variation, clumping, outliers, mean, median, mode, range, quartiles; and statistical association or trends, including two-way tables, bivariate measurement data, scatter plots, trend line, line of best fit, correlation. (Introduced in the CCSSM in grade 6)
- Similarity, congruence, or geometric transformations. (Introduced in the CCSSM in grade 8)
- Symmetry of shapes, including line/ reflection symmetry, rotational symmetry. (Introduced in the CCSSM in grade 4)

How to Find the Evidence:

Evaluate the table of contents, all chapter tests, all unit tests, and other such assessment components (including rubrics).

For context, read Criterion #2 from the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013). NOTE: Grade alignments of other topics are addressed in Non-Negotiable 2, Focus and Coherence.)

In this criterion, "topics named" means the topics that are explicitly named in Metric 1A. No other topics should be added to the list in Metric 1A. (Note that other topics in the standards are addressed in criterion NN2.)

Evidence-

- Content + practice Standards
- assessments include grade level standards
- growth checks within units checkpoints

ex: Unit 1, Mod. 3, Session 2 - MD.3.,
Unit 1, M3, Sess 2 - MD5a - rectangular prism corner checkpoint - Oct pg 4 of.

(Reviewer only.)

X **Meets**

____ **Does Not Meet**

Non-Negotiable 1: Materials must reflect the content architecture of the Standards by not assessing the topics named* before the grade level where they first appear in the Standards.

NN 1 If Metric 1A was rated as Meets, then rate Non-Negotiable 1 as Meets. If Metric 1A was rated as Does Not Meet, then rate Non- Negotiable 1 as Does Not Meet. Check the final rating.

Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion.**(Reviewer only.)**

Before moving to Non-Negotiable 2, record the final Meets or Does Not Meet rating in the Evaluation Summary.

(Reviewer only.)

X **Meets**

____ **Does Not Meet**

Strengths/Weaknesses:

- pre + post test assessments
- growth checks
- skills addressed in pre + post are not always the same.

Directions for Non-Negotiable 2

Focus and Coherence

Non-Negotiable 2: **Focus and Coherence** **Materials must focus coherently on the Major Work of the grade in a way that is consistent with the progressions in the Standards.** Focus and coherence are the two major evidence-based design principles of the Common Core State Standards for Mathematics (CCSSM, p. 3). Focus is necessary in order to fulfill the ambitious promise the states have made to their students by adopting the Standards: greater achievement at the college and career ready level; greater depth of understanding of mathematics; and a rich classroom environment in which reasoning, sense-making, applications, and a range of mathematical practices flourish. In simpler terms, a mile-wide, inch-deep curriculum translates to less time per topic. Less time means less depth and moving on without many students. Thus, materials must focus coherently on the Major Work of the grade in a way that is consistent with the progressions in the Standards.	**Required Materials** • Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf) • Focus by Grade Level for the grade being evaluated (www.achievethecore.org/focus) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion:** Non-Negotiable 2 is rated as Meets or Does Not Meet. To rate Non-Negotiable 2, first rate metrics 2A–2H. Each of these eight metrics must be rated as Meets in order for Non-Negotiable 2 to be rated as Meets. Rate each metric 2A-2H as Meets or Does Not Meet/Insufficient Evidence. If the evidence examined shows that the Criterion is met, then mark the Criterion Meets. If the evidence examined shows that the Criterion is not met—or if there is insufficient evidence to make a determination—then mark the Criterion as Does Not Meet/Insufficient Evidence. Support all ratings with evidence.
Metric NN2A: **In each grade K–8, students and teachers using the materials as designed devote the large majority of time to the Major Work of the grade.** **How to Find the Evidence:** Familiarize yourself with the Major Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, lessons, homework assignments, and assessments. (Evaluate both student and teacher materials.) Consider time spent on the Major Work of the grade and judge qualitatively whether students and teachers using the materials as designed will devote the large majority of time to the Major Work of the grade. For context, read Criterion #1 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013)	**Evidence-** ◦ major work/clusters focus instruction meet the requirement. ◦ place value, multi-digit w/decimal hundredths, ×, ÷, +, - fractions. (numerous work with fractions & decimals throughout the units)	**(Reviewer only.)** **X Meets** **____ Does Not Meet/ Insufficient Evidence**

Metric NN2B: **Supporting Work, where present, enhances focus and coherence simultaneously by also engaging students in the Major Work of the grade.** **How to Find the Evidence:** Familiarize yourself with the Major Work and Supporting Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate chapters and lessons that focus on Supporting Work. NOTE: Example of evaluating this Criterion might include looking at whether materials for K–5 generally treat data displays as an occasion for solving grade-level word problems using the four operations (e.g., see 3.MD.B.3); or whether materials for grade 7 take advantage of opportunities to use probability to support ratios, proportions, and percentages. For context, read Criterion #3 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** • Set-up of program unit → module ⇒ sessions (daily lessons). • all units include contextual problems • reinforced through number corners.	(Reviewer only.) X Meets ____Does Not Meet/ **Insufficient Evidence**
Metric NN2C: **Materials base content progressions on the grade-by-grade progressions in the Standards. Content from previous or future grades does not unduly interfere with or displace on-grade-level content.** **How to Find the Evidence:** Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, and lessons in both student and teacher materials. NOTE: In some cases it may be possible that aligned materials might address some aspects of a topic in a strategic way before or after the grade level in which the topic is central in the Standards' progressions; for example, a curriculum author might purposefully choose to explore adding fractions with unlike denominators in a way appropriate to grade four, recognizing that this work is not really required until the next grade. However, any such purposeful discrepancies in content progressions should enhance the required learning in each grade; not unduly interfere with or displace grade-level content; and be clearly aimed at helping students meet the Standards as written rather than effectively rewriting the progressions in the Standards. And in all cases, note that Non-Negotiable 1 must be met for materials to be aligned. For context, read Criterion #5a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** • Spend 2-3 weeks reviewing previous year move to grade level. • Skills across the grade level chart unit introduction shows ~~the~~ teachers standards introduced. • Number corners introduce reinforce, extend skills & concepts. • Unit 4 - Mod 3, Session 5 → Standard algorithm	(Reviewer only.) X Meets ____Does Not Meet/ **Insufficient Evidence**

Metric NN2D: **Materials give all students extensive work with on-grade-level problems.** **How to Find the Evidence:** Evaluate both student and teacher materials. If the materials provide resources for differentiated learning, consider whether lower-performing students have opportunities to engage with grade-level problems. Also consider whether higher-performing students are given opportunities to learn current grade-level content in greater depth. For context, read Criterion #5b in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** • Each unit has a chart with suggestions for support, challenge. • Intervention sets also assist to move through grade level material as building on prior knowledge	(Reviewer only.) __X__ **Meets** ____ **Does Not Meet/** **Insufficient Evidence**
Metric NN2E: **Materials relate on-grade-level concepts explicitly to prior knowledge from earlier grades.** **How to Find the Evidence:** Evaluate both student and teacher materials. NOTE: Examples of evaluating this Criterion might include looking at the way the materials extend basic ideas of place value across the decimal point; or the role that properties of operations play when the materials extend arithmetic beyond whole numbers to fractions, variables, and expressions. More generally, cluster headings in the Standards sometimes signal key moments where reorganizing and extending previous knowledge is important in order to accommodate new knowledge (e.g., see cluster headings that use the phrase "Apply and extend previous understanding"). For context, read Criterion #5c in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** • Prior knowledge built upon • practice with equivalent fractions extended (Unit 2, module 1, session 2) • Colored fractions strips, comparing fractions clocks (Unit 2, module 1, session 3). • Progression contains with number lines (Unit 2, module 1, session 3).	(Reviewer only.) __X__ **Meets** ____ **Does Not Meet/** **Insufficient Evidence**
Metric NN2F: **Review of material from previous grades is clearly identified as such to the teacher, and teacher and students can see what their specific responsibility is for the current year.** **How to Find the Evidence:** Evaluate the table of contents, but do not stop there; also evaluate units, chapters, lessons, homework assignments and assessments. (Evaluate both student and teacher materials.) Identify any content from previous grades and check whether it is identified as such. For context, read Criterion #5a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** • Assessment Guide provides progression of standards. • Does not promote simply reviewing then marginally extending • Eighteen modules in Bridges involve 2 or more sessions relating to NBT.B • One number corner workout from S[illegible] through April -NBT B.	(Reviewer only.) __X__ **Meets** ____ **Does Not Meet/** **Insufficient Evidence**

Metric NN2G: **Materials include learning objectives that are visibly shaped by CCSSM cluster headings.** **How to Find the Evidence:** Select several clusters from the Major Work in the grade being evaluated. Evaluate teacher and student materials in relation to these clusters. For context, read Criterion #6a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** • Each unit begins with a section of mathematical content. • Assessment guide, section 2, pg 11-17 describes where standards are assessed through year	(Reviewer only.) X Meets ____Does Not Meet/ Insufficient Evidence
Metric NN2H: **Materials include problems and activities that serve to connect two or more clusters in a domain, or two or more domains in a grade, in cases where these connections are natural and important.** **How to Find the Evidence:** In the grade being evaluated, choose two or more clusters or two or more domains for which connections are natural and important. Evaluate the units, chapters, and lessons that deal with the chosen topics, looking for problems and activities that serve to connect the chosen clusters or domains. NOTE: An example of evaluating this Criterion might include looking at whether problems in grade 4 sometimes or often involve students applying their developing computation skills (detailed in domain NBT) in the context of solving word problems (detailed in domain OA). For context, read Criterion #6b in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** • Program definately clusters several domains within lessons • Number corner unit 8, 5.NBT.7, 5.NF.1. • Number corners connect within clusters and across domains	(Reviewer only.) X Meets ____Does Not Meet/ Insufficient Evidence
Non-Negotiable 2: **Focus and Coherence** **Materials must focus coherently on the Major Work of the grade in a way that is consistent with the progressions in the Standards.** **NN 2** If all Metrics 2A – 2H were rated as Meets, then rate Non-Negotiable 2 as Meets. If one or more Metric was rated Does Not Meet/Insufficient Evidence, then rate Non-Negotiable 2 as Does Not Meet. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)** **Before moving to Alignment Criterion 1, record the final Meets or Does Not Meet rating in the Evaluation Summary.**		(Reviewer only.) X Meets ____Does Not Meet **Strengths/Weaknesses:** • Journals for resources (notes) • Number corners connecting domains • Assessment guide shows Standards assessed.

Now continue by evaluating the Alignment Criterion 1 for Rigor and Balance.

Directions for Alignment Criterion 1

Rigor and Balance

Alignment Criterion 1: Rigor and Balance

Materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.

The Standards set expectations for attention to all three aspects of rigor: conceptual understanding, procedural skill and fluency, and applications. Thus, materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.

Required Materials

- Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf)
- Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)
- Focus by Grade Level for the grade being evaluated (achievethecore.org/focus)
- Situation Types for the Operations in Word Problems (achievethecore.org/situation-types)
- From the materials being evaluated: teacher guides, student texts and workbooks

Rating this Criterion:

Alignment Criterion 1 is rated as Meets or Does Not Meet.

To rate Alignment Criterion 1, first rate metrics 1A, 1B, and 1C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). For each metric, guiding questions are provided to aid in gathering evidence.
Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 1 if the materials rate 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as rigor and balance, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.

Metric AC1A:
The materials support the development of students' conceptual understanding of key mathematical concepts, especially where called for in specific content Standards or cluster headings.

How to Find the Evidence:

Select one or more cluster(s) or Standard(s) from the Major Work for the grade being evaluated that relate specifically conceptual understanding to use throughout the questions associated with this metric. NOTE: Some examples of clusters or Standards that call for conceptual understanding include: K.OA.A.1, (1.NBT.B, 1.NBT.C), (2.NBT.A, 2.NBT.B), (3.OA.A.1, 3.OA.A.2), 4.NF.A, (4.NBT.A, 4.NBT.B), 5.NF.B, (5.NBT.A, 5.NBT.B), 6.RP.A, 6.EE.A.3, 7.NS.A, 7.EE.A, 8.EE.B, 8.F.A, 8.G.A

Clusters or Standards grouped by parentheses are closely connected and could be analyzed together.

For context, read Criterion #4a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).

-Choose a cluster/Standard from the Major Work that is aligned to each aspect of rigor and use it to evaluate these metrics. It is most helpful if the same clusters/Standards are chosen for all of the programs being evaluated. (Guidance in choosing clusters/Standards is included in "How to Find the Evidence".)

Use the questions for AC Metric 1A to evaluate Metric 1A. Record evidence for each question and rate Metric 1A.

X Meets (2)

____ Partially Meets (1)

____ Does Not Meet (0)

Is conceptual understanding attended to thoroughly where the Standards set e[illegible] expectations for understanding or interpreting? Evaluate lessons, chapter/unit assessments and homework assignments, paying attention to work aligned to Standards that explicitly call for understanding or interpreting. NOTE: Examples of evaluating this Criterion might include looking at how well the multi-digit addition and subtraction algorithms are developed and explained on the basis of place value and properties of operations; or how well the multi-digit multiplication and division algorithms are developed and explained on the basis of place value and properties of operations; or how well solving equations is presented and explained as a process of reasoning.	**Evidence-** Conceptual understanding present. place value - Unit 3, Module 1, Sessions 1, 2, 4, Module 3 Session 4.	
Do the materials feature high-quality conceptual problems and conceptual discussion questions? Evaluate lessons, chapter/unit assessments, and homework assignments. NOTE: Example of conceptual problems might include such questions as "Find a number greater than 1/5 and less than 1/4," or "If the divisor does not change and the dividend increases, what happens to the quotient?"	**Evidence-** • Conceptual problems are built within units along with number corners • Math forums - Unit 1, mod 2, Session 2	
Do the materials feature opportunities to identify correspondences across mathematical representations? Evaluate lessons, chapter/unit assessments and homework assignments. NOTE: Examples of evaluating this Criterion might include looking at whether students are supported in identifying correspondences among: the verbal description of a situation, the diagrams that distill its mathematical features, and the equations that model it; or equivalent forms of numbers (e.g., 3 and 6/2) and the number line; or rational number operations and representations of them via models such as the vector model; or the expression that defines a function and the graph that shows the relationship.	**Evidence-** • Written description for 3 dims. figures provided after modeling & demonstrating. • Drawings. open arrays. number lines - opportunities embedded throughout.	
Metric AC1B: **The materials are designed so that students attain the fluencies and procedural skills required by the Standards.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Major Work for the grade being evaluated that relate specifically to fluency and procedural skill to use throughout the questions associated with this metric. NOTE: Some examples of Standards that call for procedural skill and fluency include: K.OA.A.5, 1.OA.C.6, 2.OA.B.2, 2.NBT.B.5, 3.OA.C.7, 3.NBT.A.2, 4.NBT.B.4, 5.NBT.B.5, 6.NS.B.2, and 6.NS.B.3, 6.EE.A, 7.NS.A, 7.EE.A.1,7.EE.B.4a, 8.EE.C.7, 8.EE.C.8b For context, read Criterion #4b in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).		**Use the questions for Metric 1B to evaluate Metric 1 B. Record evidence for each question and rate Metric 1B.** **(Reviewer only.)** **X Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**

Is progress toward fluency and procedural skill interwoven with students' developing conceptual understanding of the operations in question? Evaluate lessons, chapter/unit assessments, daily routines, and homework assignments for evidence that the development of fluency and procedural skill is supported by conceptual understanding.	**Evidence-** • fluency - unit 4, mod. 1, 3, 4 unit 5; mod 1, 24. • number corners have computational fluency each month homeconnection + student book daily	
Are purely procedural problems and exercises present that include cases in which opportunistic strategies are valuable and generic cases that require efficient algorithms present? Evaluate lessons, chapter/unit assessments, daily routines, and homework assignments. NOTE: Examples of problems in which opportunistic strategies are valuable might include the sum 698 + 240 or the system x + y = 1, 2x + 2y = 3. Examples of generic cases that require efficient algorithms might include the sum 8767+2286 or the system 6y + x = x + 3, – x = 1 + 2y.	**Evidence-** • unit work, work place, daily practice pages. • variety of algorithms for all four operations Note: program has practice, but many times groups → partner progression, not always independent sufficiently.	
Do the materials in grades K–6 provide repeated practice toward attainment of fluency Standards? Evaluate lessons, daily routines, and homework assignments for evidence of repeated practice toward attainment of the following K–6 Standards that set an explicit expectation of fluent (accurate and reasonably fast) computation: K.OA.A.5, 1.OA.C.6, 2.OA.B.2, 2.NBT.B.5, 3.OA.C.7, 3.NBT.A.2, 4.NBT.B.4, 5.NBT.B.5, 6.NS.B.2, 6.NS.B.3.	**Evidence-** • Daily practice pages, number corners., home connections • variety of strategies working with whole numbers, fractions, decimals	
Metric AC1C: **The materials are designed so that teachers and students spend sufficient time working with engaging applications, without losing focus on the Major Work of each grade.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Major Work for the grade being evaluated that relate specifically application to use throughout the questions associated with this metric. NOTE: Some examples of clusters or Standards that call for application include: K.OA.A.2, 1.OA.A, 2.OA.A, 3.OA.A.3, 3.OA.D.8, 4.OA.A.3, 4.NF.B.3d, 4.NF.B.4c, 5.NF.B.6, 5.NF.B.7c, 6.RP.A.3, 6.NS.A.1, 6.EE.B.7, 6.EE.C.9, 7.RP.A, 7.NS.A.3, 7.EE.B.3, 8.EE.C.8c, 8.F.B For context, read Criterion #4c in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** • lessons includes: whole group, small group, partner work, independent practice • Cluster (major) represent approximately 70% of grade level work.	**Use the questions for Metric 1C to evaluate Metric 1C. Record evidence for each question and rate Metric 1C.** **(Reviewer only.)** X **Meets (2)** ____ **Partially Meets (1)** ____ **Does Not Meet (0)**
Are there are single- and multi-step contextual problems, including non-routine problems, that develop the mathematics of the grade, afford opportunities for practice, and engage students in problem solving? Do the problems attend thoroughly to those places in the content Standards where expectations for multi-step and real-world problems are explicit? Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** modeling moves from concrete to iconic & symbolic #number corners include various models & contextual problems. (March)	

Do application problems particularly stress applying the Major Work of the grade? Evaluate lessons, chapter/unit assessments, and homework assignments. NOTE: Examples of evaluating this Criterion might include looking at: how well, by the end of grade 2, students using the materials as designed can represent and solve a full range of one-step addition and subtraction word problems; or how well, by the end of grade 3, students using the materials as designed can represent and solve a full range of one-step multiplication and division word problems; or how well these basic situation types for each operation are carried coherently across the grades, (e.g., with fractions and algebraic expressions); or, in all grades, whether the problems connect concepts, Standards, and domains in ways that are natural and important. For a list of situation types for one-step addition, subtraction, multiplication, and division problems, see Situation Types for the Operations in Word Problems	**Evidence-** • Application problems reflect major work of the grade • curriculum focuses on students having a deep understanding - evident through consistent practice with various strategies within the components of the curriculum	
Does modeling build slowly across K–8, with applications that are relatively simple in earlier grades and when students are encountering new content? In grades 6–8, do the problems begin to provide opportunities for students to make their own assumptions or simplifications in order to model a situation mathematically? Read Standard for Mathematical Practice 4, Model with Mathematics. Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** • modeling moves from concrete to iconic to symbols • real-world problems represented by students in various ways	

Alignment Criterion 1: Rigor and Balance

Materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.

AC1 Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 out of 6 points, the Criterion has not been met. Check the final rating.
Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)**

Before moving to Alignment Criterion 2, record the final Meets or Does Not Meet rating in the Evaluation Summary.

(Reviewer only.)

X **Meets**

____ **Does Not Meet**

Strengths/Weaknesses:

- High quality of work on conceptual understanding
- multiple opportunities to practice various strategies
- Great job of offering student opportunities to move through progression - concrete, iconic - symbolic

Directions for Alignment Criterion 2

Standards for Mathematical Practice

Alignment Criterion 2: Standards for Mathematical Practice

Materials must demonstrate authentic connections between content Standards and practice Standards.

The Standards require that designers of instructional materials connect the mathematical practices to mathematical content in instruction. Thus, materials must demonstrate authentic connections between content Standards and practice Standards.

Required Materials:

- Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf)
- Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)
- Focus by Grade Level for the grade being evaluated (www.achievethecore.org/focus)
- From the materials being evaluated: teacher guides, student texts and workbooks

Rating this Criterion

Alignment Criterion 2 is rated as Meets or Does Not Meet.

To rate Alignment Criterion 2, first rate metrics 2A, 2B, and 2C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). For each metric, guiding questions are provided to aid in gathering evidence.

Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 2 if the materials earn 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as mathematical practices, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.

Metric AC2A:
Materials address the practice Standards in such a way as to enrich the Major Work of the grade; practices strengthen the focus on Major Work instead of detracting from it, in both teacher and student materials.

How to Find the Evidence:

Familiarize yourself with the Major Work of the grade being evaluated (see the Focus by Grade Level documents.)

Evaluate teacher and student materials for evidence that the mathematical practices support and connect to the focus of the grade.

NOTE: Examples of evaluating this Criterion might include looking at whether, in grades K–5, students using the materials are supported to look for and express regularity in repeated reasoning about the addition table, the multiplication table, the properties of operations, the relationship between addition and subtraction or multiplication and division, and the place value system; or whether, in grades 6–8, students using the materials are supported to look for and express regularity in repeated reasoning about proportional relationships and linear functions.

For context, read Criterion #8 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013).

Evidence-

- Most lessons have students employ reasoning / discussion
- journals are utilized
- Many examples of program coherence.
  MP7 - pictures to show numbers present throughout
  Unit 2, Mod. 1, Sess. 4 - adding fractions, area models utilized

(Reviewer only.)

X **Meets (2)**

____ **Partially Meets (1)**

____ **Does Not Meet (0)**

Metric AC2B: **Materials att to the full meaning of each practice Standard.** **How to Find the Evidence:** For context, read Criterion #7 and Criterion #9 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).		**Use the questions for Metric 2B to evaluate Metric 2B. Record evidence for each que and rate Metric 2B.** **(Reviewer only.)** **Meets (2)** **Partially Meets (1)** **Does Not Meet (0)**
Over the course of any given year of instruction, is each mathematical practice Standard meaningfully present in the form of assignments, activities, or problems that stimulate students to develop the habits of mind described in the practice Standard? Evaluate lessons, chapter/ unit assessments, and homework assignments for evidence of each mathematical practice being meaningfully present in instruction.	**Evidence-** • Assessment Guide - Session 3 pg 19-25 • Unit sessions & Number corners - list to show focus of MP. • Sidebars included in teachers guide	
Do the materials treat the practice Standards as developing across grades or grade bands? Are the practice Standards in early grades appropriately simple? Do they display an arc of growing sophistication across the grades?	**Evidence-** • Graph paper to solve problems • Sidebar - "Math Practici in Action" ways to integrate practices into lesson	-Note. not all lessons have multple standards addressed.
Are there teacher-directed materials that explain the role of the practice Standards in the classroom and in students' mathematical development? Are alignments to practice Standards accurate?	**Evidence-** Teacher guide - shows information on practices. Assessment guide - shares practices in assessments	
Metric AC2C: **Materials support the Standards' emphasis on mathematical reasoning.** **How to Find the Evidence:** For context, read Criterion #10 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).		**Use the questions for Metric 2C to evaluate Metric 2C. Record evidence for each question and rate Metric 2C.** **(Reviewer only.)** **Meets (2)** **Partially Meets (1)** **Does Not Meet (0)**
Do the materials support students in constructing viable arguments and critiquing the arguments of others concerning grade-level mathematics that is detailed in the content Standards? Read Standard for Mathematical Practice 3. Evaluate teacher and student materials to ensure that students are given opportunities to reason with grade-level mathematics.	**Evidence-** • Creats opportunities for students to reason • Unit 2, Mod 2, Session 2 - story problems, answers shared • Assessment rubrics for teachers	to assess arguments
Do the materials support students in producing not only answers and solutions, but also, in a grade-appropriate way, arguments, explanations, diagrams, mathematical models, etc., especially in the Major Work of the grade? Familiarize yourself with the Major Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate teacher and student materials, to understand the types of work students are expected to produce.	**Evidence-** • Unit 5 module 2 Session 1 +,- fractions using equivalents • Brians Box • Number corners	

Do materials explicitly attend to the specialized language of mathematics? Is the language of argument, problem solving, and mathematical explanations taught rather than assumed? Evaluate teacher and student materials, paying attention to how mathematical language is taught. NOTE: Examples of evaluating this Criterion might include looking at whether students are supported in: basing arguments on definitions; using the method of providing a counterexample; or recognizing that examples alone do not establish a general statement.	**Evidence-** • Journal used as a resource for mathematical concepts with appropriate language • Teacher-created anchor charts (suggestions provided). • Vocabulary cards provided.	

Alignment Criterion 2: Standards for Mathematical Practice

Materials must demonstrate authentic connections between content Standards and practice Standards.

AC2 Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 out of 6 points, the Criterion has not been met. Check the final rating.
Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion.
(Reviewer only.)

Before moving to Alignment Criterion 3, record the final Meets or Does Not Meet rating in the Evaluation Summary.

(Reviewer only.)

X **Meets**

____ **Does Not Meet**

Strengths/Weaknesses:

Multiple opportunities within all units - daily practice, number corners, - to practice reasoning with conceptual problems

Alignment Criterion 3: Access to the Standards for All Students

Materials must provide supports for English Language Learners and other special populations.

Because Standards are for all students, alignment requires thoughtful support to ensure all students are able to meet the Standards. Thus, aligned materials must provide supports for English Language Learners and other special populations.

Required Materials:

- Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf)
- Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)
- From the materials being evaluated: teacher guides, student texts and workbooks

Rating this Criterion:

Alignment Criterion 3 is rated as Meets or Does Not Meet.

To rate Alignment Criterion 3, first rate metrics 3A, 3B, and 3C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points).

Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 3 if the materials earn 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as support for special population, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.

Metric AC3A: **Support for [redacted]ish Language Learners and other special populations is thoughtful and helps those students meet the same Standards as all other students. The language in which problems are posed is carefully considered.** **How to Find the Evidence:** Evaluate teacher and student materials, paying attention to supports offered for special populations.	**Evidence-** Spanish parent letters & student work book, home connection offered Note: only offered in Spanish - not for non-Spanish speaking ELL	Reviewer only.) ____Meets (2) X Partially Meets (1) ____Does Not Meet (0)
Metric AC3B: **Materials provide appropriate level and type of scaffolding, differentiation, intervention, and support for a broad range of learners with gradual removal of supports, when needed, to allow students to demonstrate their mathematical understanding independently.** **How to Find the Evidence:** Evaluate teacher and student materials, paying attention to whether materials provide differentiation that will lead all learners to engage with on-grade-level content.	**Evidence-** • TE guide - differentiation for learning (scaffolding + challenge) Unit 2 - Racing Fractions • Workplace - allows students to work at their own pace. Note - not all lessons offer differentiation - just some.	Reviewer only.) X Meets (2) X Partially Meets (1) ____Does Not Meet (0)
Metric AC3C: **Design of lessons recommends and facilitates a mix of instructional approaches for a variety of learners such as using multiple representations (e.g., including models, using a range of questions, checking for understanding, flexible grouping, pair-share).** **How to Find the Evidence:** Evaluate teacher materials, noting instructional approaches suggested for whole class and differentiated lessons and activities.	**Evidence-** • Lessons begin with concrete practice & then into iconic and finally symbolic • Students work independently, in pairs, small groups • teachers provided with high quality questions	Reviewer only.) X Meets (2) ____Partially Meets (1) ____Does Not Meet (0)

Alignment Criterion 3: **Access to the Standards for All Students** **Materials must provide supports for English Language Learners and other special populations.** **AC3** Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 points, the Criterion has not been met. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion.**(Reviewer only.)** **Move to the Evaluation Summary and record the final Meets or Does Not Meet rating .**	**(Reviewer only.)** ~~X~~ **Meets** X **Does Not Meet** **Strengths/Weaknesses:** W- only spanish available for ELL S- differentation available for each session in TE guide -extensive modeling/strategies

Once an evaluation for alignment to the Shifts and major features of the CCSS has been conducted using Sections 1-3, it's important to evaluate for overall quality and best practices. A starting list of Indicators of Quality are suggested below. States, districts and others evaluating instructional materials are encouraged to add to this list to ensure materials reflect local contexts. For background information on some of the Indicators of Quality in this section, refer to pp.18–21 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).

Indicators of Quality	**Evidence- Give specific examples.**	**Rating: (Reviewers only.)**
1. Lessons are thoughtfully structured and support the teacher in leading the class through the learning paths at hand, with active participation by all students in their own learning and in the learning of their classmates.	**Evidence-** • Lesson set-up thorough • Binders are organized & easy to follow • TE guide, copies, student book provided	**(Reviewer only.)** X **Yes** ____ **No**
2. The underlying design of the materials includes both problems and exercises. (In solving problems, students learn new mathematics, whereas in working exercises, students apply what they have already learned to build mastery.) Each problem or exercise has a purpose. **NOTE: This Criterion does not require that the problems and exercises be labeled as such.**	**Evidence-** • Workplace provides practice in new skills • Student book builds independence • Home connection practice on skills previously taught.	**(Reviewer only.)** X **Yes** ____ **No**

3. Design of assignments is not haphazard: exercises are given in intentional sequences in order to strengthen students' mathematical understanding.	**Evidence-** • lessons have specific sequence- begins with teacher-led and moves to independence of student.	(Reviewer only.) X Yes ____ No
4. There are separate teacher materials that support and reward teacher study including, but not limited to: discussion of the mathematics of the units and the mathematical point of each lesson as it relates to the organizing concepts of the unit, discussion on student ways of thinking and anticipating a variety of students responses, guidance on lesson flow, guidance on questions that prompt students thinking, and discussion of desired mathematical behaviors being elicited among students.	**Evidence-** • professional development provided year long. • Sample student responses • Unit outline- page #'s for teacher- master, student book & home connection	(Reviewer only.) X Yes ____ No
5. Manipulatives suggested in the materials are faithful representations of the mathematical objects they represent and are connected to written methods.	**Evidence-** Various manipulatives calendar marker, sticks, money cards, dice, vocab cards	(Reviewer only.) X Yes ____ No
6. Materials include a variety of curriculum-embedded assessments. Examples include pre-, formative, summative, and self-assessment resources.	**Evidence-** Assessment binder- thorough. Includes: pre-assessments Check-ups post assessments oral assessment, intervention ideas	(Reviewer only.) X Yes ____ No
7. Assessments contain aligned rubrics, answer keys, and scoring guidelines that provide sufficient guidance for interpreting student performance.	**Evidence-** Assessments include- answer key rubrics / scoring guide reflection sheets (pre-assess)	(Reviewer only.) X Yes ____ No
8. Materials assess student proficiency using methods that are accessible and unbiased, including the use of course-level language in student prompts.	**Evidence-** Assessment questions align to practice. Contextual word problems. Offer concrete tangible items to visualize & represent.	(Reviewer only.) X Yes ____ No

9. Materials are carefully evaluated by qualified individuals, whose names are listed, in an effort to ensure freedom from mathematical errors and course-level appropriateness.	**Evidence-** Names of creators of program & reviewers are provided.	**(Reviewer only.)** X **Yes** ____ **No**
10. The visual design supports students in engaging thoughtfully with the subject. Navigation through the text is clear.	**Evidence-** • Student pages supported by manipulatives & models • graphics included • navigation through texts easy to follow	**(Reviewer only.)** X **Yes** ____ **No**
11. The materials engage parents in appropriate ways. For example, homework assignments in elementary grades, consist of routine problems, practice with getting answers, and fluency-building exercises that parents can easily support.	**Evidence-** • Home connection 2x week • Suggestions for family activities • Family support web page. • games, activities, literature suggestions	**(Reviewer only.)** X **Yes** ____ **No**

Reviewer IMET Evaluation Summary **Title/Level:** Bridges - Grade 5

Publisher: The Math Learning Center **Copyright:** 2016 **ISBN:** 978-1-60262-573

Reviewer ID # AM + DB **Date Review Completed:** March 9, 2016

Non-Negotiable Criteria- Each Non-Negotiable must be met in order for the Non-Negotiable Alignment Criteria to be met overall.

Non-Negotiable 1: Freedom from Obstacles to Focus	Non- Negotiable 2: Focus and Coherence
X Meets	X Meets
_____ Does Not Meet	_____ Does Not Meet

Non-Negotiable Overall:

\ Meets _____ Does Not Meet

Alignment Criteria- Each Alignment Criterion must be met with a sufficient number of points in order for Alignment Criteria to be labeled as "Meets" overall. The more points the materials receive on the Alignment Criteria, the better they are aligned.

Alignment Criterion 1: Rigor and Balance	Alignment Criterion 2: Standards of Mathematical Practice	Alignment Criterion 3: Access to Standards for All Learners
Points: 6 of 6 possible. (Materials must receive at least 5 of 6 points to align.)	Points: 5 of 6 possible. (Materials must receive at least 5 of 6 points to align.)	Points: 4 of 6 possible. (Materials must receive at least 5 of 6 points to align.)
X Meets	X Meets	~~X~~ Meets
_____ Does Not Meet	_____ Does Not Meet	Y Does Not Meet

Alignment Criteria Overall:

~~X~~ Meets X Does Not Meet

If the materials meet both Non-Negotiables and relevant Alignment Criterion, they are aligned to the Shifts and major features of the Core Standards. **Do the materials meet every Non-Negotiable and Alignment Criterion?** ~~X~~ **Yes** X **No**

What are the specific areas of strength and weakness based on this evaluation? Publishers or others modifying or developing assessments can use this information to make improvements and/or to remedy gaps in the alignment of assessment materials.

Strengths - number clusters connect within cluster and across domains

- progression of work from concrete to iconic to symbolic throughout units
- contextual - real world multi-step problems throughout with many opportunities to ~~of~~ reason and present arguments

Weaknesses - Spanish only option for ELL
- insufficient practice in student workbooks
- practice standards not sufficiently addressed in lessons

2015-16 Mathematics Interim Review Recommendation & Summary

Publisher Name:	McGraw-Hill School Education LLC
Title:	My Math
ISBN #	Varias
Grade Level(s) or Course:	Kindergarten
Reviewer ID:	CO, AF

RECOMMENDED AS:

✓ **Core Mathematics Program-** a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials. Substantial evidence clearly supports the designation of this program as Core.

_____ **Other Mathematics Program-** a program that substantially, but partially, meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for supplemental materials. Substantial evidence clearly supports the designation of this program as Other.

_____ **Component Mathematics Program-** a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs. Substantial evidence clearly supports the designation of this program as Component.

_____ **Intervention Program-** a program designed and intended to target and support students' specific needs. Substantial evidence clearly supports the designation of this program as Intervention.

_____ **Does not meet criteria** for recommendation as a Curricular Material or Online Resource for Mathematics.

EVIDENCE SUMMARY:

FOCUS- The instructional materials do not assess any topics from future grades. The assessments are featured online. Six assessment forms exist for each chapter and an online test generator is available. My Math only assesses grade level content.

COHERENCE-
Supporting content for Kindergarten My Math enhances focus and content by engaging students in major work. The instructional materials do not miss opportunities to connect non-major clusters of standards to the major clusters.

RIGOR-
At the beginning of each lesson a section on rigor exists to identify levels of complexity by problem or exercise number. for example (lesson 8 in chapter 3 has two workbook pages 225-226 for conceptual learning.

CONCEPTUAL UNDERSTANDING-
The majority of the homework contains problems that provide students the opportunity to practice procedural skills and fluency. Procedures for addition and subtraction are emphasized in Kindergarten. Most of the investigate the math is conceptual understanding. The talk Math targets conceptual understanding.

MATHEMATICAL PRACTICES-
Overall the instructional materials carefully attend to the full meaning of the mathematical practices. They are used within and throughout the grade. The teacher edition pages T22-T24. states the MP and the corresponding pages.

ACCESSIBILITY OF STANDARDS TO ALL STUDENTS-
Kindergarten My Math meet the expectations for accessibility of standards. The materials for both students and teachers have multiple ways for students to engage with the vocabulary of mathematics that is consistently present throughout the materials.
Vocabulary checks are included in some homework assignments

OTHER: Chapter 3 page 172.

Strenghts of the program include:
Problem of the day
Lots of problem solving
Differenciated instruction
Vocabulary
Ell Component
Literature connection

Weaknesses of the program include:
10 frames are the main model

2015-16 Interim Mathematics Review

Mathematics Evaluation Tool Grades K-8

Publisher: McGraw-Hill School Education LLC

Title of Material: My Math Kindergarten

Author: Altieri

ISBN #: various **Copyright** 2013

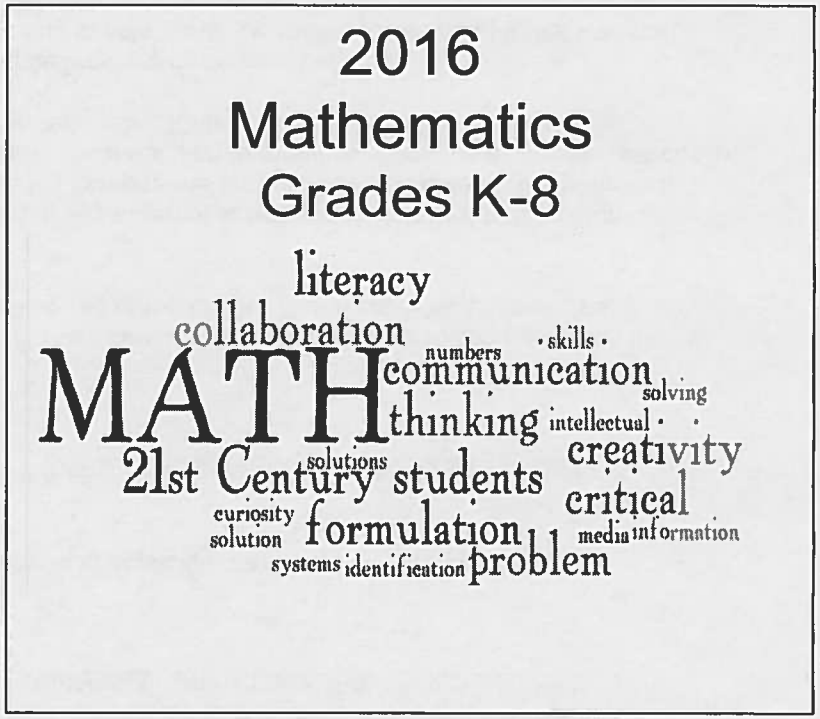
Reviewer ID: AF CO

Core Mathematics Program- a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Core.

Other Mathematics Program- a program that substantially, but partially, meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Other.

Component Mathematics Program- a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs.
Substantial evidence clearly supports the designation of this program as Component.

Intervention Program- a program designed and intended to target and support students' specific needs.
Substantial evidence clearly supports the designation of this program as Intervention.



- Evaluation Form adapted from Instructional Materials Evaluation Toolkit (IMET).

The IMET was developed by Student Achievement Partners. Educators may use or adapt. http://creativecommons.org/licenses/by/3.0/ Download this tool at http://achievethecore.org/IMET

Instructional Materials Evaluation Tool

Mathematics, Grades K-8

What Are the Purposes of the IMET?

This Math IMET is designed to help educators determine whether instructional materials are aligned to the Shifts and major features of the Common Core State Standards (CCSS). The substantial instructional Shifts (http://www.corestandards.org/other-resources/key-shifts-inmathematics/) at the heart of the Common Core State Standards are:

- **Focus** strongly where the Standards focus
- **Coherence**: Think across grades and link to major topics within the grade
- **Rigor**: In major topics, pursue conceptual understanding, procedural skill and fluency, and application with equal intensity.

The IMET draws directly from the following documents:

- Common Core State Standards for Mathematics (www.corestandards.org/Math)
- Publishers' Criteria for the Common Core State Standards in Mathematics grade K-8 (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)

When to use the IMET

1. Purchasing materials: Many factors go into local purchasing decisions. Alignment to the Standards is a critical factor to consider. This tool is designed to evaluate alignment of instructional materials to the Shifts and the major features of the CCSS. It also provides suggestions of additional indicators to consider in the materials evaluation and purchasing process.

2. Evaluating materials currently in use: The IMET can be used to analyze the degree of alignment of existing materials and help to highlight specific, concrete flaws in alignment. Even where materials and tools currently in use fail to meet one or more of these criteria, the pattern of failure is likely to be informative. States and districts can use the evaluation to create a thoughtful plan to modify or combine existing resources in such a way that students' actual learning experiences approach the focus, coherence, and rigor of the Standards.

3. Developing programs: Those developing new programs can use this tool as guidance for creating aligned curricula.
Please note this tool was designed for evaluating comprehensive curricula (including any supplemental or ancillary materials), but it was not designed for the evaluation of standalone supplemental materials.

Who Uses the IMET?

Evaluating instructional materials requires both subject-matter and pedagogical expertise. Evaluators should be well versed in the Standards (www.corestandards.org/Math) for all grades in which materials are being evaluated. This includes understanding the Major Work of the grade (www.achievethecore/focus), the Supporting and Additional work, how the content fits into the progressions in the Standards (www.achievethecore.org/progressions), and the expectations of the Standards with respect to conceptual understanding, procedural skill and fluency, and application. Evaluators also should be familiar with the substantial instructional Shifts (http:// www.corestandards.org/other-resources/key-shifts-in-mathematics/) of Focus, Coherence and Rigor that are listed above.

Getting Started

Prior to Evaluation

Assemble all of the materials necessary for the evaluation. It is essential for evaluators to have materials for all grades covered by the program, as some criteria cannot be rated without having access to each grade. In addition, each evaluator should have a reference copy of the Common Core State Standards for Mathematics (CCSSM) and the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013).

2015-16 Interim Mathematics Review

Mathematics Evaluation Tool Grades K-8

Publisher: McGraw-Hill School Education LLC

Title of Material: MyMath Kindergarta

Author: _____

ISBN #: _____ **Copyright**_____

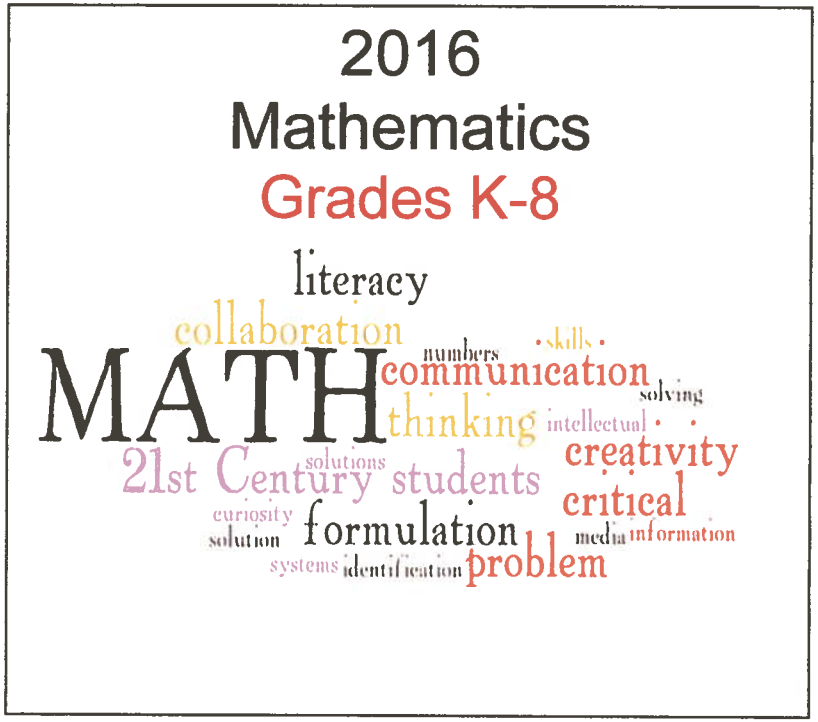
Reviewer ID: CO, AF

Core Mathematics Program- a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Core.

Other Mathematics Program- a program that substantially, but partially, meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Other.

Component Mathematics Program- a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs.
Substantial evidence clearly supports the designation of this program as Component.

Intervention Program- a program designed and intended to target and support students' specific needs.
Substantial evidence clearly supports the designation of this program as Intervention.



- Evaluation Form adapted from Instructional Materials Evaluation Toolkit (IMET).

The IMET was developed by Student Achievement Partners. Educators may use or adapt. http://creativecommons.org/licenses/by/3.0/ Download this tool at http://achievethecore.org/IMET

Instructional Materials Evaluation Tool
Mathematics, Grades K-8

What Are the Purposes of the IMET?

This Math IMET is designed to help educators determine whether instructional materials are aligned to the Shifts and major features of the Common Core State Standards (CCSS). The substantial instructional Shifts (http://www.corestandards.org/other-resources/key-shifts-inmathematics/) at the heart of the Common Core State Standards are:

- **Focus** strongly where the Standards focus
- **Coherence**: Think across grades and link to major topics within the grade
- **Rigor**: In major topics, pursue conceptual understanding, procedural skill and fluency, and application with equal intensity.

The IMET draws directly from the following documents:

- Common Core State Standards for Mathematics (www.corestandards.org/Math)
- Publishers' Criteria for the Common Core State Standards in Mathematics grade K-8 (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)

When to use the IMET

1. Purchasing materials: Many factors go into local purchasing decisions. Alignment to the Standards is a critical factor to consider. This tool is designed to evaluate alignment of instructional materials to the Shifts and the major features of the CCSS. It also provides suggestions of additional indicators to consider in the materials evaluation and purchasing process.

2. Evaluating materials currently in use: The IMET can be used to analyze the degree of alignment of existing materials and help to highlight specific, concrete flaws in alignment. Even where materials and tools currently in use fail to meet one or more of these criteria, the pattern of failure is likely to be informative. States and districts can use the evaluation to create a thoughtful plan to modify or combine existing resources in such a way that students' actual learning experiences approach the focus, coherence, and rigor of the Standards.

3. Developing programs: Those developing new programs can use this tool as guidance for creating aligned curricula.
Please note this tool was designed for evaluating comprehensive curricula (including any supplemental or ancillary materials), but it was not designed for the evaluation of standalone supplemental materials.

Who Uses the IMET?

Evaluating instructional materials requires both subject-matter and pedagogical expertise. Evaluators should be well versed in the Standards (www.corestandards.org/Math) for all grades in which materials are being evaluated. This includes understanding the Major Work of the grade (www.achievethecore/focus), the Supporting and Additional work, how the content fits into the progressions in the Standards (www.achievethecore.org/progressions), and the expectations of the Standards with respect to conceptual understanding, procedural skill and fluency, and application. Evaluators also should be familiar with the substantial instructional Shifts (http:// www.corestandards.org/other-resources/key-shifts-in-mathematics/) of Focus, Coherence and Rigor that are listed above.

Getting Started
Prior to Evaluation

Assemble all of the materials necessary for the evaluation. It is essential for evaluators to have materials for all grades covered by the program, as some criteria cannot be rated without having access to each grade. In addition, each evaluator should have a reference copy of the Common Core State Standards for Mathematics (CCSSM) and the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013).

Before conducting the evaluation itself, it is important to develop a protocol for the evaluation process. The protocol should include having evaluators study the Publishers' Criteria and the IMET. It will also be helpful for evaluators to get a sense of each program overall before beginning the process. At a minimum, this would include reading the front matter of the text, looking at the table of contents and paging through multiple chapters.

Sections 1-3 below should be completed to produce a comprehensive picture of the strengths and weaknesses of the materials under evaluation. Information about areas in need of improvement or supplementation should be shared with internal and external stakeholders.

Navigating the Tool

Begin with Section 1: Non-Negotiable Alignment Criteria

- The Non-Negotiable Alignment Criteria must each be met in full for materials to be considered aligned to the Shifts and the major features of the Common Core State Standards. Each Non-Negotiable Alignment Criterion has one or more metrics associated with it; every one of these metrics must be met in order for the criterion as a whole to be met.

- Examine the relevant materials and use evidence to rate the materials against each criterion and its associated metric(s).

- Record and explain the evidence upon which the rating is based.

Continue to Section 2: Alignment Criteria

- The Alignment Criteria must each be met for materials to be considered aligned to the Shifts and the major features of the Common Core State Standards. Each Alignment Criterion has one or more metric associated with it; a specific number of these metrics must be met or partially met in order for the criterion as a whole to be met.

- Examine the materials in relation to these criteria, assigning each metric a point value. Rate the criterion as "Meets" or "Does Note Meet" based on the number of points assigned. The more points the materials receive on the alignment Criteria, the better they are aligned.

- Record and explain the evidence upon which the rating is based.

Proceed to Section 4: Indicators of Quality

- Indicators of Quality are important considerations that will help evaluators better understand the overall quality of instructional materials. These considerations are not criteria for alignment to the CCSS, but they provide valuable information about additional program characteristics. Evaluators may want to add their own indicators to the examples provided.

Directions for Non-Negotiable 1

Freedom from Obstacles to Focus

Criterion	Evidence- Give specific examples.	Rating: (Reviewer only.)
Non-Negotiable 1: **Freedom from Obstacles to Focus** **Materials must reflect the content architecture of the Standards by not assessing the topics named before the grade level where they first appear in the Standards.** The Standards foster students' progress to algebra by focusing strongly on arithmetic. Consistent with this focus, certain topics from outside of arithmetic appear only in later grades. Thus, to be aligned, materials must reflect the content architecture of the Standards by not assessing the topics named before the grade level where they first appear in the Standards. In this criterion, "topics named" means the topics that are explicitly named in Metric 1A. No other topics should be added to the list in Metric 1A. (Note that other topics in the standards are addressed in criterion NN2.)	**Required Materials** • Common Core State Standards for Mathematics (www.corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf) • From the materials being evaluated: teacher guides and all assessment components	**Rating this Criterion:** Non-Negotiable 1 is rated as Meets or Does Not Meet. To rate Non-Negotiable 1, begin by rating Metric 1A. Since Metric 1A is the only metric for Non-Negotiable 1, the rating for Non-Negotiable 1 is the same as the rating for Metric 1A. If Metric 1A is rated as Does Not Meet, include evidence of when the named topic(s) is/are assessed. If the metric is rated as Meets, list the grade(s) examined in the evaluation.

Metric NN1A: **Materials re[illegible] the basic architecture of the Standards by not assessing the listed topics before the grade level indicated.** • Probability, including chance, likely outcomes, probability models. (Introduced in the CCSSM in grade 7) • Statistical distributions, including center, variation, clumping, outliers, mean, median, mode, range, quartiles; and statistical association or trends, including two-way tables, bivariate measurement data, scatter plots, trend line, line of best fit, correlation. (Introduced in the CCSSM in grade 6) • Similarity, congruence, or geometric transformations. (Introduced in the CCSSM in grade 8) • Symmetry of shapes, including line/ reflection symmetry, rotational symmetry. (Introduced in the CCSSM in grade 4) **How to Find the Evidence:** Evaluate the table of contents, all chapter tests, all unit tests, and other such assessment components (including rubrics). For context, read Criterion #2 from the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013). NOTE: Grade alignments of other topics are addressed in Non-Negotiable 2, Focus and Coherence.) In this criterion, "topics named" means the topics that are explicitly named in Metric 1A. No other topics should be added to the list in Metric 1A. (Note that other topics in the standards are addressed in criterion NN2.)	**Evidence-** The instructional materials do not assess any topics from future grade levels. The assessments are featured online. Six assessment forms exist for each chapter and an online test generator is available. The Kindergarten *My Math* instructional materials only assess grade-level content on form assessments. An online test generator is included in the materials for teachers to create their own assessments.	**(Reviewer only.)** **__x__Meets** **____Does Not Meet**
Non-Negotiable 1: Materials must reflect the content architecture of the Standards by not assessing the topics named* before the grade level where they first appear in the Standards. **NN 1** If Metric 1A was rated as Meets, then rate Non-Negotiable 1 as Meets. If Metric 1A was rated as Does Not Meet, then rate Non- Negotiable 1 as Does Not Meet. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion.**(Reviewer only.)** **Before moving to Non-Negotiable 2, record the final Meets or Does Not Meet rating in the Evaluation Summary.**		**(Reviewer only.)** **___x_Meets** **____Does Not Meet** **Strengths/Weaknesses:**

Directions for Non-Negotiable 2

Focus and Coherence

Non-Negotiable 2: Focus and Coherence	Required Materials	Rating this Criterion:
Materials must focus coherently on the Major Work of the grade in a way that is consistent with the progressions in the Standards. Focus and coherence are the two major evidence-based design principles of the Common Core State Standards for Mathematics (CCSSM, p. 3). Focus is necessary in order to fulfill the ambitious promise the states have made to their students by adopting the Standards: greater achievement at the college and career ready level; greater depth of understanding of mathematics; and a rich classroom environment in which reasoning, sense-making, applications, and a range of mathematical practices flourish. In simpler terms, a mile-wide, inch-deep curriculum translates to less time per topic. Less time means less depth and moving on without many students. Thus, materials must focus coherently on the Major Work of the grade in a way that is consistent with the progressions in the Standards.	• Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf) • Focus by Grade Level for the grade being evaluated (www.achievethecore.org/focus) • From the materials being evaluated: teacher guides, student texts and workbooks	Non-Negotiable 2 is rated as Meets or Does Not Meet. To rate Non-Negotiable 2, first rate metrics 2A–2H. Each of these eight metrics must be rated as Meets in order for Non-Negotiable 2 to be rated as Meets. Rate each metric 2A-2H as Meets or Does Not Meet/Insufficient Evidence. If the evidence examined shows that the Criterion is met, then mark the Criterion Meets. If the evidence examined shows that the Criterion is not met—or if there is insufficient evidence to make a determination—then mark the Criterion as Does Not Meet/Insufficient Evidence. Support all ratings with evidence.

Metric NN2A: **In each grade 1–8, students and teachers using the materials as designed devote the large majority of time to the Major Work of the grade.** **How to Find the Evidence:** Familiarize yourself with the Major Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, lessons, homework assignments, and assessments. (Evaluate both student and teacher materials.) Consider time spent on the Major Work of the grade and judge qualitatively whether students and teachers using the materials as designed will devote the large majority of time to the Major Work of the grade. For context, read Criterion #1 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013)	**Evidence-** The instructional materials do not spend the majority of the time on the major work of the grade. Kindergarten *My Math* consists of 12 chapters scheduled to be taught in 160 days. • In Kindergarten, the major work should happen closer to the 85% of the time benchmark. • Eight of the twelve chapters or about 67% of the time is spent on the major work of the grade or in support of the major work. • Four of the twelve chapters (8-12) or about 33% of the time is spent on the supporting work of the grade. • The chapters are written to be taught and assessed over 160 days. • Each chapter has a certain number of days set aside for instruction and two days for each unit are focused on assessment. • Chapters 1-7 are focused on the major work of the grade level. This is 102 out of 160 days, which is 64% of the instruction is focused on major work of the grade level. • The remaining 58 days or 36% of the work is focused on additional and supporting clusters. Chapter 9 focuses on a supporting cluster, while chapters 8-12 focus on additional clusters. The major work of Kindergarten, specifically counting and cardinality, are not given daily practice.	**(Reviewer only.)** **__x__Meets** **_____Does Not Meet/ Insufficient Evidence**

Metric NN2B: **Supporting [illegible], where present, enhances focus and coherence simultaneously by also engaging students in the Major Work of the grade.** **How to Find the Evidence:** Familiarize yourself with the Major Work and Supporting Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate chapters and lessons that focus on Supporting Work. NOTE: Example of evaluating this Criterion might include looking at whether materials for K–5 generally treat data displays as an occasion for solving grade-level word problems using the four operations (e.g., see 3.MD.B.3); or whether materials for grade 7 take advantage of opportunities to use probability to support ratios, proportions, and percentages. For context, read Criterion #3 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Supporting content for Kindergarten *My Math* enhances focus and content by engaging students in the major work of the grade. Overall, the instructional materials do not miss opportunities to connect non-major clusters of standards to major clusters and as a result, the supporting content does engage students in the major work of Kindergarten. • In chapter 9 on classifying objects, students must count objects (K.CC) in order to classify objects into groups (lesson 5). • In chapter 8 on measurement, students must count objects (K.CC) in order to estimate lengths of objects (lesson 3). • In chapter 11 on two-dimensional shapes, students must count (K.CC) vertices and sides of objects (lesson 2).	(Reviewer only.) **___x_Meets** **____Does Not Meet/ Insufficient Evidence**
Metric NN2C: **Materials base content progressions on the grade-by-grade progressions in the Standards. Content from previous or future grades does not unduly interfere with or displace on-grade-level content.** **How to Find the Evidence:** Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, and lessons in both student and teacher materials. NOTE: In some cases it may be possible that aligned materials might address some aspects of a topic in a strategic way before or after the grade level in which the topic is central in the Standards' progressions; for example, a curriculum author might purposefully choose to explore adding fractions with unlike denominators in a way appropriate to grade four, recognizing that this work is not really required until the next grade. However, any such purposeful discrepancies in content progressions should enhance the required learning in each grade; not unduly interfere with or displace grade-level content; and be clearly aimed at helping students meet the Standards as written rather than effectively rewriting the progressions in the Standards. And in all cases, note that Non-Negotiable 1 must be met for materials to be aligned. For context, read Criterion #5a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** The amount of content designated for Kindergarten *My Math* is viable for one school year. Overall, the amount of time needed to complete the lessons is appropriate for a school year of approximately 170-190. • There are 160 days of instruction/assessment. • Each lesson is designed for one day of instruction. • Chapter assessments and reviews are calculated to take two instructional days per chapter. Each chapter also has remediation and enrichment activities available plus chapter projects.	(Reviewer only.) **_x___Meets** **____Does Not Meet/ Insufficient Evidence**

Metric NN2D: **Materials gi[illegible]ll students extensive work with on-grade-level problems.** **How to Find the Evidence:** Evaluate both student and teacher materials. If the materials provide resources for differentiated learning, consider whether lower-performing students have opportunities to engage with grade-level problems. Also consider whether higher-performing students are given opportunities to learn current grade-level content in greater depth. For context, read Criterion #5b in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Kindergarten *My Math* materials are consistent with the progressions in the standards. Content is clearly identified, there are extensive grade-level problems and concepts are explicitly related to prior knowledge. The Kindergarten materials develop according to grade-by-grade progressions in the standards and are clearly identified and related to grade-level work. • Each chapter identifies how students will apply current learning to the next chapter and also in the next grade. • In chapter 1, students are working on numbers 0-5. In chapter 2, students will be learning to count, represent and name number objects up to 10 (K.CC.A.1). This standard progresses to the Grade 1 standard, where students will be learning to read and write numerals and represent a number of objects with a written numeral up to 120 (teacher edition 1F). • Each lesson shows coherence by identifying which standard is being taught now and how it connects to the standard being taught in the next grade. • There is no content from prior or future grade levels. • The major work of the grade is found within the first seven chapters and supporting work is found in the last five chapters. • Each chapter has a page titled "What's in this chapter?" This page explains the skills associated with each CCSSM standard that is included within the chapter. An example of this can be found in chapter 1, page 1F. • Each chapter contains a section that explains what happened before, now and next with each of the standards. An example of this can be found in chapter 1 on page 11A. • The teacher edition has a page at the beginning of each chapter that shows what information the student should know before the chapter and also shows the progression to what standard will be taught in the next unit. The Kindergarten materials give all students extensive work with grade-level problems.	**(Reviewer only.)** **__x__Meets** **____Does Not Meet/ Insufficient Evidence**

Metric NN2E: **Materials re[illegible]on-grade-level concepts explicitly to prior knowledge from earlier grades.** **How to Find the Evidence:** Evaluate both student and teacher materials. NOTE: Examples of evaluating this Criterion might include looking at the way the materials extend basic ideas of place value across the decimal point; or the role that properties of operations play when the materials extend arithmetic beyond whole numbers to fractions, variables, and expressions. More generally, cluster headings in the Standards sometimes signal key moments where reorganizing and extending previous knowledge is important in order to accommodate new knowledge (e.g., see cluster headings that use the phrase "Apply and extend previous understanding"). For context, read Criterion #5c in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Kindergarten materials foster coherence through connections at a single grade level. Overall, the materials do include learning objectives that are visibly shaped by the CCSSM cluster headings and the materials connect two or more clusters in a domain or two or more domains in a grade when appropriate. The Kindergarten materials include learning objectives visibly shaped by CCSSM cluster objectives. • The chapter overview of the teacher edition identifies each lesson as major, supporting, or additional work. The learning objective is listed below. • For example, chapter 1 focuses on major work of counting and cardinality. Lesson 1 has students counting 1, 2, and 3, then lesson 2 has students writing 1, 2 and 3. • Each lesson identifies the domain, cluster, objective and any additional objectives that are addressed in the lesson. Materials include problems and activities that serve to connect two or more clusters in a domain or two or more domains in a grade. • Activities in lesson 1, chapter 1 connect K.CC.B.4.A with K.CC.B.4.B and K.OA.A.1. • Activities in lesson 3, chapter 8 address K.MD.A.1 with connections to K.CC.B.4.B. Chapter 2 connects clusters under counting and cardinality.	(Reviewer only.) **__x__Meets** **____Does Not Meet/ Insufficient Evidence**
Metric NN2F: **Review of material from previous grades is clearly identified as such to the teacher, and teacher and students can see what their specific responsibility is for the current year.** **How to Find the Evidence:** Evaluate the table of contents, but do not stop there; also evaluate units, chapters, lessons, homework assignments and assessments. (Evaluate both student and teacher materials.) Identify any content from previous grades and check whether it is identified as such. For context, read Criterion #5a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** The scope and sequence of the materials are aigned to the common core progresson. Kindergarten: Numbers 0-5, Numbers to 10, Numbers beyond 10, Compose and Decompose numbers to 10, Addition, Subtraction, Compose and Decompose numbers 11-19, Measurement, Classify Objects, Position, 2 dimentional shapes, 3 dimentional shapes.	(Reviewer only.) **__x__Meets** **____Does Not Meet/ Insufficient Evidence**

Metric NN2G: **Materials include learning objectives that are visibly shaped by CCSSM cluster headings.** **How to Find the Evidence:** Select several clusters from the Major Work in the grade being evaluated. Evaluate teacher and student materials in relation to these clusters. For context, read Criterion #6a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** The Kindergarten materials include learning objectives visibly shaped by CCSSM cluster objectives. • The chapter overview of the teacher edition identifies each lesson as major, supporting, or additional work. The learning objective is listed below. • For example, chapter 1 focuses on major work of counting and cardinality. Lesson 1 has students counting 1, 2, and 3, then lesson 2 has students writing 1, 2 and 3. • Each lesson identifies the domain, cluster, objective and any additional objectives that are addressed in the lesson.	(Reviewer only.) **__x__Meets** **____Does Not Meet/ Insufficient Evidence**
Metric NN2H: **Materials include problems and activities that serve to connect two or more clusters in a domain, or two or more domains in a grade, in cases where these connections are natural and important.** **How to Find the Evidence:** In the grade being evaluated, choose two or more clusters or two or more domains for which connections are natural and important. Evaluate the units, chapters, and lessons that deal with the chosen topics, looking for problems and activities that serve to connect the chosen clusters or domains. NOTE: An example of evaluating this Criterion might include looking at whether problems in grade 4 sometimes or often involve students applying their developing computation skills (detailed in domain NBT) in the context of solving word problems (detailed in domain OA). For context, read Criterion #6b in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Materials include problems and activities that serve to connect two or more clusters in a domain or two or more domains in a grade. • Activities in lesson 1, chapter 1 connect K.CC.B.4.A with K.CC.B.4.B and K.OA.A.1. • Activities in lesson 3, chapter 8 address K.MD.A.1 with connections to K.CC.B.4.B. • Chapter 2 connects clusters under counting and cardinality.	(Reviewer only.) **_x___Meets** **____Does Not Meet/ Insufficient Evidence**

Non-Negotiable 2:

Focus and Coherence

Materials must focus coherently on the Major Work of the grade in a way that is consistent with the progressions in the Standards.

NN 2 If all Metrics 2A – 2H were rated as Meets, then rate Non-Negotiable 2 as Meets. If one or more Metric was rated Does Not Meet/Insufficient Evidence, then rate Non-Negotiable 2 as Does Not Meet. Check the final rating.
Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)**

Before moving to Alignment Criterion 1, record the final Meets or Does Not Meet rating in the Evaluation Summary.

(Reviewer only.)

__x__Meets

____Does Not Meet

Strengths/Weaknesses:

Now continue by evaluating the Alignment Criterion 1 for Rigor and Balance.

Directions for Alignment Criterion 1

Rigor and Balance

Alignment Criterion 1: Rigor and Balance

Materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.

The Standards set expectations for attention to all three aspects of rigor: conceptual understanding, procedural skill and fluency, and applications. Thus, materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.

Required Materials

- Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf)
- Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)
- Focus by Grade Level for the grade being evaluated (achievethecore.org/focus)
- Situation Types for the Operations in Word Problems (achievethecore.org/situation-types)
- From the materials being evaluated: teacher guides, student texts and workbooks

Rating this Criterion:

Alignment Criterion 1 is rated as Meets or Does Not Meet.

To rate Alignment Criterion 1, first rate metrics 1A, 1B, and 1C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). For each metric, guiding questions are provided to aid in gathering evidence.
Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 1 if the materials rate 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as rigor and balance, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.

Metric AC1A: **The material[illegible]pport the development of students' conceptual understanding of key mathematical concepts, especially where called for in specific content Standards or cluster headings.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Major Work for the grade being evaluated that relate specifically conceptual understanding to use throughout the questions associated with this metric. NOTE: Some examples of clusters or Standards that call for conceptual understanding include: K.OA.A.1, (1.NBT.B, 1.NBT.C), (2.NBT.A, 2.NBT.B), (3.OA.A.1, 3.OA.A.2), 4.NF.A, (4.NBT.A, 4.NBT.B), 5.NF.B, (5.NBT.A, 5.NBT.B), 6.RP.A, 6.EE.A.3, 7.NS.A, 7.EE.A, 8.EE.B, 8.F.A, 8.G.A Clusters or Standards grouped by parentheses are closely connected and could be analyzed together. For context, read Criterion #4a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	-Choose a cluster/Standard from the Major Work that is aligned to each aspect of rigor and use [illegible]valuate these metrics. It is most helpful if the same clusters/Standards are chosen for all of the programs being evaluated. (Guidance in choosing clusters/Standards is included in "How to Find the Evidence".)	**Use the questions for AC Metric 1A to evaluate Metric 1A. Record evidence for [illegible] question and rate Metric 1A.** **____Meets (2)** **__x__Partially Meets (1)** **____Does Not Meet (0)**
Is conceptual understanding attended to thoroughly where the Standards set explicit expectations for understanding or interpreting? Evaluate lessons, chapter/unit assessments and homework assignments, paying attention to work aligned to Standards that explicitly call for understanding or interpreting. NOTE: Examples of evaluating this Criterion might include looking at how well the multi-digit addition and subtraction algorithms are developed and explained on the basis of place value and properties of operations; or how well the multi-digit multiplication and division algorithms are developed and explained on the basis of place value and properties of operations; or how well solving equations is presented and explained as a process of reasoning.	**Evidence-** Kindergarten *My Math* materials partially meet the expectations for developing conceptual understanding of key mathematical concepts, where called for, in specific content standards or cluster headings. • The majority of the homework contains problems that provide students the opportunity to practice procedural skill and fluency and not conceptual understanding. • Procedures for addition/putting together and subtraction/taking apart are emphasized in Kindergarten. More attention is needed for the conceptual understanding of addition/subtraction • The content in chapters 1 and 4 through 6 address standards that are	

Do the materials feature high-quality conceptual problems and conceptual discussion questions? Evaluate lessons, chapter/unit assessments, and homework assignments. NOTE: Example of conceptual problems might include such questions as "Find a number greater than 1/5 and less than 1/4," or "If the divisor does not change and the dividend increases, what happens to the quotient?"	explicitly outlined as conceptual standards. (K.CC.B.4 and K.NBT.A.1) • Of the 88 lessons, [illegible] focused specifically on the conceptual understanding standards. • The majority of lessons in Kindergarten My Math have a section called "Investigate the Math" which targets conceptual understanding. This is contained in the online lesson presentation. For example, see page 705B in the teacher edition. • All lessons in the series have a section called "Talk Math" which targets conceptual understanding. This is contained in the online lesson presentation. For example, see pages 495 – 496 in the teacher and student editions. • In the student edition, some of the lessons in Kindergarten *My Math* have a section "Explore and Explain" to begin the lessons which targets conceptual understanding. For example, see page 705 in the teacher and student editions. • Most Investigate the Math is conceptual understanding; however, there are a few instances where this is not true. For examples, see chapter 1, lesson 8, page 55B TE; chapter 2, lesson 10, page 151B TE; and chapter 2, lesson 11, page 157B.	
Do the materials feature opportunities to identify correspondences across mathematical representations? Evaluate lessons, chapter/unit assessments and homework assignments. NOTE: Examples of evaluating this Criterion might include looking at whether students are supported in identifying correspondences among: the verbal description of a situation, the diagrams that distill its mathematical features, and the equations that model it; or equivalent forms of numbers (e.g., 3 and 6/2) and the number line; or rational number operations and representations of them via models such as the vector model; or the expression that defines a function and the graph that shows the relationship.	**Evidence-**	

Metric AC1B: **The materials are designed so that students attain the fluencies and procedural skills required by the Standards.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Major Work for the grade being evaluated that relate specifically to fluency and procedural skill to use throughout the questions associated with this metric. NOTE: Some examples of Standards that call for procedural skill and fluency include: K.OA.A.5, 1.OA.C.6, 2.OA.B.2, 2.NBT.B.5, 3.OA.C.7, 3.NBT.A.2, 4.NBT.B.4, 5.NBT.B.5, 6.NS.B.2, and 6.NS.B.3, 6.EE.A, 7.NS.A, 7.EE.A.1,7.EE.B.4a, 8.EE.C.7, 8.EE.C.8b For context, read Criterion #4b in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	Kindergarten *My Math* materials partially meet the expectations for giving attention throughout the year to individual standards to set an expectation of procedural skill and fluency. Lessons contain some examples of fluency practice pages. • Lessons contain few examples with fluency practice pages. • In the student edition, K.OA.5 is addressed in chapters 5 and 6. For example, see chapter 5, pages 339-344, and chapter 6, pages 415–420. • Homework does not contain multiple opportunities for students to practice fluency. • A "Fact Dash" game is available online with the student login to practice fluency. Students can select the operation and number facts. • The online teacher edition does have fluency pages available for printing. • "Sail through the Math" is an app game for fluency and is available for purchase ($1.99). • Eight lessons out of 89 address K.OA.A.5 Fluently add and subtract within 5 and are in chapters 5 and 6, which does not provide enough time to become fluent. • Procedural skills and fluency are present in the majority of the lessons in "Model the Math" (TE 43B). • Daily practice of counting /counting sequence is not provided in Kindergarten My Math. • In the student edition, fluency practice to write numbers is present in many lessons. • Math standard K.CC.A.1 (count to 100 by ones and tens) is addressed in 11 lessons out of 88 in chapters 1, 2 and 3. With counting to 100 by ones and tens being a required fluency for Kindergarten, 11 lessons are insufficient. • The cluster K.OA.A (Understand addition as putting together and adding to, and understand subtraction as taking apart and taking from) has 13 lessons out of 88 that address the standard and are all in chapters 2 and 3. • Procedural skills such as writing numbers are present in most of the lessons. • Within the Connect Ed website, there are more opportunities to give fluency, but they are difficult to find.	**Use the questions for Metric 1B to evaluate Metric 1 B. Record evidence for each question and rate Metric 1B.** **(Reviewer only.)** **____Meets (2)** **x** **____Partially Meets (1)** **____Does Not Meet (0)**
Is progress toward fluency and procedural skill interwoven with students' developing conceptual understanding of the operations in question? Evaluate lessons, chapter/unit assessments, daily routines, and homework assignments for evidence that the development of fluency and procedural skill is supported by conceptual understanding.	**Evidence-**	

Are purely procedural problems and exercises present that include cases in which opportunistic strategies are valuable and generic cases that require efficient algorithms present? Evaluate lessons, chapter/unit assessments, daily routines, and homework assignments. NOTE: Examples of problems in which opportunistic strategies are valuable might include the sum 698 + 240 or the system x + y = 1, 2x + 2y = 3. Examples of generic cases that require efficient algorithms might include the sum 8767+2286 or the system 6y + x = x + 3, – x = 1 + 2y.	**Evidence-**	
Do the materials in grades K–6 provide repeated practice toward attainment of fluency Standards? Evaluate lessons, daily routines, and homework assignments for evidence of repeated practice toward attainment of the following K–6 Standards that set an explicit expectation of fluent (accurate and reasonably fast) computation: K.OA.A.5, 1.OA.C.6, 2.OA.B.2, 2.NBT.B.5, 3.OA.C.7, 3.NBT.A.2, 4.NBT.B.4, 5.NBT.B.5, 6.NS.B.2, 6.NS.B.3.	**Evidence-**	
Metric AC1C: **The materials are designed so that teachers and students spend sufficient time working with engaging applications, without losing focus on the Major Work of each grade.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Major Work for the grade being evaluated that relate specifically application to use throughout the questions associated with this metric. NOTE: Some examples of clusters or Standards that call for application include: K.OA.A.2, 1.OA.A, 2.OA.A, 3.OA.A.3, 3.OA.D.8, 4.OA.A.3, 4.NF.B.3d, 4.NF.B.4c, 5.NF.B.6, 5.NF.B.7c, 6.RP.A.3, 6.NS.A.1, 6.EE.B.7, 6.EE.C.9, 7.RP.A, 7.NS.A.3, 7.EE.B.3, 8.EE.C.8c, 8.F.B For context, read Criterion #4c in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Kindergarten *My Math* materials meet the expectations for being designed so teachers and students spend sufficient time working with engaging applications of the mathematics without losing focus on the major work. • The majority of lessons include "Explore and Explain" which uses real-world problems to introduce concepts. For example, see chapter 1, lesson 5, page 35 and chapter 8, lesson 1, page 489. • The teacher edition states "Explore and Explain" and "Real-World Problem Solving Readers" address application. • While "Real-World Problem-Solving Readers" are available to provide additional problems, they were not reviewed by EdReports.org as they are not included in the basic package with the student and teacher editions and were therefore considered supplementary. • In the online portion, several chapters include "Project-Based Learning," which has students' applying mathematics to real-world situations.	**Use the questions for Metric 1C to evaluate Metric 1C. Record evidence for each question and rate Metric 1C.** **(Reviewer only.)** **__x__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**

Are there are single- and multi-step contextual problems, including non-routine problems, that develop the mathematics of the grade, afford opportunities for practice, and engage students in problem solving? Do the problems attend thoroughly to those places in the content Standards where expectations for multi-step and real-world problems are explicit? Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** rten *My Math* materials meet the expectations for being designed so teachers and students spend sufficient time working with engaging applications of the mathematics without losing focus on the major work. • The majority of lessons include "Explore and Explain" which uses real-world problems to introduce concepts. For example, see chapter 1, lesson 5, page 35 and chapter 8, lesson 1, page 489. • The teacher edition states "Explore and Explain" and "Real-World Problem Solving Readers" address application. • While "Real-World Problem-Solving Readers" are available to provide additional problems, they were not reviewed by EdReports.org as they are not included in the basic package with the student and teacher editions and were therefore considered supplementary. • In the online portion, several chapters include "Project-Based Learning," which has students' applying mathematics to real-world situations.	
Do application problems particularly stress applying the Major Work of the grade? Evaluate lessons, chapter/unit assessments, and homework assignments. NOTE: Examples of evaluating this Criterion might include looking at: how well, by the end of grade 2, students using the materials as designed can represent and solve a full range of one-step addition and subtraction word problems; or how well, by the end of grade 3, students using the materials as designed can represent and solve a full range of one-step multiplication and division word problems; or how well these basic situation types for each operation are carried coherently across the grades, (e.g., with fractions and algebraic expressions); or, in all grades, whether the problems connect concepts, Standards, and domains in ways that are natural and important. For a list of situation types for one-step addition, subtraction, multiplication, and division problems, see Situation Types for the Operations in Word Problems	**Evidence-** rten *My Math* materials meet the expectations for being designed so teachers and students spend sufficient time working with engaging applications of the mathematics without losing focus on the major work. • The majority of lessons include "Explore and Explain" which uses real-world problems to introduce concepts. For example, see chapter 1, lesson 5, page 35 and chapter 8, lesson 1, page 489. • The teacher edition states "Explore and Explain" and "Real-World Problem Solving Readers" address application. • While "Real-World Problem-Solving Readers" are available to provide additional problems, they were not reviewed by EdReports.org as they are not included in the basic package with the student and teacher editions and were therefore considered supplementary. • In the online portion, several chapters include "Project-Based Learning," which has students' applying mathematics to real-world situations.	

Does modeling build slowly across K–8, with applications that are relatively simpl[illegible] earlier grades and when students are encountering new content? In grades 6–8, do the problems begin to provide opportunities for students to make their own assumptions or simplifications in order to model a situation mathematically? Read Standard for Mathematical Practice 4, Model with Mathematics. Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** rten *My Math* materials meet the expectations for being designed so teachers and students spend sufficient time working with engaging applications of the mathematics without losing focus on the major work. • The majority of lessons include "Explore and Explain" which uses real-world problems to introduce concepts. For example, see chapter 1, lesson 5, page 35 and chapter 8, lesson 1, page 489. • The teacher edition states "Explore and Explain" and "Real-World Problem Solving Readers" address application. • While "Real-World Problem-Solving Readers" are available to provide additional problems, they were not reviewed by EdReports.org as they are not included in the basic package with the student and teacher editions and were therefore considered supplementary. • In the online portion, several chapters include "Project-Based Learning," which has students' applying mathematics to real-world situations.	

Alignment Criterion 1: Rigor and Balance

Materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.

AC1 Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 out of 6 points, the Criterion has not been met. Check the final rating.
Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)**

Before moving to Alignment Criterion 2, record the final Meets or Does Not Meet rating in the Evaluation Summary.

(Reviewer only.)

_x___Meets

____Does Not Meet

Strengths/Weaknesses:

Directions for Alignment Criterion 2

Standards for Mathematical Practice

Alignment Criterion 2: Standards for Mathematical Practice

Materials must demonstrate authentic connections between content Standards and practice Standards.

The Standards require that designers of instructional materials connect the mathematical practices to mathematical content in instruction. Thus, materials must demonstrate authentic connections between content Standards and practice Standards.

Required Materials:

- Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf)
- Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)
- Focus by Grade Level for the grade being evaluated (www.achievethecore.org/focus)
- From the materials being evaluated: teacher guides, student texts and workbooks

Rating this Criterion

Alignment Criterion 2 is rated as Meets or Does Not Meet.

To rate Alignment Criterion 2, first rate metrics 2A, 2B, and 2C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). For each metric, guiding questions are provided to aid in gathering evidence.

Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 2 if the materials earn 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as mathematical practices, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.

Metric AC2A:

Materials address the practice Standards in such a way as to enrich the Major Work of the grade; practices strengthen the focus on Major Work instead of detracting from it, in both teacher and student materials.

How to Find the Evidence:

Familiarize yourself with the Major Work of the grade being evaluated (see the Focus by Grade Level documents.)

Evaluate teacher and student materials for evidence that the mathematical practices support and connect to the focus of the grade.

NOTE: Examples of evaluating this Criterion might include looking at whether, in grades K–5, students using the materials are supported to look for and express regularity in repeated reasoning about the addition table, the multiplication table, the properties of operations, the relationship between addition and subtraction or multiplication and division, and the place value system; or whether, in grades 6–8, students using the materials are supported to look for and express regularity in repeated reasoning about proportional relationships and linear functions.

For context, read Criterion #8 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013).

Evidence-

Kindergarten *My Math* instructional materials meet the expectations for balance. Overall, the three aspects of rigor are neither always treated together nor always treated separately within the materials, and there is a balance of the three aspects of rigor within the grade.

- At the beginning of each lesson a section on rigor exists to identify levels of complexity by problem or exercise number. For example, lesson 8 in chapter 3 has two workbook pages (pages 225 – 226) for conceptual learning (understand concepts), one workbook page (page 227) for fluency/procedural skill (apply concepts), and one workbook page (page 228) for application (extend concepts).

(Reviewer only.)

__x__Meets (2)

____Partially Meets (1)

____Does Not Meet (0)

Metric AC2B: **Materials a[illegible]d to the full meaning of each practice Standard.** **How to Find the Evidence:** For context, read Criterion #7 and Criterion #9 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).		**Use the questions for Metric 2[illegible]to evaluate Metric 2B. Record evidence for eac[illegible]stion and rate Metric 2B.** **(Reviewer only.)** **____Meets (2)** **__x__Partially Meets (1)** **____Does Not Meet (0)**
Over the course of any given year of instruction, is each mathematical practice Standard meaningfully present in the form of assignments, activities, or problems that stimulate students to develop the habits of mind described in the practice Standard? Evaluate lessons, chapter/ unit assessments, and homework assignments for evidence of each mathematical practice being meaningfully present in instruction.	**Evidence-** Kindergarten My Math, the materials meet the expectations for identifying the MPs and using them to enrich mathematics content within and throughout Kindergarten. Overall, the instructional materials do not over-identify or under-identify the MPs, and they are used within and throughout the grade. • The teacher edition, pages T22 – T24, states the MPs and the corresponding pages. • The practices are identified throughout all 89 lessons. Each lesson addresses three to four practices as a focus. • The teacher edition indicates which Mathematical practice the student is working with in the lesson and in the homework. • **The student edition for Kindergarten does not indicate which Mathematical practice is present.** • **Not addressed on assessments.** Overall, the instructional materials carefully attend to the full meaning of some of the practice standards but not for all of them. The full meaning of each practice standard is not consistently addressed.	
Do the materials treat the practice Standards as developing across grades or grade bands? Are the practice Standards in early grades appropriately simple? Do they display an arc of growing sophistication across the grades?	**Evidence-** Overall, the instructional materials carefully attend to the full meaning of some of the practice standards but not for all of them. The full meaning of each practice standard is not consistently addressed.	
Are there teacher-directed materials that explain the role of the practice Standards in the classroom and in students' mathematical development? Are alignments to practice Standards accurate?	**Evidence-** Overall, the instructional materials carefully attend to the full meaning of some of the practice standards but not for all of them. The full meaning of each practice standard is not consistently addressed.	
Metric AC2C: **Materials support the Standards' emphasis on mathematical reasoning.** **How to Find the Evidence:** For context, read Criterion #10 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).		**Use the questions for Metric 2C to evaluate Metric 2C. Record evidence for each question and rate Metric 2C.** **(Reviewer only.)** **___x_Meets (2)**

Do the materials support students in constructing viable arguments and critiquing the arguments of others concerning grade-level mathematics that is detailed in the content Standards? Read Standard for Mathematical Practice 3. Evaluate teacher and student materials to ensure that students are given opportunities to reason with grade-level mathematics.	Mathematical Practices are throughout every lesson.	____**Partially Meets (1)** ____**Does Not Meet (0)**
Do the materials support students in producing not only answers and solutions, but also, in a grade-appropriate way, arguments, explanations, diagrams, mathematical models, etc., especially in the Major Work of the grade? Familiarize yourself with the Major Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate teacher and student materials, to understand the types of work students are expected to produce.	Mathematical Practices are throughout every lesson. Chapter 1 Lesson 1: Building conceptual understanding – includes arguments, models, and solutions.	
Do materials explicitly attend to the specialized language of mathematics? Is the language of argument, problem solving, and mathematical explanations taught rather than assumed? Evaluate teacher and student materials, paying attention to how mathematical language is taught. NOTE: Examples of evaluating this Criterion might include looking at whether students are supported in: basing arguments on definitions; using the method of providing a counterexample; or recognizing that examples alone do not establish a general statement.		

Alignment Criterion 2:
Standards for Mathematical Practice

Materials must demonstrate authentic connections between content Standards and practice Standards.

AC2 Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 out of 6 points, the Criterion has not been met. Check the final rating.
Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion.
(Reviewer only.)

Before moving to Alignment Criterion 3, record the final Meets or Does Not Meet rating in the Evaluation Summary.

(Reviewer only.)

__x__Meets

____Does Not Meet

Strengths/Weaknesses:

Alignment Criterion 3:

Access to the Standards for All Students

Materials must provide supports for English Language Learners and other special populations.

Because Standards are for all students, alignment requires thoughtful support to ensure all students are able to meet the Standards. Thus, aligned materials must provide supports for English Language Learners and other special populations.

Required Materials:

- Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf)
- Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)
- From the materials being evaluated: teacher guides, student texts and workbooks

Rating this Criterion:

Alignment Criterion 3 is rated as Meets or Does Not Meet.

To rate Alignment Criterion 3, first rate metrics 3A, 3B, and 3C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points).

Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 3 if the materials earn 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as support for special population, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.

Metric AC3A:

Support for English Language Learners and other special populations is thoughtful and helps those students meet the same Standards as all other students. The language in which problems are posed is carefully considered.

How to Find the Evidence:

Evaluate teacher and student materials, paying attention to supports offered for special populations.

Evidence-

The Kindergarten *My Math* instructional materials meet the expectations for explicitly attending to the specialized language of mathematics. Overall, the materials for both students and teachers have multiple ways for students to engage with the vocabulary of mathematics that is consistently present throughout the materials

- The special language of mathematics is a strength of the series.
- Individual vocabulary cards are found at the beginning of each chapter in the student edition.
- Vocabulary checks are included in some homework assignments. For example, see chapter 3, page 172.
- Vocabulary assessments can be created online.
- Virtual word walls are available online.
- "Match the Pairs" is an interactive vocabulary component.
- "Check my Progress" assesses vocabulary.
- Each chapter begins with a foldable that supports vocabulary development.
- "My Math Words" is at the beginning of some chapters. For example, see chapter 5, lesson 1, page 325A TE.
- The teacher, student, and online editions contain extensive glossaries in English and Spanish.

Oral and listening assessments are available online.

Reviewer only.)

__x__Meets (2)

____Partially Meets (1)

____Does Not Meet (0)

Metric AC3B: **Materials provide appropriate level and type of scaffolding, differentiation, intervention, and support for a broad range of learners with gradual removal of supports, when needed, to allow students to demonstrate their mathematical understanding independently.** **How to Find the Evidence:** Evaluate teacher and student materials, paying attention to whether materials provide differentiation that will lead all learners to engage with on-grade-level content.	**Evidence-** All lessons contain instructions with strategies. Lessons have support for differentiated instruction as well as ELL instruction.	**Reviewer only.)** **___x_Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Metric AC3C: **Design of lessons recommends and facilitates a mix of instructional approaches for a variety of learners such as using multiple representations (e.g., including models, using a range of questions, checking for understanding, flexible grouping, pair-share).** **How to Find the Evidence:** Evaluate teacher materials, noting instructional approaches suggested for whole class and differentiated lessons and activities.	**Evidence-** There are 4 different levels for instruction. They are color coded. Purple: ELL Orange: Approaching Tier 2 Blue: On Level Green: Beyond	**Reviewer only.)** **____xMeets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Alignment Criterion 3: **Access to the Standards for All Students** **Materials must provide supports for English Language Learners and other special populations.** **AC3** Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 points, the Criterion has not been met. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion.**(Reviewer only.)** **Move to the Evaluation Summary and record the final Meets or Does Not Meet rating .**		**(Reviewer only.)** **__x__Meets** **____Does Not Meet** **Strengths/Weaknesses:**

Once an evaluation for alignment to the Shifts and major features of the CCSS has been conducted using Sections 1-3, it's important to evaluate for overall quality and best practices. A starting list of Indicators of Quality are suggested below. States, districts and others evaluating instructional materials are encouraged to add to this list to ensure materials reflect local contexts. For background information on some of the Indicators of

Quality in this section, refer to pp.18–21 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2[illegible]).

Indicators of Quality	Evidence- Give specific examples.	Rating: (Reviewers only.)
1. Lessons are thoughtfully structured and support the teacher in leading the class through the learning paths at hand, with active participation by all students in their own learning and in the learning of their classmates.	**Evidence-** Every content lesson is organized with a five-step plan for instruction. 1. Get Ready 2. Investigate and Model 3. Teach 4. Practice and Apply 5. Wrap Up	(Reviewer only.) ___x___ Yes _____ No
2. The underlying design of the materials includes both problems and exercises. (In solving problems, students learn new mathematics, whereas in working exercises, students apply what they have already learned to build mastery.) Each problem or exercise has a purpose. **NOTE: This Criterion does not require that the problems and exercises be labeled as such.**	**Evidence-** My Math has problems and exercises. The math in the chapter shows how the math relates to previous and future work.	(Reviewer only.) _x_____ Yes _____ No
3. Design of assignments is not haphazard: exercises are given in intentional sequences in order to strengthen students' mathematical understanding.	**Evidence-** The design of work is arranged from guided practice, independent practice, extra practice, apply and extend. The problem of the day, literature connection, investigate the math and model the math have students using the mathematical practices.	(Reviewer only.) __x____ Yes _____ No
4. There are separate teacher materials that support and reward teacher study including, but not limited to: discussion of the mathematics of the units and the mathematical point of each lesson as it relates to the organizing concepts of the unit, discussion on student ways of thinking and anticipating a variety of students responses, guidance on lesson flow, guidance on questions that prompt students thinking, and discussion of desired mathematical behaviors being elicited among students.	**Evidence-** There are several online resources available for the teacher. The teacher can choose to only use the print resourse. ConnectED is an online portal that has all of the resources available digitally. My Math gives teachers lots of background knowledge about the content.	(Reviewer only.) ___x___ Yes _____ No

5. Manipulatives suggested in the materials are faithful representations of the mathematical objects they represent and are connected to written methods.	**Evidence-** Manipulatives and diagrams are included with the curriculum. The use of manipulatives start in Kindergarten. Instruction for the use of manipulatives is in the student edition and in Modeling the math.	(Reviewer only.) __x____ Yes _____ No
6. Materials include a variety of curriculum-embedded assessments. Examples include pre-, formative, summative, and self-assessment resources.	**Evidence-** Pre and post tests for each unit are included with My Math. The Problem of the Day is also a great way to assess students informally. Assessment masters are available on line and in print. There is also a check my progress diagnostic test and pretest.	(Reviewer only.) ____x__ Yes _____ No
7. Assessments contain aligned rubrics, answer keys, and scoring guidelines that provide sufficient guidance for interpreting student performance.	**Evidence-** The assessments include rubrics, answer keys, and scoring guidelines both in digital and print form.	(Reviewer only.) ___x___ Yes _____ No
8. Materials assess student proficiency using methods that are accessible and unbiased, including the use of course-level language in student prompts.	**Evidence-** The unit tests assess students proficiency.	(Reviewer only.) ___x___ Yes _____ No
9. Materials are carefully evaluated by qualified individuals, whose names are listed, in an effort to ensure freedom from mathematical errors and course-level appropriateness.	**Evidence-**	(Reviewer only.) ___x___ Yes _____ No
10. The visual design supports students in engaging thoughtfully with the subject. Navigation through the text is clear.	**Evidence-** The use of real world examples help to gain the students interest. This helps the students to understand the content. This helps students relate. The material is visually appealing.	(Reviewer only.) ___x___ Yes _____ No

11. The materials engage parents in appropriate ways. For example, homework assignments in elementary grades, consist of routine problems, practice with getting answers, and fluency-building exercises that parents can easily support.	**Evidence-** Parent letters are provided to introduce the math topics and to offer suggestions for assisting with student learning at home.	**(Reviewer only.)** __x____ **Yes** _____ **No**

Reviewer IMET Evaluation Summary **Title/Level:** Kindergarten My Math

Publisher: McGraw-Hill School Education **Copyright:** 2013 **ISBN:** various

Reviewer ID # CO AF **Date Review Completed:** 3/8/16

Non-Negotiable Criteria- Each Non-Negotiable must be met in order for the Non-Negotiable Alignment Criteria to be met overall.	
Non-Negotiable 1: Freedom from Obstacles to Focus __X__ **Meets** _____ **Does Not Meet**	**Non- Negotiable 2: Focus and Coherence** __X__ **Meets** _____ **Does Not Meet**

Non-Negotiable Overall:

X Meets _____ Does Not Meet

Alignment Criteria- Each Alignment Criterion must be met with a sufficient number of points in order for Alignment Criteria to be labeled as "Meets" overall. The more points the materials receive on the Alignment Criteria, the better they are aligned.

Alignment Criterion 1: Rigor and Balance	Alignment Criterion 2: Standards of Mathematical Practice	Alignment Criterion 3: Access to Standards for All Learners
Points: 4 of 6 possible. (Materials must receive at least 5 of 6 points to align.)	Points: 5 of 6 possible. (Materials must receive at least 5 of 6 points to align.)	Points: 6 of 6 possible. (Materials must receive at least 5 of 6 points to align.)
_____ Meets	X Meets	X Meets
X Does Not Meet	_____ Does Not Meet	_____ Does Not Meet

Alignment Criteria Overall:

X Meets _____ Does Not Meet

If the materials meet both Non-Negotiables and relevant Alignment Criterion, they are aligned to the Shifts and major features of the Core Standards. **Do the materials meet every Non-Negotiable and Alignment Criterion? _____ Yes _____ No**

What are the specific areas of strength and weakness based on this evaluation? Publishers or others modifying or developing assessments can use this information to make improvements and/or to remedy gaps in the alignment of assessment materials.

Strengths:

- Problem of the day
- Lots of problem solving
- Differenctiated instruction
- Vocabulary
- Big ELL component
- Big Literature Connection

Weaknesses:

- 10 frames are the main model
- rigor could be higher
- not many games for kids to play

not much for counting 21-100

2015-16 Mathematics Interim Review Recommendation & Summary

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Title:	My Math
ISBN #	978-0-02-138395-5 and 978-0-02-138396-2
Grade Level(s) or Course:	First grade
Reviewer ID:	EL and AF

RECOMMENDED AS:

__✓__ **Core Mathematics Program-** a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials. Substantial evidence clearly supports the designation of this program as Core.

_____ **Other Mathematics Program-** a program that substantially, but partially, meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for supplemental materials. Substantial evidence clearly supports the designation of this program as Other.

_____ **Component Mathematics Program-** a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs. Substantial evidence clearly supports the designation of this program as Component.

_____ **Intervention Program-** a program designed and intended to target and support students' specific needs. Substantial evidence clearly supports the designation of this program as Intervention.

_____ **Does not meet criteria** for recommendation as a Curricular Material or Online Resource for Mathematics.

EVIDENCE SUMMARY:

FOCUS- My Math assesses on grade level standards. Lessons are devoted to the major works of the grade level. There is a natural progression of skills taught through the grade level curriculum.

COHERENCE-

Each lesson identifies prerequisite skills needed to master current standards and practices being taught. It also identifies what standards will be taught in next grade level and how they link.

RIGOR-

Each chapter begins with basic skills and builds to conceptual understanding.

CONCEPTUAL UNDERSTANDING-

Each lesson has a conceptual understanding piece with emphasis on discussion.

MATHEMATICAL PRACTICES-

Mathematical practices are infused throughout each lesson. They are in the Teacher Edition and Student Edition. They are linked to standards.

ACCESSIBILITY OF STANDARDS TO ALL STUDENTS-

ELL support and differentiating options contained in each lesson.

OTHER:

2015-16 Interim Mathematics Review

Mathematics Evaluation Tool Grades K-8

Publisher: McGraw-Hill

Title of Material: My Math 1st Grade

Author: Mary Behr Altieri + 13 others

ISBN #: 978-0-02-138395-5 + 978-0-02-138396-2 **- Copyright** 2014

Reviewer ID: EL + AF

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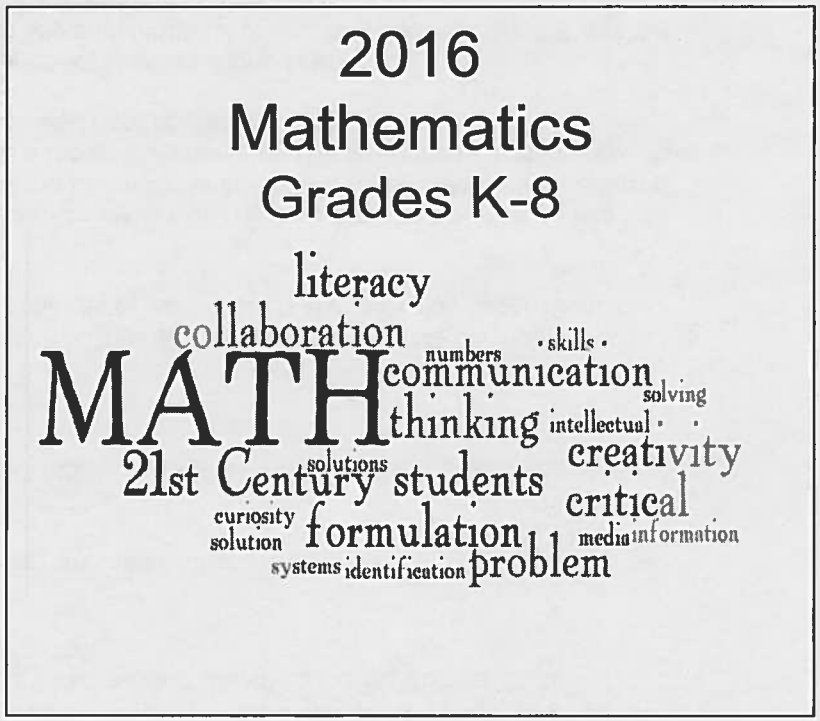
Substantial evidence clearly supports the designation of this program as Core.

Other Mathematics Program- a program that substantially, but partially, meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Other.

Component Mathematics Program- a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs.
Substantial evidence clearly supports the designation of this program as Component.

Intervention Program- a program designed and intended to target and support students' specific needs.
Substantial evidence clearly supports the designation of this program as Intervention.



- Evaluation Form adapted from Instructional Materials Evaluation Toolkit (IMET).

The IMET was developed by Student Achievement Partners. Educators may use or adapt. http://creativecommons.org/licenses/by/3.0/ Download this tool at http://achievethecore.org/IMET

Instructional Materials Evaluation Tool

Mathematics, Grades K-8

What Are the Purposes of the IMET?

This Math IMET is designed to help educators determine whether instructional materials are aligned to the Shifts and major features of the Common Core State Standards (CCSS). The substantial instructional Shifts (http://www.corestandards.org/other-resources/key-shifts-inmathematics/) at the heart of the Common Core State Standards are:

- **Focus** strongly where the Standards focus
- **Coherence**: Think across grades and link to major topics within the grade
- **Rigor**: In major topics, pursue conceptual understanding, procedural skill and fluency, and application with equal intensity.

The IMET draws directly from the following documents:

- Common Core State Standards for Mathematics (www.corestandards.org/Math)
- Publishers' Criteria for the Common Core State Standards in Mathematics grade K-8 (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)

When to use the IMET

1. Purchasing materials: Many factors go into local purchasing decisions. Alignment to the Standards is a critical factor to consider. This tool is designed to evaluate alignment of instructional materials to the Shifts and the major features of the CCSS. It also provides suggestions of additional indicators to consider in the materials evaluation and purchasing process.

2. Evaluating materials currently in use: The IMET can be used to analyze the degree of alignment of existing materials and help to highlight specific, concrete flaws in alignment. Even where materials and tools currently in use fail to meet one or more of these criteria, the pattern of failure is likely to be informative. States and districts can use the evaluation to create a thoughtful plan to modify or combine existing resources in such a way that students' actual learning experiences approach the focus, coherence, and rigor of the Standards.

3. Developing programs: Those developing new programs can use this tool as guidance for creating aligned curricula.
Please note this tool was designed for evaluating comprehensive curricula (including any supplemental or ancillary materials), but it was not designed for the evaluation of standalone supplemental materials.

Who Uses the IMET?

Evaluating instructional materials requires both subject-matter and pedagogical expertise. Evaluators should be well versed in the Standards (www.corestandards.org/Math) for all grades in which materials are being evaluated. This includes understanding the Major Work of the grade (www.achievethecore/focus), the Supporting and Additional work, how the content fits into the progressions in the Standards (www.achievethecore.org/progressions), and the expectations of the Standards with respect to conceptual understanding, procedural skill and fluency, and application. Evaluators also should be familiar with the substantial instructional Shifts (http:// www.corestandards.org/other-resources/key-shifts-in-mathematics/) of Focus, Coherence and Rigor that are listed above.

Getting Started

Prior to Evaluation

Assemble all of the materials necessary for the evaluation. It is essential for evaluators to have materials for all grades covered by the program, as some criteria cannot be rated without having access to each grade. In addition, each evaluator should have a reference copy of the Common Core State Standards for Mathematics (CCSSM) and the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013).

Instructional Materials Evaluation Tool
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Getting Started
Prior to Evaluation

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Before conducting the evaluation itself, it is important to develop a protocol for the evaluation process. The protocol should include having evaluators study the Publishers' Criteria and the IMET. It will also be helpful for evaluators to get a sense of each program overall before beginning the process. At a minimum, this would include reading the front matter of the text, looking at the table of contents and paging through multiple chapters.

Sections 1-3 below should be completed to produce a comprehensive picture of the strengths and weaknesses of the materials under evaluation. Information about areas in need of improvement or supplementation should be shared with internal and external stakeholders.

Navigating the Tool

Begin with Section 1: Non-Negotiable Alignment Criteria

- The Non-Negotiable Alignment Criteria must each be met in full for materials to be considered aligned to the Shifts and the major features of the Common Core State Standards. Each Non-Negotiable Alignment Criterion has one or more metrics associated with it; every one of these metrics must be met in order for the criterion as a whole to be met.

- Examine the relevant materials and use evidence to rate the materials against each criterion and its associated metric(s).

- Record and explain the evidence upon which the rating is based.

Continue to Section 2: Alignment Criteria

- The Alignment Criteria must each be met for materials to be considered aligned to the Shifts and the major features of the Common Core State Standards. Each Alignment Criterion has one or more metric associated with it; a specific number of these metrics must be met or partially met in order for the criterion as a whole to be met.

- Examine the materials in relation to these criteria, assigning each metric a point value. Rate the criterion as "Meets" or "Does Note Meet" based on the number of points assigned. The more points the materials receive on the alignment Criteria, the better they are aligned.

- Record and explain the evidence upon which the rating is based.

Proceed to Section 4: Indicators of Quality

- Indicators of Quality are important considerations that will help evaluators better understand the overall quality of instructional materials. These considerations are not criteria for alignment to the CCSS, but they provide valuable information about additional program characteristics. Evaluators may want to add their own indicators to the examples provided.

Directions for Non-Negotiable 1

Freedom from Obstacles to Focus

Criterion	Evidence- Give specific examples.	Rating: (Reviewer only.)
Non-Negotiable 1: **Freedom from Obstacles to Focus** **Materials must reflect the content architecture of the Standards by not assessing the topics named before the grade level where they first appear in the Standards.** The Standards foster students' progress to algebra by focusing strongly on arithmetic. Consistent with this focus, certain topics from outside of arithmetic appear only in later grades. Thus, to be aligned, materials must reflect the content architecture of the Standards by not assessing the topics named before the grade level where they first appear in the Standards. In this criterion, "topics named" means the topics that are explicitly named in Metric 1A. No other topics should be added to the list in Metric 1A. (Note that other topics in the standards are addressed in criterion NN2.)	**Required Materials** • Common Core State Standards for Mathematics (www.corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf) • From the materials being evaluated: teacher guides and all assessment components	**Rating this Criterion:** Non-Negotiable 1 is rated as Meets or Does Not Meet. To rate Non-Negotiable 1, begin by rating Metric 1A. Since Metric 1A is the only metric for Non-Negotiable 1, the rating for Non-Negotiable 1 is the same as the rating for Metric 1A. If Metric 1A is rated as Does Not Meet, include evidence of when the named topic(s) is/are assessed. If the metric is rated as Meets, list the grade(s) examined in the evaluation.

Metric NN1A: **Materials re[illegible] the basic architecture of the Standards by not assessing the listed topics before the grade level indicated.** • Probability, including chance, likely outcomes, probability models. (Introduced in the CCSSM in grade 7) • Statistical distributions, including center, variation, clumping, outliers, mean, median, mode, range, quartiles; and statistical association or trends, including two-way tables, bivariate measurement data, scatter plots, trend line, line of best fit, correlation. (Introduced in the CCSSM in grade 6) • Similarity, congruence, or geometric transformations. (Introduced in the CCSSM in grade 8) • Symmetry of shapes, including line/ reflection symmetry, rotational symmetry. (Introduced in the CCSSM in grade 4) **How to Find the Evidence:** Evaluate the table of contents, all chapter tests, all unit tests, and other such assessment components (including rubrics). For context, read Criterion #2 from the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013). NOTE: Grade alignments of other topics are addressed in Non-Negotiable 2, Focus and Coherence.) In this criterion, "topics named" means the topics that are explicitly named in Metric 1A. No other topics should be added to the list in Metric 1A. (Note that other topics in the standards are addressed in criterion NN2.)	**Evidence-** **After reviewing the table of contents, chapter tests, and unit tests all standards that are expected to be taught at the 1st grade level are the only standards being tested.**	(Reviewer only.) **_X_ Meets** **____Does Not Meet**
Non-Negotiable 1: Materials must reflect the content architecture of the Standards by not assessing the topics named* before the grade level where they first appear in the Standards. **NN 1** If Metric 1A was rated as Meets, then rate Non-Negotiable 1 as Meets. If Metric 1A was rated as Does Not Meet, then rate Non- Negotiable 1 as Does Not Meet. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion.**(Reviewer only.)** **Strengths: Chapter overviews show standards taught. Tests on each required standard in a variety of ways. (differentiation)** **Before moving to Non-Negotiable 2, record the final Meets or Does Not Meet rating in the Evaluation Summary.**		(Reviewer only.) **_X_ Meets** **____Does Not Meet** **Strengths/Weaknesses:**

Directions for Non-Negotiable 2

Focus and Coherence

Non-Negotiable 2: **Focus and Coherence** **Materials must focus coherently on the Major Work of the grade in a way that is consistent with the progressions in the Standards.** Focus and coherence are the two major evidence-based design principles of the Common Core State Standards for Mathematics (CCSSM, p. 3). Focus is necessary in order to fulfill the ambitious promise the states have made to their students by adopting the Standards: greater achievement at the college and career ready level; greater depth of understanding of mathematics; and a rich classroom environment in which reasoning, sense-making, applications, and a range of mathematical practices flourish. In simpler terms, a mile-wide, inch-deep curriculum translates to less time per topic. Less time means less depth and moving on without many students. Thus, materials must focus coherently on the Major Work of the grade in a way that is consistent with the progressions in the Standards.	**Required Materials** • Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf) • Focus by Grade Level for the grade being evaluated (www.achievethecore.org/focus) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion:** Non-Negotiable 2 is rated as Meets or Does Not Meet. To rate Non-Negotiable 2, first rate metrics 2A–2H. Each of these eight metrics must be rated as Meets in order for Non-Negotiable 2 to be rated as Meets. Rate each metric 2A-2H as Meets or Does Not Meet/Insufficient Evidence. If the evidence examined shows that the Criterion is met, then mark the Criterion Meets. If the evidence examined shows that the Criterion is not met—or if there is insufficient evidence to make a determination—then mark the Criterion as Does Not Meet/Insufficient Evidence. Support all ratings with evidence.
Metric NN2A: **In each grade K–8, students and teachers using the materials as designed devote the large majority of time to the Major Work of the grade.** **How to Find the Evidence:** Familiarize yourself with the Major Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, lessons, homework assignments, and assessments. (Evaluate both student and teacher materials.) Consider time spent on the Major Work of the grade and judge qualitatively whether students and teachers using the materials as designed will devote the large majority of time to the Major Work of the grade. For context, read Criterion #1 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013)	**Evidence-** **74% of lessons devoted to major work of the grade. 7 of the 10 chapters (1-6 and 8) focus on the 4 major clusters for 1st grade. In the mid range of the 65%-85% range for devotion to major works.** **The other 3 chapters focus on the rest of the standards. Chapters 1-6 are focusing on addition and subtraction while chapter 8 is time and measurement.** **The pacing of the program puts most of the major work within the 1st half of the school year. The remainder of the chapters are supporting clusters.**	**(Reviewer only.)** **_X_ Meets** **____Does Not Meet/** **Insufficient Evidence**

Metric NN2B: **Supporting Work, where present, enhances focus and coherence simultaneously by also engaging students in the Major Work of the grade.** **How to Find the Evidence:** Familiarize yourself with the Major Work and Supporting Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate chapters and lessons that focus on Supporting Work. NOTE: Example of evaluating this Criterion might include looking at whether materials for K–5 generally treat data displays as an occasion for solving grade-level word problems using the four operations (e.g., see 3.MD.B.3); or whether materials for grade 7 take advantage of opportunities to use probability to support ratios, proportions, and percentages. For context, read Criterion #3 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** **Data is mostly represented in the data chapters (7 and 8). However, within that unit every data display is tied to real world problems and students have to use addition or subtraction to solve the problems within the unit.** **Page 501C – "What students should understand" overview.** **Page 509A – Lesson 1 (chapter 7) – "On My Own" – good example of data interpretation.**	(Reviewer only.) **__X__ Meets** **____Does Not Meet/** **Insufficient Evidence**
Metric NN2C: **Materials base content progressions on the grade-by-grade progressions in the Standards. Content from previous or future grades does not unduly interfere with or displace on-grade-level content.** **How to Find the Evidence:** Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, and lessons in both student and teacher materials. NOTE: In some cases it may be possible that aligned materials might address some aspects of a topic in a strategic way before or after the grade level in which the topic is central in the Standards' progressions; for example, a curriculum author might purposefully choose to explore adding fractions with unlike denominators in a way appropriate to grade four, recognizing that this work is not really required until the next grade. However, any such purposeful discrepancies in content progressions should enhance the required learning in each grade; not unduly interfere with or displace grade-level content; and be clearly aimed at helping students meet the Standards as written rather than effectively rewriting the progressions in the Standards. And in all cases, note that Non-Negotiable 1 must be met for materials to be aligned. For context, read Criterion #5a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** **The teacher's edition breaks down what the students learned in the previous grade and each chapter begins with an Am I Ready? This assesses whether students have the prerequisite skills mastered to be successful with the new content being taught. All content within the chapters builds on what they should already know.**	(Reviewer only.) **__X__ Meets** **____Does Not Meet/** **Insufficient Evidence**

Metric NN2D: **Materials gi[illegible]l students extensive work with on-grade-level problems.** **How to Find the Evidence:** Evaluate both student and teacher materials. If the materials provide resources for differentiated learning, consider whether lower-performing students have opportunities to engage with grade-level problems. Also consider whether higher-performing students are given opportunities to learn current grade-level content in greater depth. For context, read Criterion #5b in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** **Each lesson has an explore and explain, see and show, on my own, and problem solving section. This scaffolds the lessons and gives the students several opportunities within each lesson to practice the topic. There is also a differentiation section containing reteach, on level, and beyond activity for each lesson for homework.**	(Reviewer only.) **__X__ Meets** **____Does Not Meet/** **Insufficient Evidence**
Metric NN2E: **Materials relate on-grade-level concepts explicitly to prior knowledge from earlier grades.** **How to Find the Evidence:** Evaluate both student and teacher materials. NOTE: Examples of evaluating this Criterion might include looking at the way the materials extend basic ideas of place value across the decimal point; or the role that properties of operations play when the materials extend arithmetic beyond whole numbers to fractions, variables, and expressions. More generally, cluster headings in the Standards sometimes signal key moments where reorganizing and extending previous knowledge is important in order to accommodate new knowledge (e.g., see cluster headings that use the phrase "Apply and extend previous understanding"). For context, read Criterion #5c in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** **There is a "What's the Math in this Chapter" which shows what students should already know, what students should understand, and what students should be able to do, and what will my students do next with these skills for each chapter. This shows the direct link to prior standards that have been taught and how the chapter builds on prior knowledge.**	(Reviewer only.) **__X__ Meets** **____Does Not Meet/** **Insufficient Evidence**
Metric NN2F: **Review of material from previous grades is clearly identified as such to the teacher, and teacher and students can see what their specific responsibility is for the current year.** **How to Find the Evidence:** Evaluate the table of contents, but do not stop there; also evaluate units, chapters, lessons, homework assignments and assessments. (Evaluate both student and teacher materials.) Identify any content from previous grades and check whether it is identified as such. For context, read Criterion #5a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** **This is found in the "Review What I Know" at the beginning of each chapter. Instruction for review of concepts is based on how students answer and what they miss.** **For example – Chapter 1 page 11A – shows K.OA.2 progression to 1.OA.1**	(Reviewer only.) **__X__ Meets** **____Does Not Meet/** **Insufficient Evidence**

Metric NN2G: **Materials include learning objectives that are visibly shaped by CCSSM cluster headings.** **How to Find the Evidence:** Select several clusters from the Major Work in the grade being evaluated. Evaluate teacher and student materials in relation to these clusters. For context, read Criterion #6a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** **Every lesson is labeled with a domain, major cluster, MP, lesson objectives, and specific standard being taught.**	(Reviewer only.) **_X_ Meets** **____Does Not Meet/** **Insufficient Evidence**
Metric NN2H: **Materials include problems and activities that serve to connect two or more clusters in a domain, or two or more domains in a grade, in cases where these connections are natural and important.** **How to Find the Evidence:** In the grade being evaluated, choose two or more clusters or two or more domains for which connections are natural and important. Evaluate the units, chapters, and lessons that deal with the chosen topics, looking for problems and activities that serve to connect the chosen clusters or domains. NOTE: An example of evaluating this Criterion might include looking at whether problems in grade 4 sometimes or often involve students applying their developing computation skills (detailed in domain NBT) in the context of solving word problems (detailed in domain OA). For context, read Criterion #6b in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** **In the supplement "Countdown to Common Core" Mathematics Performance Tasks; students are given 4 opportunities to solve problems that cover multiple mathematical practices, domains, and standards within a single task.**	(Reviewer only.) **_X_ Meets** **____Does Not Meet/** **Insufficient Evidence**
Non-Negotiable 2: **Focus and Coherence** **Materials must focus coherently on the Major Work of the grade in a way that is consistent with the progressions in the Standards.** **NN 2** If all Metrics 2A – 2H were rated as Meets, then rate Non-Negotiable 2 as Meets. If one or more Metric was rated Does Not Meet/Insufficient Evidence, then rate Non-Negotiable 2 as Does Not Meet. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)** **Chapter overviews shows domains and major works covered in the curriculum.** **Before moving to Alignment Criterion 1, record the final Meets or Does Not Meet rating in the Evaluation Summary.**		(Reviewer only.) **_X_ Meets** **____Does Not Meet** **Strengths/Weaknesses:**
Now continue by evaluating the Alignment Criterion 1 for Rigor and Balance.		

Directions for Alignment Criterion 1

Rigor and Balance

Alignment Criterion 1: Rigor and Balance **Materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.** The Standards set expectations for attention to all three aspects of rigor: conceptual understanding, procedural skill and fluency, and applications. Thus, materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.	**Required Materials** • Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf) • Focus by Grade Level for the grade being evaluated (achievethecore.org/focus) • Situation Types for the Operations in Word Problems (achievethecore.org/situation-types) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion:** Alignment Criterion 1 is rated as Meets or Does Not Meet. To rate Alignment Criterion 1, first rate metrics 1A, 1B, and 1C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). For each metric, guiding questions are provided to aid in gathering evidence. Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 1 if the materials rate 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as rigor and balance, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.
Metric AC1A: **The materials support the development of students' conceptual understanding of key mathematical concepts, especially where called for in specific content Standards or cluster headings.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Major Work for the grade being evaluated that relate specifically conceptual understanding to use throughout the questions associated with this metric. NOTE: Some examples of clusters or Standards that call for conceptual understanding include: K.OA.A.1, (1.NBT.B, 1.NBT.C), (2.NBT.A, 2.NBT.B), (3.OA.A.1, 3.OA.A.2), 4.NF.A, (4.NBT.A, 4.NBT.B), 5.NF.B, (5.NBT.A, 5.NBT.B), 6.RP.A, 6.EE.A.3, 7.NS.A, 7.EE.A, 8.EE.B, 8.F.A, 8.G.A Clusters or Standards grouped by parentheses are closely connected and could be analyzed together. For context, read Criterion #4a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	-Choose a cluster/Standard from the Major Work that is aligned to each aspect of rigor and use it to evaluate these metrics. It is most helpful if the same clusters/Standards are chosen for all of the programs being evaluated. (Guidance in choosing clusters/Standards is included in "How to Find the Evidence".)	**Use the questions for AC Metric 1A to evaluate Metric 1A. Record evidence for each question and rate Metric 1A.** **__X__ Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**

Is conceptual understanding attended to thoroughly where the Standards set e[illegible] expectations for understanding or interpreting? Evaluate lessons, chapter/unit assessments and homework assignments, paying attention to work aligned to Standards that explicitly call for understanding or interpreting. NOTE: Examples of evaluating this Criterion might include looking at how well the multi-digit addition and subtraction algorithms are developed and explained on the basis of place value and properties of operations; or how well the multi-digit multiplication and division algorithms are developed and explained on the basis of place value and properties of operations; or how well solving equations is presented and explained as a process of reasoning.	**Evidence-** **Every chapter begins with an essential question which is then referenced within every lesson in that chapter. Each lesson helps the students to gain a conceptual understanding of the essential concept.** **Each lesson within the chapter uses the previous lessons knowledge to go to a deeper understanding of the concept.** **For example – Chapter 1 lesson 2 and 3 – building conceptual understanding of part-part-whole.**	
Do the materials feature high-quality conceptual problems and conceptual discussion questions? Evaluate lessons, chapter/unit assessments, and homework assignments. NOTE: Example of conceptual problems might include such questions as "Find a number greater than 1/5 and less than 1/4," or "If the divisor does not change and the dividend increases, what happens to the quotient?"	**Evidence-** **Every lesson, homework page, and test has a problem solving section. Every lesson has a math talk to get conversations about the topic started.** **For example – Chapter 1 lesson 2 - Investigate the discussion. – Students discuss subtraction.**	
Do the materials feature opportunities to identify correspondences across mathematical representations? Evaluate lessons, chapter/unit assessments and homework assignments. NOTE: Examples of evaluating this Criterion might include looking at whether students are supported in identifying correspondences among: the verbal description of a situation, the diagrams that distill its mathematical features, and the equations that model it; or equivalent forms of numbers (e.g., 3 and 6/2) and the number line; or rational number operations and representations of them via models such as the vector model; or the expression that defines a function and the graph that shows the relationship.	**Evidence-** **Mathematical practices are identified by a red arrow on the page. The teacher's edition then has an activity to check students for understanding.** **For Example – Chapter 2 1.OA.1 Lesson 2** • **Problem of the Day** • **Model the Math** • **Explore and Explain** • **See and Show** **Models go from enactive to iconic**	

Metric AC1B: **The material[illegible]e designed so that students attain the fluencies and procedural skills required by the Standards.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Major Work for the grade being evaluated that relate specifically to fluency and procedural skill to use throughout the questions associated with this metric. NOTE: Some examples of Standards that call for procedural skill and fluency include: K.OA.A.5, 1.OA.C.6, 2.OA.B.2, 2.NBT.B.5, 3.OA.C.7, 3.NBT.A.2, 4.NBT.B.4, 5.NBT.B.5, 6.NS.B.2, and 6.NS.B.3, 6.EE.A, 7.NS.A, 7.EE.A.1,7.EE.B.4a, 8.EE.C.7, 8.EE.C.8b For context, read Criterion #4b in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).		**Use the questions for Metric 1B to evaluate Metric 1 B. Record evidence for each questi[illegible]nd rate Metric 1B.** **(Reviewer only.)** **__x__ Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Is progress toward fluency and procedural skill interwoven with students' developing conceptual understanding of the operations in question? Evaluate lessons, chapter/unit assessments, daily routines, and homework assignments for evidence that the development of fluency and procedural skill is supported by conceptual understanding.	**Evidence-** **There is fluency practice in each of the chapters that deals with addition and subtraction.** **Pg. 93,94, 197-198, 267-268, 331-332 are fluency specific and many practice pages within the addition and subtraction chapters.** **There are also on-line digital resources like fact dash and sail through math that work with fact fluency.**	
Are purely procedural problems and exercises present that include cases in which opportunistic strategies are valuable and generic cases that require efficient algorithms present? Evaluate lessons, chapter/unit assessments, daily routines, and homework assignments. NOTE: Examples of problems in which opportunistic strategies are valuable might include the sum 698 + 240 or the system x + y = 1, 2x + 2y = 3. Examples of generic cases that require efficient algorithms might include the sum 8767+2286 or the system 6y + x = x + 3, – x = 1 + 2y.	**Evidence-** **Within each lesson students are working toward fluency within the problems solving section of the lesson where they need to apply what they have learned.**	
Do the materials in grades K–6 provide repeated practice toward attainment of fluency Standards? Evaluate lessons, daily routines, and homework assignments for evidence of repeated practice toward attainment of the following K–6 Standards that set an explicit expectation of fluent (accurate and reasonably fast) computation: K.OA.A.5, 1.OA.C.6, 2.OA.B.2, 2.NBT.B.5, 3.OA.C.7, 3.NBT.A.2, 4.NBT.B.4, 5.NBT.B.5, 6.NS.B.2, 6.NS.B.3.	**Evidence-** **Every lesson within the addition and subtraction chapters has an independent portion where students are practicing their fluency.** **See Chapter 1 lesson 7 for an example.**	

Metric AC1C: **The materials are designed so that teachers and students spend sufficient time working with engaging applications, without losing focus on the Major Work of each grade.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Major Work for the grade being evaluated that relate specifically application to use throughout the questions associated with this metric. NOTE: Some examples of clusters or Standards that call for application include: K.OA.A.2, 1.OA.A, 2.OA.A, 3.OA.A.3, 3.OA.D.8, 4.OA.A.3, 4.NF.B.3d, 4.NF.B.4c, 5.NF.B.6, 5.NF.B.7c, 6.RP.A.3, 6.NS.A.1, 6.EE.B.7, 6.EE.C.9, 7.RP.A, 7.NS.A.3, 7.EE.B.3, 8.EE.C.8c, 8.F.B For context, read Criterion #4c in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** **In addition to the student edition there are also practice opportunities with learning stations. This gives students practice through games, problem solving, graphic novels, real world problem readers, and interactive activities.** **These can be referenced in the teacher's edition 1l; 102; 99l; 99-100; 203G; 203-204; 273G; 273-274**	**Use the questions for Metric 1C to evaluate Metric 1C. Record evidence for each question and rate Metric 1C.** **(Reviewer only.)** **__X__ Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Are there are single- and multi-step contextual problems, including non-routine problems, that develop the mathematics of the grade, afford opportunities for practice, and engage students in problem solving? Do the problems attend thoroughly to those places in the content Standards where expectations for multi-step and real-world problems are explicit? Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** **Problem solving within every lesson.**	
Do application problems particularly stress applying the Major Work of the grade? Evaluate lessons, chapter/unit assessments, and homework assignments. NOTE: Examples of evaluating this Criterion might include looking at: how well, by the end of grade 2, students using the materials as designed can represent and solve a full range of one-step addition and subtraction word problems; or how well, by the end of grade 3, students using the materials as designed can represent and solve a full range of one-step multiplication and division word problems; or how well these basic situation types for each operation are carried coherently across the grades, (e.g., with fractions and algebraic expressions); or, in all grades, whether the problems connect concepts, Standards, and domains in ways that are natural and important. For a list of situation types for one-step addition, subtraction, multiplication, and division problems, see Situation Types for the Operations in Word Problems	**Evidence-** **The program uses HOT (Higher Order Thinking) problems to apply the major work.** **Example: Chapter 2 Lesson 12 page 182 of the student book**	
Does modeling build slowly across K–8, with applications that are relatively simple in earlier grades and when students are encountering new content? In grades 6–8, do the problems begin to provide opportunities for students to make their own assumptions or simplifications in order to model a situation mathematically? Read Standard for Mathematical Practice 4, Model with Mathematics. Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** **An example would be the array model where in 1st grade they use arrays to begin the understanding of addition to 10 and then to 20. Then in 2nd grade students are introduced to repeated addition using arrays.**	

Alignment Criterion 1: Rigor and Balance

Materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.

AC1 Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 out of 6 points, the Criterion has not been met. Check the final rating.
Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)**

Weakness – Could use more practice with missing addends in all positions.

Before moving to Alignment Criterion 2, record the final Meets or Does Not Meet rating in the Evaluation Summary.

(Reviewer only.)

_X_ Meets

____Does Not Meet

Strengths/Weaknesses:

Directions for Alignment Criterion 2

Standards for Mathematical Practice

Alignment Criterion 2: Standards for Mathematical Practice

Materials must demonstrate authentic connections between content Standards and practice Standards.

The Standards require that designers of instructional materials connect the mathematical practices to mathematical content in instruction. Thus, materials must demonstrate authentic connections between content Standards and practice Standards.

Required Materials:

- Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf)
- Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)
- Focus by Grade Level for the grade being evaluated (www.achievethecore.org/focus)
- From the materials being evaluated: teacher guides, student texts and workbooks

Rating this Criterion

Alignment Criterion 2 is rated as Meets or Does Not Meet.

To rate Alignment Criterion 2, first rate metrics 2A, 2B, and 2C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). For each metric, guiding questions are provided to aid in gathering evidence.

Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 2 if the materials earn 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as mathematical practices, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.

Metric AC2A: **Materials address the practice Standards in such a way as to enrich the Major Work of the grade; practices strengthen the focus on Major Work instead of detracting from it, in both teacher and student materials.** **How to Find the Evidence:** Familiarize yourself with the Major Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate teacher and student materials for evidence that the mathematical practices support and connect to the focus of the grade. NOTE: Examples of evaluating this Criterion might include looking at whether, in grades K–5, students using the materials are supported to look for and express regularity in repeated reasoning about the addition table, the multiplication table, the properties of operations, the relationship between addition and subtraction or multiplication and division, and the place value system; or whether, in grades 6–8, students using the materials are supported to look for and express regularity in repeated reasoning about proportional relationships and linear functions. For context, read Criterion #8 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013).	**Evidence-** **Mathematical practices are labeled at key points in the lesson instruction to provide an indication of a clear and specific example for teachers to use to draw students attention to the practice without making it overwhelming.** **Example: MP8 (Look for and express regularity in repeated reasoning) is found throughout every chapter.**	**(Reviewer only.)** **__X__ Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Metric AC2B: **Materials attend to the full meaning of each practice Standard.** **How to Find the Evidence:** For context, read Criterion #7 and Criterion #9 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).		**Use the questions for Metric 2B to evaluate Metric 2B. Record evidence for each question and rate Metric 2B.** **(Reviewer only.)** **__X__Meets (2)**
Over the course of any given year of instruction, is each mathematical practice Standard meaningfully present in the form of assignments, activities, or problems that stimulate students to develop the habits of mind described in the practice Standard? Evaluate lessons, chapter/ unit assessments, and homework assignments for evidence of each mathematical practice being meaningfully present in instruction.	**Evidence-** **The beginning of each chapter outlines the mathematical practices that will be represented in that chapter. Each lesson identifies the practice that represents the mathematical practices. They are not identified on the assessments but similar problems are evident.** **For Example - Chapter 1 – Lesson 1 - page 11A – MP 1, 2, 3, 4, 7**	**____Partially Meets (1)** **____Does Not Meet (0)**

Do the materials treat the practice Standards as developing across grades or grade bands? Are the practice Standards in early grades appropriately simple? Do they display an arc of growing sophistication across the grades?	**Evidence-** **The standards are identified in early grades and key words and ideas are called out in the text making it simple for students to identify what they need to concentrate on to solve the problem.**	
Are there teacher-directed materials that explain the role of the practice Standards in the classroom and in students' mathematical development? Are alignments to practice Standards accurate?	**Evidence-** **The teacher's edition calls out each mathematical practice within the lesson and has dialog or a lesson help to help make sure the practice is covered.**	
Metric AC2C: **Materials support the Standards' emphasis on mathematical reasoning.** **How to Find the Evidence:** For context, read Criterion #10 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).		**Use the questions for Metric 2C to evaluate Metric 2C. Record evidence for each question and rate Metric 2C.** **(Reviewer only.)** **__x__ Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Do the materials support students in constructing viable arguments and critiquing the arguments of others concerning grade-level mathematics that is detailed in the content Standards? Read Standard for Mathematical Practice 3. Evaluate teacher and student materials to ensure that students are given opportunities to reason with grade-level mathematics.	**Evidence-** **My Math has a built in feature called math talk in the lessons. It gives students an opportunity to describe and defend work. There is a math talk in almost every lesson.** **Student edition page 212 – Talk Math**	
Do the materials support students in producing not only answers and solutions, but also, in a grade-appropriate way, arguments, explanations, diagrams, mathematical models, etc., especially in the Major Work of the grade? Familiarize yourself with the Major Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate teacher and student materials, to understand the types of work students are expected to produce.	**Evidence-** **My Math has a built in feature called math talk in the lessons. It gives students an opportunity to describe and defend work.** **Students are given practice through HOT problems: Example Chapter 5 Lesson 4** **Morgan wrote this sentence. Tell why Morgan is wrong. Make it right.** **3 tens and 6 more is 16.**	

Do materials explicitly attend to the specialized language of mathematics? Is the language of argument, problem solving, and mathematical explanations taught rather than assumed? Evaluate teacher and student materials, paying attention to how mathematical language is taught. NOTE: Examples of evaluating this Criterion might include looking at whether students are supported in: basing arguments on definitions; using the method of providing a counterexample; or recognizing that examples alone do not establish a general statement.	**Evidence-** **Each chapter has math vocabulary that is introduced at the beginning of each chapter. It is then reinforced throughout the chapter in the lessons and tested on the check my progress and at the end of each chapter. Interactive guides for ELL and vocabulary support.**	

Alignment Criterion 2:
Standards for Mathematical Practice

Materials must demonstrate authentic connections between content Standards and practice Standards.

AC2 Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 out of 6 points, the Criterion has not been met. Check the final rating.
Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion.
(Reviewer only.)

Strength - Content standards and practice standards are linked throughout each lesson and chapter overviews.

Before moving to Alignment Criterion 3, record the final Meets or Does Not Meet rating in the Evaluation Summary.

(Reviewer only.)

__X__ Meets

____Does Not Meet

Strengths/Weaknesses:

Alignment Criterion 3:
Access to the Standards for All Students

Materials must provide supports for English Language Learners and other special populations.

Because Standards are for all students, alignment requires thoughtful support to ensure all students are able to meet the Standards. Thus, aligned materials must provide supports for English Language Learners and other special populations.

Required Materials:

- Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf)
- Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)
- From the materials being evaluated: teacher guides, student texts and workbooks

Rating this Criterion:

Alignment Criterion 3 is rated as Meets or Does Not Meet.

To rate Alignment Criterion 3, first rate metrics 3A, 3B, and 3C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points).

Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 3 if the materials earn 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as support for special population, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.

Metric AC3A: **Support for English Language Learners and other special populations is thoughtful and helps those students meet the same Standards as all other students. The language in which problems are posed is carefully considered.** How to Find the Evidence: Evaluate teacher and student materials, paying attention to supports offered for special populations.	**Evidence-** **There is ELL Support in the teacher's edition for every lesson. The lessons feature differentiated support for beginning, intermediate, and advanced language proficiency. The activities emphasize oral language development.**	Reviewer only.) __x__ Meets (2) ____Partially Meets (1) ____Does Not Meet (0)
Metric AC3B: **Materials provide appropriate level and type of scaffolding, differentiation, intervention, and support for a broad range of learners with gradual removal of supports, when needed, to allow students to demonstrate their mathematical understanding independently.** How to Find the Evidence: Evaluate teacher and student materials, paying attention to whether materials provide differentiation that will lead all learners to engage with on-grade-level content.	**Evidence-** **The program has scaffolded lessons as in I do, we do, you do. It also has leveled homework; reteaching, practice, and enrich.** **RTI Support at the end of each lesson.** **ELL Support Guide.**	Reviewer only.) __X__ Meets (2) ____Partially Meets (1) ____Does Not Meet (0)
Metric AC3C: **Design of lessons recommends and facilitates a mix of instructional approaches for a variety of learners such as using multiple representations (e.g., including models, using a range of questions, checking for understanding, flexible grouping, pair-share).** How to Find the Evidence: Evaluate teacher materials, noting instructional approaches suggested for whole class and differentiated lessons and activities.	**Evidence-** **There is differentiated instruction for each lesson within a chapter. These include hands on activities, games, and lesson animations. For examples see: 15A; 21A; 27A; 33A.** **Online option to differentiate assessments.**	Reviewer only.) __X__ Meets (2) ____Partially Meets (1) ____Does Not Meet (0)

Alignment Criterion 3: Access to the Standards for All Students **Materials must provide supports for English Language Learners and other special populations.** AC3 Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 points, the Criterion has not been met. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion.**(Reviewer only.)** **Strengths – Support provided in each lesson.** **Move to the Evaluation Summary and record the final Meets or Does Not Meet rating .**	**(Reviewer only.)** **__X__ Meets** **____Does Not Meet** **Strengths/Weaknesses:**

Once an evaluation for alignment to the Shifts and major features of the CCSS has been conducted using Sections 1-3, it's important to evaluate for overall quality and best practices. A starting list of Indicators of Quality are suggested below. States, districts and others evaluating instructional materials are encouraged to add to this list to ensure materials reflect local contexts. For background information on some of the Indicators of Quality in this section, refer to pp.18–21 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).

Indicators of Quality	Evidence- Give specific examples.	Rating: (Reviewers only.)
1. Lessons are thoughtfully structured and support the teacher in leading the class through the learning paths at hand, with active participation by all students in their own learning and in the learning of their classmates.	**Evidence-** **Each lesson is organized under a five-step plan for instruction: Get ready, investigate and model, teach, practice and apply, and wrap it up.**	**(Reviewer only.)** **__X__ Yes** **_____ No**
2. The underlying design of the materials includes both problems and exercises. (In solving problems, students learn new mathematics, whereas in working exercises, students apply what they have already learned to build mastery.) Each problem or exercise has a purpose. **NOTE: This Criterion does not require that the problems and exercises be labeled as such.**	**Evidence-** **My Math offers a variety of problems and exercises. There are several problems that mimic the examples of the new mathematics that were introduced in the lesson There are also multi-step problems that allow students to combine the math that they learned with previously learned skills.**	**(Reviewer only.)** **__X__ Yes** **_____ No**

3. Design of assignments is not haphazard: exercises are given in intentional sequences in order to strengthen students' mathematical understanding.	Evidence- Each lesson is organized under a five-step plan for instruction: Get ready, investigate and model, teach, practice and apply, and wrap it up. Each chapter includes a problem solving investigation that is linked to a real-world situation so students can understand how it is important to them. Scope and Sequence page T17	(Reviewer only.) __X__ Yes _____ No
4. There are separate teacher materials that support and reward teacher study including, but not limited to: discussion of the mathematics of the units and the mathematical point of each lesson as it relates to the organizing concepts of the unit, discussion on student ways of thinking and anticipating a variety of students responses, guidance on lesson flow, guidance on questions that prompt students thinking, and discussion of desired mathematical behaviors being elicited among students.	Evidence- Everything can be taught from print form; however, ConnectED which is the online portal has all of the digital resources in one place including teacher's edition, student edition, digital animations and tutorials, editable worksheets, and assessment resources. It also has professional development, page 1l, such as webinars and videos on standards for MP's.	(Reviewer only.) __x__ Yes _____ No
5. Manipulatives suggested in the materials are faithful representations of the mathematical objects they represent and are connected to written methods.	Evidence- There are multiple manipulatives to use with the program to help with the visual and kinesthetic learners. They are primarily used during the modeling math part of the lesson. There is also a foldable at the beginning of most chapters to help with the main concept of the chapter.	(Reviewer only.) __x__ Yes _____ No
6. Materials include a variety of curriculum-embedded assessments. Examples include pre-, formative, summative, and self-assessment resources.	Evidence- There is Am I Ready at the beginning of each chapter that assesses previously taught skills or prerequisite skills for the chapter. There are also chapter pretests and check my progress tests, and end of chapter tests in multiple formats for all types of learners. Also included is standard test practice.	(Reviewer only.) __x__ Yes _____ No
7. Assessments contain aligned rubrics, answer keys, and scoring guidelines that provide sufficient guidance for interpreting student performance.	Evidence- Each chapter has a performance task which includes a rubric for scoring. Also there are answer keys for all assessments. Think Smart for the SBAC Guide contains rubrics.	(Reviewer only.) __x__ Yes _____ No

8. Materials assess student proficiency using methods that are accessible and unbiased, including the use of course-level language in student prompts.	**Evidence-** **All tests are in student friendly wording (if you teach the academic vocabulary). See example on page 160-184 in the assessment masters for all Chapter 7 Tests.**	**(Reviewer only.)** **__x__ Yes** **_____ No**
9. Materials are carefully evaluated by qualified individuals, whose names are listed, in an effort to ensure freedom from mathematical errors and course-level appropriateness.	**Evidence-** **See pages xx through xxiii for a complete list of the authors, consultants, and reviewers of the program.**	**(Reviewer only.)** **__x__ Yes** **_____ No**
10. The visual design supports students in engaging thoughtfully with the subject. Navigation through the text is clear.	**Evidence-** **The text is colorful and student friendly. The teacher's edition is easy to navigate and clear. The exercises are written so students can relate and to make it more interesting. For examples see pages 235-240 in the student edition.**	**(Reviewer only.)** **__x__ Yes** **_____ No**
11. The materials engage parents in appropriate ways. For example, homework assignments in elementary grades, consist of routine problems, practice with getting answers, and fluency-building exercises that parents can easily support.	**Evidence-** **There are parent letters at the beginning of each chapter to help explain to parents what their child will be learning. There is also a stepped out problem on all homework pages to demonstrate to parents what was learned. In addition there are also digital personal tutors available on line. There is also ConnetEd.mcgraw-hill.com available for parent help.**	**(Reviewer only.)** **__x__ Yes** **_____ No**

Reviewer IMET Evaluation Summary **Title/Level:** My Math Grade 1

Publisher: McGraw-Hill School Education, LLC **Copyright:** 2014
ISBN: various

Reviewer ID # _____ **Date Review Completed:** _____

Non-Negotiable Criteria- Each Non-Negotiable must be met in order for the Non-Negotiable Alignment Criteria to be met overall.	
Non-Negotiable 1: Freedom from Obstacles to Focus __X__ Meets _____ Does Not Meet	**Non- Negotiable 2: Focus and Coherence** __X__ Meets _____ Does Not Meet

Non-Negotiable Overall:

__X__ Meets _____ Does Not Meet

Alignment Criteria- Each Alignment Criterion must be met with a sufficient number of points in order for Alignment Criteria to be labeled as "Meets" overall. The more points the materials receive on the Alignment Criteria, the better they are aligned.

Alignment Criterion 1: Rigor and Balance	**Alignment Criterion 2: Standards of Mathematical Practice**	**Alignment Criterion 3: Access to Standards for All Learners**
Points: __6__ **of 6 possible.** **(Materials must receive at least 5 of 6 points to align.)** __X__ Meets _____ Does Not Meet	**Points:** __6__ **of 6 possible.** **(Materials must receive at least 5 of 6 points to align.)** __X__ Meets _____ Does Not Meet	**Points:** __6__ **of 6 possible.** **(Materials must receive at least 5 of 6 points to align.)** __X__ Meets _____ Does Not Meet

Alignment Criteria Overall:

__X__ Meets _____ Does Not Meet

If the materials meet both Non-Negotiables and relevant Alignment Criterion, they are aligned to the Shifts and major features of the Core Standards. **the materials meet every Non-Negotiable and Alignment Criterion? ___X__ Yes _____ No**

What are the specific areas of strength and weakness based on this evaluation? Publishers or others modifying or developing assessments can use this information to make improvements and/or to remedy gaps in the alignment of assessment materials.

2015-16 Mathematics Interim Review Recommendation & Summary

Publisher Name:	McGraw-Hill
Title:	My Math
ISBN #	978-0-02-138395-5 and 978-0-02-138396-2
Grade Level(s) or Course:	2nd
Reviewer ID:	EL & EL

RECOMMENDED AS:

X **Core Mathematics Program-** a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials. Substantial evidence clearly supports the designation of this program as Core.

_____ **Other Mathematics Program-** a program that substantially, but partially, meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for supplemental materials. Substantial evidence clearly supports the designation of this program as Other.

_____ **Component Mathematics Program-** a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs. Substantial evidence clearly supports the designation of this program as Component.

_____ **Intervention Program-** a program designed and intended to target and support students' specific needs. Substantial evidence clearly supports the designation of this program as Intervention.

_____ **Does not meet criteria** for recommendation as a Curricular Material or Online Resource for Mathematics.

EVIDENCE SUMMARY:

FOCUS- The work is focused on grade level standards with the majority on the time spent on the major clusters.

COHERENCE- Major clusters of standards are supported by the minor clusters. Learning from prior grade level is explicit to teachers and connected work for next grade level.

RIGOR- Work supports the development of conceptual understanding (maybe more support than ideal) and fluency is present to build procedural skills, especially when online resources are considered.

CONCEPTUAL UNDERSTANDING- Opportunities are present for students to develop conceptual understanding through: essential questions & building on prior learning.

MATHEMATICAL PRACTICES- Connections are made for teacher and students between content standards and mathematical standards.

ACCESSIBILITY OF STANDARDS TO ALL STUDENTS- Many supports for all students with differentiation (RTI & ELL specifically) and teacher is supported in teacher all students. The "Am I Ready" pre-assessment helps students and teachers w/ specific things to try when a student misses a problem.

OTHER:

2015-16 Interim Mathematics Review

Mathematics Evaluation Tool Grades K-8

Publisher: McGraw-Hill

Title of Material: My Math 2nd Grade

Author: John A Carter, Gilbert J. Cuevas, Roger Day, Carol Malby

ISBN #: 9780021383915-5+9780021383962 **Copyright**

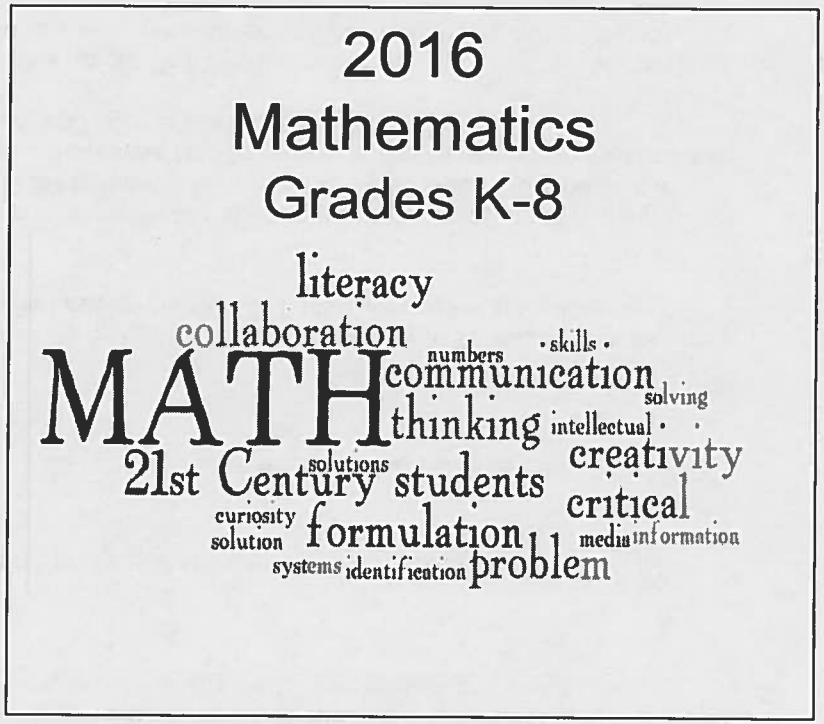
Reviewer ID: EL + EL

Core Mathematics Program- a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Core.

Other Mathematics Program- a program that substantially, but partially, meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Other.

Component Mathematics Program- a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs.
Substantial evidence clearly supports the designation of this program as Component.

Intervention Program- a program designed and intended to target and support students' specific needs.
Substantial evidence clearly supports the designation of this program as Intervention.



- Evaluation Form adapted from Instructional Materials Evaluation Toolkit (IMET).

The IMET was developed by Student Achievement Partners. Educators may use or adapt. http://creativecommons.org/licenses/by/3.0/ Download this tool at http://achievethecore.org/IMET

Directions for Non-Negotiable 2

Focus and Coherence

Non-Negotiable 2: **Focus and Coherence** **Materials must focus coherently on the Major Work of the grade in a way that is consistent with the progressions in the Standards.** Focus and coherence are the two major evidence-based design principles of the Common Core State Standards for Mathematics (CCSSM, p. 3). Focus is necessary in order to fulfill the ambitious promise the states have made to their students by adopting the Standards: greater achievement at the college and career ready level; greater depth of understanding of mathematics; and a rich classroom environment in which reasoning, sense-making, applications, and a range of mathematical practices flourish. In simpler terms, a mile-wide, inch-deep curriculum translates to less time per topic. Less time means less depth and moving on without many students. Thus, materials must focus coherently on the Major Work of the grade in a way that is consistent with the progressions in the Standards.	**Required Materials** • Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf) • Focus by Grade Level for the grade being evaluated (www.achievethecore.org/focus) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion:** Non-Negotiable 2 is rated as Meets or Does Not Meet. To rate Non-Negotiable 2, first rate metrics 2A–2H. Each of these eight metrics must be rated as Meets in order for Non-Negotiable 2 to be rated as Meets. Rate each metric 2A-2H as Meets or Does Not Meet/Insufficient Evidence. If the evidence examined shows that the Criterion is met, then mark the Criterion Meets. If the evidence examined shows that the Criterion is not met—or if there is insufficient evidence to make a determination—then mark the Criterion as Does Not Meet/Insufficient Evidence. Support all ratings with evidence.
Metric NN2A: **In each grade K–8, students and teachers using the materials as designed devote the large majority of time to the Major Work of the grade.** **How to Find the Evidence:** Familiarize yourself with the Major Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, lessons, homework assignments, and assessments. (Evaluate both student and teacher materials.) Consider time spent on the Major Work of the grade and judge qualitatively whether students and teachers using the materials as designed will devote the large majority of time to the Major Work of the grade. For context, read Criterion #1 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013)	**Evidence-** **8 of the 12 chapters (1-7 and 11) focus on the 4 major clusters for 2nd grade. The other 4 chapters focus on the rest of the standards. Units 1-7 are focusing on mastering addition and subtraction while unit 11 is measurement. The pacing of the program puts most of the major work within the 1st half of the school year. The remainder of the chapters are supporting clusters.**	**(Reviewer only.)** **_X__ Meets** **____Does Not Meet/** **Insufficient Evidence**

Metric NN2B: **Supporting Work, where present, enhances focus and coherence simultaneously by also engaging students in the Major Work of the grade.** **How to Find the Evidence:** Familiarize yourself with the Major Work and Supporting Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate chapters and lessons that focus on Supporting Work. NOTE: Example of evaluating this Criterion might include looking at whether materials for K–5 generally treat data displays as an occasion for solving grade-level word problems using the four operations (e.g., see 3.MD.B.3); or whether materials for grade 7 take advantage of opportunities to use probability to support ratios, proportions, and percentages. For context, read Criterion #3 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** **Data is mostly represented in the data chapter (9). However, within that unit every data display is tied to real world problems and students have to use addition or subtraction to solve the problems within the unit.**	(Reviewer only.) **_X_ Meets** **____Does Not Meet/ Insufficient Evidence**
Metric NN2C: **Materials base content progressions on the grade-by-grade progressions in the Standards. Content from previous or future grades does not unduly interfere with or displace on-grade-level content.** **How to Find the Evidence:** Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, and lessons in both student and teacher materials. NOTE: In some cases it may be possible that aligned materials might address some aspects of a topic in a strategic way before or after the grade level in which the topic is central in the Standards' progressions; for example, a curriculum author might purposefully choose to explore adding fractions with unlike denominators in a way appropriate to grade four, recognizing that this work is not really required until the next grade. However, any such purposeful discrepancies in content progressions should enhance the required learning in each grade; not unduly interfere with or displace grade-level content; and be clearly aimed at helping students meet the Standards as written rather than effectively rewriting the progressions in the Standards. And in all cases, note that Non-Negotiable 1 must be met for materials to be aligned. For context, read Criterion #5a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** **The teacher's edition breaks down what the students learned in the previous grade and each chapter begins with an Am I Ready? This assesses whether students have the prerequisite skills mastered to be successful with the new content being taught. All content within the chapters builds on what they should already know.**	(Reviewer only.) **_X_ Meets** **____Does Not Meet/ Insufficient Evidence**

Metric NN2D: **Materials give all students extensive work with on-grade-level problems.** **How to Find the Evidence:** Evaluate both student and teacher materials. If the materials provide resources for differentiated learning, consider whether lower-performing students have opportunities to engage with grade-level problems. Also consider whether higher-performing students are given opportunities to learn current grade-level content in greater depth. For context, read Criterion #5b in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** **Each lesson has an explore and explain, see and show, on my own, and problems solving. This scaffolds the lessons and gives the students several opportunities within each lesson to practice the topic. There is also a reteach, on level, and beyond activity for each lesson for homework. Common Errors are also addressed.**	(Reviewer only.) __X__ Meets ____Does Not Meet/ Insufficient Evidence
Metric NN2E: **Materials relate on-grade-level concepts explicitly to prior knowledge from earlier grades.** **How to Find the Evidence:** Evaluate both student and teacher materials. NOTE: Examples of evaluating this Criterion might include looking at the way the materials extend basic ideas of place value across the decimal point; or the role that properties of operations play when the materials extend arithmetic beyond whole numbers to fractions, variables, and expressions. More generally, cluster headings in the Standards sometimes signal key moments where reorganizing and extending previous knowledge is important in order to accommodate new knowledge (e.g., see cluster headings that use the phrase "Apply and extend previous understanding"). For context, read Criterion #5c in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** **There is a "What's the Math in this Chapter" which shows what students should already know, what students should understand, and what students should be able to do, and what will my students do next with these skills for each chapter. This shows the direct link to prior standards that have been taught and how the chapter builds on prior knowledge.**	(Reviewer only.) _X___ Meets ____Does Not Meet/ Insufficient Evidence
Metric NN2F: **Review of material from previous grades is clearly identified as such to the teacher, and teacher and students can see what their specific responsibility is for the current year.** **How to Find the Evidence:** Evaluate the table of contents, but do not stop there; also evaluate units, chapters, lessons, homework assignments and assessments. (Evaluate both student and teacher materials.) Identify any content from previous grades and check whether it is identified as such. For context, read Criterion #5a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** **This is found in the "Review What I Know" at the beginning of each chapter. Instruction for review of concepts is based on how students answer and what they miss.**	(Reviewer only.) __X__ Meets ____Does Not Meet/ Insufficient Evidence

Metric NN2G: **Materials in[illegible]e learning objectives that are visibly shaped by CCSSM cluster headings.** **How to Find the Evidence:** Select several clusters from the Major Work in the grade being evaluated. Evaluate teacher and student materials in relation to these clusters. For context, read Criterion #6a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** **Every lesson is labeled with a domain, major cluster, and specific standard being taught. Each chapter has an essential question that is addressed in every lesson.**	**(Reviewer only.)** **_X__ Meets** **____Does Not Meet/** **Insufficient Evidence**
Metric NN2H: **Materials include problems and activities that serve to connect two or more clusters in a domain, or two or more domains in a grade, in cases where these connections are natural and important.** **How to Find the Evidence:** In the grade being evaluated, choose two or more clusters or two or more domains for which connections are natural and important. Evaluate the units, chapters, and lessons that deal with the chosen topics, looking for problems and activities that serve to connect the chosen clusters or domains. NOTE: An example of evaluating this Criterion might include looking at whether problems in grade 4 sometimes or often involve students applying their developing computation skills (detailed in domain NBT) in the context of solving word problems (detailed in domain OA). For context, read Criterion #6b in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** **In the supplement "Countdown to Common Core" Mathematics Performance Tasks; students are given 4 opportunities to solve problems that cover multiple mathematical practices, domains, and standards within a single task.**	**(Reviewer only.)** **_X__ Meets** **____Does Not Meet/** **Insufficient Evidence**
Non-Negotiable 2: **Focus and Coherence** **Materials must focus coherently on the Major Work of the grade in a way that is consistent with the progressions in the Standards.** **NN 2** If all Metrics 2A – 2H were rated as Meets, then rate Non-Negotiable 2 as Meets. If one or more Metric was rated Does Not Meet/Insufficient Evidence, then rate Non-Negotiable 2 as Does Not Meet. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)** **Before moving to Alignment Criterion 1, record the final Meets or Does Not Meet rating in the Evaluation Summary.**		**(Reviewer only.)** **__X__ Meets** **____Does Not Meet** **Strengths/Weaknesses:**

Now continue by evaluating the Alignment Criterion 1 for Rigor and Balance.

Directions for Alignment Criterion 1

Rigor and Balance

Alignment Criterion 1: Rigor and Balance

Materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.

The Standards set expectations for attention to all three aspects of rigor: conceptual understanding, procedural skill and fluency, and applications. Thus, materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.

Required Materials

- Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf)
- Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)
- Focus by Grade Level for the grade being evaluated (achievethecore.org/focus)
- Situation Types for the Operations in Word Problems (achievethecore.org/situation-types)
- From the materials being evaluated: teacher guides, student texts and workbooks

Rating this Criterion:

Alignment Criterion 1 is rated as Meets or Does Not Meet.

To rate Alignment Criterion 1, first rate metrics 1A, 1B, and 1C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). For each metric, guiding questions are provided to aid in gathering evidence.

Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 1 if the materials rate 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as rigor and balance, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.

Metric AC1A:
The materials support the development of students' conceptual understanding of key mathematical concepts, especially where called for in specific content Standards or cluster headings.

How to Find the Evidence:

Select one or more cluster(s) or Standard(s) from the Major Work for the grade being evaluated that relate specifically conceptual understanding to use throughout the questions associated with this metric. NOTE: Some examples of clusters or Standards that call for conceptual understanding include: K.OA.A.1, (1.NBT.B, 1.NBT.C), (2.NBT.A, 2.NBT.B), (3.OA.A.1, 3.OA.A.2), 4.NF.A, (4.NBT.A, 4.NBT.B), 5.NF.B, (5.NBT.A, 5.NBT.B), 6.RP.A, 6.EE.A.3, 7.NS.A, 7.EE.A, 8.EE.B, 8.F.A, 8.G.A

Clusters or Standards grouped by parentheses are closely connected and could be analyzed together.

For context, read Criterion #4a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).

-Choose a cluster/Standard from the Major Work that is aligned to each aspect of rigor and use it to evaluate these metrics. It is most helpful if the same clusters/Standards are chosen for all of the programs being evaluated. (Guidance in choosing clusters/Standards is included in "How to Find the Evidence".)

Every chapter begins with an essential question which is then referenced within every lesson in that chapter. Each lesson helps the students to gain a conceptual understanding of the essential concept. For example in chapter 1 the essential question is "What strategies can I use to add and subtract?" and by the end of the unit students should be able to show make a 10, use double to add and subtract, complete fact families, and find missing addends.

Use the questions for AC Metric 1A to evaluate Metric 1A. Record evidence for each question and rate Metric 1A.

__X__ Meets (2)

____Partially Meets (1)

____Does Not Meet (0)

Is conceptual understanding attended to thoroughly where the Standards set explicit expectations for understanding or interpreting? Evaluate lessons, chapter/unit assessments and homework assignments, paying attention to work aligned to Standards that explicitly call for understanding or interpreting. NOTE: Examples of evaluating this Criterion might include looking at how well the multi-digit addition and subtraction algorithms are developed and explained on the basis of place value and properties of operations; or how well the multi-digit multiplication and division algorithms are developed and explained on the basis of place value and properties of operations; or how well solving equations is presented and explained as a process of reasoning.	**Evidence-** **Each lesson within the unit uses the previous lessons knowledge to go to a deeper understanding of the concept.** **Chapter 1 starts with addition properties and then moves to count on to add, then doubles and near doubles, make a 10, adding 3 numbers, writing number sentence, count back to subtract, subtract all and zero, using doubles to subtract, relate addition and subtraction, missing addends, fact families, and word problems** **The foldable, making connections, and modeling the math help to build the conceptual understanding.**	
Do the materials feature high-quality conceptual problems and conceptual discussion questions? Evaluate lessons, chapter/unit assessments, and homework assignments. NOTE: Example of conceptual problems might include such questions as "Find a number greater than 1/5 and less than 1/4," or "If the divisor does not change and the dividend increases, what happens to the quotient?"	**Evidence-** **Every lesson, homework page, and test has a problem solving section. Every lesson has a math talk to get conversations about the topic started.**	
Do the materials feature opportunities to identify correspondences across mathematical representations? Evaluate lessons, chapter/unit assessments and homework assignments. NOTE: Examples of evaluating this Criterion might include looking at whether students are supported in identifying correspondences among: the verbal description of a situation, the diagrams that distill its mathematical features, and the equations that model it; or equivalent forms of numbers (e.g., 3 and 6/2) and the number line; or rational number operations and representations of them via models such as the vector model; or the expression that defines a function and the graph that shows the relationship.	**Evidence-** **Mathematical practices are identified by a red arrow on the page. The teacher's edition then has an activity to check students for understanding. For example on pg. 82 of the student book is a red arrow. The teachers edition tells that it is for MP3 and has students tell a friend both fact families they created. The friend has to verify whether it is accurate or suggest ideas on how to change the fact family to make them accurate.**	

Metric AC1B: **The materials are designed so that students attain the fluencies and procedural skills required by the Standards.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Major Work for the grade being evaluated that relate specifically to fluency and procedural skill to use throughout the questions associated with this metric. NOTE: Some examples of Standards that call for procedural skill and fluency include: K.OA.A.5, 1.OA.C.6, 2.OA.B.2, 2.NBT.B.5, 3.OA.C.7, 3.NBT.A.2, 4.NBT.B.4, 5.NBT.B.5, 6.NS.B.2, and 6.NS.B.3, 6.EE.A, 7.NS.A, 7.EE.A.1,7.EE.B.4a, 8.EE.C.7, 8.EE.C.8b For context, read Criterion #4b in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**There is fluency practice in each of the chapters that deals with addition and subtraction.** **There are also on-line digital resources like fact dash and sail through math that work with fact fluency.**	**Use the questions for Metric 1B to evaluate Metric 1 B. Record evidence for each question and rate Metric 1B.** **(Reviewer only.)** **__x__ Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Is progress toward fluency and procedural skill interwoven with students' developing conceptual understanding of the operations in question? Evaluate lessons, chapter/unit assessments, daily routines, and homework assignments for evidence that the development of fluency and procedural skill is supported by conceptual understanding.	**Evidence-** **There is fluency practice in each of the chapters that deals with addition and subtraction.** **Pg. 93,94, 151, 152, 209, 210, 281, 282 are fluency specific and many practice pages within the addition and subtraction chapters.**	
Are purely procedural problems and exercises present that include cases in which opportunistic strategies are valuable and generic cases that require efficient algorithms present? Evaluate lessons, chapter/unit assessments, daily routines, and homework assignments. NOTE: Examples of problems in which opportunistic strategies are valuable might include the sum 698 + 240 or the system $x + y = 1$, $2x + 2y = 3$. Examples of generic cases that require efficient algorithms might include the sum 8767+2286 or the system $6y + x = x + 3$, $-x = 1 + 2y$.	**Evidence-** **Within each lesson students are working toward fluency within the problems solving section of the lesson where they need to apply what they have learned.**	
Do the materials in grades K–6 provide repeated practice toward attainment of fluency Standards? Evaluate lessons, daily routines, and homework assignments for evidence of repeated practice toward attainment of the following K–6 Standards that set an explicit expectation of fluent (accurate and reasonably fast) computation: K.OA.A.5, 1.OA.C.6, 2.OA.B.2, 2.NBT.B.5, 3.OA.C.7, 3.NBT.A.2, 4.NBT.B.4, 5.NBT.B.5, 6.NS.B.2, 6.NS.B.3.	**Evidence-** **Every lesson within the addition and subtraction chapters has an independent portion where students are practicing their fluency.** **See Chapter 1 lesson 7 for an example.**	

Metric AC1C: **The materials are designed so that teachers and students spend sufficient time working with engaging applications, without losing focus on the Major Work of each grade.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Major Work for the grade being evaluated that relate specifically application to use throughout the questions associated with this metric. NOTE: Some examples of clusters or Standards that call for application include: K.OA.A.2, 1.OA.A, 2.OA.A, 3.OA.A.3, 3.OA.D.8, 4.OA.A.3, 4.NF.B.3d, 4.NF.B.4c, 5.NF.B.6, 5.NF.B.7c, 6.RP.A.3, 6.NS.A.1, 6.EE.B.7, 6.EE.C.9, 7.RP.A, 7.NS.A.3, 7.EE.B.3, 8.EE.C.8c, 8.F.B For context, read Criterion #4c in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** **In addition to the student edition there are also practice opportunities with learning stations. This gives students practice through games, problem solving, graphic novels, real world problem readers, and interactive activities.** **These can be referenced in the teacher's edition 1l; 1-2; 157G; 157-158; 215G; 215-216; 285G; 285-286**	**Use the questions for Metric 1C to evaluate Metric 1C. Record evidence for each question and rate Metric 1C.** **(Reviewer only.)** **__X__ Meets (2)** **_____Partially Meets (1)** **_____Does Not Meet (0)**
Are there are single- and multi-step contextual problems, including non-routine problems, that develop the mathematics of the grade, afford opportunities for practice, and engage students in problem solving? Do the problems attend thoroughly to those places in the content Standards where expectations for multi-step and real-world problems are explicit? Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** **Problem solving within every lesson.**	
Do application problems particularly stress applying the Major Work of the grade? Evaluate lessons, chapter/unit assessments, and homework assignments. NOTE: Examples of evaluating this Criterion might include looking at: how well, by the end of grade 2, students using the materials as designed can represent and solve a full range of one-step addition and subtraction word problems; or how well, by the end of grade 3, students using the materials as designed can represent and solve a full range of one-step multiplication and division word problems; or how well these basic situation types for each operation are carried coherently across the grades, (e.g., with fractions and algebraic expressions); or, in all grades, whether the problems connect concepts, Standards, and domains in ways that are natural and important. For a list of situation types for one-step addition, subtraction, multiplication, and division problems, see Situation Types for the Operations in Word Problems	**Evidence-** **The program uses HOT (Higher Order Thinking) problems to apply the major work.** **Example: Chapter 1 Lesson 11 page 78 of the student book**	

Does modeling build slowly across K–8, with applications that are relatively simple in earlier grades and when students are encountering new content? In grades 6–8, do the problems begin to provide opportunities for students to make their own assumptions or simplifications in order to model a situation mathematically? Read Standard for Mathematical Practice 4, Model with Mathematics. Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** **An example would be the array model where in 1st grade they use arrays to begin the understanding of addition to 10 and then to 20. Then in 2nd grade students are introduced to repeated addition using arrays (Chapter 2, Lesson 5)**	
Alignment Criterion 1: **Rigor and Balance** **Materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.** **AC1** Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 out of 6 points, the Criterion has not been met. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)** **Before moving to Alignment Criterion 2, record the final Meets or Does Not Meet rating in the Evaluation Summary.**		**(Reviewer only.)** **_X_ Meets** **____Does Not Meet** **Strengths: Math Talk, See and Show, Conceptual problems** **Weaknesses:Not enough opportunities for students to have productive struggle because of the amount of support in the lessons. Within Math Talk a lot of the questions were low DUK.**
Directions for Alignment Criterion 2 **Standards for Mathematical Practice**		

Alignment Criterion 2: Standards for Mathematical Practice **Materials must demonstrate authentic connections between content Standards and practice Standards.** The Standards require that designers of instructional materials connect the mathematical practices to mathematical content in instruction. Thus, materials must demonstrate authentic connections between content Standards and practice Standards.	**Required Materials:** • Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf) • Focus by Grade Level for the grade being evaluated (www.achievethecore.org/focus) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion** Alignment Criterion 2 is rated as Meets or Does Not Meet. To rate Alignment Criterion 2, first rate metrics 2A, 2B, and 2C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). For each metric, guiding questions are provided to aid in gathering evidence. Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 2 if the materials earn 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as mathematical practices, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.
Metric AC2A: **Materials address the practice Standards in such a way as to enrich the Major Work of the grade; practices strengthen the focus on Major Work instead of detracting from it, in both teacher and student materials.** **How to Find the Evidence:** Familiarize yourself with the Major Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate teacher and student materials for evidence that the mathematical practices support and connect to the focus of the grade. NOTE: Examples of evaluating this Criterion might include looking at whether, in grades K–5, students using the materials are supported to look for and express regularity in repeated reasoning about the addition table, the multiplication table, the properties of operations, the relationship between addition and subtraction or multiplication and division, and the place value system; or whether, in grades 6–8, students using the materials are supported to look for and express regularity in repeated reasoning about proportional relationships and linear functions. For context, read Criterion #8 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013).	**Evidence-** **Mathematical practices are labeled at key points in the lesson instruction to provide an indication of a clear and specific example for teachers to use to draw students attention to the practice without making it overwhelming.** **Example: MP8 (Look for and express regularity in repeated reasoning) is found throughout chapters 3 (Subtract two-digit numbers), 6 (Add Three-digit number), and 7 (Subtract three-digit numbers)**	**(Reviewer only.)** **__X__ Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Metric AC2B: **Materials attend to the full meaning of each practice Standard.** **How to Find the Evidence:** For context, read Criterion #7 and Criterion #9 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).		**Use the questions for Metric 2B to evaluate Metric 2B. Record evidence for each question and rate Metric 2B.** **(Reviewer only.)** **__X__Meets (2)**

Over the course of any given year of instruction, is each mathematical practice Standard meaningfully present in the form of assignments, activities, or problems that stimulate students to develop the habits of mind described in the practice Standard? Evaluate lessons, chapter/ unit assessments, and homework assignments for evidence of each mathematical practice being meaningfully present in instruction.	**Evidence-** **The beginning of each chapter outlines the mathematical practices that will be represented in that chapter. Each lesson identifies the practice that represents the mathematical practices.** **They are not identified on the assessments but similar problems are evident.**	**____Partially Meets (1)** **____Does Not Meet (0)**
Do the materials treat the practice Standards as developing across grades or grade bands? Are the practice Standards in early grades appropriately simple? Do they display an arc of growing sophistication across the grades?	**Evidence-** **The standards are identified in early grades and key words and ideas are called out in the text making it simple for students to identify what they need to concentrate on to solve the problem.**	
Are there teacher-directed materials that explain the role of the practice Standards in the classroom and in students' mathematical development? Are alignments to practice Standards accurate?	**Evidence-** **The teacher's edition calls out each mathematical practice within the lesson and has dialog or a lesson help to help make sure the practice is covered.**	
Metric AC2C: **Materials support the Standards' emphasis on mathematical reasoning.** **How to Find the Evidence:** For context, read Criterion #10 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).		**Use the questions for Metric 2C to evaluate Metric 2C. Record evidence for each question and rate Metric 2C.** **(Reviewer only.)** **__x__ Meets (2)**
Do the materials support students in constructing viable arguments and critiquing the arguments of others concerning grade-level mathematics that is detailed in the content Standards? Read Standard for Mathematical Practice 3. Evaluate teacher and student materials to ensure that students are given opportunities to reason with grade-level mathematics.	**Evidence-** **My Math has a built in feature called math talk in the lessons. It gives students an opportunity to describe and defend work. In second grade, it was found on pp. 18; 56; 70; 82; 143; 166; 230; 296; 334; and 414.**	**____Partially Meets (1)** **____Does Not Meet (0)**

Do the materials support students in producing not only answers and solutions, but also in a grade-appropriate way, arguments, explanations, diagrams, mathematical models, etc., especially in the Major Work of the grade? Familiarize yourself with the Major Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate teacher and student materials, to understand the types of work students are expected to produce.	**Evidence-** **My Math has a built in feature called math talk in the lessons. It gives students an opportunity to describe and defend work. In second grade, it was found on pp. 18; 56; 70; 82; 143; 166; 230; 296; 334; and 414.** **There is a Write Math on some of the independent work.** **Students are given practice through HOT problems: Example Chapter 8 Lesson 1** **Paul finds 5 dimes and 2 nickels. He counts them and says he has 50 cents. Tell why Paul is wrong. Make it right.**	
Do materials explicitly attend to the specialized language of mathematics? Is the language of argument, problem solving, and mathematical explanations taught rather than assumed? Evaluate teacher and student materials, paying attention to how mathematical language is taught. NOTE: Examples of evaluating this Criterion might include looking at whether students are supported in: basing arguments on definitions; using the method of providing a counterexample; or recognizing that examples alone do not establish a general statement.	**Evidence-** **Each chapter has math vocabulary that is introduced at the beginning of each chapter. It is then reinforced throughout the chapter in the lessons and tested on the check my progress and at the end of each chapter.**	
Alignment Criterion 2: **Standards for Mathematical Practice** **Materials must demonstrate authentic connections between content Standards and practice Standards.** **AC2** Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 out of 6 points, the Criterion has not been met. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)** **Before moving to Alignment Criterion 3, record the final Meets or Does Not Meet rating in the Evaluation Summary.**		**(Reviewer only.)** **__X__ Meets** **____Does Not Meet** **Strengths/Weaknesses:**

Alignment Criterion 3: Access to the Standards for All Students **Materials must provide supports for English Language Learners and other special populations.** Because Standards are for all students, alignment requires thoughtful support to ensure all students are able to meet the Standards. Thus, aligned materials must provide supports for English Language Learners and other special populations.	**Required Materials:** • Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion:** Alignment Criterion 3 is rated as Meets or Does Not Meet. To rate Alignment Criterion 3, first rate metrics 3A, 3B, and 3C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 3 if the materials earn 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as support for special population, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.
Metric AC3A: **Support for English Language Learners and other special populations is thoughtful and helps those students meet the same Standards as all other students. The language in which problems are posed is carefully considered.** **How to Find the Evidence:** Evaluate teacher and student materials, paying attention to supports offered for special populations.	**Evidence-** **There is ELL Support in the teacher's edition for every lesson. The lessons feature differentiated support for beginning, intermediate, and advanced language proficiency. The activities emphasize oral language development.**	**Reviewer only.)** **__x__ Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Metric AC3B: **Materials provide appropriate level and type of scaffolding, differentiation, intervention, and support for a broad range of learners with gradual removal of supports, when needed, to allow students to demonstrate their mathematical understanding independently.** **How to Find the Evidence:** Evaluate teacher and student materials, paying attention to whether materials provide differentiation that will lead all learners to engage with on-grade-level content.	**Evidence-** **The program has scaffolded lessons as in I do, we do, you do. It also has leveled homework; reteaching, practice, and enrich.**	**Reviewer only.)** **__X__ Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Metric AC3C: **Design of lessons recommends and facilitates a mix of instructional approaches for a variety of learners such as using multiple representations (e.g., including models, using a range of questions, checking for understanding, flexible grouping, pair-share).** **How to Find the Evidence:** Evaluate teaching materials, noting instructional approaches suggested for whole class and differentiated lessons and activities.	**Evidence-** **There is differentiated instruction for each lesson within a chapter. These include hands on activities, games, and lesson animations. For examples see:** **15A; 21A; 27A; 33A; 39A; 45A; 53A; 59A; 65A; 73A; 79A; 85A; and 91A**	**Reviewer only.)** **__X___ Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**

Alignment Criterion 3: **Access to the Standards for All Students** **Materials must provide supports for English Language Learners and other special populations.** **AC3** Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 points, the Criterion has not been met. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion.**(Reviewer only.)** **Move to the Evaluation Summary and record the final Meets or Does Not Meet rating .**	**(Reviewer only.)** **__X__ Meets** **____Does Not Meet** **Strengths/Weaknesses:**

Once an evaluation for alignment to the Shifts and major features of the CCSS has been conducted using Sections 1-3, it's important to evaluate for overall quality and best practices. A starting list of Indicators of Quality are suggested below. States, districts and others evaluating instructional materials are encouraged to add to this list to ensure materials reflect local contexts. For background information on some of the Indicators of Quality in this section, refer to pp.18–21 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).

Indicators of Quality	**Evidence- Give specific examples.**	**Rating: (Reviewers only.)**
1. Lessons are thoughtfully structured and support the teacher in leading the class through the learning paths at hand, with active participation by all students in their own learning and in the learning of their classmates.	**Evidence-** **Each lesson is organized under a five-step plan for instruction: Get ready, investigate and model, teach, practice and apply, and wrap it up.**	**(Reviewer only.)** **__X__ Yes** **_____ No**
2. The underlying design of the materials includes both problems and exercises. (In solving problems, students learn new mathematics, whereas in working exercises, students apply what they have already learned to build mastery.) Each problem or exercise has a purpose. **NOTE: This Criterion does not require that the problems and exercises be labeled as such.**	**Evidence-** **My Math offers a variety of problems and exercises. There are several problems that mimic the examples of the new mathematics that were introduced in the lesson There are also multi-step problems that allow students to combine the math that they learned with previously learned skills.**	**(Reviewer only.)** **__X__ Yes** **_____ No**

3. Design of assignments is not haphazard: exercises are given in intentional sequences in order to strengthen students' mathematical understanding.	**Evidence-** **Each lesson is organized under a five-step plan for instruction: Get ready, investigate and model, teach, practice and apply, and wrap it up.** **Each chapter includes a problem solving investigation that is linked to a real-world situation so students can understand how it is important to them.**	**(Reviewer only.)** **__X__ Yes** **_____ No**
4. There are separate teacher materials that support and reward teacher study including, but not limited to: discussion of the mathematics of the units and the mathematical point of each lesson as it relates to the organizing concepts of the unit, discussion on student ways of thinking and anticipating a variety of students responses, guidance on lesson flow, guidance on questions that prompt students thinking, and discussion of desired mathematical behaviors being elicited among students.	**Evidence-** **Everything can be taught from print form; however, ConnectED which is the online portal has all of the digital resources in one place including teacher's edition, student edition, digital animations and tutorials, editable worksheets, and assessment resources.** **TE is very comprehensive; including content knowledge behind the standards and models.**	**(Reviewer only.)** **__x__ Yes** **_____ No**
5. Manipulatives suggested in the materials are faithful representations of the mathematical objects they represent and are connected to written methods.	**Evidence-** **There are multiple manipulatives to use with the program to help with the visual and kinesthetic learners. They are primarily used during the modeling math part of the lesson. There is also a foldable at the beginning of most chapters to help with the main concept of the chapter.**	**(Reviewer only.)** **__x__ Yes** **_____ No**
6. Materials include a variety of curriculum-embedded assessments. Examples include pre-, formative, summative, and self-assessment resources.	**Evidence-** **There is Am I Ready at the beginning of each chapter that assesses previously taught skills or prerequisite skills for the chapter. There are also chapter pretests and check my progress tests, and end of chapter tests in multiple formats for all types of learners. Also included is standard test practice. Formative assessments were not explicitly labeled but many of the activities could be used as formative assessments.**	**(Reviewer only.)** **__x__ Yes** **_____ No**
7. Assessments contain aligned rubrics, answer keys, and scoring guidelines that provide sufficient guidance for interpreting student performance.	**Evidence-** **Each chapter has a performance task which includes a rubric for scoring. Also there are answer keys for all assessments.**	**(Reviewer only.)** **__x__ Yes** **_____ No**

8. Materials assess student proficiency using methods that are accessible and unbiased, including the use of course-level language in student prompts.	**Evidence-** **All tests are in student friendly wording (if you teach the academic vocabulary). See example on page 160-184 in the assessment masters for all Chapter 7 Tests.**	**(Reviewer only.)** **__x__ Yes** **_____ No**
9. Materials are carefully evaluated by qualified individuals, whose names are listed, in an effort to ensure freedom from mathematical errors and course-level appropriateness.	**Evidence-** **See pages xx through xxiii for a complete list of the authors, consultants, and reviewers of the program.**	**(Reviewer only.)** **__x__ Yes** **_____ No**
10. The visual design supports students in engaging thoughtfully with the subject. Navigation through the text is clear.	**Evidence-** **The text is colorful and student friendly. The teacher's edition is easy to navigate and clear. The exercises are written so students can relate and to make it more interesting. For examples see pages 235-236 in the student edition.**	**(Reviewer only.)** **__x__ Yes** **_____ No**
11. The materials engage parents in appropriate ways. For example, homework assignments in elementary grades, consist of routine problems, practice with getting answers, and fluency-building exercises that parents can easily support.	**Evidence-** **There are parent letters at the beginning of each chapter to help explain to parents what their child will be learning. There is also a stepped out problem on all homework pages to demonstrate to parents what was learned. In addition there are also digital personal tutors available on line.**	**(Reviewer only.)** **__x__ Yes** **_____ No**

Reviewer IMET Evaluation Summary **Title/Level:** My Math Grade 2

Publisher: McGraw-Hill School Education, LLC **Copyright:** 2014
ISBN: various

Reviewer ID # EI & EL **Date Review Completed:** 3-8-16

Non-Negotiable Criteria- Each Non-Negotiable must be met in order for the Non-Negotiable Alignment Criteria to be met overall.

Non-Negotiable 1: Freedom from Obstacles to Focus	Non- Negotiable 2: Focus and Coherence
___X____ Meets _____ Does Not Meet	__X___ Meets _____ Does Not Meet

Non-Negotiable Overall:

___X__ Meets _____ Does Not Meet

Alignment Criteria- Each Alignment Criterion must be met with a sufficient number of points in order for Alignment Criteria to be labeled as "Meets" overall. The more points the materials receive on the Alignment Criteria, the better they are aligned.

Alignment Criterion 1: Rigor and Balance	Alignment Criterion 2: Standards of Mathematical Practice	Alignment Criterion 3: Access to Standards for All Learners
Points: __6___ of 6 possible. (Materials must receive at least 5 of 6 points to align.) ____X___ Meets _____ Does Not Meet	Points: __6___ of 6 possible. (Materials must receive at least 5 of 6 points to align.) ___X____ Meets _____ Does Not Meet	Points: __6___ of 6 possible. (Materials must receive at least 5 of 6 points to align.) ___X____ Meets _____ Does Not Meet

Alignment Criteria Overall:

___X__ Meets _____ Does Not Meet

If the materials meet both Non-Negotiables and relevant Alignment Criterion, they are aligned to the Shifts and major features of the Core Standards. **the materials meet every Non-Negotiable and Alignment Criterion? ___X__ Yes _____ No**

What are the specific areas of strength and weakness based on this evaluation? Publishers or others modifying or developing assessments can use this information to make improvements and/or to remedy gaps in the alignment of assessment materials.

2015-16 Mathematics Interim Review Recommendation & Summary

Publisher Name:	McGraw-Hill
Title:	My Math Grade 3
ISBN #	
Grade Level(s) or Course:	3
Reviewer ID:	DD + AJ

RECOMMENDED AS:

X **Core Mathematics Program-** a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials. Substantial evidence clearly supports the designation of this program as Core.

_____ **Other Mathematics Program-** a program that substantially, but partially, meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for supplemental materials. Substantial evidence clearly supports the designation of this program as Other.

_____ **Component Mathematics Program-** a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs. Substantial evidence clearly supports the designation of this program as Component.

_____ **Intervention Program-** a program designed and intended to target and support students' specific needs. Substantial evidence clearly supports the designation of this program as Intervention.

_____ **Does not meet criteria** for recommendation as a Curricular Material or Online Resource for Mathematics.

EVIDENCE SUMMARY:

FOCUS- NN1 & NN2 - my Math 3 devotes majority to the major work of 3 grade.

COHERENCE- NN1 & NN2 My Math 3 provides sufficient support materials to enhance & support Engaging students in the major work of third Grade.

RIGOR- AC1 My Math 3 provides materials and opportunities to help students meet CCSS standard providing both rigor and balance.

CONCEPTUAL UNDERSTANDING- AC1 My Math 3 materials supports the student development and conceptual understanding of key mathematical concepts with regards to CCSS.

MATHEMATICAL PRACTICES- AC2 - Teacher and student edition provide sufficient information to provide understand of mathematical practices for both. Mathematical Reasoning is addressed through various problem-solving strategies and examples.

ACCESSIBILITY OF STANDARDS TO ALL STUDENTS- AC3 My Math 3 provides good support throughout all materials including teacher's and student edition, and supporting materials to engage diverse learners (and teachers).

OTHER: My Math 3 provides access and practice to the major work and supporting work of the third grade.

2015-16 Interim Mathematics Review

Mathematics Evaluation Tool Grades K-8

Publisher: McGraw-Hill

Title of Material: My Math, Grade 3

Author: Ritter, Carter

ISBN #: _____ **Copyright** 2013

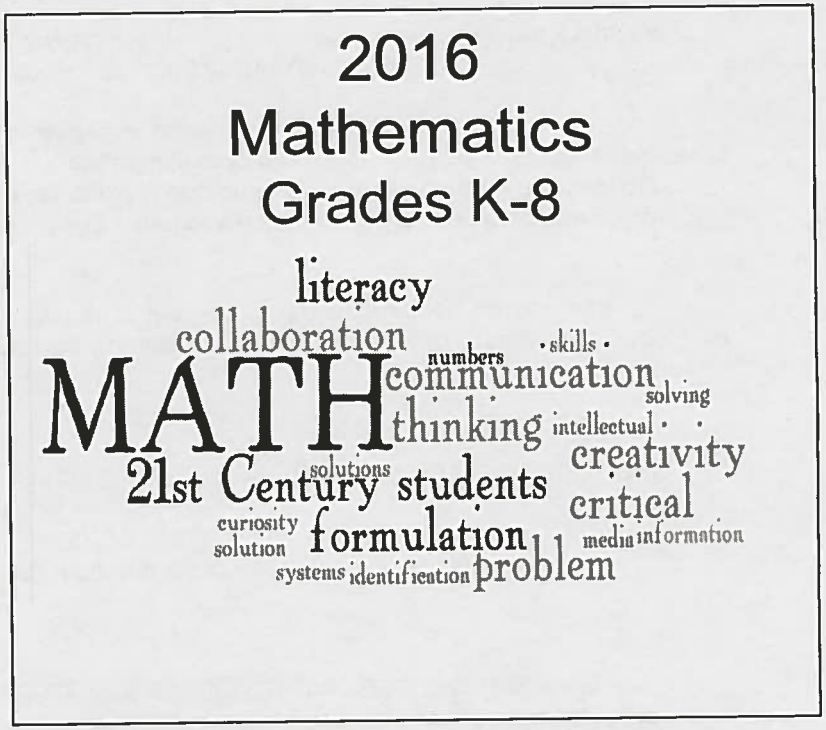
Reviewer ID: DD, AS

Core Mathematics Program- a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Core.

Other Mathematics Program- a program that substantially, but partially, meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Other.

Component Mathematics Program- a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs.
Substantial evidence clearly supports the designation of this program as Component.

Intervention Program- a program designed and intended to target and support students' specific needs.
Substantial evidence clearly supports the designation of this program as Intervention.



- Evaluation Form adapted from Instructional Materials Evaluation Toolkit (IMET).

The IMET was developed by Student Achievement Partners. Educators may use or adapt. http://creativecommons.org/licenses/by/3.0/ Download this tool at http://achievethecore.org/IMET

Instructional Materials Evaluation Tool
Mathematics, Grades K-8

What Are the Purposes of the IMET?
This Math IMET is designed to help educators determine whether instructional materials are aligned to the Shifts and major features of the Common Core State Standards (CCSS). The substantial instructional Shifts (http://www.corestandards.org/other-resources/key-shifts-inmathematics/) at the heart of the Common Core State Standards are:
- **Focus** strongly where the Standards focus
- **Coherence**: Think across grades and link to major topics within the grade
- **Rigor**: In major topics, pursue conceptual understanding, procedural skill and fluency, and application with equal intensity.

The IMET draws directly from the following documents:
- Common Core State Standards for Mathematics (www.corestandards.org/Math)
- Publishers' Criteria for the Common Core State Standards in Mathematics grade K-8 (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)

When to use the IMET
1. Purchasing materials: Many factors go into local purchasing decisions. Alignment to the Standards is a critical factor to consider. This tool is designed to evaluate alignment of instructional materials to the Shifts and the major features of the CCSS. It also provides suggestions of additional indicators to consider in the materials evaluation and purchasing process.

2. Evaluating materials currently in use: The IMET can be used to analyze the degree of alignment of existing materials and help to highlight specific, concrete flaws in alignment. Even where materials and tools currently in use fail to meet one or more of these criteria, the pattern of failure is likely to be informative. States and districts can use the evaluation to create a thoughtful plan to modify or combine existing resources in such a way that students' actual learning experiences approach the focus, coherence, and rigor of the Standards.

3. Developing programs: Those developing new programs can use this tool as guidance for creating aligned curricula.
Please note this tool was designed for evaluating comprehensive curricula (including any supplemental or ancillary materials), but it was not designed for the evaluation of standalone supplemental materials.

Who Uses the IMET?
Evaluating instructional materials requires both subject-matter and pedagogical expertise. Evaluators should be well versed in the Standards (www.corestandards.org/Math) for all grades in which materials are being evaluated. This includes understanding the Major Work of the grade (www.achievethecore/focus), the Supporting and Additional work, how the content fits into the progressions in the Standards (www.achievethecore.org/progressions), and the expectations of the Standards with respect to conceptual understanding, procedural skill and fluency, and application. Evaluators also should be familiar with the substantial instructional Shifts (http:// www.corestandards.org/other-resources/key-shifts-in-mathematics/) of Focus, Coherence and Rigor that are listed above.

Getting Started
Prior to Evaluation

Assemble all of the materials necessary for the evaluation. It is essential for evaluators to have materials for all grades covered by the program, as some criteria cannot be rated without having access to each grade. In addition, each evaluator should have a reference copy of the Common Core State Standards for Mathematics (CCSSM) and the Publishers' Criteria for the Common State Standards for Mathematics, Grades K-8 (Spring 2013).

Before conducting the evaluation itself, it is important to develop a protocol for the evaluation process. The protocol should include having evaluators study the Publishers' Criteria and the IMET. It will also be helpful for evaluators to get a sense of each program overall before beginning the process. At a minimum, this would include reading the front matter of the text, looking at the table of contents and paging through multiple chapters.

Sections 1-3 below should be completed to produce a comprehensive picture of the strengths and weaknesses of the materials under evaluation. Information about areas in need of improvement or supplementation should be shared with internal and external stakeholders.

Navigating the Tool

Begin with Section 1: Non-Negotiable Alignment Criteria

- The Non-Negotiable Alignment Criteria must each be met in full for materials to be considered aligned to the Shifts and the major features of the Common Core State Standards. Each Non-Negotiable Alignment Criterion has one or more metrics associated with it; every one of these metrics must be met in order for the criterion as a whole to be met.

- Examine the relevant materials and use evidence to rate the materials against each criterion and its associated metric(s).

- Record and explain the evidence upon which the rating is based.

Continue to Section 2: Alignment Criteria

- The Alignment Criteria must each be met for materials to be considered aligned to the Shifts and the major features of the Common Core State Standards. Each Alignment Criterion has one or more metric associated with it; a specific number of these metrics must be met or partially met in order for the criterion as a whole to be met.

- Examine the materials in relation to these criteria, assigning each metric a point value. Rate the criterion as "Meets" or "Does Note Meet" based on the number of points assigned. The more points the materials receive on the alignment Criteria, the better they are aligned.

- Record and explain the evidence upon which the rating is based.

Proceed to Section 4: Indicators of Quality

- Indicators of Quality are important considerations that will help evaluators better understand the overall quality of instructional materials. These considerations are not criteria for alignment to the CCSS, but they provide valuable information about additional program characteristics. Evaluators may want to add their own indicators to the examples provided.

Directions for Non-Negotiable 1

Freedom from Obstacles to Focus

Criterion	Evidence- Give specific examples.	Rating: (Reviewer only.)
Non-Negotiable 1: **Freedom from Obstacles to Focus** **Materials must reflect the content architecture of the Standards by not assessing the topics named before the grade level where they first appear in the Standards.** The Standards foster students' progress to algebra by focusing strongly on arithmetic. Consistent with this focus, certain topics from outside of arithmetic appear only in later grades. Thus, to be aligned, materials must reflect the content architecture of the Standards by not assessing the topics named before the grade level where they first appear in the Standards. In this criterion, "topics named" means the topics that are explicitly named in Metric 1A. No other topics should be added to the list in Metric 1A. (Note that other topics in the standards are addressed in criterion NN2.)	**Required Materials** • Common Core State Standards for Mathematics (www.corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf) • From the materials being evaluated: teacher guides and all assessment components	**Rating this Criterion:** Non-Negotiable 1 is rated as Meets or Does Not Meet. To rate Non-Negotiable 1, begin by rating Metric 1A. Since Metric 1A is the only metric for Non-Negotiable 1, the rating for Non-Negotiable 1 is the same as the rating for Metric 1A. If Metric 1A is rated as Does Not Meet, include evidence of when the named topic(s) is/are assessed. If the metric is rated as Meets, list the grade(s) examined in the evaluation.

Metric NN1A: **Materials reflect the basic architecture of the Standards by not assessing the listed topics before the grade level indicated.** • Probability, including chance, likely outcomes, probability models. (Introduced in the CCSSM in grade 7) • Statistical distributions, including center, variation, clumping, outliers, mean, median, mode, range, quartiles; and statistical association or trends, including two-way tables, bivariate measurement data, scatter plots, trend line, line of best fit, correlation. (Introduced in the CCSSM in grade 6) • Similarity, congruence, or geometric transformations. (Introduced in the CCSSM in grade 8) • Symmetry of shapes, including line/ reflection symmetry, rotational symmetry. (Introduced in the CCSSM in grade 4) **How to Find the Evidence:** Evaluate the table of contents, all chapter tests, all unit tests, and other such assessment components (including rubrics). For context, read Criterion #2 from the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013). NOTE: Grade alignments of other topics are addressed in Non-Negotiable 2, Focus and Coherence.) In this criterion, "topics named" means the topics that are explicitly named in Metric 1A. No other topics should be added to the list in Metric 1A. (Note that other topics in the standards are addressed in criterion NN2.)	All materials included in My Math are aligned to the standards for 3rd grade. Future grade level concepts may be alluded to, but are not assessed. The materials stick to the concepts, skills, and strategies stated in the standards. Each Lesson includes a focus for the teacher, which states the connection to the Common Core Standards and a coherence portion, which provides thinking across grade levels. Evidence: • Table of Contents (TE) vi-xx • Assessment Masters • Think Smart for the Smarter Balanced Assessment • Common Core State Standards Correlation Chart (T17-T21) • Assessment Master	**(Reviewer only.)** **_X___Meets** **____Does Not Meet**
Non-Negotiable 1: Materials must reflect the content architecture of the Standards by not assessing the topics named* before the grade level where they first appear in the Standards. **NN 1** If Metric 1A was rated as Meets, then rate Non-Negotiable 1 as Meets. If Metric 1A was rated as Does Not Meet, then rate Non- Negotiable 1 as Does Not Meet. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion.**(Reviewer only.)** **Before moving to Non-Negotiable 2, record the final Meets or Does Not Meet rating in the Evaluation Summary.**		**(Reviewer only.)** **__X__Meets** **____Does Not Meet** **Strengths/Weaknesses:**

Directions for Non-Negotiable 2

Focus and Coherence

Non-Negotiable 2: **Focus and Coherence** **Materials must focus coherently on the Major Work of the grade in a way that is consistent with the progressions in the Standards.** Focus and coherence are the two major evidence-based design principles of the Common Core State Standards for Mathematics (CCSSM, p. 3). Focus is necessary in order to fulfill the ambitious promise the states have made to their students by adopting the Standards: greater achievement at the college and career ready level; greater depth of understanding of mathematics; and a rich classroom environment in which reasoning, sense-making, applications, and a range of mathematical practices flourish. In simpler terms, a mile-wide, inch-deep curriculum translates to less time per topic. Less time means less depth and moving on without many students. Thus, materials must focus coherently on the Major Work of the grade in a way that is consistent with the progressions in the Standards.	**Required Materials** • Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf) • Focus by Grade Level for the grade being evaluated (www.achievethecore.org/focus) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion:** Non-Negotiable 2 is rated as Meets or Does Not Meet. To rate Non-Negotiable 2, first rate metrics 2A–2H. Each of these eight metrics must be rated as Meets in order for Non-Negotiable 2 to be rated as Meets. Rate each metric 2A-2H as Meets or Does Not Meet/Insufficient Evidence. If the evidence examined shows that the Criterion is met, then mark the Criterion Meets. If the evidence examined shows that the Criterion is not met—or if there is insufficient evidence to make a determination—then mark the Criterion as Does Not Meet/Insufficient Evidence. Support all ratings with evidence.
Metric NN2A: **In each grade K–8, students and teachers using the materials as designed devote the large majority of time to the Major Work of the grade.** **How to Find the Evidence:** Familiarize yourself with the Major Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, lessons, homework assignments, and assessments. (Evaluate both student and teacher materials.) Consider time spent on the Major Work of the grade and judge qualitatively whether students and teachers using the materials as designed will devote the large majority of time to the Major Work of the grade. For context, read Criterion #1 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013)	Materials for 3rd grade, My Math devote the majority of lessons and activities to the major works of the grade. Of the 14 chapters in My Math, 11 are focused on the major works within 3rd grade, equaling 78%. With a total of 160 days, 125 are devoted to the major work of the grade, equaling 78%. • Table of Contents (TE) vi-xx • Assessment Masters • Unit Overviews • Individual Lesson Pacing Guides	**(Reviewer only.)** **_X___Meets** **_____Does Not Meet/ Insufficient Evidence**

Metric NN2B: **Supporting work, where present, enhances focus and coherence simultaneously by also engaging students in the Major Work of the grade.** **How to Find the Evidence:** Familiarize yourself with the Major Work and Supporting Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate chapters and lessons that focus on Supporting Work. NOTE: Example of evaluating this Criterion might include looking at whether materials for K–5 generally treat data displays as an occasion for solving grade-level word problems using the four operations (e.g., see 3.MD.B.3); or whether materials for grade 7 take advantage of opportunities to use probability to support ratios, proportions, and percentages. For context, read Criterion #3 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	Supporting materials support, enhance the focus and coherence the Major Work in CCSS standards and math practices. The supporting works for the grade are not isolated from the major works. For example, in **Measurement and Data; Represent and Interpret Data** (a supporting work), connections to using **Develop understanding of fractions as numbers** (a major work) are made. **Evidence:** • Chapter 12. Lesson 6 connects the creation of a line plot with measures halves and fourth of an inch. This connects measurement and data with the fraction standards. • Chapter 12: Represent and Interpret Data connects with Operations and Algebraic Thinking as students answer story problems to place data on graphs. • On-line professional development and extra videos for each chapter	**(Reviewer only.)** **_X___Meets** **____Does Not Meet/ Insufficient Evidence**
Metric NN2C: **Materials base content progressions on the grade-by-grade progressions in the Standards. Content from previous or future grades does not unduly interfere with or displace on-grade-level content.** **How to Find the Evidence:** Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, and lessons in both student and teacher materials. NOTE: In some cases it may be possible that aligned materials might address some aspects of a topic in a strategic way before or after the grade level in which the topic is central in the Standards' progressions; for example, a curriculum author might purposefully choose to explore adding fractions with unlike denominators in a way appropriate to grade four, recognizing that this work is not really required until the next grade. However, any such purposeful discrepancies in content progressions should enhance the required learning in each grade; not unduly interfere with or displace grade-level content; and be clearly aimed at helping students meet the Standards as written rather than effectively rewriting the progressions in the Standards. And in all cases, note that Non-Negotiable 1 must be met for materials to be aligned. For context, read Criterion #5a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	The progressions in the materials match those in the Standards. Discrepancies in the content progressions were minimal and used to enhance learning. Each lesson includes a Coherence portion for teacher reference, which provides a sequence of thinking across the grades. It provides a connection to previous lesson (or previous grade), the current lesson, and the subsequent lesson (or subsequent grade). It is also explicitly states how the lesson links to major topics within the grade. Future grade concepts are not taught in the teacher manual, student manual, or online resources. **Evidence:** • Lesson progressions TE: Chapter 2 Lesson 3 p. 73a Addition Patterns Previous Grade 2 2.Oa.2 NOW Grade 3 3.OA.9 NEXT Grade 4 4.OS.5	**(Reviewer only.)** **__X__Meets** **____Does Not Meet/ Insufficient Evidence**

Metric NN2D: **Materials give all students extensive work with on-grade-level problems.** **How to Find the Evidence:** Evaluate both student and teacher materials. If the materials provide resources for differentiated learning, consider whether lower-performing students have opportunities to engage with grade-level problems. Also consider whether higher-performing students are given opportunities to learn current grade-level content in greater depth. For context, read Criterion #5b in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	The materials give all students the opportunity to work with on grade level problems. Although materials are provided for intervention and remediation, the program does not focus on these sources as a replacement of the core curriculum. Each Lesson includes RTI steps, and identifying what support students may need. Activities for student beyond level (extend) are weak in extending thinking beyond the grade level. **Evidence:** • TE: Chapter 10 Lesson 1: Unit Fractions pg 573A Differentiated Instruction • Teacher guide: Differentiated Instruction • "Am I Ready?" give students and teacher a review and questions to assess the repeated addition concept. This activity is also available on-line.	(Reviewer only.) **_X___Meets** **____Does Not Meet/ Insufficient Evidence**
Metric NN2E: **Materials relate on-grade-level concepts explicitly to prior knowledge from earlier grades.** **How to Find the Evidence:** Evaluate both student and teacher materials. NOTE: Examples of evaluating this Criterion might include looking at the way the materials extend basic ideas of place value across the decimal point; or the role that properties of operations play when the materials extend arithmetic beyond whole numbers to fractions, variables, and expressions. More generally, cluster headings in the Standards sometimes signal key moments where reorganizing and extending previous knowledge is important in order to accommodate new knowledge (e.g., see cluster headings that use the phrase "Apply and extend previous understanding"). For context, read Criterion #5c in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	Materials explicitly relate grade-level concepts to prior knowledge. For teacher reference, each chapter has a "what should my students already know" section. This states what skills student should already possess from the previous grade level. However, connections to previous grade level material or prior knowledge are not explicitly stated in the student materials. **Evidence:** • Chapter 10 TE pg 561E What's the Math in This Chapter? What should my students already know? In the previous grade...What students should understand...what students should be able to do • 2.OA.4 students use Operations and Algebraic Thinking and Operations in Base Ten to gain knowledge of using additon to find the number of total objects arranged in rectangular arrays and skip counting by tens and five, both prerequisites for understanding multiplication.	(Reviewer only.) **__X__Meets** **____Does Not Meet/ Insufficient Evidence**

Metric NN2F: **Review of material from previous grades is clearly identified as such to the teacher, and teacher and students can see what their specific responsibility is for the current year.** **How to Find the Evidence:** Evaluate the table of contents, but do not stop there; also evaluate units, chapters, lessons, homework assignments and assessments. (Evaluate both student and teacher materials.) Identify any content from previous grades and check whether it is identified as such. For context, read Criterion #5a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	Materials are focused on the current grade-level progressions. Previous grade level topics are quickly reviewed as needed in lessons. The materials focus on third grade standards. **Evidence:** • Chapter 10 Lesson 2 Common Core Quick Check-review of the previous lesson TE 575B Overview • Chapter 13 Overview TE 745C-F What students should be able to understand and do • It also lists Mathematical practices 1-5. Another sidebar listed as Coherence list the progression across grades from the previous grades, the current level and the next year's level. The are accurate with respects to CCSS. • Student material briefly lists the previous years standards, lists in explicit form the current year's CCSS standards and standards for mathematical practice in an easy to read and understand format at the beginning of each chapter. MEETS	**(Reviewer only.)** **__X__Meets** **____Does Not Meet/ Insufficient Evidence**
Metric NN2G: **Materials include learning objectives that are visibly shaped by CCSSM cluster headings.** **How to Find the Evidence:** Select several clusters from the Major Work in the grade being evaluated. Evaluate teacher and student materials in relation to these clusters. For context, read Criterion #6a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	A correlation between learning objectives and cluster headings is explicit in the materials. The lesson explicitly states the standards being taught in each lesson. Each lesson identifies the cluster, which the lesson correlates to. Student edition also includes CCSS standards and mathematical practices in student friendly language **Evidence:** • For example, in third grade, a cluster is **solving problems involving measurement and estimation of intervals of time, liquid volumes, and masses of objects.** Chapter 11 Lesson 2 (TE 639A supports the learning of this cluster. The stated lesson objective shows a direct correlation to the major cluster. When a lesson is correlated to a supporting work, the lesson focus identifies that as an additional cluster, Chapter 2, Lesson 8 TE 107A. • Student work example: What are all the possible fruit sorbet combinations if you chose one fruit and one flavor to combine? Students use a colorful tree diagram with 3 fruits and three flavors to solve the problem and reach a solution that ends with a multiplication equation.	**(Reviewer only.)** **_X___Meets** **____Does Not Meet/ Insufficient Evidence**

Metric NN2H: **Materials include problems and activities that serve to connect two or more clusters in a domain, or two or more domains in a grade, in cases where these connections are natural and important.** **How to Find the Evidence:** In the grade being evaluated, choose two or more clusters or two or more domains for which connections are natural and important. Evaluate the units, chapters, and lessons that deal with the chosen topics, looking for problems and activities that serve to connect the chosen clusters or domains. NOTE: An example of evaluating this Criterion might include looking at whether problems in grade 4 sometimes or often involve students applying their developing computation skills (detailed in domain NBT) in the context of solving word problems (detailed in domain OA). For context, read Criterion #6b in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	The materials are weak in connecting clusters and domains. The lesson overview only states one cluster and standard. Upon review of the concepts in the lesson, generally only one standard is taught. In the lesson over view Coherence, links to major topics are stated. Opportunities for connecting multiple standards are missed in the materials. **Evidence:** • Chapter 2: Lesson 7l Adding Three-digit numbers focuses only on the procedural aspects of addition. There is a lack of story problems. • Chapter 2: Lesson 8 107A Linking to Major Topics • Example: Chapter 5, Lesson 5 Inverse Operations addresses 3 OA 4, 3 OA 6 and 3 OA 7, with 3 OA 7 being the major domai: Fluently multiply within 100, using strategies such a the relationship between multiplication and division.	**(Reviewer only.)** **__X__Meets** **____Does Not Meet/** **Insufficient Evidence**
Non-Negotiable 2: **Focus and Coherence** **Materials must focus coherently on the Major Work of the grade in a way that is consistent with the progressions in the Standards.** **NN 2** If all Metrics 2A – 2H were rated as Meets, then rate Non-Negotiable 2 as Meets. If one or more Metric was rated Does Not Meet/Insufficient Evidence, then rate Non-Negotiable 2 as Does Not Meet. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)** **Before moving to Alignment Criterion 1, record the final Meets or Does Not Meet rating in the Evaluation Summary.**		**(Reviewer only.)** **__X__Meets** **____Does Not Meet** **Strengths/Weaknesses:**

Now continue by evaluating the Alignment Criterion 1 for Rigor and Balance.

Directions for Alignment Criterion 1

Rigor and Balance

Alignment Criterion 1: Rigor and Balance **Materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.** The Standards set expectations for attention to all three aspects of rigor: conceptual understanding, procedural skill and fluency, and applications. Thus, materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.	**Required Materials** • Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf) • Focus by Grade Level for the grade being evaluated (achievethecore.org/focus) • Situation Types for the Operations in Word Problems (achievethecore.org/situation-types) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion:** Alignment Criterion 1 is rated as Meets or Does Not Meet. To rate Alignment Criterion 1, first rate metrics 1A, 1B, and 1C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). For each metric, guiding questions are provided to aid in gathering evidence. Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 1 if the materials rate 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as rigor and balance, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.
Metric AC1A: **The materials support the development of students' conceptual understanding of key mathematical concepts, especially where called for in specific content Standards or cluster headings.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Major Work for the grade being evaluated that relate specifically conceptual understanding to use throughout the questions associated with this metric. NOTE: Some examples of clusters or Standards that call for conceptual understanding include: K.OA.A.1, (1.NBT.B, 1.NBT.C), (2.NBT.A, 2.NBT.B), (3.OA.A.1, 3.OA.A.2), 4.NF.A, (4.NBT.A, 4.NBT.B), 5.NF.B, (5.NBT.A, 5.NBT.B), 6.RP.A, 6.EE.A.3, 7.NS.A, 7.EE.A, 8.EE.B, 8.F.A, 8.G.A Clusters or Standards grouped by parentheses are closely connected and could be analyzed together. For context, read Criterion #4a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	-Choose a cluster/Standard from the Major Work that is aligned to each aspect of rigor and use it to evaluate these metrics. It is most helpful if the same clusters/Standards are chosen for all of the programs being evaluated. (Guidance in choosing clusters/Standards is included in "How to Find the Evidence".)	**Use the questions for AC Metric 1A to evaluate Metric 1A. Record evidence for each question and rate Metric 1A.** **____Meets (2)** **__X__Partially Meets (1)** **____Does Not Meet (0)**

Is conceptual understanding attended to thoroughly where the Standards set explicit expectations for understanding or interpreting? Evaluate lessons, chapter/unit assessments and homework assignments, paying attention to work aligned to Standards that explicitly call for understanding or interpreting. NOTE: Examples of evaluating this Criterion might include looking at how well the multi-digit addition and subtraction algorithms are developed and explained on the basis of place value and properties of operations; or how well the multi-digit multiplication and division algorithms are developed and explained on the basis of place value and properties of operations; or how well solving equations is presented and explained as a process of reasoning.	The materials support conceptual understanding of mathematical concepts through varied conceptual problems and questions. Questions range from low difficulty to requiring students make connections between concepts appropriate or the grade level. Evidence: • Connections to place value are made when using models to add. Chapter 2 Lesson 5 SE 93-98. Students use base ten blocks and mat to add numbers with regrouping. • Student worksheets connect addition to place value strategies when adding. SE p. 100-101 • Chapter 6 Lesson4 uses array and area models to teach students multiplying by 5. Students draw arrays and use repeated addition to support conceptual understanding of multiplication.	
Do the materials feature high-quality conceptual problems and conceptual discussion questions? Evaluate lessons, chapter/unit assessments, and homework assignments. NOTE: Example of conceptual problems might include such questions as "Find a number greater than 1/5 and less than 1/4," or "If the divisor does not change and the dividend increases, what happens to the quotient?"	3.OA.1. Interpret product of whole numbers as the total number of objects in 5 groups of 7 objects. The materials are limited in their use of high-quality conceptual problems and conceptual discussion questions. Most questions provided are basic and do not require students to demonstrate their conceptual understanding of topic. • TE 295: How does the multiplication table relate to the addition table? • Describe two strategies you can use to remember the multiplication facts for 2. TE 301-302	
Do the materials feature opportunities to identify correspondences across mathematical representations? Evaluate lessons, chapter/unit assessments and homework assignments. NOTE: Examples of evaluating this Criterion might include looking at whether students are supported in identifying correspondences among: the verbal description of a situation, the diagrams that distill its mathematical features, and the equations that model it; or equivalent forms of numbers (e.g., 3 and 6/2) and the number line; or rational number operations and representations of them via models such as the vector model; or the expression that defines a function and the graph that shows the relationship.	The materials provide correspondence across mathematical representations. However, the connections are weak and sporadic. Evidence: • SE pg 326 # 6-An array is given and students are asked to write an addition sentence and a multiplication sentence. • SE pg 349 When teaching division, a number line and repeated subtraction are shown, but no connection between the two models is made.	

Metric AC1B: **The materials are designed so that students attain the fluencies and procedural skills required by the Standards.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Major Work for the grade being evaluated that relate specifically to fluency and procedural skill to use throughout the questions associated with this metric. NOTE: Some examples of Standards that call for procedural skill and fluency include: K.OA.A.5, 1.OA.C.6, 2.OA.B.2, 2.NBT.B.5, 3.OA.C.7, 3.NBT.A.2, 4.NBT.B.4, 5.NBT.B.5, 6.NS.B.2, and 6.NS.B.3, 6.EE.A, 7.NS.A, 7.EE.A.1,7.EE.B.4a, 8.EE.C.7, 8.EE.C.8b For context, read Criterion #4b in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).		**Use the questions for Metric 1B to evaluate Metric 1 B. Record evidence for each question and rate Metric 1B.** **(Reviewer only.)** **_X___Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Is progress toward fluency and procedural skill interwoven with students' developing conceptual understanding of the operations in question? Evaluate lessons, chapter/unit assessments, daily routines, and homework assignments for evidence that the development of fluency and procedural skill is supported by conceptual understanding.	Student's progression toward fluency is balanced with procedural skills. Students are exposed to a variety of strategies in lessons. However, the strategies, which are based on place-value are often briefly touched on. • In the materials 3.NBT.2 is taught is 14 lessons, which is fourteen days. Students are expected to become fluent in adding and subtracting within 1000 using strategies ad algorithms based on place value during that time. • Chapter 2 Lesson 4 connects addition to expanded form and place value.	
Are purely procedural problems and exercises present that include cases in which opportunistic strategies are valuable and generic cases that require efficient algorithms present? Evaluate lessons, chapter/unit assessments, daily routines, and homework assignments. NOTE: Examples of problems in which opportunistic strategies are valuable might include the sum 698 + 240 or the system $x + y = 1$, $2x + 2y = 3$. Examples of generic cases that require efficient algorithms might include the sum 8767+2286 or the system $6y + x = x + 3$, $-x = 1 + 2y$.	Purely procedural problems which encourage the use of strategies, as well as algorithms are present in the materials. Students have plenty of opportunities to practice procedural problems. Students are transitioned to the traditional algorithm rather quickly. Evidence: • SE pg 173 Independent Practice problems • SE pg 301 Students write an addition sentence and then transition to a multiplication sentence.	
Do the materials in grades K–6 provide repeated practice toward attainment of fluency Standards? Evaluate lessons, daily routines, and homework assignments for evidence of repeated practice toward attainment of the following K–6 Standards that set an explicit expectation of fluent (accurate and reasonably fast) computation: K.OA.A.5, 1.OA.C.6, 2.OA.B.2, 2.NBT.B.5, 3.OA.C.7, 3.NBT.A.2, 4.NBT.B.4, 5.NBT.B.5, 6.NS.B.2, 6.NS.B.3.	The materials provide repeated practice toward the attainment of fluency of NBT.3.2, adding and subtracting multi-digit whole numbers using strategies and algorithms based on place value. However, emphasis is placed on the traditional algorithm. • Lesson independent Practice • Differentiated Instruction activities for each lesson • Fluency Practice SE p. 119; 351 • ConnectED.mcgraw-hill.com	

Metric AC1C: **The materials are designed so that teachers and students spend sufficient time working with engaging applications, without losing focus on the Major Work of each grade.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Major Work for the grade being evaluated that relate specifically application to use throughout the questions associated with this metric. NOTE: Some examples of clusters or Standards that call for application include: K.OA.A.2, 1.OA.A, 2.OA.A, 3.OA.A.3, 3.OA.D.8, 4.OA.A.3, 4.NF.B.3d, 4.NF.B.4c, 5.NF.B.6, 5.NF.B.7c, 6.RP.A.3, 6.NS.A.1, 6.EE.B.7, 6.EE.C.9, 7.RP.A, 7.NS.A.3, 7.EE.B.3, 8.EE.C.8c, 8.F.B For context, read Criterion #4c in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).		**Use the questions for Metric 1C to evaluate Metric 1C. Record evidence for each question and rate Metric 1C.** **(Reviewer only.)** **__X__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Are there are single- and multi-step contextual problems, including non-routine problems, that develop the mathematics of the grade, afford opportunities for practice, and engage students in problem solving? Do the problems attend thoroughly to those places in the content Standards where expectations for multi-step and real-world problems are explicit? Evaluate lessons, chapter/unit assessments, and homework assignments.	Single and multi-step problems are used throughout the materials. The majority of lessons include either single or multi-step word problems in class work, independent practice, and homework. Evidence: • Chapter 2 Lesson 1 pg 61. Sid has 4 blue pes and 5 red pens. Mario had 5 blue pens and 4 red pens. How many pens does each boy have? • Real-World Problems Solving Readers • My Learning Stations includes many activities centered on contextual problems	
Do application problems particularly stress applying the Major Work of the grade? Evaluate lessons, chapter/unit assessments, and homework assignments. NOTE: Examples of evaluating this Criterion might include looking at: how well, by the end of grade 2, students using the materials as designed can represent and solve a full range of one-step addition and subtraction word problems; or how well, by the end of grade 3, students using the materials as designed can represent and solve a full range of one-step multiplication and division word problems; or how well these basic situation types for each operation are carried coherently across the grades, (e.g., with fractions and algebraic expressions); or, in all grades, whether the problems connect concepts, Standards, and domains in ways that are natural and important. For a list of situation types for one-step addition, subtraction, multiplication, and division problems, see Situation Types for the Operations in Word Problems	The major works of the grade are supported through application problems. Varied situation-type problems are used throughout the materials. **Evidence:** • Array of Products: SE pg. 245 Division Arrays • Put Together: The Board Shop sold 342 snowboards and 637 pairs of boots in the last year. About how many snowboards and pairs of boots did they sell altogether. SE p. 87. • Results Unknown: How many more sheets of craft paper does Will have than Lisa?	

Does modeling build slowly across K–8, with applications that are relatively simple in earlier grades and when students are encountering new content? In grades 6–8, do the problems begin to provide opportunities for students to make their own assumptions or simplifications in order to model a situation mathematically? Read Standard for Mathematical Practice 4, Model with Mathematics. Evaluate lessons, chapter/unit assessments, and homework assignments.	The materials use models in most units when introducing new concepts. However, the models are not a major focus of the materials. Connections to multiple models are made, but done so infrequently. The materials seem to transition students away from models quickly. Examples: • Chapter 6 Lesson 3: Uses the array model to teach basic division facts. • Chapter 6 Lesson 5 Uses money to model Multiplication by 5. • Chapter 6 Lesson5 SE pg 315, students draw an array of multiplication sentences. • Chapter 2 Lesson 8 SE pg. 111 students add by place value, but the model used is not labeled.	

Alignment Criterion 1: Rigor and Balance

Materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.

AC1 Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 out of 6 points, the Criterion has not been met. Check the final rating.
Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)**

Before moving to Alignment Criterion 2, record the final Meets or Does Not Meet rating in the Evaluation Summary.

(Reviewer only.)

__X__Meets

____Does Not Meet

Strengths/Weaknesses:

Directions for Alignment Criterion 2

Standards for Mathematical Practice

Alignment Criterion 2: Standards for Mathematical Practice **Materials must demonstrate authentic connections between content Standards and practice Standards.** The Standards require that designers of instructional materials connect the mathematical practices to mathematical content in instruction. Thus, materials must demonstrate authentic connections between content Standards and practice Standards.	**Required Materials:** • Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf) • Focus by Grade Level for the grade being evaluated (www.achievethecore.org/focus) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion** Alignment Criterion 2 is rated as Meets or Does Not Meet. To rate Alignment Criterion 2, first rate metrics 2A, 2B, and 2C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). For each metric, guiding questions are provided to aid in gathering evidence. Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 2 if the materials earn 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as mathematical practices, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.
Metric AC2A: **Materials address the practice Standards in such a way as to enrich the Major Work of the grade; practices strengthen the focus on Major Work instead of detracting from it, in both teacher and student materials.** **How to Find the Evidence:** Familiarize yourself with the Major Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate teacher and student materials for evidence that the mathematical practices support and connect to the focus of the grade. NOTE: Examples of evaluating this Criterion might include looking at whether, in grades K–5, students using the materials are supported to look for and express regularity in repeated reasoning about the addition table, the multiplication table, the properties of operations, the relationship between addition and subtraction or multiplication and division, and the place value system; or whether, in grades 6–8, students using the materials are supported to look for and express regularity in repeated reasoning about proportional relationships and linear functions. For context, read Criterion #8 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013).	The curriculum uses the practice standards to strengthen the focus of the major works, as they integrate the practices into all lessons and daily work. Evidence: • Each lesson identifies practice standards for teachers throughout the lesson. • In the TE, connections to SMP are provided. TE p. 153A Reason Quantitatively: Have students look back at the problems they solved. (more directions provided) • TE pg 313-314 Why might the 5s facts be easier to remember than other facts? (Construct Arguments) • The student edition identifies problems that require the use of mathematical practices. Se pg 350 • Major work for third grade states that Geometric Measurement should demonstrate the understanding of area and relate area to multiplication and division. 10 lessons are solely devoted to area using array model, L x W, tiling models using unit tiles, Distributive property of Multiplication.	**(Reviewer only.)** **_X___Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**

Metric AC2B: **Materials attend to the full meaning of each practice Standard.** **How to Find the Evidence:** For context, read Criterion #7 and Criterion #9 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).		**Use the questions for Metric 2B to evaluate Metric 2B. Record evidence for each question and rate Metric 2B.** **(Reviewer only.)** **__X__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Over the course of any given year of instruction, is each mathematical practice Standard meaningfully present in the form of assignments, activities, or problems that stimulate students to develop the habits of mind described in the practice Standard? Evaluate lessons, chapter/ unit assessments, and homework assignments for evidence of each mathematical practice being meaningfully present in instruction.	The mathematical practice standards are present in each lesson through assignments, activities, and problems. **Evidence:** • SMP are built into the instruction and problems throughout the student book. • Make Sense of Problems: How could the multiplication fact 4 x 12 = 48 be used to find 96÷12? SE pg. 484	
Do the materials treat the practice Standards as developing across grades or grade bands? Are the practice Standards in early grades appropriately simple? Do they display an arc of growing sophistication across the grades?	The practice standards are developed throughout the entire year. This is evident through the daily incorporation of mathematical standards in each lesson.	
Are there teacher-directed materials that explain the role of the practice Standards in the classroom and in students' mathematical development? Are alignments to practice Standards accurate?	The materials provided resources for teachers to strengthen their knowledge and application of the standards for mathematical practice. **Evidence:** • Correlation of lessons to Mathematical Practices TE pg. T22-T24	
Metric AC2C: **Materials support the Standards' emphasis on mathematical reasoning.** **How to Find the Evidence:** For context, read Criterion #10 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).		**Use the questions for Metric 2C to evaluate Metric 2C. Record evidence for each question and rate Metric 2C.** **(Reviewer only.)** **_X___Meets (2)**

Do the materials support students in constructing viable arguments and critiquing the arguments of others concerning grade-level mathematics that is detailed in the content Standards? Read Standard for Mathematical Practice 3. Evaluate teacher and student materials to ensure that students are given opportunities to reason with grade-level mathematics.	The materials place an emphasis on a student's ability to reason and provides numerous opportunities to practice their reasoning skills. However, the questioning required of students is often surface level. Students must explain, justify, show, or prove their thinking daily. Evidence: • Explain the reasoning behind the number sentence you created. TE pg 109-110 • Ask students to explain why it is easy to mentally subtract 10 from a given number. TE pg 133A	____**Partially Meets (1)** ____**Does Not Meet (0)**
Do the materials support students in producing not only answers and solutions, but also, in a grade-appropriate way, arguments, explanations, diagrams, mathematical models, etc., especially in the Major Work of the grade? Familiarize yourself with the Major Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate teacher and student materials, to understand the types of work students are expected to produce.	The materials occasionally require students to produce not only answers but arguments, models, diagrams, and explanations. Evidence: • Students create an array on Independent Practice SE pg. 306 Draw an array for each. • Vocabulary Check: Write or draw the meaning of a bar diagram. SE pg. 306 • Reflect SE pg. 182 How are the operations of subtraction and addition related. Students create a real world problem, model, and vocabulary • Lesson 3, Chapter 3, Subtraction, where students are asked to solve a problem about Arbor Day tree planting at an elementary and high school. Each step is carefully lined out for instruction, in the practice phase students are given a similar problem about students writing stories in 2nd and third grade.	
Do materials explicitly attend to the specialized language of mathematics? Is the language of argument, problem solving, and mathematical explanations taught rather than assumed? Evaluate teacher and student materials, paying attention to how mathematical language is taught. NOTE: Examples of evaluating this Criterion might include looking at whether students are supported in: basing arguments on definitions; using the method of providing a counterexample; or recognizing that examples alone do not establish a general statement.	The materials are weak in their use and teaching of the language of mathematics. Vocabulary is stated for each lesson in the teacher edition. However, explicit instruction on language for argument, problem solving, and mathematical explanations is not evident.	

Alignment Criterion 2:
Standards for Mathematical Practice

Materials must demonstrate authentic connections between content Standards and practice Standards.

AC2 Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 out of 6 points, the Criterion has not been met. Check the final rating.
Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion.
(Reviewer only.)

Before moving to Alignment Criterion 3, record the final Meets or Does Not Meet rating in the Evaluation Summary.

(Reviewer only.)

__X__Meets

____Does Not Meet

Strengths/Weaknesses:

Alignment Criterion 3:
Access to the Standards for All Students

Materials must provide supports for English Language Learners and other special populations.

Because Standards are for all students, alignment requires thoughtful support to ensure all students are able to meet the Standards. Thus, aligned materials must provide supports for English Language Learners and other special populations.

Required Materials:

- Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf)
- Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)
- From the materials being evaluated: teacher guides, student texts and workbooks

Rating this Criterion:
Alignment Criterion 3 is rated as Meets or Does Not Meet.

To rate Alignment Criterion 3, first rate metrics 3A, 3B, and 3C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points).

Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 3 if the materials earn 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as support for special population, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.

Metric AC3A: **Support for English Language Learners and other special populations is thoughtful and helps those students meet the same Standards as all other students. The language in which problems are posed is carefully considered.** **How to Find the Evidence:** Evaluate teacher and student materials, paying attention to supports offered for special populations.	Support for ELLs is provided in the materials through notes in the TE, as well as suggestions for visual models, and visual models in the SE. The Interactive Guide Teacher Edition provides a plethora of strategies for English Language Learners. However, ELL supports are not as strong in the SBAC "Think Smart" guide or the Real World Problem Solving Guide. Evidence: • TE pg 179A Differentiated English Language Learners Support (this is separate from Differentiated Instruction) includes emerging level, expanding level, and bridging level. • English Language Learner Instructional Strategy: Vocabulary Support TE pg 79A • Interactive Guide: TE pg T44 English Learner Instructional Strategy for Lesson 5. Includes a note taking page for students	**Reviewer only.)** **_X___Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Metric AC3B: **Materials provide appropriate level and type of scaffolding, differentiation, intervention, and support for a broad range of learners with gradual removal of supports, when needed, to allow students to demonstrate their mathematical understanding independently.** **How to Find the Evidence:** Evaluate teacher and student materials, paying attention to whether materials provide differentiation that will lead all learners to engage with on-grade-level content.	Through the use of all materials, scaffolding, differentiation and support of diverse learners could be met. At the end of each lesson is a Differentiated Instruction page, which provides teachers with activities, practice, and resources for re-teaching that can be used with students. Online resources include games and re-teaching masters. Evidence: • Differentiated Instruction TE 143A	**Reviewer only.)** **__X__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Metric AC3C: **Design of lessons recommends and facilitates a mix of instructional approaches for a variety of learners such as using multiple representations (e.g., including models, using a range of questions, checking for understanding, flexible grouping, pair-share).** **How to Find the Evidence:** Evaluate teacher materials, noting instructional approaches suggested for whole class and differentiated lessons and activities.	Numerous instructional approaches are included in the materials. Models, pictures, activities, questions, and pair/share are a few of the strategies used throughout a lesson. Evidence: • Hands-On Model Multiplication SE pg 193 • My Drawing SE pg 193. Students draw a representation of their model. • Model the Math TE pg 295B • Talk Math SE pg 384: Explain how knowing 2x7 can help you find 4x7.	**Reviewer only.)** **_X___Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**

Alignment Criterion 3: Access to the Standards for All Students **Materials must provide supports for English Language Learners and other special populations.** AC3 Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 points, the Criterion has not been met. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion.**(Reviewer only.)** **Move to the Evaluation Summary and record the final Meets or Does Not Meet rating .**	**(Reviewer only.)** **_X___Meets** **_____Does Not Meet** **Strengths/Weaknesses:**

Once an evaluation for alignment to the Shifts and major features of the CCSS has been conducted using Sections 1-3, it's important to evaluate for overall quality and best practices. A starting list of Indicators of Quality are suggested below. States, districts and others evaluating instructional materials are encouraged to add to this list to ensure materials reflect local contexts. For background information on some of the Indicators of Quality in this section, refer to pp.18–21 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).

Indicators of Quality	Evidence- Give specific examples.	Rating: (Reviewers only.)
1. Lessons are thoughtfully structured and support the teacher in leading the class through the learning paths at hand, with active participation by all students in their own learning and in the learning of their classmates.	Lessons begin with a review problem of the day. This provides students the opportunity to connect previous learning as well as practice using the mathematical practices. Then the lesson transitions into investigating the math, which involves modeling, then guided practice and independent practice follow. Differentiated instruction for Intensive intervention, Approaching Level, On level and Beyond level is also suggested for each lesson. ELL support is also included in the TE. All lessons are structured in this manner providing students with support and time to become independent. **Evidence:** Lesson Introduction, Guided Practice, Independent Practice,	**(Reviewer only.)** **___X___ Yes** **_____ No**

2. The underlying design of the materials includes both problems and exercises. (In solving problems, students learn new mathematics, whereas in working exercises, students apply what they have already learned to build mastery.) Each problem or exercise has a purpose. **NOTE: This Criterion does not require that the problems and exercises be labeled as such.**	In the Introduction and Modeled and Guided Instruction, students participate in solving problems. As students gain experience and practice with the concept, they transition to solving exercises in the Independent Practice portion of the lesson. The materials are designed is a comprehensive which includea a variety of problem solving activities in a lesson, including algorithms, word problems, drawings, matching, tables, number lines, base ten blocks, vocabulary cards, and foldables.	**(Reviewer only.)** **__X____ Yes** **_____ No**
3. Design of assignments is not haphazard: exercises are given in intentional sequences in order to strengthen students' mathematical understanding.	Chapters and Lesson are designed in an orderly manner that align with CCSS, beginning with a review of addition and subtraction leading into multiplication and division. Operations in Base Ten are placed throughout the chapters. Fractions and measurement follow. Measurement and data follow. **Evidence:** Problems in Independent Practice increase in difficulty through the assignment.	**(Reviewer only.)** **__X____ Yes** **_____ No**
4. There are separate teacher materials that support and reward teacher study including, but not limited to: discussion of the mathematics of the units and the mathematical point of each lesson as it relates to the organizing concepts of the unit, discussion on student ways of thinking and anticipating a variety of students responses, guidance on lesson flow, guidance on questions that prompt students thinking, and discussion of desired mathematical behaviors being elicited among students.	The materials provide teachers support in teaching the lesson. The objective is clearly stated as well as instructions on how to guide students to a deeper mathematical understanding. **Evidence:** • What's the Math in this Chapter (beginning of each chapter) shows what students should already know, what they should understand and what they should be able to do (TE pg 287E-287F). • Professional Development is provided in the online resources at ConnectED	**(Reviewer only.)** **___X___ Yes** **_____ No**
5. Manipulatives suggested in the materials are faithful representations of the mathematical objects they represent and are connected to written methods.	Manipulatives, when suggested are appropriate and are connected to written methods. Foldables are incorporated into each unit and include graphic organizers, which may then connect with the Model the Math in each lesson. The model the math incorporates manipulatives as well as graphic organizers. Foam pieces are lightweight and colorful, longevity is to be seen	**(Reviewer only.)** **_X_____ Yes** **_____ No**

6. Materials include a variety of curriculum-embedded assessments. Examples include pre-, formative, summative, and self-assessment resources.	Many opportunities for assessment are provided throughout the materials. The assessments are varied. **Evidence:** • Homework • Test Practice (on homework SE pg 200). Test Practice: Diagnose Students Errors TE pg 299-300 • Summative Assessment by Chapter • Assessment Masters Teacher Edition include; diagnostic tests, formatives tests, and summative assessments • Check My Progress quizzes • Mathematics Performance Tasks • Exit Slips TE pg 187-388 • eAssessment	**(Reviewer only.)** __X____ **Yes** _____ **No**
7. Assessments contain aligned rubrics, answer keys, and scoring guidelines that provide sufficient guidance for interpreting student performance.	All assessments for the materials contain rubrics, answer keys, and score guides. **Evidence:** • Answer Keys (Assessment Masters) • Performance Task Rubrics • Interim Assessment Solutions TE p.236-238a	**(Reviewer only.)** __X____ **Yes** _____ **No**
8. Materials assess student proficiency using methods that are accessible and unbiased, including the use of course-level language in student prompts.	Materials used to assess for proficiency are appropriate to the grade level, and are not biased. All students receive the same opportunities to display proficiency.	**(Reviewer only.)** ___X___ **Yes** _____ **No**
9. Materials are carefully evaluated by qualified individuals, whose names are listed, in an effort to ensure freedom from mathematical errors and course-level appropriateness.	Authors are listed. Lead authors John A. Cater, Gilbert J. Cuevas, Roger Day, and Carol Malloy	**(Reviewer only.)** ___X___ **Yes** _____ **No**
10. The visual design supports students in engaging thoughtfully with the subject. Navigation through the text is clear.	The materials are difficult to follow. The student pages are very small in the teacher manual. There are numerous colors on a page, which could be distracting for students. • Includes real world activities and ideas. • Children included in photos and drawings are real world and doing third grade student level activities.	**(Reviewer only.)** ___X___ **Yes** _____ **No**

11. The materials engage parents in appropriate ways. For example, homework assignments in elementary grades, consist of routine problems, practice with getting answers, and fluency-building exercises that parents can easily support.	The materials are created to engage parents and support parents and students with math work at home. **Evidence:** Students create foldables and record vocabulary as they learn, which can support the learning at home. Homework is consistent and includes a review of the concept learned, practice, problem solving and vocabulary. Students only receive approximately 9-12 problems for homework. Online help can be accessed by parents at home. Each unit has an overarching theme, a chapter project, and a math at home resource (online).	**(Reviewer only.)** **___X___ Yes** **_____ No**

Reviewer IMET Evaluation Summary **Title/Level: _____My Math_____**

Publisher: _McGraw-Hill_____ Copyright: 2013

ISBN:_____

Reviewer ID # ____AJ, DD **Date Review Completed: March 8, 2016**

Non-Negotiable Criteria- Each Non-Negotiable must be met in order for the Non-Negotiable Alignment Criteria to be met overall.	
Non-Negotiable 1: Freedom from Obstacles to Focus **____X___ Meets** **_____ Does Not Meet**	**Non- Negotiable 2: Focus and Coherence** **_X____ Meets** **_____ Does Not Meet**
Non-Negotiable Overall: **__X___ Meets** **_____ Does Not Meet**	
Alignment Criteria- Each Alignment Criterion must be met with a sufficient number of points in order for Alignment Criteria to be labeled as "Meets" overall. The more points the materials receive on the Alignment Criteria, the better they are aligned.	

Alignment Criterion 1: Rigor and Balance	Alignment Criterion 2: Standards of Mathematical Practice	Alignment Criterion 3: Access to Standards for All Learners
Points: __5___ of 6 possible. **(Materials must receive at least 5 of 6 points to align.)** **__X____ Meets** **_____ Does Not Meet**	**Points: __6___ of 6 possible.** **(Materials must receive at least 5 of 6 points to align.)** **____X___ Meets** **_____ Does Not Meet**	**Points: __6___ of 6 possible.** **(Materials must receive at least 5 of 6 points to align.)** **____X___ Meets** **_____ Does Not Meet**

Alignment Criteria Overall:

__X___ Meets **_____ Does Not Meet**

If the materials meet both Non-Negotiables and relevant Alignment Criterion, they are aligned to the Shifts and major features of the Core Standards. **Do the materials meet every Non-Negotiable and Alignment Criterion? ___X__ Yes _____ No**

What are the specific areas of strength and weakness based on this evaluation? Publishers or others modifying or developing assessments can use this information to make improvements and/or to remedy gaps in the alignment of assessment materials.

Strengths:

Weaknesses:

2015-16 Mathematics Interim Review Recommendation & Summary

Publisher Name:	McGraw-Hill
Title:	My Math
ISBN #	Various
Grade Level(s) or Course:	4
Reviewer ID:	SA, RP

RECOMMENDED AS:

____X____**Core Mathematics Program-** a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials. Substantial evidence clearly supports the designation of this program as Core.

_____**Other Mathematics Program-** a program that substantially, but partially, meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for supplemental materials. Substantial evidence clearly supports the designation of this program as Other.

_____**Component Mathematics Program-** a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs. Substantial evidence clearly supports the designation of this program as Component.

_____**Intervention Program-** a program designed and intended to target and support students' specific needs. Substantial evidence clearly supports the designation of this program as Intervention.

_____ **Does not meet criteria** for recommendation as a Curricular Material or Online Resource for Mathematics.

EVIDENCE SUMMARY:

FOCUS- The materials used by students and teachers have devoted the large majority of time to the Major work of the Grade. The curriculum emphasis is at grade level according to the major work clusters with in the standards. (77%) 9 of 14 chapters are devoted to the major work clusters:

COHERENCE- Supporting work enhances coherence by also engaging students in the major work of grade 4. Each lesson is tied to the Common Core standards.

RIGOR- Materials feature opportunities to identify correspondences across mathematical representations. Students use higher order thinking to engage in discourse to describe or defend their solutions.

CONCEPTUAL UNDERSTANDING- Conceptual understanding is attended to where the standards set explicit expectations for understanding or interpreting. The materials support instilling proficiency and developing conceptual understandings.

MATHEMATICAL PRACTICES- Materials provide focused approach to standards of Mathematical Practice in order to enrich the major work of grade 4. Math Practices are clearly labeled in front of teacher manuals

ACCESSIBILITY OF STANDARDS TO ALL STUDENTS- Materials provide scaffolding, differentiation, intervention and support for a broad range of learners. Every lesson has exact instructional strategies to be taught and has additional differentiated "RTI" instructional activities that may be used.

OTHER:

2015-16 Interim Mathematics Review

Mathematics Evaluation Tool Grades K-8

Publisher: McGraw-Hill

Title of Material: My Math grade 4

Author: Alteri

ISBN #: Various **Copyright** 2013

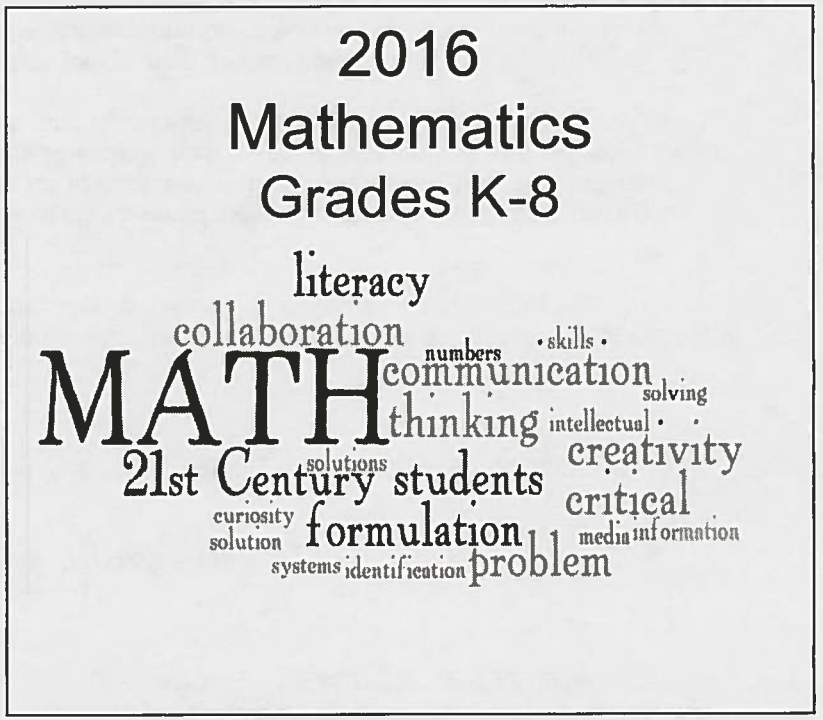
Reviewer ID: SA RP

Core Mathematics Program- a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Core.

Other Mathematics Program- a program that substantially, but partially, meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Other.

Component Mathematics Program- a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs.
Substantial evidence clearly supports the designation of this program as Component.

Intervention Program- a program designed and intended to target and support students' specific needs.
Substantial evidence clearly supports the designation of this program as Intervention.



- Evaluation Form adapted from Instructional Materials Evaluation Toolkit (IMET).

The IMET was developed by Student Achievement Partners. Educators may use or adapt. http://creativecommons.org/licenses/by/3.0/ Download this tool at http://achievethecore.org/IMET

2015-16 Interim Mathematics Review

Mathematics Evaluation Tool Grades K-8

Publisher: McGraw-Hill

Title of Material: My Math Grade 4

Author: Alteri

ISBN #: Various **Copyright** 2013

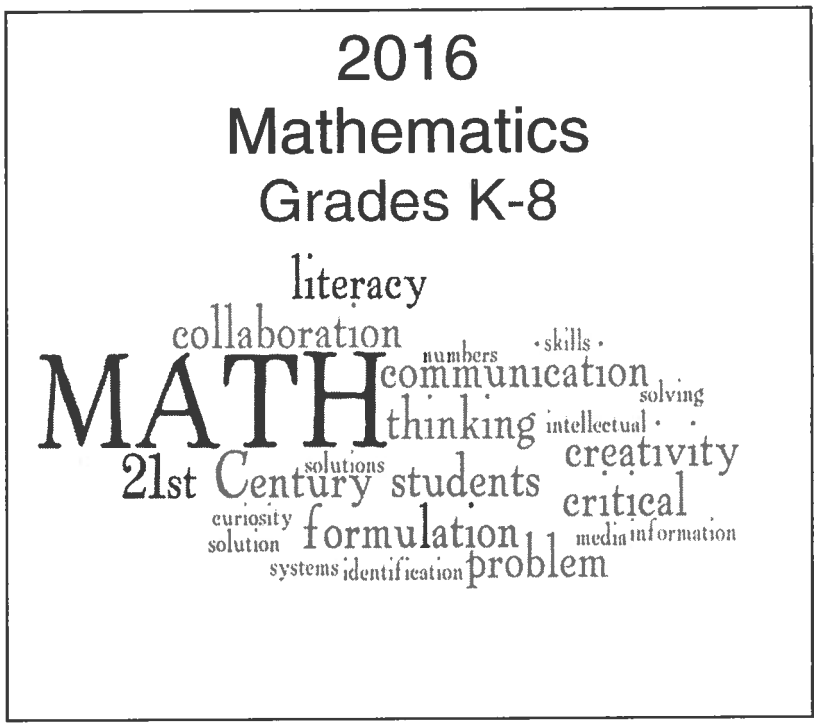
Reviewer ID: SA RP

Core Mathematics Program- a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Core.

Other Mathematics Program- a program that substantially, but partially, meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Other.

Component Mathematics Program- a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs.
Substantial evidence clearly supports the designation of this program as Component.

Intervention Program- a program designed and intended to target and support students' specific needs.
Substantial evidence clearly supports the designation of this program as Intervention.



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Instructional Materials Evaluation Tool
Mathematics, Grades K-8

What Are the Purposes of the IMET?
This Math IMET is designed to help educators determine whether instructional materials are aligned to the Shifts and major features of the Common Core State Standards (CCSS). The substantial instructional Shifts (http://www.corestandards.org/other-resources/key-shifts-inmathematics/) at the heart of the Common Core State Standards are:
- **Focus** strongly where the Standards focus
- **Coherence**: Think across grades and link to major topics within the grade
- **Rigor**: In major topics, pursue conceptual understanding, procedural skill and fluency, and application with equal intensity.

The IMET draws directly from the following documents:
- Common Core State Standards for Mathematics (www.corestandards.org/Math)
- Publishers' Criteria for the Common Core State Standards in Mathematics grade K-8 (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)

When to use the IMET
1. Purchasing materials: Many factors go into local purchasing decisions. Alignment to the Standards is a critical factor to consider. This tool is designed to evaluate alignment of instructional materials to the Shifts and the major features of the CCSS. It also provides suggestions of additional indicators to consider in the materials evaluation and purchasing process.

2. Evaluating materials currently in use: The IMET can be used to analyze the degree of alignment of existing materials and help to highlight specific, concrete flaws in alignment. Even where materials and tools currently in use fail to meet one or more of these criteria, the pattern of failure is likely to be informative. States and districts can use the evaluation to create a thoughtful plan to modify or combine existing resources in such a way that students' actual learning experiences approach the focus, coherence, and rigor of the Standards.

3. Developing programs: Those developing new programs can use this tool as guidance for creating aligned curricula.
Please note this tool was designed for evaluating comprehensive curricula (including any supplemental or ancillary materials), but it was not designed for the evaluation of standalone supplemental materials.

Who Uses the IMET?
Evaluating instructional materials requires both subject-matter and pedagogical expertise. Evaluators should be well versed in the Standards (www.corestandards.org/Math) for all grades in which materials are being evaluated. This includes understanding the Major Work of the grade (www.achievethecore/focus), the Supporting and Additional work, how the content fits into the progressions in the Standards (www.achievethecore.org/progressions), and the expectations of the Standards with respect to conceptual understanding, procedural skill and fluency, and application. Evaluators also should be familiar with the substantial instructional Shifts (http:// www.corestandards.org/other-resources/key-shifts-in-mathematics/) of Focus, Coherence and Rigor that are listed above.

Getting Started
Prior to Evaluation

Assemble all of the materials necessary for the evaluation. It is essential for evaluators to have materials for all grades covered by the program, as some criteria cannot be rated without having access to each grade. In addition, each evaluator should have a reference copy of the Common Core State Standards for Mathematics (CCSSM) and the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013).

Before conducting the evaluation itself, it is important to develop a protocol for the evaluation process. The protocol should include having evaluators study the Publishers' Criteria and the IMET. It will also be helpful for evaluators to get a sense of each program overall before beginning the process. At a minimum, this would include reading the front matter of the text, looking at the table of contents and paging through multiple chapters.

Sections 1-3 below should be completed to produce a comprehensive picture of the strengths and weaknesses of the materials under evaluation. Information about areas in need of improvement or supplementation should be shared with internal and external stakeholders.

Navigating the Tool

Begin with Section 1: Non-Negotiable Alignment Criteria

- The Non-Negotiable Alignment Criteria must each be met in full for materials to be considered aligned to the Shifts and the major features of the Common Core State Standards. Each Non-Negotiable Alignment Criterion has one or more metrics associated with it; every one of these metrics must be met in order for the criterion as a whole to be met.

- Examine the relevant materials and use evidence to rate the materials against each criterion and its associated metric(s).

- Record and explain the evidence upon which the rating is based.

Continue to Section 2: Alignment Criteria

- The Alignment Criteria must each be met for materials to be considered aligned to the Shifts and the major features of the Common Core State Standards. Each Alignment Criterion has one or more metric associated with it; a specific number of these metrics must be met or partially met in order for the criterion as a whole to be met.

- Examine the materials in relation to these criteria, assigning each metric a point value. Rate the criterion as "Meets" or "Does Note Meet" based on the number of points assigned. The more points the materials receive on the alignment Criteria, the better they are aligned.

Record and explain the evidence upon which the rating is based.

Proceed to Section 4: Indicators of Quality

- Indicators of Quality are important considerations that will help evaluators better understand the overall quality of instructional materials. These considerations are not criteria for alignment to the CCSS, but they provide valuable information about additional program characteristics. Evaluators may want to add their own indicators to the examples provided.

Directions for Non-Negotiable 1

Freedom from Obstacles to Focus

Criterion	Evidence- Give specific examples.	Rating: (Reviewer only.)
Non-Negotiable 1: **Freedom from Obstacles to Focus** **Materials must reflect the content architecture of the Standards by not assessing the topics named before the grade level where they first appear in the Standards.** The Standards foster students' progress to algebra by focusing strongly on arithmetic. Consistent with this focus, certain topics from outside of arithmetic appear only in later grades. Thus, to be aligned, materials must reflect the content architecture of the Standards by not assessing the topics named before the grade level where they first appear in the Standards. In this criterion, "topics named" means the topics that are explicitly named in Metric 1A. No other topics should be added to the list in Metric 1A. (Note that other topics in the standards are addressed in criterion NN2.)	**Required Materials** • Common Core State Standards for Mathematics (www.corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf) • From the materials being evaluated: teacher guides and all assessment components	**Rating this Criterion:** Non-Negotiable 1 is rated as Meets or Does Not Meet. To rate Non-Negotiable 1, begin by rating Metric 1A. Since Metric 1A is the only metric for Non-Negotiable 1, the rating for Non-Negotiable 1 is the same as the rating for Metric 1A. If Metric 1A is rated as Does Not Meet, include evidence of when the named topic(s) is/are assessed. If the metric is rated as Meets, list the grade(s) examined in the evaluation.

Metric NN1A: **Materials re[illegible] the basic architecture of the Standards by not assessing the listed topics before the grade level indicated.** • Probability, including chance, likely outcomes, probability models. (Introduced in the CCSSM in grade 7) • Statistical distributions, including center, variation, clumping, outliers, mean, median, mode, range, quartiles; and statistical association or trends, including two-way tables, bivariate measurement data, scatter plots, trend line, line of best fit, correlation. (Introduced in the CCSSM in grade 6) • Similarity, congruence, or geometric transformations. (Introduced in the CCSSM in grade 8) • Symmetry of shapes, including line/ reflection symmetry, rotational symmetry. (Introduced in the CCSSM in grade 4) **How to Find the Evidence:** Evaluate the table of contents, all chapter tests, all unit tests, and other such assessment components (including rubrics). For context, read Criterion #2 from the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013). NOTE: Grade alignments of other topics are addressed in Non-Negotiable 2, Focus and Coherence.) In this criterion, "topics named" means the topics that are explicitly named in Metric 1A. No other topics should be added to the list in Metric 1A. (Note that other topics in the standards are addressed in criterion NN2.)	**Evidence-** All contents reflect[illegible] standards by not assessing the topics before the grade level indicated to the right. Showed overview of domains, clusters, standards, and objectives of entire unit. As well as assessments, materials, and RTI information. Examples: Table of Contents VI Correlation of Standards p. T 17-24 Chapter overviews p.1A, 271A, 685A, 681A	**(Reviewer only.)** **__X__Meets** **____Does Not Meet**
Non-Negotiable 1: Materials must reflect the content architecture of the Standards by not assessing the topics named* before the grade level where they first appear in the Standards. **NN 1** If Metric 1A was rated as Meets, then rate Non-Negotiable 1 as Meets. If Metric 1A was rated as Does Not Meet, then rate Non- Negotiable 1 as Does Not Meet. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion.**(Reviewer only.)** **Before moving to Non-Negotiable 2, record the final Meets or Does Not Meet rating in the Evaluation Summary.**		**(Reviewer only.)** **__X__Meets** **____Does Not Meet** **Strengths/Weaknesses:**

Directions for Non-Negotiable 2

Focus and Coherence

Non-Negotiable 2: **Focus and Coherence** **Materials must focus coherently on the Major Work of the grade in a way that is consistent with the progressions in the Standards.** Focus and coherence are the two major evidence-based design principles of the Common Core State Standards for Mathematics (CCSSM, p. 3). Focus is necessary in order to fulfill the ambitious promise the states have made to their students by adopting the Standards: greater achievement at the college and career ready level; greater depth of understanding of mathematics; and a rich classroom environment in which reasoning, sense-making, applications, and a range of mathematical practices flourish. In simpler terms, a mile-wide, inch-deep curriculum translates to less time per topic. Less time means less depth and moving on without many students. Thus, materials must focus coherently on the Major Work of the grade in a way that is consistent with the progressions in the Standards.	**Required Materials** • Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf) • Focus by Grade Level for the grade being evaluated (www.achievethecore.org/focus) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion:** Non-Negotiable 2 is rated as Meets or Does Not Meet. To rate Non-Negotiable 2, first rate metrics 2A–2H. Each of these eight metrics must be rated as Meets in order for Non-Negotiable 2 to be rated as Meets. Rate each metric 2A-2H as Meets or Does Not Meet/Insufficient Evidence. If the evidence examined shows that the Criterion is met, then mark the Criterion Meets. If the evidence examined shows that the Criterion is not met—or if there is insufficient evidence to make a determination—then mark the Criterion as Does Not Meet/Insufficient Evidence. Support all ratings with evidence.
Metric NN2A: **In each grade K–8, students and teachers using the materials as designed devote the large majority of time to the Major Work of the grade.** **How to Find the Evidence:** Familiarize yourself with the Major Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, lessons, homework assignments, and assessments. (Evaluate both student and teacher materials.) Consider time spent on the Major Work of the grade and judge qualitatively whether students and teachers using the materials as designed will devote the large majority of time to the Major Work of the grade. For context, read Criterion #1 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013)	**Evidence-** The materials used by students and teachers have devoted the large majority of time to the Major Work of the Grade. The curriculum emphasis is at grade level according to the major work clusters with in the standards. (77%) 9 of 14 chapters are devoted to the major work clusters: **Examples:** Contents in Brief VI, Chapter Assessments p. 215-236 in Assessment Book, Homework P. 583	**(Reviewer only.)** **__X__Meets** **____Does Not Meet/** **Insufficient Evidence**

Metric NN2B **Supporting work, where present, enhances focus and coherence simultaneously by also engaging students in the Major Work of the grade.** **How to Find the Evidence:** Familiarize yourself with the Major Work and Supporting Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate chapters and lessons that focus on Supporting Work. NOTE: Example of evaluating this Criterion might include looking at whether materials for K–5 generally treat data displays as an occasion for solving grade-level word problems using the four operations (e.g., see 3.MD.B.3); or whether materials for grade 7 take advantage of opportunities to use probability to support ratios, proportions, and percentages. For context, read Criterion #3 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Supporting work enhances focus and coherence simultaneously by also engaging students in the major work of grade 4. Each lesson is tied to the Common Core standards. Examples: Vocabulary Cards and Foldables, (Teacher Edition pg. 4-9, 128-133, 192-196...) Data displays (Teacher edition pg. 32, 76, 82, 170, 181, 315...) Portable Learning Stations, p. 125G, 321 G Leveled Readers, Virtual online manipulatives.	(Reviewer only.) __X__Meets ____Does Not Meet/ Insufficient Evidence
Metric NN2C: **Materials base content progressions on the grade-by-grade progressions in the Standards. Content from previous or future grades does not unduly interfere with or displace on-grade-level content.** **How to Find the Evidence:** Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, and lessons in both student and teacher materials. NOTE: In some cases it may be possible that aligned materials might address some aspects of a topic in a strategic way before or after the grade level in which the topic is central in the Standards' progressions; for example, a curriculum author might purposefully choose to explore adding fractions with unlike denominators in a way appropriate to grade four, recognizing that this work is not really required until the next grade. However, any such purposeful discrepancies in content progressions should enhance the required learning in each grade; not unduly interfere with or displace grade-level content; and be clearly aimed at helping students meet the Standards as written rather than effectively rewriting the progressions in the Standards. And in all cases, note that Non-Negotiable 1 must be met for materials to be aligned. For context, read Criterion #5a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Materials progress on the grade-by-grade progressions in the Standards. Content from previous or future grades does not interfere with or displace on-grade-level content. Common Core Correlation Standards (Teacher Edition p. T16-T21) Beginning of each chapter has "what should my students already know?" section and a "what will my students do next with these skills?" section. (Teacher Edition pg. T16-T21) Each lesson has focus with domain, cluster, standards, math practices, and coherence.	(Reviewer only.) __X__Meets ____Does Not Meet/ Insufficient Evidence

Metric NN2D **Materials gi[illegible]ll students extensive work with on-grade-level problems.** **How to Find the Evidence:** Evaluate both student and teacher materials. If the materials provide resources for differentiated learning, consider whether lower-performing students have opportunities to engage with grade-level problems. Also consider whether higher-performing students are given opportunities to learn current grade-level content in greater depth. For context, read Criterion #5b in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Materials give all st[illegible]nts extensive work with on-grade-level problems. Assessments help with differentiated learning. Examples: Hands on models Homework P. 215 Diagnostic Assessments (Teacher Edition pg. 3) Independent practice pages may be differentiated (TE pg. 13) All students work from same practice pages. Exit slips may be used (pg. 14) Differentiated Instruction may be used in RTI grouping (TE pg. 15A)	(Reviewer only.) __X__Meets ____Does Not Meet/ Insufficient Evidence
Metric NN2E: **Materials relate on-grade-level concepts explicitly to prior knowledge from earlier grades.** **How to Find the Evidence:** Evaluate both student and teacher materials. NOTE: Examples of evaluating this Criterion might include looking at the way the materials extend basic ideas of place value across the decimal point; or the role that properties of operations play when the materials extend arithmetic beyond whole numbers to fractions, variables, and expressions. More generally, cluster headings in the Standards sometimes signal key moments where reorganizing and extending previous knowledge is important in order to accommodate new knowledge (e.g., see cluster headings that use the phrase "Apply and extend previous understanding"). For context, read Criterion #5c in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Materials relate on-grade-level concepts to prior knowledge from earlier grades. Teachers are made aware of how skills learned previously help with what is taught now, and how what is taught today will help in future skills. Examples: "What's the math in this chapter?" pages help see the correlation between grades. (Teacher Edition pg. 1C-D, 271C-D, 53E-53F, 125E-125F). This section helps teachers see the bridge between content standards.	(Reviewer only.) __X__Meets ____Does Not Meet/ Insufficient Evidence
Metric NN2F: **Review of material from previous grades is clearly identified as such to the teacher, and teacher and students can see what their specific responsibility is for the current year.** **How to Find the Evidence:** Evaluate the table of contents, but do not stop there; also evaluate units, chapters, lessons, homework assignments and assessments. (Evaluate both student and teacher materials.) Identify any content from previous grades and check whether it is identified as such. For context, read Criterion #5a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Review of material from previous grades is clearly identified and teacher and students are able to see what their responsibility is for the current year. Examples: "What's the math in this Chapter?" states core standards from previous grade, what is being taught for the current grade, and what will be taught in the next grade. (Teacher Edition pg. 1C-1D) Also "Coherence: Thinking across the grades" is shown at the beginning of each lesson (TE pg. 11A, 17A, 23A...)	(Reviewer only.) __X__Meets ____Does Not Meet/ Insufficient Evidence

Metric NN2G **Materials include learning objectives that are visibly shaped by CCSSM cluster headings.** **How to Find the Evidence:** Select several clusters from the Major Work in the grade being evaluated. Evaluate teacher and student materials in relation to these clusters. For context, read Criterion #6a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Materials include learning objectives that are shaped by the cluster headings. The beginning of the Teacher Edition states all standards applied throughout the lessons (TE pg. T16-24) Also each lesson has CCSSM domains and clusters listed. (TE 1A-B)	**(Reviewer only.)** **__X__Meets** **____Does Not Meet/ Insufficient Evidence**
Metric NN2H: **Materials include problems and activities that serve to connect two or more clusters in a domain, or two or more domains in a grade, in cases where these connections are natural and important.** **How to Find the Evidence:** In the grade being evaluated, choose two or more clusters or two or more domains for which connections are natural and important. Evaluate the units, chapters, and lessons that deal with the chosen topics, looking for problems and activities that serve to connect the chosen clusters or domains. NOTE: An example of evaluating this Criterion might include looking at whether problems in grade 4 sometimes or often involve students applying their developing computation skills (detailed in domain NBT) in the context of solving word problems (detailed in domain OA). For context, read Criterion #6b in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Materials include problems and activities that serve to connect two or more clusters in a domain, or two or more domains in a grade. Learning objectives reflect goals of CCSSM and help explain the cluster being taught. These are listed under "Focus" at beginning of each lesson. (Teacher Edition p 1A-B: all lessons in the chapter. Pg. 11A: individual lessons. Supplemental book "Countdown to the Common Core" has performance tasks specifically related to the common core standards. Chapter Planners p. 125C-D, 685 C-D, 861A-B	**(Reviewer only.)** **__X__Meets** **____Does Not Meet/ Insufficient Evidence**
Non-Negotiable 2: **Focus and Coherence** **Materials must focus coherently on the Major Work of the grade in a way that is consistent with the progressions in the Standards.** **NN 2** If all Metrics 2A – 2H were rated as Meets, then rate Non-Negotiable 2 as Meets. If one or more Metric was rated Does Not Meet/Insufficient Evidence, then rate Non-Negotiable 2 as Does Not Meet. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)** **Before moving to Alignment Criterion 1, record the final Meets or Does Not Meet rating in the Evaluation Summary.**		**(Reviewer only.)** **__X__Meets** **____Does Not Meet** **Strengths/Weaknesses:** Strength: CCSSM and lesson objectives are quick and easy to find in every chapter as well as in individual lessons.

Now continue by evaluating the Alignment Criterion 1 for Rigor and Balance.

Directions for Alignment Criterion 1

Rigor and Balance

Alignment Criterion 1: Rigor and Balance

Materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.

The Standards set expectations for attention to all three aspects of rigor: conceptual understanding, procedural skill and fluency, and applications. Thus, materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.

Required Materials

- Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf)
- Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)
- Focus by Grade Level for the grade being evaluated (achievethecore.org/focus)
- Situation Types for the Operations in Word Problems (achievethecore.org/situation-types)
- From the materials being evaluated: teacher guides, student texts and workbooks

Rating this Criterion:

Alignment Criterion 1 is rated as Meets or Does Not Meet.

To rate Alignment Criterion 1, first rate metrics 1A, 1B, and 1C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). For each metric, guiding questions are provided to aid in gathering evidence.
Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 1 if the materials rate 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as rigor and balance, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.

Metric AC1A:
The materials support the development of students' conceptual understanding of key mathematical concepts, especially where called for in specific content Standards or cluster headings.

How to Find the Evidence:

Select one or more cluster(s) or Standard(s) from the Major Work for the grade being evaluated that relate specifically conceptual understanding to use throughout the questions associated with this metric. NOTE: Some examples of clusters or Standards that call for conceptual understanding include: K.OA.A.1, (1.NBT.B, 1.NBT.C), (2.NBT.A, 2.NBT.B), (3.OA.A.1, 3.OA.A.2), 4.NF.A, (4.NBT.A, 4.NBT.B), 5.NF.B, (5.NBT.A, 5.NBT.B), 6.RP.A, 6.EE.A.3, 7.NS.A, 7.EE.A, 8.EE.B, 8.F.A, 8.G.A

Clusters or Standards grouped by parentheses are closely connected and could be analyzed together.

For context, read Criterion #4a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).

-Choose a cluster/Standard from the Major Work that is aligned to each aspect of rigor and use it to evaluate these metrics. It is most helpful if the same clusters/Standards are chosen for all of the programs being evaluated. (Guidance in choosing clusters/Standards is included in "How to Find the Evidence".)

Use the questions for AC Metric 1A to evaluate Metric 1A. Record evidence for each question and rate Metric 1A.

__X__Meets (2)

____Partially Meets (1)

____Does Not Meet (0)

Is conceptual understanding attended to thoroughly where the Standards set explicit expectations for understanding or interpreting? Evaluate lessons, chapter/unit assessments and homework assignments, paying attention to work aligned to Standards that explicitly call for understanding or interpreting. NOTE: Examples of evaluating this Criterion might include looking at how well the multi-digit addition and subtraction algorithms are developed and explained on the basis of place value and properties of operations; or how well the multi-digit multiplication and division algorithms are developed and explained on the basis of place value and properties of operations; or how well solving equations is presented and explained as a process of reasoning.	**Evidence-** Conceptual understanding is attended to where the standards set explicit expectations for understanding or interpreting. The materials support instilling proficiency and developing conceptual understandings. Examples: (Teacher Edition pf 507-508) Lessons go from concrete to abstract, to real world problems. Essential Questioning moves to guided practice and independent practice, P. 329-332, 505-508, 485-488.	
Do the materials feature high-quality conceptual problems and conceptual discussion questions? Evaluate lessons, chapter/unit assessments, and homework assignments. NOTE: Example of conceptual problems might include such questions as "Find a number greater than 1/5 and less than 1/4," or "If the divisor does not change and the dividend increases, what happens to the quotient?"	**Evidence-** The materials feature high-quality conceptual problems and discussion questions. The level of complexity increases throughout lessons. Examples: (Teacher Edition pg. 508) "How can you check to see if 2 fractions are equivalent?" (Teacher Edition pg. 514) "How can you check to see if a fraction is in simplest form?"	
Do the materials feature opportunities to identify correspondences across mathematical representations? Evaluate lessons, chapter/unit assessments and homework assignments. NOTE: Examples of evaluating this Criterion might include looking at whether students are supported in identifying correspondences among: the verbal description of a situation, the diagrams that distill its mathematical features, and the equations that model it; or equivalent forms of numbers (e.g., 3 and 6/2) and the number line; or rational number operations and representations of them via models such as the vector model; or the expression that defines a function and the graph that shows the relationship.	**Evidence-** Materials feature opportunities to identify correspondences across mathematical representations. Students use higher order thinking to engage in discourse to describe or defend their solutions. Examples: (Teacher Edition pg. 500) Mathematical practices. (Teacher Edition pg. 508) Mathematical practices	
Metric AC1B: **The materials are designed so that students attain the fluencies and procedural skills required by the Standards.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Major Work for the grade being evaluated that relate specifically to fluency and procedural skill to use throughout the questions associated with this metric. NOTE: Some examples of Standards that call for procedural skill and fluency include: K.OA.A.5, 1.OA.C.6, 2.OA.B.2, 2.NBT.B.5, 3.OA.C.7, 3.NBT.A.2, 4.NBT.B.4, 5.NBT.B.5, 6.NS.B.2, and 6.NS.B.3, 6.EE.A, 7.NS.A, 7.EE.A.1,7.EE.B.4a, 8.EE.C.7, 8.EE.C.8b For context, read Criterion #4b in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).		**Use the questions for Metric 1B to evaluate Metric 1 B. Record evidence for each question and rate Metric 1B.** **(Reviewer only.)** **__X__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**

Is progress toward fluency and procedural skill interwoven with students' developing conceptual understanding of the operations in question? Evaluate lessons, chapter/unit assessments, daily routines, and homework assignments for evidence that the development of fluency and procedural skill is supported by conceptual understanding.	**Evidence-** Fluency progresses throughout the lessons in independent practice (pg. 119, 399). Fluency practice pages (pg. 119-120, as well as online). Problems of the day, quick check.	
Are purely procedural problems and exercises present that include cases in which opportunistic strategies are valuable and generic cases that require efficient algorithms present? Evaluate lessons, chapter/unit assessments, daily routines, and homework assignments. NOTE: Examples of problems in which opportunistic strategies are valuable might include the sum 698 + 240 or the system $x + y = 1$, $2x + 2y = 3$. Examples of generic cases that require efficient algorithms might include the sum 8767+2286 or the system $6y + x = x + 3$, $-x = 1 + 2y$.	**Evidence-** Problems and exercises include chances for students to make use of practice routines to promote automaticity of computational facts and reasoning skills. Examples: Opportunistic strategies (pg. 68 problem #2) Generic cases (pg. 115 problem #5) Math Talk p. 113A-B	
Do the materials in grades K–6 provide repeated practice toward attainment of fluency Standards? Evaluate lessons, daily routines, and homework assignments for evidence of repeated practice toward attainment of the following K–6 Standards that set an explicit expectation of fluent (accurate and reasonably fast) computation: K.OA.A.5, 1.OA.C.6, 2.OA.B.2, 2.NBT.B.5, 3.OA.C.7, 3.NBT.A.2, 4.NBT.B.4, 5.NBT.B.5, 6.NS.B.2, 6.NS.B.3.	**Evidence-** Materials provide repeated practice toward attainment in fluency. Examples: Chapter 2 pertains to specific fluency for grade 4. Many lessons following are used as repeated daily practice of fluency standard. Math in My World p113-114	
Metric AC1C: **The materials are designed so that teachers and students spend sufficient time working with engaging applications, without losing focus on the Major Work of each grade.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Major Work for the grade being evaluated that relate specifically application to use throughout the questions associated with this metric. NOTE: Some examples of clusters or Standards that call for application include: K.OA.A.2, 1.OA.A, 2.OA.A, 3.OA.A.3, 3.OA.D.8, 4.OA.A.3, 4.NF.B.3d, 4.NF.B.4c, 5.NF.B.6, 5.NF.B.7c, 6.RP.A.3, 6.NS.A.1, 6.EE.B.7, 6.EE.C.9, 7.RP.A, 7.NS.A.3, 7.EE.B.3, 8.EE.C.8c, 8.F.B For context, read Criterion #4c in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Materials assist students and teachers to spend sufficient time working with engaging applications without losing focus on the major work of Grade 4. Above listed practices plus learning stations that engage students in learning. The "Making Connections" and "Getting Ready" pages. Examples: Teacher Edition Pages: 53G, 53-54, 125G, 125-126, 189G, 189-190	**Use the questions for Metric 1C to evaluate Metric 1C. Record evidence for each question and rate Metric 1C.** **(Reviewer only.)** **__X__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**

Are there are single and multi-step contextual problems, including non-routine problems, that develop the mathematics of the grade, afford opportunities for practice, and engage students in problem solving? Do the problems attend thoroughly to those places in the content Standards where expectations for multi-step and real-world problems are explicit? Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** There are many single and multi-step problems to engage students in meaningful problem solving strategies. Examples: Story problems are throughout the curriculum including lessons and homework pages (pgs. 78, 436, 680)	
Do application problems particularly stress applying the Major Work of the grade? Evaluate lessons, chapter/unit assessments, and homework assignments. NOTE: Examples of evaluating this Criterion might include looking at: how well, by the end of grade 2, students using the materials as designed can represent and solve a full range of one-step addition and subtraction word problems; or how well, by the end of grade 3, students using the materials as designed can represent and solve a full range of one-step multiplication and division word problems; or how well these basic situation types for each operation are carried coherently across the grades, (e.g., with fractions and algebraic expressions); or, in all grades, whether the problems connect concepts, Standards, and domains in ways that are natural and important. For a list of situation types for one-step addition, subtraction, multiplication, and division problems, see Situation Types for the Operations in Word Problems	**Evidence-** Application problems stress the major work of grade 4. Every lesson uses Higher Order Thinking (HOT) skills that stress the major work. Examples: Pgs. 20, 26, 76	
Does modeling build slowly across K–8, with applications that are relatively simple in earlier grades and when students are encountering new content? In grades 6–8, do the problems begin to provide opportunities for students to make their own assumptions or simplifications in order to model a situation mathematically? Read Standard for Mathematical Practice 4, Model with Mathematics. Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** Modeling builds slowly with applications that are simpler to begin with and increase in depth as year progresses. Lessons build in orderly manner. Examples: (Teacher Edition pg. T23) "Model with Mathematics" information.	

Alignment Criterion 1: Rigor and Balance

Materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.

AC1 Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 out of 6 points, the Criterion has not been met. Check the final rating.
Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)**

Before moving to Alignment Criterion 2, record the final Meets or Does Not Meet rating in the Evaluation Summary.

(Reviewer only.)

__X__Meets

____Does Not Meet

Strengths/Weaknesses:

Strengths: Standards are written clearly and are used for each lesson essential question.

Weakness: Could use more fluency practice daily.

Directions for Alignment Criterion 2

Standards for Mathematical Practice

Alignment Criterion 2: Standards for Mathematical Practice **Materials must demonstrate authentic connections between content Standards and practice Standards.** The Standards require that designers of instructional materials connect the mathematical practices to mathematical content in instruction. Thus, materials must demonstrate authentic connections between content Standards and practice Standards.	**Required Materials:** • Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf) • Focus by Grade Level for the grade being evaluated (www.achievethecore.org/focus) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion** Alignment Criterion 2 is rated as Meets or Does Not Meet. To rate Alignment Criterion 2, first rate metrics 2A, 2B, and 2C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). For each metric, guiding questions are provided to aid in gathering evidence. Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 2 if the materials earn 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as mathematical practices, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.
Metric AC2A: **Materials address the practice Standards in such a way as to enrich the Major Work of the grade; practices strengthen the focus on Major Work instead of detracting from it, in both teacher and student materials.** **How to Find the Evidence:** Familiarize yourself with the Major Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate teacher and student materials for evidence that the mathematical practices support and connect to the focus of the grade. NOTE: Examples of evaluating this Criterion might include looking at whether, in grades K–5, students using the materials are supported to look for and express regularity in repeated reasoning about the addition table, the multiplication table, the properties of operations, the relationship between addition and subtraction or multiplication and division, and the place value system; or whether, in grades 6–8, students using the materials are supported to look for and express regularity in repeated reasoning about proportional relationships and linear functions. For context, read Criterion #8 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013).	**Evidence-** Materials provide focused approach to standards of Mathematical Practice in order to enrich the major work of grade 4. Math Practices are clearly labeled in front of teacher manuals (Teacher Edition T22-24, T393-394). The practices are also labeled on each lesson page. (pg. 19-20, 393). Examples: Math Practice 6, "Attend to Precision", Students communicate precisely with others using mathematical language. Teacher Edition Pgs: 11-12 13-14 17A 23A	**(Reviewer only.)** __X__ **Meets (2)** ____ **Partially Meets (1)** ____ **Does Not Meet (0)**

Metric AC2B **Materials attend to the full meaning of each practice Standard.** **How to Find the Evidence:** For context, read Criterion #7 and Criterion #9 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).		**Use the questions for Metric 2B to evaluate Metric 2B. Record evidence for each question and rate Metric 2B.** **(Reviewer only.)** **__X__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Over the course of any given year of instruction, is each mathematical practice Standard meaningfully present in the form of assignments, activities, or problems that stimulate students to develop the habits of mind described in the practice Standard? Evaluate lessons, chapter/ unit assessments, and homework assignments for evidence of each mathematical practice being meaningfully present in instruction.	**Evidence-** Math Practices are clearly labeled at beginning of Teacher Text (T22-24) as well as in individual lessons (T17A-B) and practice pages (17-18, 19-20). All math practices are used throughout the year. Example pages in Teacher Edition: MP1: 17B, 453-454 MP5: 23-24, 839A MP2: 11B, 729-730 MP6: 17A, 931-932 MP3: 19-20, 631A MP7: 45-46, 801A MP4: 13-14, 135B MP8: 61B, 709-710	
Do the materials treat the practice Standards as developing across grades or grade bands? Are the practice Standards in early grades appropriately simple? Do they display an arc of growing sophistication across the grades?	**Evidence-** Math Practices are labeled at the beginning of each lesson (511A). Examples develop in sophistication from beginning of year lessons (37A) to end of year lessons (673-674).	
Are there teacher-directed materials that explain the role of the practice Standards in the classroom and in students' mathematical development? Are alignments to practice Standards accurate?	**Evidence-** Teacher Manual explain the role of math practices in each lesson Example: Teacher Edition pg. 61A-66	
Metric AC2C: **Materials support the Standards' emphasis on mathematical reasoning.** **How to Find the Evidence:** For context, read Criterion #10 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	"My Math" materials support the standards' emphasis on mathematical reason. It provides many opportunities for students to reason mathematically. Students are asked to describe and defend their work.	**Use the questions for Metric 2C to evaluate Metric 2C. Record evidence for each question and rate Metric 2C.** **(Reviewer only.)** **__X__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Do the materials support students in constructing viable arguments and critiquing the arguments of others concerning grade-level mathematics that is detailed in the content Standards? Read Standard for Mathematical Practice 3. Evaluate teacher and student materials to ensure that students are given opportunities to reason with grade-level mathematics.	**Evidence-** Materials support students in constructing and critiquing arguments. Students have prompts within lessons to describe their understanding of concepts labeled "Talk Math". Examples: pgs. 24, 142, 224, 388	

Do the materials support students in producing not only answers and solutions, but also, in a grade-appropriate way, arguments, explanations, diagrams, mathematical models, etc., especially in the Major Work of the grade? Familiarize yourself with the Major Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate teacher and student materials, to understand the types of work students are expected to produce.	**Evidence-** Materials help students produce solutions as well as arguments and models for major work of grade 4. Higher Order Thinking (HOT) problems allow students to formulate and articulate reasoning and understanding of essential questions of major work of the grade. Examples: pgs. 64, 250, 428	
Do materials explicitly attend to the specialized language of mathematics? Is the language of argument, problem solving, and mathematical explanations taught rather than assumed? Evaluate teacher and student materials, paying attention to how mathematical language is taught. NOTE: Examples of evaluating this Criterion might include looking at whether students are supported in: basing arguments on definitions; using the method of providing a counterexample; or recognizing that examples alone do not establish a general statement.	**Evidence-** Materials attend to mathematical language. "My Math" has vocabulary cards and new vocabulary outlined in each lesson. These words help assess students' understanding of connections between mathematical language and symbols. Examples: Teacher Edition pgs.: 56-58, 61A 128, 274)	

Alignment Criterion 2:
Standards for Mathematical Practice

Materials must demonstrate authentic connections between content Standards and practice Standards.

AC2 Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 out of 6 points, the Criterion has not been met. Check the final rating.
Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion.
(Reviewer only.)

Before moving to Alignment Criterion 3, record the final Meets or Does Not Meet rating in the Evaluation Summary.

(Reviewer only.)

_X___Meets

____Does Not Meet

Strengths/Weaknesses:
Strengths: Math practices, standards and vocabulary are clearly represented and labeled in each lesson.

Alignment Criterion 3: **Access to the Standards for All Students** **Materials must provide supports for English Language Learners and other special populations.** Because Standards are for all students, alignment requires thoughtful support to ensure all students are able to meet the Standards. Thus, aligned materials must provide supports for English Language Learners and other special populations.	**Required Materials:** • Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion:** Alignment Criterion 3 is rated as Meets or Does Not Meet. To rate Alignment Criterion 3, first rate metrics 3A, 3B, and 3C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 3 if the materials earn 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as support for special population, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.
Metric AC3A: **Support for English Language Learners and other special populations is thoughtful and helps those students meet the same Standards as all other students. The language in which problems are posed is carefully considered.** **How to Find the Evidence:** Evaluate teacher and student materials, paying attention to supports offered for special populations.	**Evidence-** Every lesson has an "ELL" instructional component to help students with language barriers. Each lesson also includes differentiated activities to help all students to progress and gain success. Examples: Teacher Edition pgs. 61A, 65A, 527A	**Reviewer only.)** __X__Meets (2) ____Partially Meets (1) ____Does Not Meet (0)
Metric AC3B: **Materials provide appropriate level and type of scaffolding, differentiation, intervention, and support for a broad range of learners with gradual removal of supports, when needed, to allow students to demonstrate their mathematical understanding independently.** **How to Find the Evidence:** Evaluate teacher and student materials, paying attention to whether materials provide differentiation that will lead all learners to engage with on-grade-level content.	**Evidence-** Materials provide scaffolding, differentiation, intervention and support for a broad range of learners. Every lesson has exact instructional strategies to be taught and has additional differentiated "RTI" instructional activities that may be used. Example: Teacher Edition pg. 41A ELL Strategies 61A, 67A	**Reviewer only.)** __X__Meets (2) ____Partially Meets (1) ____Does Not Meet (0)
Metric AC3C: **Design of lessons recommends and facilitates a mix of instructional approaches for a variety of learners such as using multiple representations (e.g., including models, using a range of questions, checking for understanding, flexible grouping, pair-share).** **How to Find the Evidence:** Evaluate teacher materials, noting instructional approaches suggested for whole class and differentiated lessons and activities.	**Evidence-** Lessons incorporate many strategies for a variety of learners using multiple representations. Examples: (Teacher Edition pages 161A-166) Also available in: literature connections, investigations, ELL strategies, math modeling, guided practice, math conversations, independent practices, vocabulary, and assessments.	**Reviewer only.)** __X__Meets (2) ____Partially Meets (1) ____Does Not Meet (0)

Alignment Criterion 3: Access to the Standards for All Students **Materials must provide supports for English Language Learners and other special populations.** **AC3** Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 points, the Criterion has not been met. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion.**(Reviewer only.)** **Move to the Evaluation Summary and record the final Meets or Does Not Meet rating .**	**(Reviewer only.)** **__X__Meets** **____Does Not Meet** **Strengths/Weaknesses:** Strengths: Every lesson contains ELL instruction and differentiated activities.

Once an evaluation for alignment to the Shifts and major features of the CCSS has been conducted using Sections 1-3, it's important to evaluate for overall quality and best practices. A starting list of Indicators of Quality are suggested below. States, districts and others evaluating instructional materials are encouraged to add to this list to ensure materials reflect local contexts. For background information on some of the Indicators of Quality in this section, refer to pp.18–21 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).

Indicators of Quality	Evidence- Give specific examples.	Rating: (Reviewers only.)
1. Lessons are thoughtfully structured and support the teacher in leading the class through the learning paths at hand, with active participation by all students in their own learning and in the learning of their classmates.	**Evidence-** Lessons develop from review then move to an investigation, math model explicit instruction, guided practice, independent practice and end with formative assessment. 5 step plan of instruction 197A-202, 537A-542.	**(Reviewer only.)** **__X____ Yes** **_____ No**
2. The underlying design of the materials includes both problems and exercises. (In solving problems, students learn new mathematics, whereas in working exercises, students apply what they have already learned to build mastery.) Each problem or exercise has a purpose. **NOTE: This Criterion does not require that the problems and exercises be labeled as such.**	**Evidence-** Lessons have multiple strategies included in guided and independent practices: Algorithms, story problems, equations, and explanation of reasoning all help students learn new procedures and apply them to real-life situations. What's the Math p. 189E-F, 321E-F.	**(Reviewer only.)** **___X___ Yes** **_____ No**

3. Design of assignments is not haphazard: exercises are given in intentional sequences in order to strengthen students' mathematical understanding.	**Evidence-** Lessons are arranged to go from guided practice with the teacher, or in small groups, and moves into independent practices and extra practices. Complexity of lessons progress throughout a unit. Flow of teaching is given in instructional sequence to develop student understanding. P.561A-566	(Reviewer only.) ___X___ Yes _____ No
4. There are separate teacher materials that support and reward teacher study including, but not limited to: discussion of the mathematics of the units and the mathematical point of each lesson as it relates to the organizing concepts of the unit, discussion on student ways of thinking and anticipating a variety of students responses, guidance on lesson flow, guidance on questions that prompt students thinking, and discussion of desired mathematical behaviors being elicited among students.	**Evidence-** There are suggestions of furthering teacher development of concepts online at connected.mcgraw-hill.com. There is some background knowledge embedded in the beginning of each lesson, but not enough to further teachers' knowledge base. However, the lesson scripts are comprehensive enough to allow teachers to teach efficiently.	(Reviewer only.) ___X___ Yes _____ No
5. Manipulatives suggested in the materials are faithful representations of the mathematical objects they represent and are connected to written methods.	**Evidence-** Manipulatives are listed at the beginning of each chapter unit listed under "foldables". Also some individual lessons also include manipulatives to help students move from concrete to abstract reasoning (Teacher Edition pg. 499-500). All manipulatives are structurally efficient and faithful representations. P. 274-278, 626-630	(Reviewer only.) __X____ Yes _____ No
6. Materials include a variety of curriculum-embedded assessments. Examples include pre-, formative, summative, and self-assessment resources.	**Evidence-** Each chapter begins with diagnostic assessments (pg. 477). Most lessons contain a formative assessment (pg. 83-84, 508). Each chapter has a summative assessment which may be printed out or taken online (pg. 552A). Also online resources.	(Reviewer only.) __X____ Yes _____ No
7. Assessments contain aligned rubrics, answer keys, and scoring guidelines that provide sufficient guidance for interpreting student performance.	**Evidence-** Rubrics and student models are in a separate assessment manual with keys.	(Reviewer only.) ___X___ Yes _____ No

8. Materials [illegible]ss student proficiency using methods that are accessible and unbiased, including the use of course-level language in student prompts.	**Evidence-** Assessment manual co[illegible]ins tests, tasks, rubrics, and student examples. These are unbiased and include course-level language. Test forms A & B. Assessment book page 69-72.	(Reviewer only.) ___X___ Yes _____ No
9. Materials are carefully evaluated by qualified individuals, whose names are listed, in an effort to ensure freedom from mathematical errors and course-level appropriateness.	**Evidence-** Experts are listed at the beginning of the Teacher Edition manuals pages xxii-xxv.	(Reviewer only.) ___X___ Yes _____ No
10. The visual design supports students in engaging thoughtfully with the subject. Navigation through the text is clear.	**Evidence-** Overall appearance is appealing to the eye. Manuals are in color. Text is clearly printed. Some extra paper may be needed to work algorithms since there is not much room on practice pages. Examples: Student book p. 99-106, 631-636.	(Reviewer only.) ___X___ Yes _____ No
11. The materials engage parents in appropriate ways. For example, homework assignments in elementary grades, consist of routine problems, practice with getting answers, and fluency-building exercises that parents can easily support.	**Evidence-** Parent letters and "Math at Home" pages are in each chapter. Also each homework page gives information to help students and parents be successful in understanding the essential question of the day. Example: Homework Unit 9 Lesson 9 p. 617-618, Unit 5 Lesson 4 p.303-304	(Reviewer only.) __X____ Yes _____ No

Reviewer IMET Evaluation Summary **Title/Level** **_My Math Grade 4_**

Publisher: _McGraw Hill_ Copyright: ____2013_____ ISBN:_____Various_____

Reviewer ID # _SA RP_____ Date Review Completed:_____3-7-2016_____

Non-Negotiable Criteria- Each Non-Negotiable must be met in order for the Non-Negotiable Alignment Criteria to be met overall.

Non-Negotiable 1: Freedom from Obstacles to Focus	Non- Negotiable 2: Focus and Coherence
____X___ Meets _____ Does Not Meet	___X__ Meets _____ Does Not Meet

Non-Negotiable Overall:

__X___ Meets _____ Does Not Meet

Alignment Criteria- Each Alignment Criterion must be met with a sufficient number of points in order for Alignment Criteria to be labeled as "Meets" overall. The more points the materials receive on the Alignment Criteria, the better they are aligned.

Alignment Criterion 1: Rigor and Balance	Alignment Criterion 2: Standards of Mathematical Practice	Alignment Criterion 3: Access to Standards for All Learners
Points: __6___ of 6 possible. (Materials must receive at least 5 of 6 points to align.) ____X___ Meets _____ Does Not Meet	Points: __6___ of 6 possible. (Materials must receive at least 5 of 6 points to align.) ____X__ Meets _____ Does Not Meet	Points: ___6__ of 6 possible. (Materials must receive at least 5 of 6 points to align.) ____X___ Meets _____ Does Not Meet

Alignment Criteria Overall:

___X__ Meets _____ Does Not Meet

If the mate[illegible] meet both Non-Negotiables and relevant Alignment C[illegible]ion, they are aligned to the Shifts and major features [illegible]he Core Standards. **Do the materials meet every Non-Negotiable and Alignment Criterion? ___X__ Yes _____ No**

What are the specific areas of strength and weakness based on this evaluation? Publishers or others modifying or developing assessments can use this information to make improvements and/or to remedy gaps in the alignment of assessment materials.

2015-16 Mathematics Interim Review Recommendation & Summary

Publisher Name:	McGraw-Hill
Title:	My Math
ISBN #	Various
Grade Level(s) or Course:	5
Reviewer ID:	RP, SB

RECOMMENDED AS:

____X____Core Mathematics Program- a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials. Substantial evidence clearly supports the designation of this program as Core.

_____Other Mathematics Program- a program that substantially, but partially, meets the *focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for* supplemental materials. Substantial evidence clearly supports the designation of this program as Other.

_____Component Mathematics Program- a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs. Substantial evidence clearly supports the designation of this program as Component.

_____Intervention Program- a program designed and intended to target and support students' specific needs. Substantial evidence clearly supports the designation of this program as Intervention.

_____ Does not meet criteria for recommendation as a Curricular Material or Online Resource for Mathematics.

2015-16 Interim Mathematics Review

Mathematics Evaluation Tool Grades K-8

Publisher: McGraw-Hill School Education, LLC

Title of Material: My Math Grade 5

Author: Altieri

ISBN #: various **Copyright** 2013

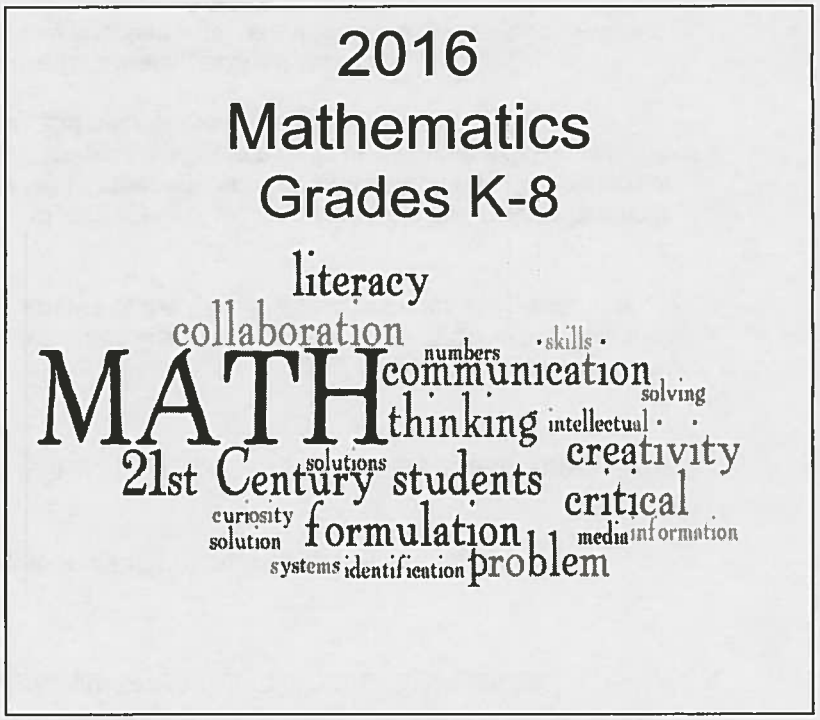
Reviewer ID: RP, SB

Core Mathematics Program- a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Core.

Other Mathematics Program- a program that substantially, but partially, meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Other.

Component Mathematics Program- a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs.
Substantial evidence clearly supports the designation of this program as Component.

Intervention Program- a program designed and intended to target and support students' specific needs.
Substantial evidence clearly supports the designation of this program as Intervention.



- Evaluation Form adapted from Instructional Materials Evaluation Toolkit (IMET).

The IMET was developed by Student Achievement Partners. Educators may use or adapt. http://creativecommons.org/licenses/by/3.0/ Download this tool at http://achievethecore.org/IMET

2015-16 Interim Mathematics Review

Mathematics Evaluation Tool Grades K-8

Publisher: McGraw-Hill

Title of Material: My Math Grade 5

Author: Alteri

ISBN #: Vaious **Copyright** 2013

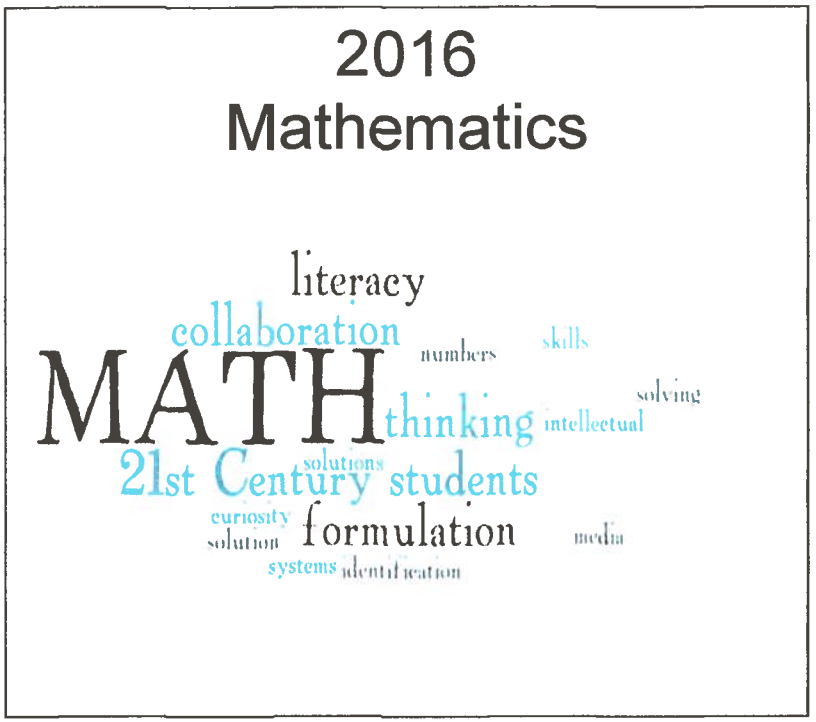
Reviewer ID: RP, SB

Core Mathematics Program- a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Core.

Other Mathematics Program- a program that substantially, but partially, meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Other.

Component Mathematics Program- a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs.
Substantial evidence clearly supports the designation of this program as Component.

Intervention Program- a program designed and intended to target and support students' specific needs.
Substantial evidence clearly supports the designation of this program as Intervention.



- Evaluation Form adapted from Instructional Materials Evaluation Toolkit (IMET).

The IMET was developed by Student Achievement Partners. Educators may use or adapt. http://creativecommons.org/licenses/by/3.0/ Download this tool at http://achievethecore.org/IMET

Instructional Materials Evaluation Tool
Mathematics, Grades K-8

What Are the Purposes of the IMET?
This Math IMET is designed to help educators determine whether instructional materials are aligned to the Shifts and major features of the Common Core State Standards (CCSS). The substantial instructional Shifts (http://www.corestandards.org/other-resources/key-shifts-inmathematics/) at the heart of the Common Core State Standards are:
- **Focus** strongly where the Standards focus
- **Coherence**: Think across grades and link to major topics within the grade
- **Rigor**: In major topics, pursue conceptual understanding, procedural skill and fluency, and application with equal intensity.

The IMET draws directly from the following documents:
- Common Core State Standards for Mathematics (www.corestandards.org/Math)
- Publishers' Criteria for the Common Core State Standards in Mathematics grade K-8 (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)

When to use the IMET
1. Purchasing materials: Many factors go into local purchasing decisions. Alignment to the Standards is a critical factor to consider. This tool is designed to evaluate alignment of instructional materials to the Shifts and the major features of the CCSS. It also provides suggestions of additional indicators to consider in the materials evaluation and purchasing process.

2. Evaluating materials currently in use: The IMET can be used to analyze the degree of alignment of existing materials and help to highlight specific, concrete flaws in alignment. Even where materials and tools currently in use fail to meet one or more of these criteria, the pattern of failure is likely to be informative. States and districts can use the evaluation to create a thoughtful plan to modify or combine existing resources in such a way that students' actual learning experiences approach the focus, coherence, and rigor of the Standards.

3. Developing programs: Those developing new programs can use this tool as guidance for creating aligned curricula.
Please note this tool was designed for evaluating comprehensive curricula (including any supplemental or ancillary materials), but it was not designed for the evaluation of standalone supplemental materials.

Who Uses the IMET?
Evaluating instructional materials requires both subject-matter and pedagogical expertise. Evaluators should be well versed in the Standards (www.corestandards.org/Math) for all grades in which materials are being evaluated. This includes understanding the Major Work of the grade (www.achievethecore/focus), the Supporting and Additional work, how the content fits into the progressions in the Standards (www.achievethecore.org/progressions), and the expectations of the Standards with respect to conceptual understanding, procedural skill and fluency, and application. Evaluators also should be familiar with the substantial instructional Shifts (http:// www.corestandards.org/other-resources/key-shifts-in-mathematics/) of Focus, Coherence and Rigor that are listed above.

Getting Started
Prior to Evaluation

Assemble all of the materials necessary for the evaluation. It is essential for evaluators to have materials for all grades covered by the program, as some criteria cannot be rated without having access to each grade. In addition, each evaluator should have a reference copy of the Common Core State Standards for Mathematics (CCSSM) and the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013).

Before conducting the evaluation itself, it is important to develop a protocol for the evaluation process. The protocol should include having evaluators study the Publishers' Criteria and the IMET. It will also be helpful for evaluators to get a sense of each program overall before beginning the process. At a minimum, this would include reading the front matter of the text, looking at the table of contents and paging through multiple chapters.

Sections 1-3 below should be completed to produce a comprehensive picture of the strengths and weaknesses of the materials under evaluation. Information about areas in need of improvement or supplementation should be shared with internal and external stakeholders.

Navigating the Tool

Begin with Section 1: Non-Negotiable Alignment Criteria

- The Non-Negotiable Alignment Criteria must each be met in full for materials to be considered aligned to the Shifts and the major features of the Common Core State Standards. Each Non-Negotiable Alignment Criterion has one or more metrics associated with it; every one of these metrics must be met in order for the criterion as a whole to be met.

- Examine the relevant materials and use evidence to rate the materials against each criterion and its associated metric(s).

- Record and explain the evidence upon which the rating is based.

Continue to Section 2: Alignment Criteria

- The Alignment Criteria must each be met for materials to be considered aligned to the Shifts and the major features of the Common Core State Standards. Each Alignment Criterion has one or more metric associated with it; a specific number of these metrics must be met or partially met in order for the criterion as a whole to be met.

- Examine the materials in relation to these criteria, assigning each metric a point value. Rate the criterion as "Meets" or "Does Note Meet" based on the number of points assigned. The more points the materials receive on the alignment Criteria, the better they are aligned.

- Record and explain the evidence upon which the rating is based.

Proceed to Section 4: Indicators of Quality

- Indicators of Quality are important considerations that will help evaluators better understand the overall quality of instructional materials. These considerations are not criteria for alignment to the CCSS, but they provide valuable information about additional program characteristics. Evaluators may want to add their own indicators to the examples provided.

Directions for Non-Negotiable 1

Freedom from Obstacles to Focus

Criterion	Evidence- Give specific examples.	Rating: (Reviewer only.)
Non-Negotiable 1: **Freedom from Obstacles to Focus** **Materials must reflect the content architecture of the Standards by not assessing the topics named before the grade level where they first appear in the Standards.** The Standards foster students' progress to algebra by focusing strongly on arithmetic. Consistent with this focus, certain topics from outside of arithmetic appear only in later grades. Thus, to be aligned, materials must reflect the content architecture of the Standards by not assessing the topics named before the grade level where they first appear in the Standards. In this criterion, "topics named" means the topics that are explicitly named in Metric 1A. No other topics should be added to the list in Metric 1A. (Note that other topics in the standards are addressed in criterion NN2.)	**Required Materials** • Common Core State Standards for Mathematics (www.corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf) • From the materials being evaluated: teacher guides and all assessment components	**Rating this Criterion**: Non-Negotiable 1 is rated as Meets or Does Not Meet. To rate Non-Negotiable 1, begin by rating Metric 1A. Since Metric 1A is the only metric for Non-Negotiable 1, the rating for Non-Negotiable 1 is the same as the rating for Metric 1A. If Metric 1A is rated as Does Not Meet, include evidence of when the named topic(s) is/are assessed. If the metric is rated as Meets, list the grade(s) examined in the evaluation.

Metric NN1A: **Materials reflect the basic architecture of the Standards by not assessing the listed topics before the grade level indicated.** • Probability, including chance, likely outcomes, probability models. (Introduced in the CCSSM in grade 7) • Statistical distributions, including center, variation, clumping, outliers, mean, median, mode, range, quartiles; and statistical association or trends, including two-way tables, bivariate measurement data, scatter plots, trend line, line of best fit, correlation. (Introduced in the CCSSM in grade 6) • Similarity, congruence, or geometric transformations. (Introduced in the CCSSM in grade 8) • Symmetry of shapes, including line/ reflection symmetry, rotational symmetry. (Introduced in the CCSSM in grade 4) **How to Find the Evidence:** Evaluate the table of contents, all chapter tests, all unit tests, and other such assessment components (including rubrics). For context, read Criterion #2 from the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013). NOTE: Grade alignments of other topics are addressed in Non-Negotiable 2, Focus and Coherence.) In this criterion, "topics named" means the topics that are explicitly named in Metric 1A. No other topics should be added to the list in Metric 1A. (Note that other topics in the standards are addressed in criterion NN2.)	**Evidence-** All contents reflect standards by not assessing the topics before the grade level indicated to the right.	**(Reviewer only.)** **__X__Meets** **____Does Not Meet**
Non-Negotiable 1: Materials must reflect the content architecture of the Standards by not assessing the topics named* before the grade level where they first appear in the Standards. **NN 1** If Metric 1A was rated as Meets, then rate Non-Negotiable 1 as Meets. If Metric 1A was rated as Does Not Meet, then rate Non- Negotiable 1 as Does Not Meet. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion.**(Reviewer only.)** **Before moving to Non-Negotiable 2, record the final Meets or Does Not Meet rating in the Evaluation Summary.**		**(Reviewer only.)** **__X__Meets** **____Does Not Meet** **Strengths/Weaknesses:**

Directions for Non-Negotiable 2

Focus and Coherence

Non-Negotiable 2:

Focus and Coherence

Materials must focus coherently on the Major Work of the grade in a way that is consistent with the progressions in the Standards.

Focus and coherence are the two major evidence-based design principles of the Common Core State Standards for Mathematics (CCSSM, p. 3). Focus is necessary in order to fulfill the ambitious promise the states have made to their students by adopting the Standards: greater achievement at the college and career ready level; greater depth of understanding of mathematics; and a rich classroom environment in which reasoning, sense-making, applications, and a range of mathematical practices flourish. In simpler terms, a mile-wide, inch-deep curriculum translates to less time per topic. Less time means less depth and moving on without many students. Thus, materials must focus coherently on the Major Work of the grade in a way that is consistent with the progressions in the Standards.

Required Materials

- Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf)
- Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)
- Focus by Grade Level for the grade being evaluated (www.achievethecore.org/focus)
- From the materials being evaluated: teacher guides, student texts and workbooks

Rating this Criterion:

Non-Negotiable 2 is rated as Meets or Does Not Meet.

To rate Non-Negotiable 2, first rate metrics 2A–2H. Each of these eight metrics must be rated as Meets in order for Non-Negotiable 2 to be rated as Meets. Rate each metric 2A-2H as Meets or Does Not Meet/Insufficient Evidence. If the evidence examined shows that the Criterion is met, then mark the Criterion Meets. If the evidence examined shows that the Criterion is not met—or if there is insufficient evidence to make a determination—then mark the Criterion as Does Not Meet/Insufficient Evidence. Support all ratings with evidence.

Metric NN2A: **In each grad -8, students and teachers using the materials as designed devote the large majority of time to the Major Work of the grade.** **How to Find the Evidence:** Familiarize yourself with the Major Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, lessons, homework assignments, and assessments. (Evaluate both student and teacher materials.) Consider time spent on the Major Work of the grade and judge qualitatively whether students and teachers using the materials as designed will devote the large majority of time to the Major Work of the grade. For context, read Criterion #1 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013)	**Evidence-** The materials used tudents and teachers have devoted the large majority of time to the Major Work of the Grade. The curriculum emphasis is at grade level according to the major work clusters with in the standards. 10 of 12 chapters (83%) are devoted to the major work clusters. The following gives examples of the Chapters: 1) place value 2) x whole numbers 3) ÷ whole numbers 4) ÷ by 2 digit numbers 5) +, - decimal numbers 6) x, ÷ decimal numbers 8) fractions and decimals 9) +, - fractions 10) x, ÷ fractions 12) Geometric Measurement	(Reviewer only.) __X__Meets ____Does Not Meet/ Insufficient Evidence
Metric NN2B: **Supporting Work, where present, enhances focus and coherence simultaneously by also engaging students in the Major Work of the grade.** **How to Find the Evidence:** Familiarize yourself with the Major Work and Supporting Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate chapters and lessons that focus on Supporting Work. NOTE: Example of evaluating this Criterion might include looking at whether materials for K–5 generally treat data displays as an occasion for solving grade-level word problems using the four operations (e.g., see 3.MD.B.3); or whether materials for grade 7 take advantage of opportunities to use probability to support ratios, proportions, and percentages. For context, read Criterion #3 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Supporting work enhances focus and coherence simultaneously by also engaging students in the major work of grade 5. Each lesson is tied to the Common Core standards. Examples: Vocabulary Cards and Foldables, (Teacher Edition pg. 4-10, 74-80, 152-156...) Data displays for real-world problems (Teacher edition pg. 20, 46, 52...)	(Reviewer only.) __X__Meets ____Does Not Meet/ Insufficient Evidence

Metric NN2C: **Materials base content progressions on the grade-by-grade progressions in the Standards. Content from previous or future grades does not unduly interfere with or displace on-grade-level content.** **How to Find the Evidence:** Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, and lessons in both student and teacher materials. NOTE: In some cases it may be possible that aligned materials might address some aspects of a topic in a strategic way before or after the grade level in which the topic is central in the Standards' progressions; for example, a curriculum author might purposefully choose to explore adding fractions with unlike denominators in a way appropriate to grade four, recognizing that this work is not really required until the next grade. However, any such purposeful discrepancies in content progressions should enhance the required learning in each grade; not unduly interfere with or displace grade-level content; and be clearly aimed at helping students meet the Standards as written rather than effectively rewriting the progressions in the Standards. And in all cases, note that Non-Negotiable 1 must be met for materials to be aligned. For context, read Criterion #5a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Materials progress the grade-by-grade progressions in the Standards. Content from previous or future grades does not interfere with or displace on-grade-level content. Common Core Correlation Standards (Teacher Edition p. T16-T21) Beginning of each chapter has "what should my students already know?" section and a "what will my students do next with these skills?" section. (Teacher Edition pg. T16-T21, 1E-1F)	**(Reviewer only.)** **__X__Meets** **____Does Not Meet/** **Insufficient Evidence**
Metric NN2D: **Materials give all students extensive work with on-grade-level problems.** **How to Find the Evidence:** Evaluate both student and teacher materials. If the materials provide resources for differentiated learning, consider whether lower-performing students have opportunities to engage with grade-level problems. Also consider whether higher-performing students are given opportunities to learn current grade-level content in greater depth. For context, read Criterion #5b in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Materials give all students extensive work with on-grade-level problems. Assessments help with differentiated learning. Examples: Diagnostic Assessments (Teacher Edition pg 3) Independent practice pages may be differentiated (TE pg. 31-32) All students work from same practice pages. Exit slips may be used (pg. 34) Differentiated Instruction may be used in RTI grouping (TE pg 15A)	**(Reviewer only.)** **__X__Meets** **____Does Not Meet/** **Insufficient Evidence**

Metric NN2E: **Materials relate on-grade-level concepts explicitly to prior knowledge from earlier grades.** **How to Find the Evidence:** Evaluate both student and teacher materials. NOTE: Examples of evaluating this Criterion might include looking at the way the materials extend basic ideas of place value across the decimal point; or the role that properties of operations play when the materials extend arithmetic beyond whole numbers to fractions, variables, and expressions. More generally, cluster headings in the Standards sometimes signal key moments where reorganizing and extending previous knowledge is important in order to accommodate new knowledge (e.g., see cluster headings that use the phrase "Apply and extend previous understanding"). For context, read Criterion #5c in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Materials relate on-grade-level concepts to prior knowledge from earlier grades. Teachers are made aware of how skills learned previously help with what is taught now, and how what is taught today will help in future skills. Examples: "What's the math in this chapter?" pages help see the correlation between grades. (Teacher Edition pg 71E-71F, 149G-149H). This section helps teachers see the bridge between content standards.	**(Reviewer only.)** **__X__Meets** **____Does Not Meet/ Insufficient Evidence**
Metric NN2F: **Review of material from previous grades is clearly identified as such to the teacher, and teacher and students can see what their specific responsibility is for the current year.** **How to Find the Evidence:** Evaluate the table of contents, but do not stop there; also evaluate units, chapters, lessons, homework assignments and assessments. (Evaluate both student and teacher materials.) Identify any content from previous grades and check whether it is identified as such. For context, read Criterion #5a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Review of material from previous grades is clearly identified and teacher and students are able to see what their responsibility is for the current year. Examples: "What's the math in this Chapter?" states core standards from previous grade, what is being taught for the current grade, and what will be taught in the next grade. (Teacher Edition pg 149G-149H) Also "Coherence: Thinking across the grades" is shown at the beginning of each lesson (TE pg. 163A, 201A, 23A...)	**(Reviewer only.)** **__X__Meets** **____Does Not Meet/ Insufficient Evidence**
Metric NN2G: **Materials include learning objectives that are visibly shaped by CCSSM cluster headings.** **How to Find the Evidence:** Select several clusters from the Major Work in the grade being evaluated. Evaluate teacher and student materials in relation to these clusters. For context, read Criterion #6a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Materials include learning objectives that are shaped by the cluster headings. The beginning of the Teacher Edition states all standards applied throughout the lessons (TE pg. T16-24) Also each lesson has CCSSM domains and clusters listed. (TE 1A-B)	**(Reviewer only.)** **__X__Meets** **____Does Not Meet/ Insufficient Evidence**

Metric NN2H: **Materials include problems and activities that serve to connect two or more clusters in a domain, or two or more domains in a grade, in cases where these connections are natural and important.** **How to Find the Evidence:** In the grade being evaluated, choose two or more clusters or two or more domains for which connections are natural and important. Evaluate the units, chapters, and lessons that deal with the chosen topics, looking for problems and activities that serve to connect the chosen clusters or domains. NOTE: An example of evaluating this Criterion might include looking at whether problems in grade 4 sometimes or often involve students applying their developing computation skills (detailed in domain NBT) in the context of solving word problems (detailed in domain OA). For context, read Criterion #6b in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Materials include problems and activities that serve to connect two or more clusters in a domain, or two or more domains in a grade. Learning objectives reflect goals of CCSSM and help explain the cluster being taught. These are listed under "Focus" at beginning of each lesson. (Teacher Edition p 1A-B: all lessons in the chapter. Pg. 11A: individual lessons.)`` Supplemental book "Countdown to the Common Core" has performance tasks specifically related to the common core standards.	**(Reviewer only.)** **__X__Meets** **____Does Not Meet/ Insufficient Evidence**

Non-Negotiable 2:

Focus and Coherence

Materials must focus coherently on the Major Work of the grade in a way that is consistent with the progressions in the Standards.

(Reviewer only.)

__X__Meets

____Does Not Meet

NN 2 If all Metrics 2A – 2H were rated as Meets, then rate Non-Negotiable 2 as Meets. If one or more Metric was rated Does Not Meet/Insufficient Evidence, then rate Non-Negotiable 2 as Does Not Meet. Check the final rating.
Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)**

Strengths/Weaknesses:
Strength: CCSSM and lesson objectives are quick and easy to find in every chapter as well as in individual lessons.

Before moving to Alignment Criterion 1, record the final Meets or Does Not Meet rating in the Evaluation Summary.

Now continue by evaluating the Alignment Criterion 1 for Rigor and Balance.

Directions for Alignment Criterion 1

Rigor and Balance

Alignment Criterion 1: Rigor and Balance **Materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.** The Standards set expectations for attention to all three aspects of rigor: conceptual understanding, procedural skill and fluency, and applications. Thus, materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.	**Required Materials** • Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf) • Focus by Grade Level for the grade being evaluated (achievethecore.org/focus) • Situation Types for the Operations in Word Problems (achievethecore.org/situation-types) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion:** Alignment Criterion 1 is rated as Meets or Does Not Meet. To rate Alignment Criterion 1, first rate metrics 1A, 1B, and 1C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). For each metric, guiding questions are provided to aid in gathering evidence. Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 1 if the materials rate 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as rigor and balance, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.
Metric AC1A: **The materials support the development of students' conceptual understanding of key mathematical concepts, especially where called for in specific content Standards or cluster headings.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Major Work for the grade being evaluated that relate specifically conceptual understanding to use throughout the questions associated with this metric. NOTE: Some examples of clusters or Standards that call for conceptual understanding include: K.OA.A.1, (1.NBT.B, 1.NBT.C), (2.NBT.A, 2.NBT.B), (3.OA.A.1, 3.OA.A.2), 4.NF.A, (4.NBT.A, 4.NBT.B), 5.NF.B, (5.NBT.A, 5.NBT.B), 6.RP.A, 6.EE.A.3, 7.NS.A, 7.EE.A, 8.EE.B, 8.F.A, 8.G.A Clusters or Standards grouped by parentheses are closely connected and could be analyzed together. For context, read Criterion #4a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	-Choose a cluster/Standard from the Major Work that is aligned to each aspect of rigor and use it to evaluate these metrics. It is most helpful if the same clusters/Standards are chosen for all of the programs being evaluated. (Guidance in choosing clusters/Standards is included in "How to Find the Evidence".)	**Use the questions for AC Metric 1A to evaluate Metric 1A. Record evidence for each question and rate Metric 1A.** **__X__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**

Is conceptual understanding attended to thoroughly where the Standards set explicit expectations for understanding or interpreting? Evaluate lessons, chapter/unit assessments and homework assignments, paying attention to work aligned to Standards that explicitly call for understanding or interpreting. NOTE: Examples of evaluating this Criterion might include looking at how well the multi-digit addition and subtraction algorithms are developed and explained on the basis of place value and properties of operations; or how well the multi-digit multiplication and division algorithms are developed and explained on the basis of place value and properties of operations; or how well solving equations is presented and explained as a process of reasoning.	**Evidence-** Conceptual understanding is attended to where the standards set explicit expectations for understanding or interpreting. The materials support instilling proficiency and developing conceptual understandings. Examples: (Teacher Edition pg. 551A-556) Lessons go from concrete to abstract, to real world problems. Fractions: Start with writing a fraction for part that is shaded, moves to finding equivalent fraction and circling equivalent fractions, to finding unknown numerator or denominator, and finally to story problems involving fractions.	
Do the materials feature high-quality conceptual problems and conceptual discussion questions? Evaluate lessons, chapter/unit assessments, and homework assignments. NOTE: Example of conceptual problems might include such questions as "Find a number greater than 1/5 and less than 1/4," or "If the divisor does not change and the dividend increases, what happens to the quotient?"	**Evidence-** The materials feature high-quality conceptual problems and discussion questions. The level of complexity increases throughout lessons. Examples: (Teacher Edition pg. 554) "How can division be represented by using a fraction?" (Teacher Edition pg. 566) "Why is it important to be able to write a fraction in simplest form?"	
Do the materials feature opportunities to identify correspondences across mathematical representations? Evaluate lessons, chapter/unit assessments and homework assignments. NOTE: Examples of evaluating this Criterion might include looking at whether students are supported in identifying correspondences among: the verbal description of a situation, the diagrams that distill its mathematical features, and the equations that model it; or equivalent forms of numbers (e.g., 3 and 6/2) and the number line; or rational number operations and representations of them via models such as the vector model; or the expression that defines a function and the graph that shows the relationship.	**Evidence-** Materials feature opportunities to identify correspondences across mathematical representations. Students use higher order thinking to engage in discourse to describe or defend their solutions. Examples: (Teacher Edition pg. 157A-162) vocabulary needed, literature book "A Place for Zero", patterns, fact families, number sense, story problems	

Metric AC1B: **The materials are designed so that students attain the fluencies and procedural skills required by the Standards.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Major Work for the grade being evaluated that relate specifically to fluency and procedural skill to use throughout the questions associated with this metric. NOTE: Some examples of Standards that call for procedural skill and fluency include: K.OA.A.5, 1.OA.C.6, 2.OA.B.2, 2.NBT.B.5, 3.OA.C.7, 3.NBT.A.2, 4.NBT.B.4, 5.NBT.B.5, 6.NS.B.2, and 6.NS.B.3, 6.EE.A, 7.NS.A, 7.EE.A.1,7.EE.B.4a, 8.EE.C.7, 8.EE.C.8b For context, read Criterion #4b in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).		**Use the questions for Metric 1B to evaluate Metric 1 B. Record evidence for each questi[illegible]d rate Metric 1B.** **(Reviewer only.)** **__X__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Is progress toward fluency and procedural skill interwoven with students' developing conceptual understanding of the operations in question? Evaluate lessons, chapter/unit assessments, daily routines, and homework assignments for evidence that the development of fluency and procedural skill is supported by conceptual understanding.	**Evidence-** Fluency progresses throughout the lessons in independent practice (pg. 101, 393). There are also specific fluency practice pages teachers may use for student use. (pg. 143-144, as well as online).	
Are purely procedural problems and exercises present that include cases in which opportunistic strategies are valuable and generic cases that require efficient algorithms present? Evaluate lessons, chapter/unit assessments, daily routines, and homework assignments. NOTE: Examples of problems in which opportunistic strategies are valuable might include the sum 698 + 240 or the system x + y = 1, 2x + 2y = 3. Examples of generic cases that require efficient algorithms might include the sum 8767+2286 or the system 6y + x = x + 3, – x = 1 + 2y.	**Evidence-** Problems and exercises include chances for students to make use of practice routines to promote automaticity of computational facts and reasoning skills. Examples: Opportunistic strategies (pg. 23) Generic cases (pg. 139)	
Do the materials in grades K–6 provide repeated practice toward attainment of fluency Standards? Evaluate lessons, daily routines, and homework assignments for evidence of repeated practice toward attainment of the following K–6 Standards that set an explicit expectation of fluent (accurate and reasonably fast) computation: K.OA.A.5, 1.OA.C.6, 2.OA.B.2, 2.NBT.B.5, 3.OA.C.7, 3.NBT.A.2, 4.NBT.B.4, 5.NBT.B.5, 6.NS.B.2, 6.NS.B.3.	**Evidence-** Materials provide repeated practice toward attainment in fluency. Examples: Chapter 2 pertains to specific fluency for grade 4. Many lessons following are used as repeated daily practice of fluency standard.	

Metric AC1C: **The materials are designed so that teachers and students spend sufficient time working with engaging applications, without losing focus on the Major Work of each grade.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Major Work for the grade being evaluated that relate specifically application to use throughout the questions associated with this metric. NOTE: Some examples of clusters or Standards that call for application include: K.OA.A.2, 1.OA.A, 2.OA.A, 3.OA.A.3, 3.OA.D.8, 4.OA.A.3, 4.NF.B.3d, 4.NF.B.4c, 5.NF.B.6, 5.NF.B.7c, 6.RP.A.3, 6.NS.A.1, 6.EE.B.7, 6.EE.C.9, 7.RP.A, 7.NS.A.3, 7.EE.B.3, 8.EE.C.8c, 8.F.B For context, read Criterion #4c in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Materials assist students and teachers to spend sufficient time working with engaging applications without losing focus on the major work of Grade 5. The "Making Connections" and "Getting Ready" pages at beginning of each chapter help fulfill this requirement. Examples: Teacher Edition Pages: 1G, 1-2, 71G, 71-72, 371 G	**Use the questions for Metric 1C to evaluate Metric 1C. Record evidence for each question and rate Metric 1C.** **(Reviewer only.)** **__X__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Are there are single- and multi-step contextual problems, including non-routine problems, that develop the mathematics of the grade, afford opportunities for practice, and engage students in problem solving? Do the problems attend thoroughly to those places in the content Standards where expectations for multi-step and real-world problems are explicit? Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** There are many single-step and multi-step problems to engage students in meaningful problem solving strategies. Examples: Story problems are throughout the curriculum including lessons and homework pages (pgs. 140, 204, 238)	
Do application problems particularly stress applying the Major Work of the grade? Evaluate lessons, chapter/unit assessments, and homework assignments. NOTE: Examples of evaluating this Criterion might include looking at: how well, by the end of grade 2, students using the materials as designed can represent and solve a full range of one-step addition and subtraction word problems; or how well, by the end of grade 3, students using the materials as designed can represent and solve a full range of one-step multiplication and division word problems; or how well these basic situation types for each operation are carried coherently across the grades, (e.g., with fractions and algebraic expressions); or, in all grades, whether the problems connect concepts, Standards, and domains in ways that are natural and important. For a list of situation types for one-step addition, subtraction, multiplication, and division problems, see Situation Types for the Operations in Word Problems	**Evidence-** Application problems stress the major work of grade 5. Every lesson uses Higher Order Thinking (HOT) skills that stress the major work. Examples: Pgs. 58, 102, 134	
Does modeling build slowly across K–8, with applications that are relatively simple in earlier grades and when students are encountering new content? In grades 6–8, do the problems begin to provide opportunities for students to make their own assumptions or simplifications in order to model a situation mathematically? Read Standard for Mathematical Practice 4, Model with Mathematics. Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** Modeling builds slowly with applications that are simpler to begin with and increase in depth as year progresses. Lessons build in orderly manner. Examples: (Teacher Edition pg. T23) "Model with Mathematics" information.	

Alignment Criterion 1: Rigor and Balance

Materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.

AC1 Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 out of 6 points, the Criterion has not been met. Check the final rating.
Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)**

Before moving to Alignment Criterion 2, record the final Meets or Does Not Meet rating in the Evaluation Summary.

(Reviewer only.)

__X__Meets

____Does Not Meet

Strengths/Weaknesses:

Strengths: Standards are written clearly and are used for each lesson essential question.

Weakness: Could use more fluency practice daily.

Directions for Alignment Criterion 2

Standards for Mathematical Practice

Alignment Criterion 2: Standards for Mathematical Practice

Materials must demonstrate authentic connections between content Standards and practice Standards.

The Standards require that designers of instructional materials connect the mathematical practices to mathematical content in instruction. Thus, materials must demonstrate authentic connections between content Standards and practice Standards.

Required Materials:

- Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf)
- Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)
- Focus by Grade Level for the grade being evaluated (www.achievethecore.org/focus)
- From the materials being evaluated: teacher guides, student texts and workbooks

Rating this Criterion

Alignment Criterion 2 is rated as Meets or Does Not Meet.

To rate Alignment Criterion 2, first rate metrics 2A, 2B, and 2C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). For each metric, guiding questions are provided to aid in gathering evidence.

Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 2 if the materials earn 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as mathematical practices, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.

Metric AC2A: **Materials address the practice Standards in such a way as to enrich the Major Work of the grade; practices strengthen the focus on Major Work instead of detracting from it, in both teacher and student materials.** **How to Find the Evidence:** Familiarize yourself with the Major Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate teacher and student materials for evidence that the mathematical practices support and connect to the focus of the grade. NOTE: Examples of evaluating this Criterion might include looking at whether, in grades K–5, students using the materials are supported to look for and express regularity in repeated reasoning about the addition table, the multiplication table, the properties of operations, the relationship between addition and subtraction or multiplication and division, and the place value system; or whether, in grades 6–8, students using the materials are supported to look for and express regularity in repeated reasoning about proportional relationships and linear functions. For context, read Criterion #8 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013).	**Evidence-** Materials provide focused approach to standards of Mathematical Practice in order to enrich the major work of grade 5. Math Practices are clearly labeled in front of teacher manuals (Teacher Edition T22-24). The practices are also labeled on each lesson page. (pg. 19-20). Examples: Math Practice 6, "Attend to Precision", Students communicate precisely with others using mathematical language. Teacher Edition Pgs: 11-12 13-14 17A	**(Reviewer only.)** **__X__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Metric AC2B: **Materials attend to the full meaning of each practice Standard.** **How to Find the Evidence:** For context, read Criterion #7 and Criterion #9 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).		**Use the questions for Metric 2B to evaluate Metric 2B. Record evidence for each question and rate Metric 2B.** **(Reviewer only.)** **__X__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Over the course of any given year of instruction, is each mathematical practice Standard meaningfully present in the form of assignments, activities, or problems that stimulate students to develop the habits of mind described in the practice Standard? Evaluate lessons, chapter/ unit assessments, and homework assignments for evidence of each mathematical practice being meaningfully present in instruction.	**Evidence-** Math Practices are clearly labeled at beginning of Teacher Text (T22-24) as well as in individual lessons (T17A-B) and practice pages (17-18, 19-20). All math practices are used throughout the year. Example pages in Teacher Edition: MP1: 17B, 393-394 MP2: 27-28, 279-280 MP3: 21-22, 183B MP4: 23-24, 379B MP5: 23-24, 437A MP6: 11A, 563-564 MP7: 49B, 157-158 MP8: 37A, 99-100	

Do the materials treat the practice Standards as developing across grades or grade bands? Are the practice Standards in early grades appropriately simple? Do they display an arc of growing sophistication across the grades?	**Evidence-** Math Practices are labeled at the beginning of each lesson (29A). Examples develop in sophistication from beginning of year lessons to end of year lessons.	
Are there teacher-directed materials that explain the role of the practice Standards in the classroom and in students' mathematical development? Are alignments to practice Standards accurate?	**Evidence-** Teacher Manual explains the role of math practices in each lesson Example: Teacher Edition pg. 23A-28	
Metric AC2C: **Materials support the Standards' emphasis on mathematical reasoning.** **How to Find the Evidence:** For context, read Criterion #10 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	"My Math" materials support the standards' emphasis on mathematical reason. It provides many opportunities for students to reason mathematically. Students are asked to describe and defend their work.	**Use the questions for Metric 2C to evaluate Metric 2C. Record evidence for each question and rate Metric 2C.** **(Reviewer only.)** **__X__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Do the materials support students in constructing viable arguments and critiquing the arguments of others concerning grade-level mathematics that is detailed in the content Standards? Read Standard for Mathematical Practice 3. Evaluate teacher and student materials to ensure that students are given opportunities to reason with grade-level mathematics.	**Evidence-** Materials support students in constructing and critiquing arguments. Students have prompts within lessons to describe their understanding of concepts labeled "Talk Math". Examples: pgs. 30, 44, 82	
Do the materials support students in producing not only answers and solutions, but also, in a grade-appropriate way, arguments, explanations, diagrams, mathematical models, etc., especially in the Major Work of the grade? Familiarize yourself with the Major Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate teacher and student materials, to understand the types of work students are expected to produce.	**Evidence-** Materials help students produce solutions as well as arguments and models for major work of grade 5. Higher Order Thinking (HOT) problems allow students to formulate and articulate reasoning and understanding of essential questions of major work of the grade. Examples: pgs. 68, 122, 134	
Do materials explicitly attend to the specialized language of mathematics? Is the language of argument, problem solving, and mathematical explanations taught rather than assumed? Evaluate teacher and student materials, paying attention to how mathematical language is taught. NOTE: Examples of evaluating this Criterion might include looking at whether students are supported in: basing arguments on definitions; using the method of providing a counterexample; or recognizing that examples alone do not establish a general statement.	**Evidence-** Materials attend to mathematical language. "My Math" has vocabulary cards and new vocabulary outlined in each lesson. These words help assess students' understanding of connections between mathematical language and symbols. Examples: Teacher Edition pgs.: 74-80, 81A	

Alignment Criterion 2:
Standards for Mathematical Practice

Materials must demonstrate authentic connections between content Standards and practice Standards.

AC2 Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 out of 6 points, the Criterion has not been met. Check the final rating.
Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion.
(Reviewer only.)

(Reviewer only.)

_X___Meets

____Does Not Meet

Strengths/Weaknesses:
Strengths: Math practices, standards and vocabulary are clearly represented and labeled in each lesson.

Before moving to Alignment Criterion 3, record the final Meets or Does Not Meet rating in the Evaluation Summary.

Alignment Criterion 3:
Access to the Standards for All Students

Materials must provide supports for English Language Learners and other special populations.

Because Standards are for all students, alignment requires thoughtful support to ensure all students are able to meet the Standards. Thus, aligned materials must provide supports for English Language Learners and other special populations.

Required Materials:

- Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf)
- Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)
- From the materials being evaluated: teacher guides, student texts and workbooks

Rating this Criterion:
Alignment Criterion 3 is rated as Meets or Does Not Meet.

To rate Alignment Criterion 3, first rate metrics 3A, 3B, and 3C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points).

Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 3 if the materials earn 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as support for special population, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.

Metric AC3A:
Support for English Language Learners and other special populations is thoughtful and helps those students meet the same Standards as all other students. The language in which problems are posed is carefully considered.

How to Find the Evidence:
Evaluate teacher and student materials, paying attention to supports offered for special populations.

Evidence-
Every lesson has an "ELL" instructional component to help students with language barriers. Each lesson also includes differentiated activities to help all students to progress and gain success.
Examples: Teacher Edition pgs. 81A, 303A

Reviewer only.)

__X__Meets (2)

____Partially Meets (1)

____Does Not Meet (0)

Metric AC3B: **Materials pr[illegible]e appropriate level and type of scaffolding, differentiation, intervention, and support for a broad range of learners with gradual removal of supports, when needed, to allow students to demonstrate their mathematical understanding independently.** **How to Find the Evidence:** Evaluate teacher and student materials, paying attention to whether materials provide differentiation that will lead all learners to engage with on-grade-level content.	**Evidence-** Materials provide sca[illegible]ding, differentiation, intervention and support for a broad range of learners. Every lesson has exact instructional strategies to be taught and has additional differentiated "RTI" instructional activities that may be used. Example: Teacher Edition pg. 307A	**Reviewer only.)** __X__Meets (2) ____Partially Meets (1) ____Does Not Meet (0)
Metric AC3C: **Design of lessons recommends and facilitates a mix of instructional approaches for a variety of learners such as using multiple representations (e.g., including models, using a range of questions, checking for understanding, flexible grouping, pair-share).** **How to Find the Evidence:** Evaluate teacher materials, noting instructional approaches suggested for whole class and differentiated lessons and activities.	**Evidence-** Lessons incorporate many strategies for a variety of learners using multiple representations. Examples: (Teacher Edition pages 303A-306) Also available in: literature connections, investigations, ELL strategies, math modeling, guided practice, math conversations, independent practices, vocabulary, and assessments.	**Reviewer only.)** __X__Meets (2) ____Partially Meets (1) ____Does Not Meet (0)
Alignment Criterion 3: **Access to the Standards for All Students** **Materials must provide supports for English Language Learners and other special populations.** **AC3** Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 points, the Criterion has not been met. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion.**(Reviewer only.)** **Move to the Evaluation Summary and record the final Meets or Does Not Meet rating .**		**(Reviewer only.)** __X__Meets ____Does Not Meet **Strengths/Weaknesses:** Strengths: Every lesson contains ELL instruction and differentiated activities.

Once an evaluation for alignment to the Shifts and major features of the CCSS has been conducted using Sections 1-3, it's important to evaluate for overall quality and best practices. A starting list of Indicators of Quality are suggested below. States, districts and others evaluating instructional materials are encouraged to add to this list to ensure materials reflect local contexts. For background information on some of the Indicators of Quality in this section, refer to pp.18–21 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).

Indicators of Quality	Evidence- Give specific examples.	Rating: (Reviewers only.)
1. Lessons are thoughtfully structured and support the teacher in leading the class through the learning paths at hand, with active participation by all students in their own learning and in the learning of their classmates.	**Evidence-** Lessons develop from review then move to an investigation, math model explicit instruction, guided practice, independent practice and end with formative assessment. Example pgs. 303A-308	(Reviewer only.) __X____ Yes _____ No
2. The underlying design of the materials includes both problems and exercises. (In solving problems, students learn new mathematics, whereas in working exercises, students apply what they have already learned to build mastery.) Each problem or exercise has a purpose. **NOTE: This Criterion does not require that the problems and exercises be labeled as such.**	**Evidence-** Lessons have multiple strategies included in guided and independent practices: Algorithms, story problems, equations, and explanation of reasoning all help students learn new procedures and apply them to real-life situations. Example: pgs. 315-320	(Reviewer only.) ___X___ Yes _____ No
3. Design of assignments is not haphazard: exercises are given in intentional sequences in order to strengthen students' mathematical understanding.	**Evidence-** Lessons are arranged to go from guided practice with the teacher, or in small groups, and moves into independent practices and extra practices. Complexity of lessons progress throughout a unit.	(Reviewer only.) ___X___ Yes _____ No
4. There are separate teacher materials that support and **reward teacher study including, but not limited to: discussion of the mathematics of the units and the mathematical point of each lesson as it relates to the organizing concepts of the unit, discussion on student ways of thinking and anticipating a variety of students responses, guidance on lesson flow, guidance on questions that prompt students thinking, and discussion of desired mathematical behaviors being elicited among students.**	**Evidence-** There are suggestions of furthering teacher development of concepts online at connected.mcgraw-hill.com. There is some background knowledge embedded in the beginning of each lesson, but not enough to further teachers' knowledge base. However, the lesson scripts are comprehensive enough to allow teachers to teach efficiently.	(Reviewer only.) ___X___ Yes _____ No
5. Manipulatives suggested in the materials are faithful representations of the mathematical objects they represent and are connected to written methods.	**Evidence-** Manipulatives are listed at the beginning of each chapter unit listed under "foldables". Also some individual lessons also include manipulatives to help students move from concrete to abstract reasoning (Teacher Edition pg. 301-303B). All manipulatives are structurally efficient and faithful representations.	(Reviewer only.) __X____ Yes _____ No

6. Materials include a variety of curriculum-embedded assessments. Examples include pre-, formative, summative, and self-assessment resources.	**Evidence-** Each chapter begins with diagnostic assessments (pg. 297A). Most lessons contain a formative assessment (pg. 312, 340). Each chapter has a summative assessment which may be printed out or taken online (pg. 370A). I did not see any self-assessment resources for students.	(Reviewer only.) __X____ Yes _____ No
7. Assessments contain aligned rubrics, answer keys, and scoring guidelines that provide sufficient guidance for interpreting student performance.	**Evidence-** Rubrics and student models are in a separate assessment manual.	(Reviewer only.) ___X___ Yes _____ No
8. Materials assess student proficiency using methods that are accessible and unbiased, including the use of course-level language in student prompts.	**Evidence-** Assessment manual contains tests, tasks, rubrics, and student examples. These are unbiased and include course-level language.	(Reviewer only.) ___X___ Yes _____ No
9. Materials are carefully evaluated by qualified individuals, whose names are listed, in an effort to ensure freedom from mathematical errors and course-level appropriateness.	**Evidence-** Experts are listed at the beginning of the Teacher Edition manuals pages xx-xxiii.	(Reviewer only.) ___X___ Yes _____ No
10. The visual design supports students in engaging thoughtfully with the subject. Navigation through the text is clear.	**Evidence-** Overall appearance is appealing to the eye. Manuals are in color. Text is clearly printed. Some extra paper may be needed to work algorithms since there is not much room on practice pages.	(Reviewer only.) ___X___ Yes _____ No
11. The materials engage parents in appropriate ways. For example, homework assignments in elementary grades, consist of routine problems, practice with getting answers, and fluency-building exercises that parents can easily support.	**Evidence-** Parent letters and "Math at Home" pages are in each chapter. Also each homework page gives information to help students and parents be successful in understanding the essential question of the day.	(Reviewer only.) __X____ Yes _____ No

Reviewer IMET Evaluation Summary **Title/Level: _____My Math Grade 5__**

Publisher: _ McGraw-Hill School Education, LLC _____ Copyright: ___2013_____
ISBN:____Various_____

Reviewer ID # ____RP, SB_____ Date Review Completed:__3-8-2016_____

Non-Negotiable Criteria- Each Non-Negotiable must be met in order for the Non-Negotiable Alignment Criteria to be met overall.

Non-Negotiable 1: Freedom from Obstacles to Focus	Non- Negotiable 2: Focus and Coherence
___X____ Meets _____ Does Not Meet	__X___ Meets _____ Does Not Meet

Non-Negotiable Overall:

__X___ Meets **_____ Does Not Meet**

Alignment Criteria- Each Alignment Criterion must be met with a sufficient number of points in order for Alignment Criteria to be labeled as "Meets" overall. The more points the materials receive on the Alignment Criteria, the better they are aligned.

Alignment Criterion 1: Rigor and Balance	Alignment Criterion 2: Standards of Mathematical Practice	Alignment Criterion 3: Access to Standards for All Learners
Points: ___6__ of 6 possible. (Materials must receive at least 5 of 6 points to align.) __X_____ Meets _____ Does Not Meet	Points: _6____ of 6 possible. (Materials must receive at least 5 of 6 points to align.) ___X____ Meets _____ Does Not Meet	Points: _6____ of 6 possible. (Materials must receive at least 5 of 6 points to align.) __X_____ Meets _____ Does Not Meet

Alignment Criteria Overall:

__X___ Meets **_____ Does Not Meet**

If the materials meet both Non-Negotiables and relevant Alignment Criterion, they are aligned to the Shifts and major features of the Core Standards. **the materials meet every Non-Negotiable and Alignment Criterion? _X____ Yes _____ No**

What are the specific areas of strength and weakness based on this evaluation? Publishers or others modifying or developing assessments can use this information to make improvements and/or to remedy gaps in the alignment of assessment materials.

A weakness is that there isn't a lot of room to work math problems on the specific student practice page.

A strength is that the standards and practices are clearly labeled. The connections between the grades are easy to find and they help students and teachers understand how the lessons align

2015-16 Mathematics Interim Review Recommendation & Summary

Publisher Name:	McGraw-Hill
Title:	Everyday Math (K)
ISBN #	Various
Grade Level(s) or Course:	K
Reviewer ID:	DY & AF

RECOMMENDED AS:

__✓__ **Core Mathematics Program-** a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials. Substantial evidence clearly supports the designation of this program as Core.

_____ **Other Mathematics Program-** a program that substantially, but partially, meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for supplemental materials. Substantial evidence clearly supports the designation of this program as Other.

_____ **Component Mathematics Program-** a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs. Substantial evidence clearly supports the designation of this program as Component.

_____ **Intervention Program-** a program designed and intended to target and support students' specific needs. Substantial evidence clearly supports the designation of this program as Intervention.

_____ **Does not meet criteria** for recommendation as a Curricular Material or Online Resource for Mathematics.

EVIDENCE SUMMARY:

FOCUS- Everyday Math assesses on grade level. It does not attempt to assess above grade level.

COHERENCE- Standards are well blended and show progression of skills.

RIGOR- Everyday Math started with basic skills needed and progressed at a logical pace. Degree of mastery expected at the end of each unit is noted in unit overviews.

CONCEPTUAL UNDERSTANDING-

Everyday Math has lots of differentiated and varied practice to achieve conceptual understanding of each lesson and standard.

MATHEMATICAL PRACTICES-

Each unit has math practice goals stated in each lesson. Background information for each math practice given at the beginning of each unit.

ACCESSIBILITY OF STANDARDS TO ALL STUDENTS-

E.L.L support in each lesson along with differentiation options. Flexible grouping suggestions and online support available.

OTHER:

Everyday Math is a comprehensive core program. It has lots of hands-on and engaging activities to meet the Common Core standards.

2015-16 Interim Mathematics Review

Mathematics Evaluation Tool Grades K-8

Publisher: McGraw-Hill

Title of Material: Everyday Math (Kinder)

Author:

ISBN #: 978-0-02-141411-6 **Copyright** 2016

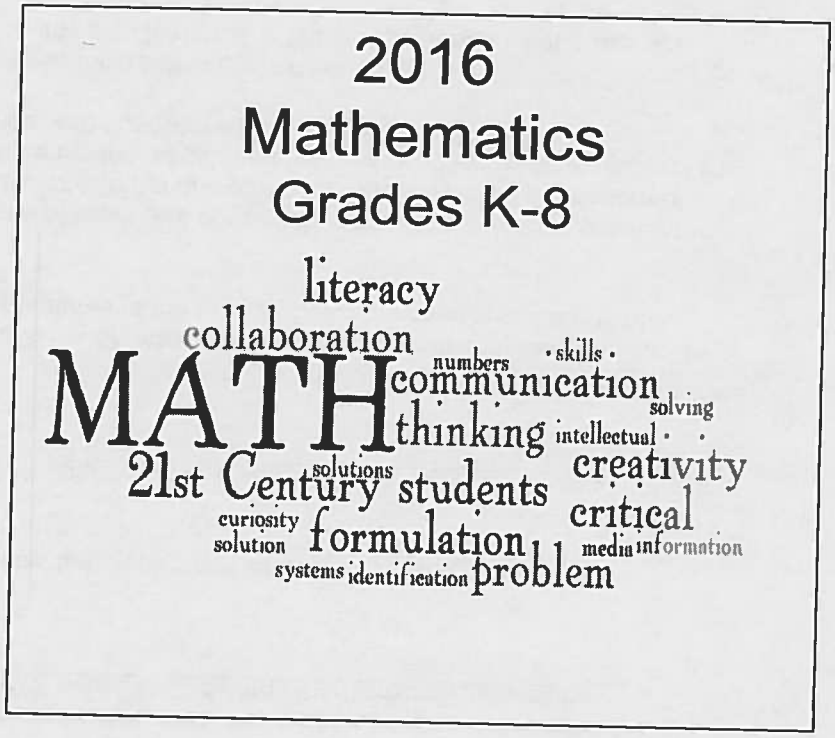
Reviewer ID: DY and AF

Core Mathematics Program- a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Core.

Other Mathematics Program- a program that substantially, but partially, meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Other.

Component Mathematics Program- a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs.
Substantial evidence clearly supports the designation of this program as Component.

Intervention Program- a program designed and intended to target and support students' specific needs.
Substantial evidence clearly supports the designation of this program as Intervention.



- Evaluation Form adapted from Instructional Materials Evaluation Toolkit (IMET).

The IMET was developed by Student Achievement Partners. Educators may use or adapt. http://creativecommons.org/licenses/by/3.0/ Download this tool at http://achievethecore.org/IMET

Instructional Materials Evaluation Tool

Mathematics, Grades K-8

What Are the Purposes of the IMET?

This Math IMET is designed to help educators determine whether instructional materials are aligned to the Shifts and major features of the Common Core State Standards (CCSS). The substantial instructional Shifts (http://www.corestandards.org/other-resources/key-shifts-inmathematics/) at the heart of the Common Core State Standards are:

- **Focus** strongly where the Standards focus
- **Coherence**: Think across grades and link to major topics within the grade
- **Rigor**: In major topics, pursue conceptual understanding, procedural skill and fluency, and application with equal intensity.

The IMET draws directly from the following documents:

- Common Core State Standards for Mathematics (www.corestandards.org/Math)
- Publishers' Criteria for the Common Core State Standards in Mathematics grade K-8 (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)

When to use the IMET

1. Purchasing materials: Many factors go into local purchasing decisions. Alignment to the Standards is a critical factor to consider. This tool is designed to evaluate alignment of instructional materials to the Shifts and the major features of the CCSS. It also provides suggestions of additional indicators to consider in the materials evaluation and purchasing process.

2. Evaluating materials currently in use: The IMET can be used to analyze the degree of alignment of existing materials and help to highlight specific, concrete flaws in alignment. Even where materials and tools currently in use fail to meet one or more of these criteria, the pattern of failure is likely to be informative. States and districts can use the evaluation to create a thoughtful plan to modify or combine existing resources in such a way that students' actual learning experiences approach the focus, coherence, and rigor of the Standards.

3. Developing programs: Those developing new programs can use this tool as guidance for creating aligned curricula. Please note this tool was designed for evaluating comprehensive curricula (including any supplemental or ancillary materials), but it was not designed for the evaluation of standalone supplemental materials.

Who Uses the IMET?

Evaluating instructional materials requires both subject-matter and pedagogical expertise. Evaluators should be well versed in the Standards (www.corestandards.org/Math) for all grades in which materials are being evaluated. This includes understanding the Major Work of the grade (www.achievethecore/focus), the Supporting and Additional work, how the content fits into the progressions in the Standards (www.achievethecore.org/progressions), and the expectations of the Standards with respect to conceptual understanding, procedural skill and fluency, and application. Evaluators also should be familiar with the substantial instructional Shifts (http:// www.corestandards.org/other-resources/key-shifts-in-mathematics/) of Focus, Coherence and Rigor that are listed above.

Getting Started

Prior to Evaluation

Assemble all of the materials necessary for the evaluation. It is essential for evaluators to have materials for all grades covered by the program, as some criteria cannot be rated without having access to each grade. In addition, each evaluator should have a reference copy of the Common Core State Standards for Mathematics (CCSSM) and the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013).

Before conducting the evaluation itself, it is important to develop a protocol for the evaluation process. The protocol should include having evaluators study the Publishers' Criteria and the IMET. It will also be helpful for evaluators to get a sense of each program overall before beginning the process. At a minimum, this would include reading the front matter of the text, looking at the table of contents and paging through multiple chapters.

Sections 1-3 below should be completed to produce a comprehensive picture of the strengths and weaknesses of the materials under evaluation. Information about areas in need of improvement or supplementation should be shared with internal and external stakeholders.

Navigating the Tool

Begin with Section 1: Non-Negotiable Alignment Criteria

- The Non-Negotiable Alignment Criteria must each be met in full for materials to be considered aligned to the Shifts and the major features of the Common Core State Standards. Each Non-Negotiable Alignment Criterion has one or more metrics associated with it; every one of these metrics must be met in order for the criterion as a whole to be met.

- Examine the relevant materials and use evidence to rate the materials against each criterion and its associated metric(s).

- Record and explain the evidence upon which the rating is based.

Continue to Section 2: Alignment Criteria

- The Alignment Criteria must each be met for materials to be considered aligned to the Shifts and the major features of the Common Core State Standards. Each Alignment Criterion has one or more metric associated with it; a specific number of these metrics must be met or partially met in order for the criterion as a whole to be met.

- Examine the materials in relation to these criteria, assigning each metric a point value. Rate the criterion as "Meets" or "Does Note Meet" based on the number of points assigned. The more points the materials receive on the alignment Criteria, the better they are aligned.

- Record and explain the evidence upon which the rating is based.

Proceed to Section 4: Indicators of Quality

- Indicators of Quality are important considerations that will help evaluators better understand the overall quality of instructional materials. These considerations are not criteria for alignment to the CCSS, but they provide valuable information about additional program characteristics. Evaluators may want to add their own indicators to the examples provided.

Directions for Non-Negotiable 1

Freedom from Obstacles to Focus

Criterion	Evidence- Give specific examples.	Rating: (Reviewer only.)
Non-Negotiable 1: **Freedom from Obstacles to Focus** **Materials must reflect the content architecture of the Standards by not assessing the topics named before the grade level where they first appear in the Standards.** The Standards foster students' progress to algebra by focusing strongly on arithmetic. Consistent with this focus, certain topics from outside of arithmetic appear only in later grades. Thus, to be aligned, materials must reflect the content architecture of the Standards by not assessing the topics named before the grade level where they first appear in the Standards. In this criterion, "topics named" means the topics that are explicitly named in Metric 1A. No other topics should be added to the list in Metric 1A. (Note that other topics in the standards are addressed in criterion NN2.)	**Required Materials** • Common Core State Standards for Mathematics (www.corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf) • From the materials being evaluated: teacher guides and all assessment components	**Rating this Criterion:** Non-Negotiable 1 is rated as Meets or Does Not Meet. To rate Non-Negotiable 1, begin by rating Metric 1A. Since Metric 1A is the only metric for Non-Negotiable 1, the rating for Non-Negotiable 1 is the same as the rating for Metric 1A. If Metric 1A is rated as Does Not Meet, include evidence of when the named topic(s) is/are assessed. If the metric is rated as Meets, list the grade(s) examined in the evaluation.

Metric NN1A:
Materials reflect the basic architecture of the Standards by not assessing the listed topics before the grade level indicated.

- Probability, including chance, likely outcomes, probability models. (Introduced in the CCSSM in grade 7)
- Statistical distributions, including center, variation, clumping, outliers, mean, median, mode, range, quartiles; and statistical association or trends, including two-way tables, bivariate measurement data, scatter plots, trend line, line of best fit, correlation. (Introduced in the CCSSM in grade 6)
- Similarity, congruence, or geometric transformations. (Introduced in the CCSSM in grade 8)
- Symmetry of shapes, including line/ reflection symmetry, rotational symmetry. (Introduced in the CCSSM in grade 4)

How to Find the Evidence:

Evaluate the table of contents, all chapter tests, all unit tests, and other such assessment components (including rubrics).

For context, read Criterion #2 from the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013). NOTE: Grade alignments of other topics are addressed in Non-Negotiable 2, Focus and Coherence.)

In this criterion, "topics named" means the topics that are explicitly named in Metric 1A. No other topics should be added to the list in Metric 1A. (Note that other topics in the standards are addressed in criterion NN2.)

Evidence-

Assessment check-ins in each lesson to on grade level skills & concepts.

Assessment Handbook assess B, M, E of year skills

Online option available for assessment

(Reviewer only.)

X **Meets**

____**Does Not Meet**

Non-Negotiable 1: Materials must reflect the content architecture of the Standards by not assessing the topics named* before the grade level where they first appear in the Standards.

NN 1 If Metric 1A was rated as Meets, then rate Non-Negotiable 1 as Meets. If Metric 1A was rated as Does Not Meet, then rate Non- Negotiable 1 as Does Not Meet. Check the final rating.

Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion.**(Reviewer only.)**

Before moving to Non-Negotiable 2, record the final Meets or Does Not Meet rating in the Evaluation Summary.

(Reviewer only.)

X **Meets**

____**Does Not Meet**

Strengths/Weaknesses:

Directions for Non-Negotiable 2

Focus and Coherence

Non-Negotiable 2:

Focus and Coherence

Materials must focus coherently on the Major Work of the grade in a way that is consistent with the progressions in the Standards.

Focus and coherence are the two major evidence-based design principles of the Common Core State Standards for Mathematics (CCSSM, p. 3). Focus is necessary in order to fulfill the ambitious promise the states have made to their students by adopting the Standards: greater achievement at the college and career ready level; greater depth of understanding of mathematics; and a rich classroom environment in which reasoning, sense-making, applications, and a range of mathematical practices flourish. In simpler terms, a mile-wide, inch-deep curriculum translates to less time per topic. Less time means less depth and moving on without many students. Thus, materials must focus coherently on the Major Work of the grade in a way that is consistent with the progressions in the Standards.

Required Materials

- Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf)
- Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)
- Focus by Grade Level for the grade being evaluated (www.achievethecore.org/focus)
- From the materials being evaluated: teacher guides, student texts and workbooks

Rating this Criterion:

Non-Negotiable 2 is rated as Meets or Does Not Meet.

To rate Non-Negotiable 2, first rate metrics 2A–2H. Each of these eight metrics must be rated as Meets in order for Non-Negotiable 2 to be rated as Meets. Rate each metric 2A-2H as Meets or Does Not Meet/Insufficient Evidence. If the evidence examined shows that the Criterion is met, then mark the Criterion Meets. If the evidence examined shows that the Criterion is not met—or if there is insufficient evidence to make a determination—then mark the Criterion as Does Not Meet/Insufficient Evidence. Support all ratings with evidence.

Metric NN2A:
In each grade K–8, students and teachers using the materials as designed devote the large majority of time to the Major Work of the grade.

How to Find the Evidence:

Familiarize yourself with the Major Work of the grade being evaluated (see the Focus by Grade Level documents.)

Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, lessons, homework assignments, and assessments. (Evaluate both student and teacher materials.)

Consider time spent on the Major Work of the grade and judge qualitatively whether students and teachers using the materials as designed will devote the large majority of time to the Major Work of the grade.

For context, read Criterion #1 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013)

Evidence-

Spiral Trace page 36 shows major works of the grade covered over the course of year.

- page xv - correlation of ccss to units / lessons
- kcc addressed in first unit + builds upon them with other standards
- Daily routines at the beginning of the year focus on major works pgs. 2-26

include MP in routines along with standards

(Reviewer only.)

_X_ **Meets**

____ **Does Not Meet/ Insufficient Evidence**

Metric NN2B: **Supporting Work, where present, enhances focus and coherence simultaneously by also engaging students in the Major Work of the grade.** **How to Find the Evidence:** Familiarize yourself with the Major Work and Supporting Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate chapters and lessons that focus on Supporting Work. NOTE: Example of evaluating this Criterion might include looking at whether materials for K–5 generally treat data displays as an occasion for solving grade-level word problems using the four operations (e.g., see 3.MD.B.3); or whether materials for grade 7 take advantage of opportunities to use probability to support ratios, proportions, and percentages. For context, read Criterion #3 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Daily Routines #2,4,5 (Pg 2-26) students analyze + discuss data MP3,4,5 Lessons that cover supporting works: 1-7, 1-8, 2-7, 3-1, 4-1, 4-3	**(Reviewer only.)** X **Meets** ____ **Does Not Meet/ Insufficient Evidence**
Metric NN2C: **Materials base content progressions on the grade-by-grade progressions in the Standards. Content from previous or future grades does not unduly interfere with or displace on-grade-level content.** **How to Find the Evidence:** Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, and lessons in both student and teacher materials. NOTE: In some cases it may be possible that aligned materials might address some aspects of a topic in a strategic way before or after the grade level in which the topic is central in the Standards' progressions; for example, a curriculum author might purposefully choose to explore adding fractions with unlike denominators in a way appropriate to grade four, recognizing that this work is not really required until the next grade. However, any such purposeful discrepancies in content progressions should enhance the required learning in each grade; not unduly interfere with or displace grade-level content; and be clearly aimed at helping students meet the Standards as written rather than effectively rewriting the progressions in the Standards. And in all cases, note that Non-Negotiable 1 must be met for materials to be aligned. For context, read Criterion #5a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** page xiv - CCSS correlation to lessons • Section overviews show lessons + standards covered • Spiral Trace page 36 Unit 1 - states what they should be able to do at the end of each section	**(Reviewer only.)** X **Meets** ____ **Does Not Meet/ Insufficient Evidence**

Metric NN2D: **Materials give all students extensive work with on-grade-level problems.** **How to Find the Evidence:** Evaluate both student and teacher materials. If the materials provide resources for differentiated learning, consider whether lower-performing students have opportunities to engage with grade-level problems. Also consider whether higher-performing students are given opportunities to learn current grade-level content in greater depth. For context, read Criterion #5b in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Page xxvi - shows explanation of differentiated learning available in curriculum • each lesson contains differentiation options for example: pg. 55 lesson 1-4 pg 56 lesson 1-5 Also ELL support cited in curriculum	(Reviewer only.) __X__ **Meets** ____ **Does Not Meet/** **Insufficient Evidence**
Metric NN2E: **Materials relate on-grade-level concepts explicitly to prior knowledge from earlier grades.** **How to Find the Evidence:** Evaluate both student and teacher materials. NOTE: Examples of evaluating this Criterion might include looking at the way the materials extend basic ideas of place value across the decimal point; or the role that properties of operations play when the materials extend arithmetic beyond whole numbers to fractions, variables, and expressions. More generally, cluster headings in the Standards sometimes signal key moments where reorganizing and extending previous knowledge is important in order to accommodate new knowledge (e.g., see cluster headings that use the phrase "Apply and extend previous understanding"). For context, read Criterion #5c in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** This is Kindergarten material. Some students may enter grade level with no math skills. Curriculum assumes students are entering with very little math knowledge. Starts with basic skills Section 1, Lesson 1 - K.CC.1, K.MD.2 Spiral Trace pg. 36	(Reviewer only.) __X__ **Meets** ____ **Does Not Meet/** **Insufficient Evidence**
Metric NN2F: **Review of material from previous grades is clearly identified as such to the teacher, and teacher and students can see what their specific responsibility is for the current year.** **How to Find the Evidence:** Evaluate the table of contents, but do not stop there; also evaluate units, chapters, lessons, homework assignments and assessments. (Evaluate both student and teacher materials.) Identify any content from previous grades and check whether it is identified as such. For context, read Criterion #5a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Not applicable to this grade	(Reviewer only.) __X__ **Meets** ____ **Does Not Meet/** **Insufficient Evidence**

Metric NN2G: **Materials include learning objectives that are visibly shaped by CCSSM cluster headings.** **How to Find the Evidence:** Select several clusters from the Major Work in the grade being evaluated. Evaluate teacher and student materials in relation to these clusters. For context, read Criterion #6a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Spiral Tra in each lesson shows standards covered. Lesson focus is covered in each section overview.	**(Reviewer only.)** X **Meets** ____ **Does Not Meet/ Insufficient Evidence**
Metric NN2H: **Materials include problems and activities that serve to connect two or more clusters in a domain, or two or more domains in a grade, in cases where these connections are natural and important.** **How to Find the Evidence:** In the grade being evaluated, choose two or more clusters or two or more domains for which connections are natural and important. Evaluate the units, chapters, and lessons that deal with the chosen topics, looking for problems and activities that serve to connect the chosen clusters or domains. NOTE: An example of evaluating this Criterion might include looking at whether problems in grade 4 sometimes or often involve students applying their developing computation skills (detailed in domain NBT) in the context of solving word problems (detailed in domain OA). For context, read Criterion #6b in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** connected domains: Chapter 1 K.MD.2, K.MD.3, K.G.1 Chapter 2 K.G.1, K.G.4, K.G.6 page xvii Correlation of standards across lessons Lesson focus shows domains + standards covered	**(Reviewer only.)** X **Meets** ____ **Does Not Meet/ Insufficient Evidence**
Non-Negotiable 2: **Focus and Coherence** **Materials must focus coherently on the Major Work of the grade in a way that is consistent with the progressions in the Standards.** **NN 2** If all Metrics 2A – 2H were rated as Meets, then rate Non-Negotiable 2 as Meets. If one or more Metric was rated Does Not Meet/Insufficient Evidence, then rate Non-Negotiable 2 as Does Not Meet. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)** standards are well blended + show progression of skills **Before moving to Alignment Criterion 1, record the final Meets or Does Not Meet rating in the Evaluation Summary.**		**(Reviewer only.)** X **Meets** ____ **Does Not Meet** **Strengths/Weaknesses:** weakness: didn't state exact % of lessons on major works

Now continue by evaluating the Alignment Criterion 1 for Rigor and Balance.

Directions for Alignment Criterion 1

Rigor and Balance

Alignment Criterion 1: Rigor and Balance **Materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.** The Standards set expectations for attention to all three aspects of rigor: conceptual understanding, procedural skill and fluency, and applications. Thus, materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.	**Required Materials** • Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf) • Focus by Grade Level for the grade being evaluated (achievethecore.org/focus) • Situation Types for the Operations in Word Problems (achievethecore.org/situation-types) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion:** Alignment Criterion 1 is rated as Meets or Does Not Meet. To rate Alignment Criterion 1, first rate metrics 1A, 1B, and 1C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). For each metric, guiding questions are provided to aid in gathering evidence. Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 1 if the materials rate 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as rigor and balance, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.
Metric AC1A: **The materials support the development of students' conceptual understanding of key mathematical concepts, especially where called for in specific content Standards or cluster headings.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Major Work for the grade being evaluated that relate specifically conceptual understanding to use throughout the questions associated with this metric. NOTE: Some examples of clusters or Standards that call for conceptual understanding include: K.OA.A.1, (1.NBT.B, 1.NBT.C), (2.NBT.A, 2.NBT.B), (3.OA.A.1, 3.OA.A.2), 4.NF.A, (4.NBT.A, 4.NBT.B), 5.NF.B, (5.NBT.A, 5.NBT.B), 6.RP.A, 6.EE.A.3, 7.NS.A, 7.EE.A, 8.EE.B, 8.F.A, 8.G.A Clusters or Standards grouped by parentheses are closely connected and could be analyzed together. For context, read Criterion #4a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	-Choose a cluster/Standard from the Major Work that is aligned to each aspect of rigor and use it to evaluate these metrics. It is most helpful if the same clusters/Standards are chosen for all of the programs being evaluated. (Guidance in choosing clusters/Standards is included in "How to Find the Evidence".)	**Use the questions for AC Metric 1A to evaluate Metric 1A. Record evidence for each question and rate Metric 1A.** ✓ **Meets (2)** ____ **Partially Meets (1)** ____ **Does Not Meet (0)**

Is conceptual understanding attended to thoroughly where the Standards set ex expectations for understanding or interpreting? Evaluate lessons, chapter/unit assessments and homework assignments, paying attention to work aligned to Standards that explicitly call for understanding or interpreting. NOTE: Examples of evaluating this Criterion might include looking at how well the multi-digit addition and subtraction algorithms are developed and explained on the basis of place value and properties of operations; or how well the multi-digit multiplication and division algorithms are developed and explained on the basis of place value and properties of operations; or how well solving equations is presented and explained as a process of reasoning.	**Evidence-** KMD3 pg. 1 Lesson 2-7 open response - intro to sorting KCC4 lessons 1-3, 1-7, 1-8 Children use one to one correspondance + cardinal principles as they engage in counting game	
Do the materials feature high-quality conceptual problems and conceptual discussion questions? Evaluate lessons, chapter/unit assessments, and homework assignments. NOTE: Example of conceptual problems might include such questions as "Find a number greater than 1/5 and less than 1/4," or "If the divisor does not change and the dividend increases, what happens to the quotient?"	**Evidence-** Lesson 1-3 pg. 49 explain why it is important to count correctly pg. 61 (1-6) Conclusion: Why is it important to count accurately	
Do the materials feature opportunities to identify correspondences across mathematical representations? Evaluate lessons, chapter/unit assessments and homework assignments. NOTE: Examples of evaluating this Criterion might include looking at whether students are supported in identifying correspondences among: the verbal description of a situation, the diagrams that distill its mathematical features, and the equations that model it; or equivalent forms of numbers (e.g., 3 and 6/2) and the number line; or rational number operations and representations of them via models such as the vector model; or the expression that defines a function and the graph that shows the relationship.	**Evidence-** One example of many Connections: pg. 42 connecting verbal description, diagrams, + equations that model, + numbers	
Metric AC1B: **The materials are designed so that students attain the fluencies and procedural skills required by the Standards.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Major Work for the grade being evaluated that relate specifically to fluency and procedural skill to use throughout the questions associated with this metric. NOTE: Some examples of Standards that call for procedural skill and fluency include: K.OA.A.5, 1.OA.C.6, 2.OA.B.2, 2.NBT.B.5, 3.OA.C.7, 3.NBT.A.2, 4.NBT.B.4, 5.NBT.B.5, 6.NS.B.2, and 6.NS.B.3, 6.EE.A, 7.NS.A, 7.EE.A.1,7.EE.B.4a, 8.EE.C.7, 8.EE.C.8b For context, read Criterion #4b in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).		**Use the questions for Metric 1B to evaluate Metric 1 B. Record evidence for each question and rate Metric 1B.** **(Reviewer only.)** ✓ **Meets (2)** ____ **Partially Meets (1)** ____ **Does Not Meet (0)**

Is progress toward fluency and procedural skill interwoven with students' developing conceptual understanding of the operations in question? Evaluate lessons, chapter/unit assessments, daily routines, and homework assignments for evidence that the development of fluency and procedural skill is supported by conceptual understanding.	**Evidence-** Each lesson has daily routines, core activities, connections to literature + music, + assessment but not a lot of pen to paper practice	
Are purely procedural problems and exercises present that include cases in which opportunistic strategies are valuable and generic cases that require efficient algorithms present? Evaluate lessons, chapter/unit assessments, daily routines, and homework assignments. NOTE: Examples of problems in which opportunistic strategies are valuable might include the sum 698 + 240 or the system x + y = 1, 2x + 2y = 3. Examples of generic cases that require efficient algorithms might include the sum 8767+2286 or the system 6y + x = x + 3, – x = 1 + 2y.	**Evidence-** subitizing cards, ten-frame cards K.NBT.1 Lesson 5-6 Teen Partners pg. 320	
Do the materials in grades K–6 provide repeated practice toward attainment of fluency Standards? Evaluate lessons, daily routines, and homework assignments for evidence of repeated practice toward attainment of the following K–6 Standards that set an explicit expectation of fluent (accurate and reasonably fast) computation: K.OA.A.5, 1.OA.C.6, 2.OA.B.2, 2.NBT.B.5, 3.OA.C.7, 3.NBT.A.2, 4.NBT.B.4, 5.NBT.B.5, 6.NS.B.2, 6.NS.B.3.	**Evidence-** subitizing cards, ten-frame cards, daily counting routines, games such as "Frog Hop" - non traditional sense	
Metric AC1C: **The materials are designed so that teachers and students spend sufficient time working with engaging applications, without losing focus on the Major Work of each grade.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Major Work for the grade being evaluated that relate specifically application to use throughout the questions associated with this metric. NOTE: Some examples of clusters or Standards that call for application include: K.OA.A.2, 1.OA.A, 2.OA.A, 3.OA.A.3, 3.OA.D.8, 4.OA.A.3, 4.NF.B.3d, 4.NF.B.4c, 5.NF.B.6, 5.NF.B.7c, 6.RP.A.3, 6.NS.A.1, 6.EE.B.7, 6.EE.C.9, 7.RP.A, 7.NS.A.3, 7.EE.B.3, 8.EE.C.8c, 8.F.B For context, read Criterion #4c in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Lesson 2-5 pg. 119 K.OA.1 Children use concrete non-verbal experiences to develop understanding of addition + subtraction • each lesson contains practice with engaging activities - above is just one example	**Use the questions for Metric 1C to evaluate Metric 1C. Record evidence for each question and rate Metric 1C.** **(Reviewer only.)** **X Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Are there are single- and multi-step contextual problems, including non-routine problems, that develop the mathematics of the grade, afford opportunities for practice, and engage students in problem solving? Do the problems attend thoroughly to those places in the content Standards where expectations for multi-step and real-world problems are explicit? Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** lots of opportunity in lessons for contextual problems ex: Lesson 2-6 pg. 123	

Do application problems particularly stress applying the Major Work of the grade? Evaluate lessons, chapter/unit assessments, and homework assignments. NOTE: Examples of evaluating this Criterion might include looking at: how well, by the end of grade 2, students using the materials as designed can represent and solve a full range of one-step addition and subtraction word problems; or how well, by the end of grade 3, students using the materials as designed can represent and solve a full range of one-step multiplication and division word problems; or how well these basic situation types for each operation are carried coherently across the grades, (e.g., with fractions and algebraic expressions); or, in all grades, whether the problems connect concepts, Standards, and domains in ways that are natural and important. For a list of situation types for one-step addition, subtraction, multiplication, and division problems, see Situation Types for the Operations in Word Problems	**Evidence-** Unit 1 Spiral Trace on page 3 shows major work of counting + cardinality in units 1 through 5. Describes degree of mastery at end of the unit. ex: lesson 1-6 Children practice oral counting & counting on	
Does modeling build slowly across K–8, with applications that are relatively simple in earlier grades and when students are encountering new content? In grades 6–8, do the problems begin to provide opportunities for students to make their own assumptions or simplifications in order to model a situation mathematically? Read Standard for Mathematical Practice 4, Model with Mathematics. Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** starts with simple counting activities in unit 1 + progress to adding + subtraction - Then moves to more complex number stories in unit 5	

Alignment Criterion 1: Rigor and Balance

Materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.

AC1 Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 out of 6 points, the Criterion has not been met. Check the final rating.
Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)**

Before moving to Alignment Criterion 2, record the final Meets or Does Not Meet rating in the Evaluation Summary.

(Reviewer only.)

X **Meets**

____ **Does Not Meet**

Strengths/Weaknesses:

not enough written fluency practice for addition + subtraction

Directions for Alignment Criterion 2

Standards for Mathematical Practice

Alignment Criterion 2: Standards for Mathematical Practice

Materials must demonstrate authentic connections between content Standards and practice Standards.

The Standards require that designers of instructional materials connect the mathematical practices to mathematical content in instruction. Thus, materials must demonstrate authentic connections between content Standards and practice Standards.

Required Materials:

- Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf)
- Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)
- Focus by Grade Level for the grade being evaluated (www.achievethecore.org/focus)
- From the materials being evaluated: teacher guides, student texts and workbooks

Rating this Criterion

Alignment Criterion 2 is rated as Meets or Does Not Meet.

To rate Alignment Criterion 2, first rate metrics 2A, 2B, and 2C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). For each metric, guiding questions are provided to aid in gathering evidence.

Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 2 if the materials earn 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as mathematical practices, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.

Metric AC2A:

Materials address the practice Standards in such a way as to enrich the Major Work of the grade; practices strengthen the focus on Major Work instead of detracting from it, in both teacher and student materials.

How to Find the Evidence:

Familiarize yourself with the Major Work of the grade being evaluated (see the Focus by Grade Level documents.)

Evaluate teacher and student materials for evidence that the mathematical practices support and connect to the focus of the grade.

NOTE: Examples of evaluating this Criterion might include looking at whether, in grades K–5, students using the materials are supported to look for and express regularity in repeated reasoning about the addition table, the multiplication table, the properties of operations, the relationship between addition and subtraction or multiplication and division, and the place value system; or whether, in grades 6–8, students using the materials are supported to look for and express regularity in repeated reasoning about proportional relationships and linear functions.

For context, read Criterion #8 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013).

Evidence-

Each unit has a mathematical background that focuses on standards + math practices

Lesson 1-3 counting + cardinality
Math practice 1 + 6

Lesson 1-4 counting + cardinality
math practice 4

Lesson 1-5 counting + cardinality
math practice 2

(Reviewer only.)

_X_ **Meets (2)**

____ **Partially Meets (1)**

____ **Does Not Meet (0)**

Metric AC2B: **Materials att to the full meaning of each practice Standard.** **How to Find the Evidence:** For context, read Criterion #7 and Criterion #9 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).		**Use the questions for Metric 2B to evaluate Metric 2B. Record evidence for each qu on and rate Metric 2B.** **(Reviewer only.)** **X Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Over the course of any given year of instruction, is each mathematical practice Standard meaningfully present in the form of assignments, activities, or problems that stimulate students to develop the habits of mind described in the practice Standard? Evaluate lessons, chapter/ unit assessments, and homework assignments for evidence of each mathematical practice being meaningfully present in instruction.	**Evidence-** Each lesson has a math practice + each math practice has a goal	
Do the materials treat the practice Standards as developing across grades or grade bands? Are the practice Standards in early grades appropriately simple? Do they display an arc of growing sophistication across the grades?	**Evidence-** Students start with simple counting activities to practice attending to precision + accuracy.	
Are there teacher-directed materials that explain the role of the practice Standards in the classroom and in students' mathematical development? Are alignments to practice Standards accurate?	**Evidence-** TE. Gives detailed summary of each math practice addressed + how it is used in lesson	
Metric AC2C: **Materials support the Standards' emphasis on mathematical reasoning.** **How to Find the Evidence:** For context, read Criterion #10 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).		**Use the questions for Metric 2C to evaluate Metric 2C. Record evidence for each question and rate Metric 2C.** **(Reviewer only.)** **X Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Do the materials support students in constructing viable arguments and critiquing the arguments of others concerning grade-level mathematics that is detailed in the content Standards? Read Standard for Mathematical Practice 3. Evaluate teacher and student materials to ensure that students are given opportunities to reason with grade-level mathematics.	**Evidence-** · Math Practice 3 unit 5 overview · lesson 5-2, 5-5 · open response lessons · various lessons throughout	
Do the materials support students in producing not only answers and solutions, but also, in a grade-appropriate way, arguments, explanations, diagrams, mathematical models, etc., especially in the Major Work of the grade? Familiarize yourself with the Major Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate teacher and student materials, to understand the types of work students are expected to produce.	**Evidence-** Open response lessons 5-7 pg. 324-331 -give various examples embedded throughout -reengagement	

Do materials explicitly attend to the specialized language of mathematics? Is the language of argument, problem solving, and mathematical explanations taught rather than assumed? Evaluate teacher and student materials, paying attention to how mathematical language is taught. NOTE: Examples of evaluating this Criterion might include looking at whether students are supported in: basing arguments on definitions; using the method of providing a counterexample; or recognizing that examples alone do not establish a general statement.	**Evidence-** Each lesson lists vocabulary + models how to use the vocabulary correctly Throughout curriculum questioning is used to scaffold language development Prompts to correct misconceptions	

Alignment Criterion 2: Standards for Mathematical Practice

Materials must demonstrate authentic connections between content Standards and practice Standards.

AC2 Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 out of 6 points, the Criterion has not been met. Check the final rating.
Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion.
(Reviewer only.)

(Reviewer only.)

X **Meets**

____ **Does Not Meet**

Strengths/Weaknesses:

vocab isn't taught by direct instruction

Before moving to Alignment Criterion 3, record the final Meets or Does Not Meet rating in the Evaluation Summary.

Alignment Criterion 3: Access to the Standards for All Students

Materials must provide supports for English Language Learners and other special populations.

Because Standards are for all students, alignment requires thoughtful support to ensure all students are able to meet the Standards. Thus, aligned materials must provide supports for English Language Learners and other special populations.

Required Materials:

- Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf)
- Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)
- From the materials being evaluated: teacher guides, student texts and workbooks

Rating this Criterion:
Alignment Criterion 3 is rated as Meets or Does Not Meet.

To rate Alignment Criterion 3, first rate metrics 3A, 3B, and 3C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points).

Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 3 if the materials earn 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as support for special population, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.

Metric AC3A: **Support for [illegible]ish Language Learners and other special populations is thoughtful and helps those students meet the same Standards as all other students. The language in which problems are posed is carefully considered.** **How to Find the Evidence:** Evaluate teacher and student materials, paying attention to supports offered for special populations.	**Evidence-** • ELL support in each lesson as a side note • ELL Support Guide	**Reviewer only.)** X **Meets (2)** ____**Partially Meets (1)** ____**Does Not Meet (0)**
Metric AC3B: **Materials provide appropriate level and type of scaffolding, differentiation, intervention, and support for a broad range of learners with gradual removal of supports, when needed, to allow students to demonstrate their mathematical understanding independently.** **How to Find the Evidence:** Evaluate teacher and student materials, paying attention to whether materials provide differentiation that will lead all learners to engage with on-grade-level content.	**Evidence-** - Differentiation options at the end of each lesson • online differentiation	**Reviewer only.)** X **Meets (2)** ____**Partially Meets (1)** ____**Does Not Meet (0)**
Metric AC3C: **Design of lessons recommends and facilitates a mix of instructional approaches for a variety of learners such as using multiple representations (e.g., including models, using a range of questions, checking for understanding, flexible grouping, pair-share).** **How to Find the Evidence:** Evaluate teacher materials, noting instructional approaches suggested for whole class and differentiated lessons and activities.	**Evidence-** Flexible grouping suggestions End of lesson assessment for quick check in online assessment available	**Reviewer only.)** X **Meets (2)** ____**Partially Meets (1)** ____**Does Not Meet (0)**

Alignment Criterion 3: **Access to the Standards for All Students** **Materials must provide supports for English Language Learners and other special populations.** AC3 Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 points, the Criterion has not been met. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion.**(Reviewer only.)** **Move to the Evaluation Summary and record the final Meets or Does Not Meet rating .**	**(Reviewer only.)** X **Meets** ____ **Does Not Meet** **Strengths/Weaknesses:**

Once an evaluation for alignment to the Shifts and major features of the CCSS has been conducted using Sections 1-3, it's important to evaluate for overall quality and best practices. A starting list of Indicators of Quality are suggested below. States, districts and others evaluating instructional materials are encouraged to add to this list to ensure materials reflect local contexts. For background information on some of the Indicators of Quality in this section, refer to pp.18–21 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).

Indicators of Quality	**Evidence- Give specific examples.**	**Rating: (Reviewers only.)**
1. Lessons are thoughtfully structured and support the teacher in leading the class through the learning paths at hand, with active participation by all students in their own learning and in the learning of their classmates.	**Evidence-** ·Daily Routines to build understanding ·Each lesson has lots of activities to teach major/supporting works ·Common misconceptions are addressed	**(Reviewer only.)** ✓ **Yes** ____ **No**
2. The underlying design of the materials includes both problems and exercises. (In solving problems, students learn new mathematics, whereas in working exercises, students apply what they have already learned to build mastery.) Each problem or exercise has a purpose. **NOTE: This Criterion does not require that the problems and exercises be labeled as such.**	**Evidence-** Each lesson has an activity to teach problem solving Opportunities for practice to teach mastery	**(Reviewer only.)** ✓ **Yes** ____ **No**

3. Design of assignments is not haphazard: exercises are given in intentional sequences in order to strengthen students' mathematical understanding.	**Evidence-** Spiral Snapshot: lessons spiral but cover all standards	**(Reviewer only.)** ✓ **Yes** ____ **No**
4. There are separate teacher materials that support and reward teacher study including, but not limited to: discussion of the mathematics of the units and the mathematical point of each lesson as it relates to the organizing concepts of the unit, discussion on student ways of thinking and anticipating a variety of students responses, guidance on lesson flow, guidance on questions that prompt students thinking, and discussion of desired mathematical behaviors being elicited among students.	**Evidence-** Each unit has a math background to deepen understanding of concepts + practices Professional Development notes throughout	**(Reviewer only.)** ✓ **Yes** ____ **No**
5. Manipulatives suggested in the materials are faithful representations of the mathematical objects they represent and are connected to written methods.	**Evidence-** manipulatives are adequate + do represent objects Connect well to lessons	**(Reviewer only.)** ✓ **Yes** ____ **No**
6. Materials include a variety of curriculum-embedded assessments. Examples include pre-, formative, summative, and self-assessment resources.	**Evidence-** -assessment handbook -online assessment -end of lesson assessment	**(Reviewer only.)** ✓ **Yes** ____ **No**
7. Assessments contain aligned rubrics, answer keys, and scoring guidelines that provide sufficient guidance for interpreting student performance.	**Evidence-** -rubric for assessments -multiple ways to assess student learning available	**(Reviewer only.)** ✓ **Yes** ____ **No**
8. Materials assess student proficiency using methods that are accessible and unbiased, including the use of course-level language in student prompts.	**Evidence-** Do not contain bias	**(Reviewer only.)** ✓ **Yes** ____ **No**

9. Materials are carefully evaluated by qualified individuals, whose names are listed, in an effort to ensure freedom from mathematical errors and course-level appropriateness.	**Evidence-** Reviewers cited by authors on back of title page	**(Reviewer only.)** ✓ **Yes** ____ **No**
10. The visual design supports students in engaging thoughtfully with the subject. Navigation through the text is clear.	**Evidence-** Easy to read Clear + easy lessons to follow	**(Reviewer only.)** ✓ **Yes** ____ **No**
11. The materials engage parents in appropriate ways. For example, homework assignments in elementary grades, consist of routine problems, practice with getting answers, and fluency-building exercises that parents can easily support.	**Evidence-** Home link letters to parents - gives explanation of content + ideas for activities	**(Reviewer only.)** ✓ **Yes** ____ **No**

Reviewer IMET Evaluation Summary **Title/Level:** Everyday Math (Kinder)

Publisher: McGraw-Hill **Copyright:** 2016 **ISBN:** 978-0-02-141411-6

Reviewer ID # DY and AF **Date Review Completed:** 3/7/16

Non-Negotiable Criteria- Each Non-Negotiable must be met in order for the Non-Negotiable Alignment Criteria to be met overall.

Non-Negotiable 1: Freedom from Obstacles to Focus	Non- Negotiable 2: Focus and Coherence
✓ Meets	✓ Meets
_____ Does Not Meet	_____ Does Not Meet

Non-Negotiable Overall:

✓ **Meets** _____ **Does Not Meet**

Alignment Criteria- Each Alignment Criterion must be met with a sufficient number of points in order for Alignment Criteria to be labeled as "Meets" overall. The more points the materials receive on the Alignment Criteria, the better they are aligned.

Alignment Criterion 1: Rigor and Balance	Alignment Criterion 2: Standards of Mathematical Practice	Alignment Criterion 3: Access to Standards for All Learners
Points: 6 of 6 possible. (Materials must receive at least 5 of 6 points to align.)	Points: 6 of 6 possible. (Materials must receive at least 5 of 6 points to align.)	Points: 6 of 6 possible. (Materials must receive at least 5 of 6 points to align.)
✓ Meets	✓ Meets	✓ Meets
_____ Does Not Meet	_____ Does Not Meet	_____ Does Not Meet

Alignment Criteria Overall:

✓ **Meets** _____ **Does Not Meet**

If the materials meet both Non-Negotiables and relevant Alignment Criterion, they are aligned to the Shifts and major features of the Core Standards. **Do the materials meet every Non-Negotiable and Alignment Criterion?** _____ **Yes** _____ **No**

What are the specific areas of strength and weakness based on this evaluation? Publishers or others modifying or developing assessments can use this information to make improvements and/or to remedy gaps in the alignment of assessment materials.

2015-16 Mathematics Interim Review Recommendation & Summary

Publisher Name:	McGraw-Hill
Title:	Everyday Math 1st
ISBN #	978-0-02-138365-8 ; 978-0-02-1144603-1
Grade Level(s) or Course:	1st
Reviewer ID:	DY, AF

RECOMMENDED AS:

__✓__ **Core Mathematics Program-** a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials. Substantial evidence clearly supports the designation of this program as Core.

_____ **Other Mathematics Program-** a program that substantially, but partially, meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for supplemental materials. Substantial evidence clearly supports the designation of this program as Other.

_____ **Component Mathematics Program-** a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs. Substantial evidence clearly supports the designation of this program as Component.

_____ **Intervention Program-** a program designed and intended to target and support students' specific needs. Substantial evidence clearly supports the designation of this program as Intervention.

_____ **Does not meet criteria** for recommendation as a Curricular Material or Online Resource for Mathematics.

EVIDENCE SUMMARY:

FOCUS- Assessed on grade level. It did not attempt to assess above grade level. It did cite skills needed from previous grade level that are needed to begin curriculum.

COHERENCE-

Major works are large majority of the lessons with supporting works interwoven appropriately throughout curriculum.

RIGOR-

Each lesson is highly engaging. Many opportunities for open response throughout lessons.

CONCEPTUAL UNDERSTANDING-

Each lesson has opportunities for conceptual understanding in many areas.

MATHEMATICAL PRACTICES-

Math practices are cited and interwoven through every lesson with grade level language.

ACCESSIBILITY OF STANDARDS TO ALL STUDENTS-

ELL support and many other differentiating options available. Also, RTI support available.

OTHER:

2[illegible]-16 Interim Mathematics Review

Mathematics Evaluation Tool Grades K-8

Publisher: McGraw-Hill

Title of Material: Everyday Math

Author: Bel at Al

ISBN #: 978-0-02-138345-8 | 978-0-02-1144463-1 **Copyright** 2016

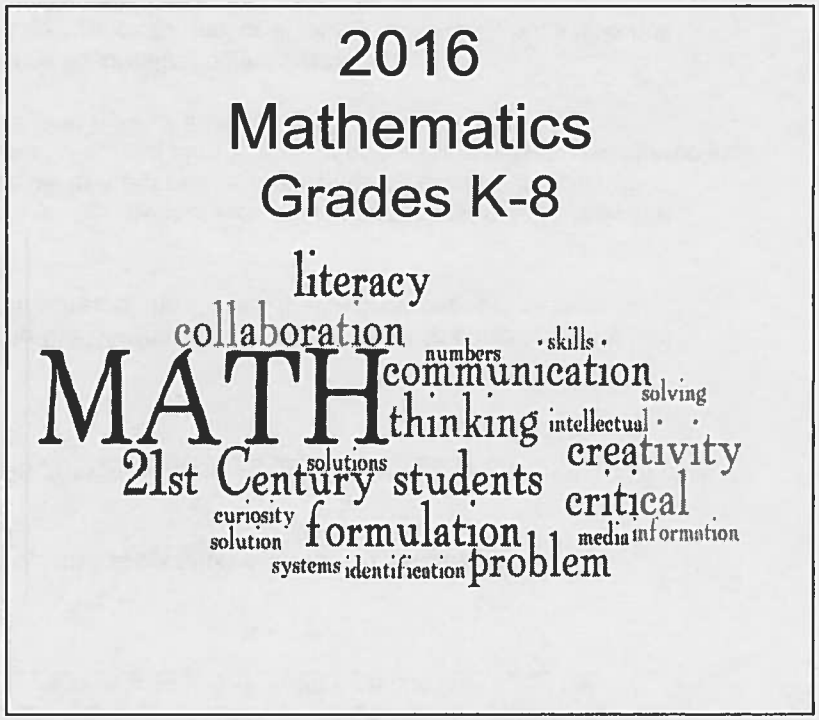
Reviewer ID: DY, AF

Core Mathematics Program- a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Core.

Other Mathematics Program- a program that substantially, but partially, meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Other.

Component Mathematics Program- a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs.
Substantial evidence clearly supports the designation of this program as Component.

Intervention Program- a program designed and intended to target and support students' specific needs.
Substantial evidence clearly supports the designation of this program as Intervention.



- Evaluation Form adapted from Instructional Materials Evaluation Toolkit (IMET).

The IMET was developed by Student Achievement Partners. Educators may use or adapt. http://creativecommons.org/licenses/by/3.0/ Download this tool at http://achievethecore.org/IMET

Instructional Materials Evaluation Tool

Mathematics, Grades K-8

What Are the Purposes of the IMET?

This Math IMET is designed to help educators determine whether instructional materials are aligned to the Shifts and major features of the Common Core State Standards (CCSS). The substantial instructional Shifts (http://www.corestandards.org/other-resources/key-shifts-inmathematics/) at the heart of the Common Core State Standards are:

- **Focus** strongly where the Standards focus
- **Coherence**: Think across grades and link to major topics within the grade
- **Rigor**: In major topics, pursue conceptual understanding, procedural skill and fluency, and application with equal intensity.

The IMET draws directly from the following documents:

- Common Core State Standards for Mathematics (www.corestandards.org/Math)
- Publishers' Criteria for the Common Core State Standards in Mathematics grade K-8 (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)

When to use the IMET

1. Purchasing materials: Many factors go into local purchasing decisions. Alignment to the Standards is a critical factor to consider. This tool is designed to evaluate alignment of instructional materials to the Shifts and the major features of the CCSS. It also provides suggestions of additional indicators to consider in the materials evaluation and purchasing process.

2. Evaluating materials currently in use: The IMET can be used to analyze the degree of alignment of existing materials and help to highlight specific, concrete flaws in alignment. Even where materials and tools currently in use fail to meet one or more of these criteria, the pattern of failure is likely to be informative. States and districts can use the evaluation to create a thoughtful plan to modify or combine existing resources in such a way that students' actual learning experiences approach the focus, coherence, and rigor of the Standards.

3. Developing programs: Those developing new programs can use this tool as guidance for creating aligned curricula.
Please note this tool was designed for evaluating comprehensive curricula (including any supplemental or ancillary materials), but it was not designed for the evaluation of standalone supplemental materials.

Who Uses the IMET?

Evaluating instructional materials requires both subject-matter and pedagogical expertise. Evaluators should be well versed in the Standards (www.corestandards.org/Math) for all grades in which materials are being evaluated. This includes understanding the Major Work of the grade (www.achievethecore/focus), the Supporting and Additional work, how the content fits into the progressions in the Standards (www.achievethecore.org/progressions), and the expectations of the Standards with respect to conceptual understanding, procedural skill and fluency, and application. Evaluators also should be familiar with the substantial instructional Shifts (http:// www.corestandards.org/other-resources/key-shifts-in-mathematics/) of Focus, Coherence and Rigor that are listed above.

Getting Started

Prior to Evaluation

Assemble all of the materials necessary for the evaluation. It is essential for evaluators to have materials for all grades covered by the program, as some criteria cannot be rated without having access to each grade. In addition, each evaluator should have a reference copy of the Common Core State Standards for Mathematics (CCSSM) and the Publishers' Criteria for the Common Core St[illegible] Standards for Mathematics, Grades K-8 (Spring 2013).

Before conducting the evaluation itself, it is important to develop a protocol for the evaluation process. The protocol should include having evaluators study the Publishers' Criteria and the IMET. It will also be helpful for evaluators to get a sense of each program overall before beginning the process. At a minimum, this would include reading the front matter of the text, looking at the table of contents and paging through multiple chapters.

Sections 1-3 below should be completed to produce a comprehensive picture of the strengths and weaknesses of the materials under evaluation. Information about areas in need of improvement or supplementation should be shared with internal and external stakeholders.

Navigating the Tool

Begin with Section 1: Non-Negotiable Alignment Criteria

- The Non-Negotiable Alignment Criteria must each be met in full for materials to be considered aligned to the Shifts and the major features of the Common Core State Standards. Each Non-Negotiable Alignment Criterion has one or more metrics associated with it; every one of these metrics must be met in order for the criterion as a whole to be met.

- Examine the relevant materials and use evidence to rate the materials against each criterion and its associated metric(s).

- Record and explain the evidence upon which the rating is based.

Continue to Section 2: Alignment Criteria

- The Alignment Criteria must each be met for materials to be considered aligned to the Shifts and the major features of the Common Core State Standards. Each Alignment Criterion has one or more metric associated with it; a specific number of these metrics must be met or partially met in order for the criterion as a whole to be met.

- Examine the materials in relation to these criteria, assigning each metric a point value. Rate the criterion as "Meets" or "Does Note Meet" based on the number of points assigned. The more points the materials receive on the alignment Criteria, the better they are aligned.

Directions for Alignment Criterion 1

Rigor and Balance

Alignment Criterion 1: Rigor and Balance

Materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.

The Standards set expectations for attention to all three aspects of rigor: conceptual understanding, procedural skill and fluency, and applications. Thus, materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.

Required Materials

- Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf)
- Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)
- Focus by Grade Level for the grade being evaluated (achievethecore.org/focus)
- Situation Types for the Operations in Word Problems (achievethecore.org/situation-types)
- From the materials being evaluated: teacher guides, student texts and workbooks

Rating this Criterion:

Alignment Criterion 1 is rated as Meets or Does Not Meet.

To rate Alignment Criterion 1, first rate metrics 1A, 1B, and 1C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). For each metric, guiding questions are provided to aid in gathering evidence.
Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 1 if the materials rate 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as rigor and balance, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.

Metric AC1A:
The materials support the development of students' conceptual understanding of key mathematical concepts, especially where called for in specific content Standards or cluster headings.

How to Find the Evidence:

Select one or more cluster(s) or Standard(s) from the Major Work for the grade being evaluated that relate specifically conceptual understanding to use throughout the questions associated with this metric. NOTE: Some examples of clusters or Standards that call for conceptual understanding include: K.OA.A.1, (1.NBT.B, 1.NBT.C), (2.NBT.A, 2.NBT.B), (3.OA.A.1, 3.OA.A.2), 4.NF.A, (4.NBT.A, 4.NBT.B), 5.NF.B, (5.NBT.A, 5.NBT.B), 6.RP.A, 6.EE.A.3, 7.NS.A, 7.EE.A, 8.EE.B, 8.F.A, 8.G.A

Clusters or Standards grouped by parentheses are closely connected and could be analyzed together.

For context, read Criterion #4a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).

-Choose a cluster/Standard from the Major Work that is aligned to each aspect of rigor and use it to evaluate these metrics. It is most helpful if the same clusters/Standards are chosen for all of the programs being evaluated. (Guidance in choosing clusters/Standards is included in "How to Find the Evidence".)

Use the questions for AC Metric 1A to evaluate Metric 1A. Record evidence for each question and rate Metric 1A.

__✓__ **Meets (2)**

____ **Partially Meets (1)**

____ **Does Not Meet (0)**

Is conceptual understanding attended to thoroughly where the Standards set explicit expectations for understanding or interpreting? Evaluate lessons, chapter/unit assessments and homework assignments, paying attention to work aligned to Standards that explicitly call for understanding or interpreting. NOTE: Examples of evaluating this Criterion might include looking at how well the multi-digit addition and subtraction algorithms are developed and explained on the basis of place value and properties of operations; or how well the multi-digit multiplication and division algorithms are developed and explained on the basis of place value and properties of operations; or how well solving equations is presented and explained as a process of reasoning.	**Evidence-** Each lesson has engaging activities to allow for open response. Lesson 3.4 page 240 – Open Response and discussion	
Do the materials feature high-quality conceptual problems and conceptual discussion questions? Evaluate lessons, chapter/unit assessments, and homework assignments. NOTE: Example of conceptual problems might include such questions as "Find a number greater than 1/5 and less than 1/4," or "If the divisor does not change and the dividend increases, what happens to the quotient?"	**Evidence-** Each lesson has the opportunity to include discussion on conceptual understanding. For Example: Chapter 3, Lesson 6	
Do the materials feature opportunities to identify correspondences across mathematical representations? Evaluate lessons, chapter/unit assessments and homework assignments. NOTE: Examples of evaluating this Criterion might include looking at whether students are supported in identifying correspondences among: the verbal description of a situation, the diagrams that distill its mathematical features, and the equations that model it; or equivalent forms of numbers (e.g., 3 and 6/2) and the number line; or rational number operations and representations of them via models such as the vector model; or the expression that defines a function and the graph that shows the relationship.	**Evidence-** Many different representations are used throughout curriculum. For Example: page 225 - Chapter 3, Lesson 1 • Dominoes vs. Part-Part-Whole	
Metric AC1B: **The materials are designed so that students attain the fluencies and procedural skills required by the Standards.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Major Work for the grade being evaluated that relate specifically to fluency and procedural skill to use throughout the questions associated with this metric. NOTE: Some examples of Standards that call for procedural skill and fluency include: K.OA.A.5, 1.OA.C.6, 2.OA.B.2, 2.NBT.B.5, 3.OA.C.7, 3.NBT.A.2, 4.NBT.B.4, 5.NBT.B.5, 6.NS.B.2, and 6.NS.B.3, 6.EE.A, 7.NS.A, 7.EE.A.1,7.EE.B.4a, 8.EE.C.7, 8.EE.C.8b For context, read Criterion #4b in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).		**Use the questions for Metric 1B to evaluate Metric 1 B. Record evidence for each question and rate Metric 1B.** **(Reviewer only.)** ✓ **Meets (2)** ____ **Partially Meets (1)** ____ **Does Not Meet (0)**

Is progress toward fluency and procedural skill interwoven with students' developing conceptual understanding of the operations in question? Evaluate lessons, chapter/unit assessments, daily routines, and homework assignments for evidence that the development of fluency and procedural skill is supported by conceptual understanding.	**Evidence-** Many opportunities for fluency and procedural skill practice interwoven through lessons. For example: Math Boxes, Mental Math, Home Links	
Are purely procedural problems and exercises present that include cases in which opportunistic strategies are valuable and generic cases that require efficient algorithms present? Evaluate lessons, chapter/unit assessments, daily routines, and homework assignments. NOTE: Examples of problems in which opportunistic strategies are valuable might include the sum 698 + 240 or the system x + y = 1, 2x + 2y = 3. Examples of generic cases that require efficient algorithms might include the sum 8767+2286 or the system 6y + x = x + 3, – x = 1 + 2y.	**Evidence-** Lots of practice available for bare problems which include – Quick Looks, Mental Math, Math Boxes and Home Links.	
Do the materials in grades K–6 provide repeated practice toward attainment of fluency Standards? Evaluate lessons, daily routines, and homework assignments for evidence of repeated practice toward attainment of the following K–6 Standards that set an explicit expectation of fluent (accurate and reasonably fast) computation: K.OA.A.5, 1.OA.C.6, 2.OA.B.2, 2.NBT.B.5, 3.OA.C.7, 3.NBT.A.2, 4.NBT.B.4, 5.NBT.B.5, 6.NS.B.2, 6.NS.B.3.	**Evidence-** Spiral Trace shows repeated practice.	
Metric AC1C: **The materials are designed so that teachers and students spend sufficient time working with engaging applications, without losing focus on the Major Work of each grade.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Major Work for the grade being evaluated that relate specifically application to use throughout the questions associated with this metric. NOTE: Some examples of clusters or Standards that call for application include: K.OA.A.2, 1.OA.A, 2.OA.A, 3.OA.A.3, 3.OA.D.8, 4.OA.A.3, 4.NF.B.3d, 4.NF.B.4c, 5.NF.B.6, 5.NF.B.7c, 6.RP.A.3, 6.NS.A.1, 6.EE.B.7, 6.EE.C.9, 7.RP.A, 7.NS.A.3, 7.EE.B.3, 8.EE.C.8c, 8.F.B For context, read Criterion #4c in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Each lesson has warm-ups, objectives, focus, and practice that focus on major works of the grade.	**Use the questions for Metric 1C to evaluate Metric 1C. Record evidence for each question and rate Metric 1C.** **(Reviewer only.)** ✓ **Meets (2)** ____ **Partially Meets (1)** ____ **Does Not Meet (0)**
Are there are single- and multi-step contextual problems, including non-routine problems, that develop the mathematics of the grade, afford opportunities for practice, and engage students in problem solving? Do the problems attend thoroughly to those places in the content Standards where expectations for multi-step and real-world problems are explicit? Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** Real problems with multiple steps in lessons throughout curriculum. For example: Open Response Problems, Journal Problems	

Do application problems particularly stress applying the Major Work of the grade? Evaluate lessons, chapter/unit assessments, and homework assignments. NOTE: Examples of evaluating this Criterion might include looking at: how well, by the end of grade 2, students using the materials as designed can represent and solve a full range of one-step addition and subtraction word problems; or how well, by the end of grade 3, students using the materials as designed can represent and solve a full range of one-step multiplication and division word problems; or how well these basic situation types for each operation are carried coherently across the grades, (e.g., with fractions and algebraic expressions); or, in all grades, whether the problems connect concepts, Standards, and domains in ways that are natural and important. For a list of situation types for one-step addition, subtraction, multiplication, and division problems, see Situation Types for the Operations in Word Problems	**Evidence-** Application problems are interwoven throughout curriculum. For example: Homelinks Lessons Journals All have application problems that cover OA - a major work.	
Does modeling build slowly across K–8, with applications that are relatively simple in earlier grades and when students are encountering new content? In grades 6–8, do the problems begin to provide opportunities for students to make their own assumptions or simplifications in order to model a situation mathematically? Read Standard for Mathematical Practice 4, Model with Mathematics. Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** Daily Routines have an appropriate progression of skills leading to unit 1 and the following units. For example: Students use simple hands-on activities to practice addition and subtraction.	

Alignment Criterion 1: Rigor and Balance

Materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.

(Reviewer only.)

✓ **Meets**

____ **Does Not Meet**

Strengths/Weaknesses:

AC1 Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 out of 6 points, the Criterion has not been met. Check the final rating.
Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)**

Strengths:
Everyday Math provides many opportunities for hands-on practice to conceptual understanding in all areas.

Before moving to Alignment Criterion 2, record the final Meets or Does Not Meet rating in the Evaluation Summary.

Directions for Alignment Criterion 2

Standards for Mathematical Practice

Alignment Criterion 2: Standards for Mathematical Practice

Materials must demonstrate authentic connections between content Standards and practice Standards.

The Standards require that designers of instructional materials connect the mathematical practices to mathematical content in instruction. Thus, materials must demonstrate authentic connections between content Standards and practice Standards.

Required Materials:

- Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf)
- Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)
- Focus by Grade Level for the grade being evaluated (www.achievethecore.org/focus)
- From the materials being evaluated: teacher guides, student texts and workbooks

Rating this Criterion

Alignment Criterion 2 is rated as Meets or Does Not Meet.

To rate Alignment Criterion 2, first rate metrics 2A, 2B, and 2C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). For each metric, guiding questions are provided to aid in gathering evidence.

Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 2 if the materials earn 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as mathematical practices, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.

Metric AC2A:
Materials address the practice Standards in such a way as to enrich the Major Work of the grade; practices strengthen the focus on Major Work instead of detracting from it, in both teacher and student materials.

How to Find the Evidence:

Familiarize yourself with the Major Work of the grade being evaluated (see the Focus by Grade Level documents.)

Evaluate teacher and student materials for evidence that the mathematical practices support and connect to the focus of the grade.

NOTE: Examples of evaluating this Criterion might include looking at whether, in grades K–5, students using the materials are supported to look for and express regularity in repeated reasoning about the addition table, the multiplication table, the properties of operations, the relationship between addition and subtraction or multiplication and division, and the place value system; or whether, in grades 6–8, students using the materials are supported to look for and express regularity in repeated reasoning about proportional relationships and linear functions.

For context, read Criterion #8 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013).

Evidence-

Practice standards are embedded throughout lessons and enhance student work.

For example:
page 211 - Unit Organizer - Shows Math Practices addressed in the unit.

(Reviewer only.)

✓ **Meets (2)**

Partially Meets (1)

Does Not Meet (0)

Metric AC2B **Materials attend to the full meaning of each practice Standard.** **How to Find the Evidence:** For context, read Criterion #7 and Criterion #9 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).		**Use the questions for Metric 2B to evaluate Metric 2B. Record evidence for each question and rate Metric 2B.** **(Reviewer only.)** ✓ **Meets (2)** **Partially Meets (1)** **Does Not Meet (0)**
Over the course of any given year of instruction, is each mathematical practice Standard meaningfully present in the form of assignments, activities, or problems that stimulate students to develop the habits of mind described in the practice Standard? Evaluate lessons, chapter/ unit assessments, and homework assignments for evidence of each mathematical practice being meaningfully present in instruction.	**Evidence-** Practice standards are noted in lessons where they are covered. Example: page 224- Unit 3, Lesson 1	
Do the materials treat the practice Standards as developing across grades or grade bands? Are the practice Standards in early grades appropriately simple? Do they display an arc of growing sophistication across the grades?	**Evidence-** Grade level appropriate language used. As curriculum progresses, math practice language stays with on grade level language but activities progress.	
Are there teacher-directed materials that explain the role of the practice Standards in the classroom and in students' mathematical development? Are alignments to practice Standards accurate?	**Evidence-** Each unit has an explanation of practices covered. For example: Unit 1, page 49	
Metric AC2C: **Materials support the Standards' emphasis on mathematical reasoning.** **How to Find the Evidence:** For context, read Criterion #10 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).		**Use the questions for Metric 2C to evaluate Metric 2C. Record evidence for each question and rate Metric 2C.** **(Reviewer only.)** ✓ **Meets (2)** **Partially Meets (1)** **Does Not Meet (0)**
Do the materials support students in constructing viable arguments and critiquing the arguments of others concerning grade-level mathematics that is detailed in the content Standards? Read Standard for Mathematical Practice 3. Evaluate teacher and student materials to ensure that students are given opportunities to reason with grade-level mathematics.	**Evidence-** Every unit has open response lessons. For example: Unit 1, Lesson 4	
Do the materials support students in producing not only answers and solutions, but also, in a grade-appropriate way, arguments, explanations, diagrams, mathematical models, etc., especially in the Major Work of the grade? Familiarize yourself with the Major Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate teacher and student materials, to understand the types of work students are expected to produce.	**Evidence-** The Open Response lessons provide practice in building arguments to support explanations and solutions to major work problems. Lots of other opportunities for discussion and arguments. Summarizing section included in each lesson.	

Do materials explicitly attend to the specialized language of mathematics? Is the language of argument, problem solving, and mathematical explanations taught rather than assumed? Evaluate teacher and student materials, paying attention to how mathematical language is taught. NOTE: Examples of evaluating this Criterion might include looking at whether students are supported in: basing arguments on definitions; using the method of providing a counterexample; or recognizing that examples alone do not establish a general statement.	**Evidence-** Vocabulary addressed at the beginning of each lesson. Sentences frames used in lessons to encourage the appropriate language.	

Alignment Criterion 2:
Standards for Mathematical Practice

Materials must demonstrate authentic connections between content Standards and practice Standards.

AC2 Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 out of 6 points, the Criterion has not been met. Check the final rating.
Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion.
(Reviewer only.)

Strength: Mathematical Practices are very well represented in each lesson. Many opportunities to practice all of them through the whole year.

Before moving to Alignment Criterion 3, record the final Meets or Does Not Meet rating in the Evaluation Summary.

(Reviewer only.)

✓ **Meets**

____ **Does Not Meet**

Strengths/Weaknesses:

Alignment Criterion 3:
Access to the Standards for All Students

Materials must provide supports for English Language Learners and other special populations.

Because Standards are for all students, alignment requires thoughtful support to ensure all students are able to meet the Standards. Thus, aligned materials must provide supports for English Language Learners and other special populations.

Required Materials:

- Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf)
- Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)
- From the materials being evaluated: teacher guides, student texts and workbooks

Rating this Criterion:

Alignment Criterion 3 is rated as Meets or Does Not Meet.

To rate Alignment Criterion 3, first rate metrics 3A, 3B, and 3C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points).

Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 3 if the materials earn 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as support for special population, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.

Metric AC3A **Support for English Language Learners and other special populations is thoughtful and helps those students meet the same Standards as all other students. The language in which problems are posed is carefully considered.** **How to Find the Evidence:** Evaluate teacher and student materials, paying attention to supports offered for special populations.	**Evidence-** ELL support in every lesson. Also, common misconceptions addressed in each lesson. Example - page 51 Lesson 1, Unit 1	Reviewer only.) ✓ **Meets (2)** ___ **Partially Meets (1)** ___ **Does Not Meet (0)**
Metric AC3B: **Materials provide appropriate level and type of scaffolding, differentiation, intervention, and support for a broad range of learners with gradual removal of supports, when needed, to allow students to demonstrate their mathematical understanding independently.** **How to Find the Evidence:** Evaluate teacher and student materials, paying attention to whether materials provide differentiation that will lead all learners to engage with on-grade-level content.	**Evidence-** Differentiation for all learners at all levels. For example - Unit 1, Lesson 6, page 83	Reviewer only.) ✓ **Meets (2)** ___ **Partially Meets (1)** ___ **Does Not Meet (0)**
Metric AC3C: **Design of lessons recommends and facilitates a mix of instructional approaches for a variety of learners such as using multiple representations (e.g., including models, using a range of questions, checking for understanding, flexible grouping, pair-share).** **How to Find the Evidence:** Evaluate teacher materials, noting instructional approaches suggested for whole class and differentiated lessons and activities.	**Evidence-** All types of models, small groups, lessons, and assessments differentiated for all learners. Adjusting Activity suggestions also included in all lessons. For example - page 87 unit 1, Lesson 6	Reviewer only.) ✓ **Meets (2)** ___ **Partially Meets (1)** ___ **Does Not Meet (0)**

Alignment Criterion 3: **Access to the Standards for All Students** **Materials must provide supports for English Language Learners and other special populations.** **AC3** Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 points, the Criterion has not been met. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion.**(Reviewer only.)** ELL support and support for other students throughout curriculum. **Move to the Evaluation Summary and record the final Meets or Does Not Meet rating .**	**(Reviewer only.)** ✓ **Meets** ____ **Does Not Meet** **Strengths/Weaknesses:**

Once an evaluation for alignment to the Shifts and major features of the CCSS has been conducted using Sections 1-3, it's important to evaluate for overall quality and best practices. A starting list of Indicators of Quality are suggested below. States, districts and others evaluating instructional materials are encouraged to add to this list to ensure materials reflect local contexts. For background information on some of the Indicators of Quality in this section, refer to pp.18–21 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).

Indicators of Quality	**Evidence- Give specific examples.**	**Rating: (Reviewers only.)**
1. Lessons are thoughtfully structured and support the teacher in leading the class through the learning paths at hand, with active participation by all students in their own learning and in the learning of their classmates.	**Evidence-** Lessons are very structured. Overviews show lesson structures and contain highly engaging activities.	**(Reviewer only.)** ✓ **Yes** ____ **No**
2. The underlying design of the materials includes both problems and exercises. (In solving problems, students learn new mathematics, whereas in working exercises, students apply what they have already learned to build mastery.) Each problem or exercise has a purpose. **NOTE: This Criterion does not require that the problems and exercises be labeled as such.**	**Evidence-** Focus- has a math problem that is new and used to introduce and develop mathematical thinking which leads to thought ful open response.	**(Reviewer only.)** ✓ **Yes** ____ **No**

3. Design of [illegible]gnments is not haphazard: exercises are given in intentional sequences in order to strengthen students' mathematical understanding.	**Evidence-** Lessons are designed to focus on standards of major works with supporting standards included in units. Spiral Trace is a very clear overview of lessons.	(Reviewer only.) ✓ Yes ____ No
4. There are separate teacher materials that support and reward teacher study including, but not limited to: discussion of the mathematics of the units and the mathematical point of each lesson as it relates to the organizing concepts of the unit, discussion on student ways of thinking and anticipating a variety of students responses, guidance on lesson flow, guidance on questions that prompt students thinking, and discussion of desired mathematical behaviors being elicited among students.	**Evidence-** Professional development available for teachers to learn curriculum and how to use effectively. For example: Online training, webinars.	(Reviewer only.) ✓ Yes ____ No
5. Manipulatives suggested in the materials are faithful representations of the mathematical objects they represent and are connected to written methods.	**Evidence-** Manipulatives are effective representations of models and problems used in lessons. Tool kits and manipulative kits are well supplied.	(Reviewer only.) ✓ Yes ____ No
6. Materials include a variety of curriculum-embedded assessments. Examples include pre-, formative, summative, and self-assessment resources.	**Evidence-** Assessment book contains - summative and cummulative. B, M, E of year assessments. Online assessments available.	(Reviewer only.) ✓ Yes ____ No
7. Assessments contain aligned rubrics, answer keys, and scoring guidelines that provide sufficient guidance for interpreting student performance.	**Evidence-** Each unit contains rubrics to interpret student answers. Scoring guidelines in assessment book.	(Reviewer only.) ✓ Yes ____ No
8. Materials assess student proficiency using methods that are accessible and unbiased, including the use of course-level language in student prompts.	**Evidence-** Assessments do not contain bias. Specific suggestions of language to use in academic development.	(Reviewer only.) ✓ Yes ____ No

9. Materials are carefully evaluated by qualified individuals, whose names are listed, in an effort to ensure freedom from mathematical errors and course-level appropriateness.	**Evidence-** Reviewers cited on inside Curriculum corr.	**(Reviewer only.)** ✓ **Yes** ____ **No**
10. The visual design supports students in engaging thoughtfully with the subject. Navigation through the text is clear.	**Evidence-** Age appropriate font, text, and wording.	**(Reviewer only.)** ✓ **Yes** ____ **No**
11. The materials engage parents in appropriate ways. For example, homework assignments in elementary grades, consist of routine problems, practice with getting answers, and fluency-building exercises that parents can easily support.	**Evidence-** Family letters describe content learned. Also, lists vocabulary to be learned and references to lessons on letter to show parents what learning to look for.	**(Reviewer only.)** ✓ **Yes** ____ **No**

Reviewer IMET Evaluation Summary **Title/Level:** Everyday Math 1st

Publisher: McGraw Hill **Copyright:** 2016 **ISBN:** various

Reviewer ID # DY, AF **Date Review Completed:** 3/9/16

Non-Negotiable Criteria- Each Non-Negotiable must be met in order for the Non-Negotiable Alignment Criteria to be met overall.

Non-Negotiable 1: Freedom from Obstacles to Focus	Non- Negotiable 2: Focus and Coherence
✓ Meets	✓ Meets
_____ Does Not Meet	_____ Does Not Meet

Non-Negotiable Overall:

✓ **Meets** _____ **Does Not Meet**

Alignment Criteria- Each Alignment Criterion must be met with a sufficient number of points in order for Alignment Criteria to be labeled as "Meets" overall. The more points the materials receive on the Alignment Criteria, the better they are aligned.

Alignment Criterion 1: Rigor and Balance	Alignment Criterion 2: Standards of Mathematical Practice	Alignment Criterion 3: Access to Standards for All Learners
Points: 6 of 6 possible. (Materials must receive at least 5 of 6 points to align.)	Points: 6 of 6 possible. (Materials must receive at least 5 of 6 points to align.)	Points: 6 of 6 possible. (Materials must receive at least 5 of 6 points to align.)
✓ Meets	✓ Meets	✓ Meets
_____ Does Not Meet	_____ Does Not Meet	_____ Does Not Meet

Alignment Criteria Overall:

✓ **Meets** _____ **Does Not Meet**

If the materials meet both Non-Negotiables and relevant Alignment Criterion, they are aligned to the Shifts and major features of the Core Standards. **Do the materials meet every Non-Negotiable and Alignment Criterion?** ✓ **Yes** _____ **No**

What are the specific areas of strength and weakness based on this evaluation? Publishers or others modifying or developing assessments can use this information to make improvements and/or to remedy gaps in the alignment of assessment materials.

2015-16 Mathematics Interim Review Recommendation & Summary

Publisher Name:	McGraw-Hill School Education LLC
Title:	Everyday Math
ISBN #	Various
Grade Level(s) or Course:	Grade 2
Reviewer ID:	KT LW

RECOMMENDED AS:

__X__ **Core Mathematics Program-** a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials. Substantial evidence clearly supports the designation of this program as Core.

_____ **Other Mathematics Program-** a program that substantially, but partially, meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for supplemental materials. Substantial evidence clearly supports the designation of this program as Other.

_____ **Component Mathematics Program-** a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs. Substantial evidence clearly supports the designation of this program as Component.

_____ **Intervention Program-** a program designed and intended to target and support students' specific needs. Substantial evidence clearly supports the designation of this program as Intervention.

_____ **Does not meet criteria** for recommendation as a Curricular Material or Online Resource for Mathematics.

EVIDENCE SUMMARY:

FOCUS- This curriculum follows the grade level standards and does not assess outside of the appropriate standards. The materials are aligned with the grade level standards.

COHERENCE- A significant portion of the instruction focuses on the Major Work for the grade. Supporting works make connections with the Major Works. The progression in the materials is clear. Materials contain ample practice. Learning objectives are present but were not easily visibl

RIGOR- The materials clearly meet all three aspects of rigor: conceptual understanding, procedural skill and fluency, and applications. All three areas are strongly represented.

CONCEPTUAL UNDERSTANDING- Conceptual understanding is promoted through appropriate classroom discussions. Furthermore, problem solving occurs frequently beyond a single answer response and open-ended question. Progress towards fluency and procedural skills are interwoven with the development of mathematical understanding.

MATHEMATICAL PRACTICES- Materials demonstrate authentic connections between content standards and mathematical practice standards. The use of MPs focus on the Major Work and provide coherent connections. The MPs develop across the grade level. There are teacher materials that explain the roles of MPs and support student learning.

ACCESSIBILITY OF STANDARDS TO ALL STUDENTS- There were ample supports for ELL and other special populations to meet the grade level standards. Materials provide appropriate level and variation in scaffolding, differentiation, intervention, and supports for home. Teacher and student materials support instruction through the discussions, problem solving, manipulatives, and various models.

OTHER:

Student Reference book does a great job with the mathematical practices. However, there are not enough supports to assist students in structuring mathematical arguments.

2015-16 Interim Mathematics Review

Mathematics Evaluation Tool Grades K-8

Publisher: McGraw-Hill School Education LLC

Title of Material: EveryDay Math Grade 2

Author: Bell et al

ISBN #: Various **Copyright** 2016

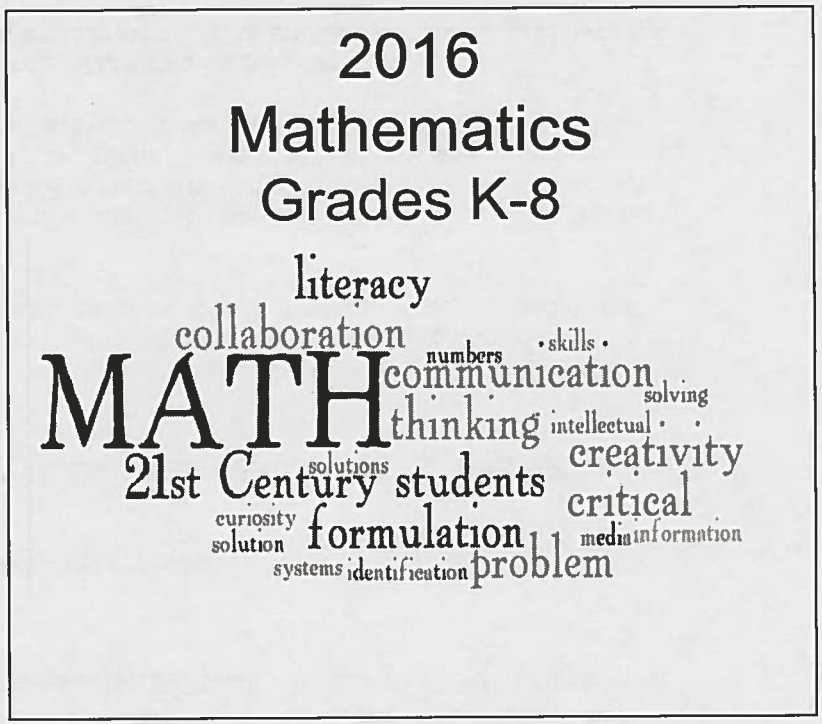
Reviewer ID: KT LW

Core Mathematics Program- a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Core.

Other Mathematics Program- a program that substantially, but partially, meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Other.

Component Mathematics Program- a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs.
Substantial evidence clearly supports the designation of this program as Component.

Intervention Program- a program designed and intended to target and support students' specific needs.
Substantial evidence clearly supports the designation of this program as Intervention.



- Evaluation Form adapted from Instructional Materials Evaluation Toolkit (IMET).

The IMET was developed by Student Achievement Partners. Educators may use or adapt. http://creativecommons.org/licenses/by/3.0/ Download this tool at http://achievethecore.org/IMET

Instructional Materials Evaluation Tool

Mathematics, Grades K-8

What Are the Purposes of the IMET?

This Math IMET is designed to help educators determine whether instructional materials are aligned to the Shifts and major features of the Common Core State Standards (CCSS). The substantial instructional Shifts (http://www.corestandards.org/other-resources/key-shifts-inmathematics/) at the heart of the Common Core State Standards are:

- **Focus** strongly where the Standards focus
- **Coherence**: Think across grades and link to major topics within the grade
- **Rigor**: In major topics, pursue conceptual understanding, procedural skill and fluency, and application with equal intensity.

The IMET draws directly from the following documents:

- Common Core State Standards for Mathematics (www.corestandards.org/Math)
- Publishers' Criteria for the Common Core State Standards in Mathematics grade K-8 (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)

When to use the IMET

1. Purchasing materials: Many factors go into local purchasing decisions. Alignment to the Standards is a critical factor to consider. This tool is designed to evaluate alignment of instructional materials to the Shifts and the major features of the CCSS. It also provides suggestions of additional indicators to consider in the materials evaluation and purchasing process.

2. Evaluating materials currently in use: The IMET can be used to analyze the degree of alignment of existing materials and help to highlight specific, concrete flaws in alignment. Even where materials and tools currently in use fail to meet one or more of these criteria, the pattern of failure is likely to be informative. States and districts can use the evaluation to create a thoughtful plan to modify or combine existing resources in such a way that students' actual learning experiences approach the focus, coherence, and rigor of the Standards.

3. Developing programs: Those developing new programs can use this tool as guidance for creating aligned curricula.
Please note this tool was designed for evaluating comprehensive curricula (including any supplemental or ancillary materials), but it was not designed for the evaluation of standalone supplemental materials.

Who Uses the IMET?

Evaluating instructional materials requires both subject-matter and pedagogical expertise. Evaluators should be well versed in the Standards (www.corestandards.org/Math) for all grades in which materials are being evaluated. This includes understanding the Major Work of the grade (www.achievethecore/focus), the Supporting and Additional work, how the content fits into the progressions in the Standards (www.achievethecore.org/progressions), and the expectations of the Standards with respect to conceptual understanding, procedural skill and fluency, and application. Evaluators also should be familiar with the substantial instructional Shifts (http:// www.corestandards.org/other-resources/key-shifts-in-mathematics/) of Focus, Coherence and Rigor that are listed above.

Getting Started

Prior to Evaluation

Assemble all of the materials necessary for the evaluation. It is essential for evaluators to have materials for all grades covered by the program, as some criteria cannot be rated without having access to each grade. In addition, each evaluator should have a reference copy of the Common Core State Standards for Mathematics (CCSSM) and the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013).

Instructional Materials Evaluation Tool
Mathematics, Grades K-8

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Getting Started
Prior to Evaluation

Assemble all of the materials necessary for the evaluation. It is essential for evaluators to have materials for all grades covered by the program, as some criteria cannot be rated without having access to each grade. In addition, each evaluator should have a reference copy of the Common Core State Standards for Mathematics (CCSSM) and the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013).

Before conducting the evaluation itself, it is important to develop a protocol for the evaluation process. The protocol should include having evaluators study the Publishers' Criteria and the IMET. It will also be helpful for evaluators to get a sense of each program overall before beginning the process. At a minimum, this would include reading the front matter of the text, looking at the table of contents and paging through multiple chapters.

Sections 1-3 below should be completed to produce a comprehensive picture of the strengths and weaknesses of the materials under evaluation. Information about areas in need of improvement or supplementation should be shared with internal and external stakeholders.

Navigating the Tool

Begin with Section 1: Non-Negotiable Alignment Criteria

- The Non-Negotiable Alignment Criteria must each be met in full for materials to be considered aligned to the Shifts and the major features of the Common Core State Standards. Each Non-Negotiable Alignment Criterion has one or more metrics associated with it; every one of these metrics must be met in order for the criterion as a whole to be met.

- Examine the relevant materials and use evidence to rate the materials against each criterion and its associated metric(s).

- Record and explain the evidence upon which the rating is based.

Continue to Section 2: Alignment Criteria

- The Alignment Criteria must each be met for materials to be considered aligned to the Shifts and the major features of the Common Core State Standards. Each Alignment Criterion has one or more metric associated with it; a specific number of these metrics must be met or partially met in order for the criterion as a whole to be met.

- Examine the materials in relation to these criteria, assigning each metric a point value. Rate the criterion as "Meets" or "Does Note Meet" based on the number of points assigned. The more points the materials receive on the alignment Criteria, the better they are aligned.

- Record and explain the evidence upon which the rating is based.

Proceed to Section 4: Indicators of Quality

- Indicators of Quality are important considerations that will help evaluators better understand the overall quality of instructional materials. These considerations are not criteria for alignment to the CCSS, but they provide valuable information about additional program characteristics. Evaluators may want to add their own indicators to the examples provided.

Directions for Non-Negotiable 1

Freedom from Obstacles to Focus

Criterion	Evidence- Give specific examples.	Rating: (Reviewer only.)
Non-Negotiable 1: **Freedom from Obstacles to Focus** **Materials must reflect the content architecture of the Standards by not assessing the topics named before the grade level where they first appear in the Standards.** The Standards foster students' progress to algebra by focusing strongly on arithmetic. Consistent with this focus, certain topics from outside of arithmetic appear only in later grades. Thus, to be aligned, materials must reflect the content architecture of the Standards by not assessing the topics named before the grade level where they first appear in the Standards. In this criterion, "topics named" means the topics that are explicitly named in Metric 1A. No other topics should be added to the list in Metric 1A. (Note that other topics in the standards are addressed in criterion NN2.)	**Required Materials** • Common Core State Standards for Mathematics (• Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf) • From the materials being evaluated: teacher guides and all assessment components	**Rating this Criterion**: Non-Negotiable 1 is rated as Meets or Does Not Meet. To rate Non-Negotiable 1, begin by rating Metric 1A. Since Metric 1A is the only metric for Non-Negotiable 1, the rating for Non-Negotiable 1 is the same as the rating for Metric 1A. If Metric 1A is rated as Does Not Meet, include evidence of when the named topic(s) is/are assessed. If the metric is rated as Meets, list the grade(s) examined in the evaluation.

Metric NN1A: **Materials reflect the basic architecture of the Standards by not assessing the listed topics before the grade level indicated.** • Probability, including chance, likely outcomes, probability models. (Introduced in the CCSSM in grade 7) • Statistical distributions, including center, variation, clumping, outliers, mean, median, mode, range, quartiles; and statistical association or trends, including two-way tables, bivariate measurement data, scatter plots, trend line, line of best fit, correlation. (Introduced in the CCSSM in grade 6) • Similarity, congruence, or geometric transformations. (Introduced in the CCSSM in grade 8) • Symmetry of shapes, including line/ reflection symmetry, rotational symmetry. (Introduced in the CCSSM in grade 4) **How to Find the Evidence:** Evaluate the table of contents, all chapter tests, all unit tests, and other such assessment components (including rubrics). For context, read Criterion #2 from the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013). NOTE: Grade alignments of other topics are addressed in Non-Negotiable 2, Focus and Coherence.) In this criterion, "topics named" means the topics that are explicitly named in Metric 1A. No other topics should be added to the list in Metric 1A. (Note that other topics in the standards are addressed in criterion NN2.)	**Evidence-** **No indication of assessments for the following topics was found: probability, statistical distributions, geometry for grade 8 (similarity, congruence, or geometric transformations), or symmetry of shapes. The text does not assess listed topics before the indicated grade level.** **1) Each assessment identifies specific grade-level standards that are being assessed.** **2) All lessons and practice identify specific grade-level standards that are being taught**	**(Reviewer only.)** **_X___Meets** **____Does Not Meet**
Non-Negotiable 1: Materials must reflect the content architecture of the Standards by not assessing the topics named* before the grade level where they first appear in the Standards. **NN 1** If Metric 1A was rated as Meets, then rate Non-Negotiable 1 as Meets. If Metric 1A was rated as Does Not Meet, then rate Non- Negotiable 1 as Does Not Meet. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion.**(Reviewer only.)** **Before moving to Non-Negotiable 2, record the final Meets or Does Not Meet rating in the Evaluation Summary.**		**(Reviewer only.)** **__X__Meets** **____Does Not Meet** **Strengths/Weaknesses:**

Directions for Non-Negotiable 2

Focus and Coherence

Non-Negotiable 2: **Focus and Coherence** **Materials must focus coherently on the Major Work of the grade in a way that is consistent with the progressions in the Standards.** Focus and coherence are the two major evidence-based design principles of the Common Core State Standards for Mathematics (CCSSM, p. 3). Focus is necessary in order to fulfill the ambitious promise the states have made to their students by adopting the Standards: greater achievement at the college and career ready level; greater depth of understanding of mathematics; and a rich classroom environment in which reasoning, sense-making, applications, and a range of mathematical practices flourish. In simpler terms, a mile-wide, inch-deep curriculum translates to less time per topic. Less time means less depth and moving on without many students. Thus, materials must focus coherently on the Major Work of the grade in a way that is consistent with the progressions in the Standards.	**Required Materials** • Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf) • Focus by Grade Level for the grade being evaluated (www.achievethecore.org/focus) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion:** Non-Negotiable 2 is rated as Meets or Does Not Meet. To rate Non-Negotiable 2, first rate metrics 2A–2H. Each of these eight metrics must be rated as Meets in order for Non-Negotiable 2 to be rated as Meets. Rate each metric 2A-2H as Meets or Does Not Meet/Insufficient Evidence. If the evidence examined shows that the Criterion is met, then mark the Criterion Meets. If the evidence examined shows that the Criterion is not met—or if there is insufficient evidence to make a determination—then mark the Criterion as Does Not Meet/Insufficient Evidence. Support all ratings with evidence.
Metric NN2A: **In each grade K–8, students and teachers using the materials as designed devote the large majority of time to the Major Work of the grade.** **How to Find the Evidence:** Familiarize yourself with the Major Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, lessons, homework assignments, and assessments. (Evaluate both student and teacher materials.) Consider time spent on the Major Work of the grade and judge qualitatively whether students and teachers using the materials as designed will devote the large majority of time to the Major Work of the grade. For context, read Criterion #1 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013)	**Evidence-** **The Major Works for Grade 2 include Number and Operations in Base Ten, within Operations and Algebraic Thinking, represent and solve problems involving addition and subtraction, adding and subtracting within 20, and within Measurement and Data, measure and estimate lengths in standard units, and relate addition and subtraction to length. Supporting Works include work with equal groups of objects to gain foundations of multiplication, work with time and money, and represent and interpret data. The only additional work is in Geometry, reason with shapes and their attributes.** **1) At least 65-85% of instruction and practice is focused on Major Works** **2) At least six of the nine units targets the Major Works with components of the Major work in all units**	**(Reviewer only.)** **__X__Meets** **____Does Not Meet/** **Insufficient Evidence**

Metric NN2B: **Supporting work, where present, enhances focus and coherence simultaneously by also engaging students in the Major Work of the grade.** **How to Find the Evidence:** Familiarize yourself with the Major Work and Supporting Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate chapters and lessons that focus on Supporting Work. NOTE: Example of evaluating this Criterion might include looking at whether materials for K–5 generally treat data displays as an occasion for solving grade-level word problems using the four operations (e.g., see 3.MD.B.3); or whether materials for grade 7 take advantage of opportunities to use probability to support ratios, proportions, and percentages. For context, read Criterion #3 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** **The text uses supporting work to make connections with Major Works.** **1) Time and money, data, shapes and equal groups are infused within the Major Works concepts and help to enhance focus** **2) Supporting works do not detract from the Major Works** **3) Student Math Journal**	**(Reviewer only.)** **__X__Meets** **____Does Not Meet/ Insufficient Evidence**
Metric NN2C: **Materials base content progressions on the grade-by-grade progressions in the Standards. Content from previous or future grades does not unduly interfere with or displace on-grade-level content.** **How to Find the Evidence:** Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, and lessons in both student and teacher materials. NOTE: In some cases it may be possible that aligned materials might address some aspects of a topic in a strategic way before or after the grade level in which the topic is central in the Standards' progressions; for example, a curriculum author might purposefully choose to explore adding fractions with unlike denominators in a way appropriate to grade four, recognizing that this work is not really required until the next grade. However, any such purposeful discrepancies in content progressions should enhance the required learning in each grade; not unduly interfere with or displace grade-level content; and be clearly aimed at helping students meet the Standards as written rather than effectively rewriting the progressions in the Standards. And in all cases, note that Non-Negotiable 1 must be met for materials to be aligned. For context, read Criterion #5a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** **The progression in text matches the progression within the standards. Any earlier grade level materials are introduced to omit gaps in students' understanding. Furthermore, material towards subsequent grade levels is provided in preparation for that upcoming grade. Differentiation requires meeting student needs. Content from previous grades is reviewed in the Warm-Up section of the lesson and does not interfere or detract from grade level content or the progression through the grade level standards. Future grade level content does not interfere at all.** **1) Students work beyond grade-level multiplication problems to develop the connections between the multiplication strategies they are learning and the upcoming multi-digit multiplication.** **2) Readiness and Enrichment activities** **3) Units 8 and 9 not only introduce students to equal groupings but make connections to multiplication, skip counting**	**(Reviewer only.)** **__X__Meets** **____Does Not Meet/ Insufficient Evidence**

Metric NN2D: **Materials gi[illegible]l students extensive work with on-grade-level problems.** **How to Find the Evidence:** Evaluate both student and teacher materials. If the materials provide resources for differentiated learning, consider whether lower-performing students have opportunities to engage with grade-level problems. Also consider whether higher-performing students are given opportunities to learn current grade-level content in greater depth. For context, read Criterion #5b in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** **Although differentiation is offered in each lesson, Readiness, Enrichment, and Extra Practice, all students receive grade-level instruction that is developmentally appropriate instruction that deepens grade level mathematical understanding. The text does not invent connections but rather uses the natural progression of the standards to create connections. There are ample opportunities for students to work on grade-level problems.** **1) Readiness, Enrichment, Extra Practice** **2) Math Journal** **3) Blackline masters**	**(Reviewer only.)** **__X__Meets** **____Does Not Meet/** **Insufficient Evidence**
Metric NN2E: **Materials relate on-grade-level concepts explicitly to prior knowledge from earlier grades.** **How to Find the Evidence:** Evaluate both student and teacher materials. NOTE: Examples of evaluating this Criterion might include looking at the way the materials extend basic ideas of place value across the decimal point; or the role that properties of operations play when the materials extend arithmetic beyond whole numbers to fractions, variables, and expressions. More generally, cluster headings in the Standards sometimes signal key moments where reorganizing and extending previous knowledge is important in order to accommodate new knowledge (e.g., see cluster headings that use the phrase "Apply and extend previous understanding"). For context, read Criterion #5c in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** **Materials relate on-grade-level concepts explicitly to prior knowledge from earlier grades.** **1) P. EM2 of each volume explains if students are extending or developing an understanding of a concept. Extending indicates a continuation of instruction from previous grade level and developing indicates it is introduced during the current grade level.** **2) At the beginning of each lesson there is a Spiral Snapshot** **3) Pp. EM10-13 indicate the games correlation in regards to the standards for K-2** **4) TE gives teacher instruction on how to relate prior knowledge and link it to new concepts.**	**(Reviewer only.)** **__X__Meets** **____Does Not Meet/** **Insufficient Evidence**
Metric NN2F: **Review of material from previous grades is clearly identified as such to the teacher, and teacher and students can see what their specific responsibility is for the current year.** **How to Find the Evidence:** Evaluate the table of contents, but do not stop there; also evaluate units, chapters, lessons, homework assignments and assessments. (Evaluate both student and teacher materials.) Identify any content from previous grades and check whether it is identified as such. For context, read Criterion #5a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** **The year-to-year and current grade level instructional and standards progression is evident in the Unit Organizer which indicates the standards, domains, clusters, and MPs for the unit, individual lessons, games, the Spiral Trace, and through the Mathematical Background PD section.** **1) Previous grade materials are typically used in Readiness activities if at all and do not constitute the main focus of the lesson** **2) Beginning of the year pre-assessments tend to have materials from the previous year of instruction.**	**(Reviewer only.)** **__X__Meets** **____Does Not Meet/** **Insufficient Evidence**

Metric NN2G: **Materials include learning objectives that are visibly shaped by CCSSM cluster headings.** **How to Find the Evidence:** Select several clusters from the Major Work in the grade being evaluated. Evaluate teacher and student materials in relation to these clusters. For context, read Criterion #6a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** **The learning objectives are clearly shaped by the CCSS domains, clusters, and MPs.** **1) The learning objectives are called Goals for Mathematical Content (GMCs) and relate directly to the standards (pp. EM3-5)** **2) The start of each unit and lesson outlines the CCSS cluster and domains.**	**(Reviewer only.)** **_X___Meets** **____Does Not Meet/** **Insufficient Evidence**
Metric NN2H: **Materials include problems and activities that serve to connect two or more clusters in a domain, or two or more domains in a grade, in cases where these connections are natural and important.** **How to Find the Evidence:** In the grade being evaluated, choose two or more clusters or two or more domains for which connections are natural and important. Evaluate the units, chapters, and lessons that deal with the chosen topics, looking for problems and activities that serve to connect the chosen clusters or domains. NOTE: An example of evaluating this Criterion might include looking at whether problems in grade 4 sometimes or often involve students applying their developing computation skills (detailed in domain NBT) in the context of solving word problems (detailed in domain OA). For context, read Criterion #6b in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** **Connection within the text are mathematically natural and significant.** **1) Most lessons, if not all, address multiple clusters and highlighting the existing mathematical connections.** **2) Problem solving is connected to real world situations and uses operations and properties to develop solutions** **3) Measurement is connected to addition and subtraction** **4) Time and money are connected to addition and subtraction**	**(Reviewer only.)** **__X__Meets** **____Does Not Meet/** **Insufficient Evidence**
Non-Negotiable 2: **Focus and Coherence** **Materials must focus coherently on the Major Work of the grade in a way that is consistent with the progressions in the Standards.** **NN 2** If all Metrics 2A – 2H were rated as Meets, then rate Non-Negotiable 2 as Meets. If one or more Metric was rated Does Not Meet/Insufficient Evidence, then rate Non-Negotiable 2 as Does Not Meet. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)** **Before moving to Alignment Criterion 1, record the final Meets or Does Not Meet rating in the Evaluation Summary.**		**(Reviewer only.)** **__X__Meets** **____Does Not Meet** **Strengths/Weaknesses:**
Now continue by evaluating the Alignment Criterion 1 for Rigor and Balance.		

Directions for Alignment Criterion 1

Rigor and Balance

Alignment Criterion 1: Rigor and Balance **Materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.** The Standards set expectations for attention to all three aspects of rigor: conceptual understanding, procedural skill and fluency, and applications. Thus, materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.	**Required Materials** • Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf) • Focus by Grade Level for the grade being evaluated (achievethecore.org/focus) • Situation Types for the Operations in Word Problems (achievethecore.org/situation-types) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion:** Alignment Criterion 1 is rated as Meets or Does Not Meet. To rate Alignment Criterion 1, first rate metrics 1A, 1B, and 1C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). For each metric, guiding questions are provided to aid in gathering evidence. Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 1 if the materials rate 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as rigor and balance, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.
Metric AC1A: **The materials support the development of students' conceptual understanding of key mathematical concepts, especially where called for in specific content Standards or cluster headings.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Major Work for the grade being evaluated that relate specifically conceptual understanding to use throughout the questions associated with this metric. NOTE: Some examples of clusters or Standards that call for conceptual understanding include: K.OA.A.1, (1.NBT.B, 1.NBT.C), (2.NBT.A, 2.NBT.B), (3.OA.A.1, 3.OA.A.2), 4.NF.A, (4.NBT.A, 4.NBT.B), 5.NF.B, (5.NBT.A, 5.NBT.B), 6.RP.A, 6.EE.A.3, 7.NS.A, 7.EE.A, 8.EE.B, 8.F.A, 8.G.A Clusters or Standards grouped by parentheses are closely connected and could be analyzed together. For context, read Criterion #4a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	-Choose a cluster/Standard from the Major Work that is aligned to each aspect of rigor and use it to evaluate these metrics. It is most helpful if the same clusters/Standards are chosen for all of the programs being evaluated. (Guidance in choosing clusters/Standards is included in "How to Find the Evidence".)	**Use the questions for AC Metric 1A to evaluate Metric 1A. Record evidence for each question and rate Metric 1A.** **__X__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**

Is conceptual understanding attended to thoroughly where the Standards set e expectations for understanding or interpreting? Evaluate lessons, chapter/unit assessments and homework assignments, paying attention to work aligned to Standards that explicitly call for understanding or interpreting. NOTE: Examples of evaluating this Criterion might include looking at how well the multi-digit addition and subtraction algorithms are developed and explained on the basis of place value and properties of operations; or how well the multi-digit multiplication and division algorithms are developed and explained on the basis of place value and properties of operations; or how well solving equations is presented and explained as a process of reasoning.	**Evidence-** **Classroom discussion about problems offers opportunities to engage in MPs for constructing and critiquing arguments.** **1) TE Sharing Strategies section within the lessons (p. 150) and other such classroom discussion opportunities have sample answers** **2) The MPs and the specific goals for the particular MPs are listed at the start of each lesson in the TE as a reminder.** **3) The two-day Open Response/Reengagement lesson in each unit requires students to use apply concepts they have learned to solve a word problem. A simple rubric in the TE helps the teacher identify if students are meeting grade-level expectations (pp. 186-193)** **4) Program uses Base Ten blocks, number lines, input charts, tally marks, and the place value chart to develop and explain addition and subtraction algorithms**	
Do the materials feature high-quality conceptual problems and conceptual discussion questions? Evaluate lessons, chapter/unit assessments, and homework assignments. NOTE: Example of conceptual problems might include such questions as "Find a number greater than 1/5 and less than 1/4," or "If the divisor does not change and the dividend increases, what happens to the quotient?"	**Evidence-** **Very rarely do students just provide a single answer response. Questions are more open-ended or require more than just a single number solution.** **1) See 3) above** **2) Grade level appropriate discussion questions relating to value of digit in place value**	
Do the materials feature opportunities to identify correspondences across mathematical representations? Evaluate lessons, chapter/unit assessments and homework assignments. NOTE: Examples of evaluating this Criterion might include looking at whether students are supported in identifying correspondences among: the verbal description of a situation, the diagrams that distill its mathematical features, and the equations that model it; or equivalent forms of numbers (e.g., 3 and 6/2) and the number line; or rational number operations and representations of them via models such as the vector model; or the expression that defines a function and the graph that shows the relationship.	**Evidence-** **Materials used within the student pages and reference book correspond to the manipulatives used for modeling strategies. The manipulatives and concrete representations enhance the mathematical understandings and are connected to the written and symbolic mathematical methods. The program gives ample opportunities for students to connect verbal description with equations that mode mathematics.** 1) **Mathematical representations are consistent within the grade level and extending across grade levels (tallies, number line, ten frames, etc.)** 2) **See above**	

Metric AC1B: **The materia[illegible]e designed so that students attain the fluencies and procedural skills required by the Standards.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Major Work for the grade being evaluated that relate specifically to fluency and procedural skill to use throughout the questions associated with this metric. NOTE: Some examples of Standards that call for procedural skill and fluency include: K.OA.A.5, 1.OA.C.6, 2.OA.B.2, 2.NBT.B.5, 3.OA.C.7, 3.NBT.A.2, 4.NBT.B.4, 5.NBT.B.5, 6.NS.B.2, and 6.NS.B.3, 6.EE.A, 7.NS.A, 7.EE.A.1,7.EE.B.4a, 8.EE.C.7, 8.EE.C.8b For context, read Criterion #4b in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).		**Use the questions for Metric 1B to evaluate Metric 1 B. Record evidence for each ques[illegible]and rate Metric 1B.** **(Reviewer only.)** **__X__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Is progress toward fluency and procedural skill interwoven with students' developing conceptual understanding of the operations in question? Evaluate lessons, chapter/unit assessments, daily routines, and homework assignments for evidence that the development of fluency and procedural skill is supported by conceptual understanding.	**Evidence-** **Progress towards fluency and procedural skill interwoven with students' developing conceptual understanding of the operations. The fluency and procedural skill opportunities are present in each lesson** **1) Each lesson begins with a progression towards fluency and reinforcement of the procedural skills with the Mental Math and Fluency exercises contained within the Warm-Up portion of the lesson.** **2) Additional practice is provided at the end of each lesson within the Practice section which often times includes Math Boxes and sometimes Home Links for support and practice at home.** **3) Fluency development is evident in each unit's Spiral Trace** **4) Blackline masters**	
Are purely procedural problems and exercises present that include cases in which opportunistic strategies are valuable and generic cases that require efficient algorithms present? Evaluate lessons, chapter/unit assessments, daily routines, and homework assignments. NOTE: Examples of problems in which opportunistic strategies are valuable might include the sum 698 + 240 or the system x + y = 1, 2x + 2y = 3. Examples of generic cases that require efficient algorithms might include the sum 8767+2286 or the system 6y + x = x + 3, – x = 1 + 2y.	**Evidence-** **Procedural problems and exercises are present throughout the program.** **1) Quick Looks and "helper facts"** **2) Fact families** **3) Work with equal groups to lead toward multiplication** **4) Math Journal – includes procedural problems and exercises requiring efficient algorithms**	

Do the materials in grades K–6 provide repeated practice toward attainment of fluency Standards? Evaluate lessons, daily routines, and homework assignments for evidence of repeated practice toward attainment of the following K–6 Standards that set an explicit expectation of fluent (accurate and reasonably fast) computation: K.OA.A.5, 1.OA.C.6, 2.OA.B.2, 2.NBT.B.5, 3.OA.C.7, 3.NBT.A.2, 4.NBT.B.4, 5.NBT.B.5, 6.NS.B.2, 6.NS.B.3.	**Evidence-** **The materials provide repeated practice towards attainment of fluency standards.** **1) See above** **2) Repeated addition, arrays, and equal group problems begin to develop multiplicative thinking** **3) Lessons** **4) Daily routines** **5) Homework**	
Metric AC1C: **The materials are designed so that teachers and students spend sufficient time working with engaging applications, without losing focus on the Major Work of each grade.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Major Work for the grade being evaluated that relate specifically application to use throughout the questions associated with this metric. NOTE: Some examples of clusters or Standards that call for application include: K.OA.A.2, 1.OA.A, 2.OA.A, 3.OA.A.3, 3.OA.D.8, 4.OA.A.3, 4.NF.B.3d, 4.NF.B.4c, 5.NF.B.6, 5.NF.B.7c, 6.RP.A.3, 6.NS.A.1, 6.EE.B.7, 6.EE.C.9, 7.RP.A, 7.NS.A.3, 7.EE.B.3, 8.EE.C.8c, 8.F.B For context, read Criterion #4c in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** **The text provides opportunities to meet CCSS and work with multi-step real-world problem solving. There are opportunities for practice and developing problem solving. Problems and activities are grade level appropriate. Learned content knowledge, skills, and strategies are used to develop solutions. This is a strength of the text. Ample time is spent working with various models within Major Works.** **1) Various types of problems and situations** **2) Numerous open-ended problems** **3) Math Journal** **2.OA.A – Unit 2 through Unit 8 as indicated by Correlation to CCSS (p. xiv)**	**Use the questions for Metric 1C to evaluate Metric 1C. Record evidence for each question and rate Metric 1C.** **(Reviewer only.)** **__X__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Are there are single- and multi-step contextual problems, including non-routine problems, that develop the mathematics of the grade, afford opportunities for practice, and engage students in problem solving? Do the problems attend thoroughly to those places in the content Standards where expectations for multi-step and real-world problems are explicit? Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** **The grade level text works with solving number stories using applications from the Major Work (application problems) throughout. The program utilizes single and multi-step contextual problems and opportunity for practice and problem solving.**	

Do application problems particularly stress applying the Major Work of the grade? Evaluate lessons, chapter/unit assessments, and homework assignments. NOTE: Examples of evaluating this Criterion might include looking at: how well, by the end of grade 2, students using the materials as designed can represent and solve a full range of one-step addition and subtraction word problems; or how well, by the end of grade 3, students using the materials as designed can represent and solve a full range of one-step multiplication and division word problems; or how well these basic situation types for each operation are carried coherently across the grades, (e.g., with fractions and algebraic expressions); or, in all grades, whether the problems connect concepts, Standards, and domains in ways that are natural and important. For a list of situation types for one-step addition, subtraction, multiplication, and division problems, see Situation Types for the Operations in Word Problems	**Evidence-** **Students use the CCSS content knowledge to problem solve with emphasis on the Major Work for the grade. In fact, many of the quality multi-step problems use multiple operations.** **Application problems focus to a great extent on the Major Work of the grade.**	
Does modeling build slowly across K–8, with applications that are relatively simple in earlier grades and when students are encountering new content? In grades 6–8, do the problems begin to provide opportunities for students to make their own assumptions or simplifications in order to model a situation mathematically? Read Standard for Mathematical Practice 4, Model with Mathematics. Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** **Models are built upon previous grade levels and prepare students for existing grade level connections and beyond. Problems and activities are grade level appropriate. For example, repeated addition is used in multiple grade levels for the appropriate grade level problems.**	

Alignment Criterion 1: Rigor and Balance

Materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.

AC1 Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 out of 6 points, the Criterion has not been met. Check the final rating.
Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)**

Before moving to Alignment Criterion 2, record the final Meets or Does Not Meet rating in the Evaluation Summary.

(Reviewer only.)

_X___Meets

____Does Not Meet

Strengths/Weaknesses:

Directions for Alignment Criterion 2

Standards for Mathematical Practice

Alignment Criterion 2: Standards for Mathematical Practice

Materials must demonstrate authentic connections between content Standards and practice Standards.

The Standards require that designers of instructional materials connect the mathematical practices to mathematical content in instruction. Thus, materials must demonstrate authentic connections between content Standards and practice Standards.

Required Materials:

- Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf)
- Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)
- Focus by Grade Level for the grade being evaluated (www.achievethecore.org/focus)
- From the materials being evaluated: teacher guides, student texts and workbooks

Rating this Criterion

Alignment Criterion 2 is rated as Meets or Does Not Meet.

To rate Alignment Criterion 2, first rate metrics 2A, 2B, and 2C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). For each metric, guiding questions are provided to aid in gathering evidence.

Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 2 if the materials earn 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as mathematical practices, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.

Metric AC2A:

Materials address the practice Standards in such a way as to enrich the Major Work of the grade; practices strengthen the focus on Major Work instead of detracting from it, in both teacher and student materials.

How to Find the Evidence:

Familiarize yourself with the Major Work of the grade being evaluated (see the Focus by Grade Level documents.)

Evaluate teacher and student materials for evidence that the mathematical practices support and connect to the focus of the grade.

NOTE: Examples of evaluating this Criterion might include looking at whether, in grades K–5, students using the materials are supported to look for and express regularity in repeated reasoning about the addition table, the multiplication table, the properties of operations, the relationship between addition and subtraction or multiplication and division, and the place value system; or whether, in grades 6–8, students using the materials are supported to look for and express regularity in repeated reasoning about proportional relationships and linear functions.

For context, read Criterion #8 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013).

Evidence-

The use of the MPs support the focus on the Major Work for the grade level and provide coherence and connections in both TE and student pages.

1) **MPs, standards, and content are integrated for meaningful practice.**
2) **Each lesson and each activity in the lesson lists the MPs and standards used (TE) and the Student Reference Book highlights the MPs**
3) **Student Reference Book goes through in student friendly explanation of all the MPs to help students understand how to apply them.**
4) **TE continually points out where an how to take advantage of the MPs.**

(Reviewer only.)

_X___Meets (2)

____Partially Meets (1)

____Does Not Meet (0)

Metric AC2B: **Materials at[illegible] to the full meaning of each practice Standard.** **How to Find the Evidence:** For context, read Criterion #7 and Criterion #9 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).		**Use the questions for Metric 2B to evaluate Metric 2B. Record evidence for each qu[illegible] and rate Metric 2B.** **(Reviewer only.)** **__X__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Over the course of any given year of instruction, is each mathematical practice Standard meaningfully present in the form of assignments, activities, or problems that stimulate students to develop the habits of mind described in the practice Standard? Evaluate lessons, chapter/ unit assessments, and homework assignments for evidence of each mathematical practice being meaningfully present in instruction.	**Evidence-** **The MPs are connected to the content in a meaningful way. The problems assist in promoting student development of mathematical habits of mind. Discussions within the lessons support the practice of the MPs in the problem solving process.**	
Do the materials treat the practice Standards as developing across grades or grade bands? Are the practice Standards in early grades appropriately simple? Do they display an arc of growing sophistication across the grades?	**Evidence-** **Each unit has a practice Standard as a focus. However, within each lesson, multiple practice Standards are addressed.** **The two-day lesson Open Response/Reengagement, in each unit, offer the most in-depth practice with the MPs**	
Are there teacher-directed materials that explain the role of the practice Standards in the classroom and in students' mathematical development? Are alignments to practice Standards accurate?	**Evidence-** **The teacher-directed materials explain the role of the practice Standards in the classroom and in students' mathematical conceptual understanding based upon the standards.** **1) Mathematical Background at the start of each unit** **2) Standards and Goals for Mathematical Practice are listed at the start of each lesson by the Warm Up activity** **3) Students have explanations and expectations of the MPs in their reference book** **4) Open-response assessments** **5) Task-specific rubrics** **6) Readymade checklists** **7) Online assessments**	
Metric AC2C: **Materials support the Standards' emphasis on mathematical reasoning.** **How to Find the Evidence:** For context, read Criterion #10 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).		**Use the questions for Metric 2C to evaluate Metric 2C. Record evidence for each question and rate Metric 2C.** **(Reviewer only.)** **_X___Meets (2)**

Do the materials support students in constructing viable arguments and critiquing the arguments of others concerning grade-level mathematics that is detailed in the content Standards? Read Standard for Mathematical Practice 3. Evaluate teacher and student materials to ensure that students are given opportunities to reason with grade-level mathematics.	**Evidence-** **The text provides opportunities for students to reason mathematically and share their process through discussions, and some of the written work. Discussion activities within each lesson support constructing viable arguments and critiquing the arguments of others. Intentional support is indicated within the TE to help students develop skills needed for mathematical discussions; however, more teacher support on how to help students construct viable arguments would be helpful. Students are asked How did you show… Explain how you know… Explain why it works… What patterns do you see….**	**__X__Partially Meets (1)** **____Does Not Meet (0)** Weakness is helping students how to structure a mathematical argument rather than simply explaining.
Do the materials support students in producing not only answers and solutions, but also, in a grade-appropriate way, arguments, explanations, diagrams, mathematical models, etc., especially in the Major Work of the grade? Familiarize yourself with the Major Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate teacher and student materials, to understand the types of work students are expected to produce.	**Evidence-** **While the text has supports for students' explanations, justification, and demonstrating their problem solving process, more teacher materials could have supported the discussions and sharing of results to create better students results. Not all teachers have the knowledge or the skill to support such dialogue. The high number of open-ended questions also supports students in producing solutions and not just answers.** **1) Math Journals** **2) Open Response/Reengagement** **3) TE and student journal does a great job with models, explanations, and diagrams**	
Do materials explicitly attend to the specialized language of mathematics? Is the language of argument, problem solving, and mathematical explanations taught rather than assumed? Evaluate teacher and student materials, paying attention to how mathematical language is taught. NOTE: Examples of evaluating this Criterion might include looking at whether students are supported in: basing arguments on definitions; using the method of providing a counterexample; or recognizing that examples alone do not establish a general statement.	**Evidence-** **There are no modifications to the mathematical language within the TE or in the student pages that sacrifice mathematical concepts or language development. However, constructing arguments is not taught. Teacher is not assisted in how to teach students to construct arguments. It is assumed that by asking How do you know type of questions that the student would come up with an argument. The program does not teach students or teacher how to base the argument.** **1) Each unit identifies vocabulary to be used** **2) Some lessons include Academic Language Development (p. 281)**	

Alignment Criterion 2:
Standards for Mathematical Practice

Materials must demonstrate authentic connections between content Standards and practice Standards.

AC2 Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 out of 6 points, the Criterion has not been met. Check the final rating.
Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion.
(Reviewer only.)

(Reviewer only.)

__X__Meets

____Does Not Meet

Strengths/Weaknesses:

Students constructing arguments is not taught even though discussions are encouraged.

Before moving to Alignment Criterion 3, record the final Meets or Does Not Meet rating in the Evaluation Summary.

Alignment Criterion 3:
Access to the Standards for All Students

Materials must provide supports for English Language Learners and other special populations.

Because Standards are for all students, alignment requires thoughtful support to ensure all students are able to meet the Standards. Thus, aligned materials must provide supports for English Language Learners and other special populations.

Required Materials:

- Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf)
- Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)
- From the materials being evaluated: teacher guides, student texts and workbooks

Rating this Criterion:
Alignment Criterion 3 is rated as Meets or Does Not Meet.

To rate Alignment Criterion 3, first rate metrics 3A, 3B, and 3C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points).

Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 3 if the materials earn 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as support for special population, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.

Metric AC3A: **Support for English Language Learners and other special populations is thoughtful and helps those students meet the same Standards as all other students. The language in which problems are posed is carefully considered.** **How to Find the Evidence:** Evaluate teacher and student materials, paying attention to supports offered for special populations.	**Evidence-** **ELL supports and other special populations have thoughtful and helpful supports to assist the students in meeting the grade-level standards.** **1) Supports are included with each lesson** **2) Academic Language Development notes in some lessons** **3) Common Misconceptions and differentiated instruction sections may also address the needs of ELL students** **4) TE has Differentiation box in each lesson** **5) Differentiation options (RTI) offered at the beginning of each level** **6) Online supports available**	**Reviewer only.)** **__X__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Metric AC3B: **Materials provide appropriate level and type of scaffolding, differentiation, intervention, and support for a broad range of learners with gradual removal of supports, when needed, to allow students to demonstrate their mathematical understanding independently.** **How to Find the Evidence:** Evaluate teacher and student materials, paying attention to whether materials provide differentiation that will lead all learners to engage with on-grade-level content.	**Evidence-** **1) Each lesson has multiple differentiation options for a variety of learners** **2) Readiness, Enrichment, and Extra Practice** **3) Games** **4) Sections for Adjusting the Activity** **5) Common Misconceptions** **6) Academic Language Development** **7) Online differentiations supports**	**Reviewer only.)** **__X__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Metric AC3C: **Design of lessons recommends and facilitates a mix of instructional approaches for a variety of learners such as using multiple representations (e.g., including models, using a range of questions, checking for understanding, flexible grouping, pair-share).** **How to Find the Evidence:** Evaluate teacher materials, noting instructional approaches suggested for whole class and differentiated lessons and activities.	**Evidence-** **Materials provide appropriate level and variation in scaffolding, differentiation, intervention, and support for a variety of learners.** **1) Written practice** **2) Classroom discussion** **3) Individual, partner, small group, and whole group work** **4) Games** **5) Multiple methods/strategies for solving problems** **6) Manipulatives are used in various activities**	**Reviewer only.)** **__X__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**

Alignment Criterion 3: Access to the Standards for All Students **Materials must provide supports for English Language Learners and other special populations.** AC3 Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 points, the Criterion has not been met. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion.**(Reviewer only.)** **Move to the Evaluation Summary and record the final Meets or Does Not Meet rating .**	**(Reviewer only.)** **__X__Meets** **____Does Not Meet** **Strengths/Weaknesses:**

Once an evaluation for alignment to the Shifts and major features of the CCSS has been conducted using Sections 1-3, it's important to evaluate for overall quality and best practices. A starting list of Indicators of Quality are suggested below. States, districts and others evaluating instructional materials are encouraged to add to this list to ensure materials reflect local contexts. For background information on some of the Indicators of Quality in this section, refer to pp.18–21 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).

Indicators of Quality	Evidence- Give specific examples.	Rating: (Reviewers only.)
1. Lessons are thoughtfully structured and support the teacher in leading the class through the learning paths at hand, with active participation by all students in their own learning and in the learning of their classmates.	**Evidence-** **Each unit follows a structured sequence** **Each lesson follows an appropriately structured sequence with a variety of instructional methods and activities** **1) Teacher supports are clear and easy to follow** **2) Intended sequence is evident in the**	**(Reviewer only.)** **___X___ Yes** **_____ No**
2. The underlying design of the materials includes both problems and exercises. (In solving problems, students learn new mathematics, whereas in working exercises, students apply what they have already learned to build mastery.) Each problem or exercise has a purpose. **NOTE: This Criterion does not require that the problems and exercises be labeled as such.**	**Evidence-** **Both problems and exercises are included in the lessons. Problems are used to introduce and develop new mathematical learning (Math Message). Exercises are used to practice, apply, and build mastery of mathematic concepts (Fluency, Math Boxes).**	**(Reviewer only.)** **___X___ Yes** **_____ No**

3. Design of assignments is not haphazard: exercises are given in intentional sequences in order to strengthen students' mathematical understanding.	Evidence- Lesson design develops concepts, skills, and applications with increased number of connections between content with grade level appropriateness that spirals through the previous and upcoming grade levels.	(Reviewer only.) __X____ Yes _____ No
4. There are separate teacher materials that support and reward teacher study including, but not limited to: discussion of the mathematics of the units and the mathematical point of each lesson as it relates to the organizing concepts of the unit, discussion on student ways of thinking and anticipating a variety of students responses, guidance on lesson flow, guidance on questions that prompt students thinking, and discussion of desired mathematical behaviors being elicited among students.	Evidence- Professional development pieces are interwoven in the lessons and each unit has a lengthy PD section, Mathematical Background, in the Unit Organizer. Each lesson has pacing guidelines and guided instruction for supporting student learning. Digital resources include the Virtual Learning Community and Everyday Math Online. 1) Professional development pieces are interwoven in the lessons and each unit has a lengthy PD section, Mathematical Background, in the Unit Organizer. 2) Each lesson has pacing guidelines and guided instruction for supporting student learning. 3) Digital resources include the Virtual Learning Community and Everyday Math Online. 4) TE Observe and Discuss at the beginning of each lesson gives teachers questions to use during observation and questions to facilitate classroom discussion 5) GMP listed in the back of TE explains goals for each lesson	(Reviewer only.) __X____ Yes _____ No
5. Manipulatives suggested in the materials are faithful representations of the mathematical objects they represent and are connected to written methods.	Evidence- Manipulatives and student-generated representations are used. Connections are made between the manipulatives and problem solving strategies. Instructional strategies work to connect the appropriate manipulatives and representations and assist students in moving towards more efficient methods of problem solving. Manipulatives are faithful representations and are well-connected to written methods.	(Reviewer only.) ___X___ Yes _____ No

6. Materials include a variety of curriculum-embedded assessments. Examples include pre-, formative, summative, and self-assessment resources.	**Evidence-** **The text has a variety of embedded assessments including Preview Math Boxes and Assessment Check-In.** **1) Mental Math and Fluency could be used as quick formative assessments.** **2) Digital tools are also available.** **3) Formative assessment opportunities are present for teacher to use while presenting each lesson** **4) Self-assessments available for all units** **5) Summative assessment at the end of each unit** **6) Journal**	**(Reviewer only.)** **___X___ Yes** **_____ No**
7. Assessments contain aligned rubrics, answer keys, and scoring guidelines that provide sufficient guidance for interpreting student performance.	**Evidence-** **In addition to the embedded assessments listed above, the text also has Unit Progress Check Lessons with optional Challenge Assessments. Answers are included in the TE. Open-Response Assessments in every other unit are evaluated with a task specific rubric. The Assessment Handbook includes Progress Check masters, Interim Assessments, Record-Keeping Masters, and Blank Exit Slips that could be used for a quick post assessment.** **See above.**	**(Reviewer only.)** **___X___ Yes** **_____ No**
8. Materials assess student proficiency using methods that are accessible and unbiased, including the use of course-level language in student prompts.	**Evidence-** **Grade level appropriate language is used in student prompts and appear to be accessible and unbiased.** **1) See above** **2) Math Journal** **3) Answer Book**	**(Reviewer only.)** **__X____ Yes** **_____ No**
9. Materials are carefully evaluated by qualified individuals, whose names are listed, in an effort to ensure freedom from mathematical errors and course-level appropriateness.	**Evidence-** **Authors and editors carefully evaluated materials to ensure grade level appropriateness and freedom from errors.**	**(Reviewer only.)** **___X___ Yes** **_____ No**
10. The visual design supports students in engaging thoughtfully with the subject. Navigation through the text is clear.	**Evidence-** **The hands-on activities and the visual design of the student reference book are engaging the student thoughtfully with the content. Navigation is clear. Materials are well-laid out and visually appealing.**	**(Reviewer only.)** **___X___ Yes** **_____ No**

11. The materials engage parents in appropriate ways. For example, homework assignments in elementary grades, consist of routine problems, practice with getting answers, and fluency-building exercises that parents can easily support.	**Evidence-** **Family Letters are included for each unit and include vocabulary, games, and activities.** **Home Links have practice problems from the concepts covered in class and explanations for how the content was taught.**	**(Reviewer only.)** **__X____ Yes** **_____ No**

Reviewer IMET Evaluation Summary Title/Level: Everyday Math/ Grade 2_____

Publisher: McGraw-Hill School Education LLC__ Copyright: 2016_____ ISBN: Various_____

Reviewer ID # __KT____LW_____ Date Review Completed: 3-9-16_____

Non-Negotiable Criteria- Each Non-Negotiable must be met in order for the Non-Negotiable Alignment Criteria to be met overall.	
Non-Negotiable 1: Freedom from Obstacles to Focus **____X___ Meets** **_____ Does Not Meet**	**Non- Negotiable 2: Focus and Coherence** **__X___ Meets** **_____ Does Not Meet**

Non-Negotiable Overall:

___X__ Meets _____ Does Not Meet

Alignment Criteria- Each Alignment Criterion must be met with a sufficient number of points in order for Alignment Criteria to be labeled as "Meets" overall. The more points the materials receive on the Alignment Criteria, the better they are aligned.

Alignment Criterion 1: Rigor and Balance	Alignment Criterion 2: Standards of Mathematical Practice	Alignment Criterion 3: Access to Standards for All Learners
Points: __6___ of 6 possible. **(Materials must receive at least 5 of 6 points to align.)**	**Points: ___5__ of 6 possible.** **(Materials must receive at least 5 of 6 points to align.)**	**Points: __6___ of 6 possible.** **(Materials must receive at least 5 of 6 points to align.)**
___X____ Meets	**___X____ Meets**	**___X____ Meets**
_____ Does Not Meet	**_____ Does Not Meet**	**_____ Does Not Meet**

Alignment Criteria Overall:

___X__ Meets _____ Does Not Meet

If the materials meet both Non-Negotiables and relevant Alignment Criterion, they are aligned to the Shifts and major features of the Core Standards. **Do the materials meet every Non-Negotiable and Alignment Criterion? __X___ Yes _____ No**

What are the specific areas of strength and weakness based on this evaluation? Publishers or others modifying or developing assessments can use this information to make improvements and/or to remedy gaps in the alignment of assessment materials.

2015-16 Mathematics Interim Review Recommendation & Summary

Publisher Name:	McGraw-Hill School Education LLC
Title:	Everyday Math
ISBN #	Various
Grade Level(s) or Course:	Grade 3
Reviewer ID:	KT LW

RECOMMENDED AS:

__X__ **Core Mathematics Program-** a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials. Substantial evidence clearly supports the designation of this program as Core.

_____ **Other Mathematics Program-** a program that substantially, but partially, meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for supplemental materials. Substantial evidence clearly supports the designation of this program as Other.

_____ **Component Mathematics Program-** a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs. Substantial evidence clearly supports the designation of this program as Component.

_____ **Intervention Program-** a program designed and intended to target and support students' specific needs. Substantial evidence clearly supports the designation of this program as Intervention.

_____ **Does not meet criteria** for recommendation as a Curricular Material or Online Resource for Mathematics.

EVIDENCE SUMMARY:

FOCUS- This curriculum follows the grade level standards and does not assess outside of the appropriate standards. The materials are aligned with the grade level standards.

COHERENCE- A significant portion of the instruction focuses on the Major Work for the grade. Supporting works make connections with the Major Works; however the Interpret and Represent Data seemed to be more of a stand alone section. The progression in the materials is clear. Materials contain sufficient practice. Learning objectives are present but were not clearly visible.

RIGOR- The materials meet all three aspects of rigor: conceptual understanding, procedural skill and fluency, and applications. All three areas are strongly represented.

CONCEPTUAL UNDERSTANDING- Conceptual understanding is promoted through appropriate classroom discussions. Furthermore, problem solving occurs frequently beyond a single answer response and open-ended question. Progress towards flueney and procedural skills are interwoven with the development of mathematical understanding.

MATHEMATICAL PRACTICES- Materials demonstrate authentic connections between content Standards and mathematical practice standards. The use of MPs focus on the Major Work and provide coherent connections. The MPs develop across the grade level. There are teacher materials that explain the roles of the MPs and support student learning.

ACCESSIBILITY OF STANDARDS TO ALL STUDENTS- There were ample supports for ELL and other special populations to meet the grade level standards. Materials provide appropriate level and variation in scaffolding, differentiation, intervention, and supports for home. Teacher and student materials support instruction through the discussions, problem solving, manipulatives, and various models.

OTHER:

Student Reference book does a great job with the mathematical practices.

2015-16 Interim Mathematics Review

Mathematics Evaluation Tool Grades K-8

Publisher: McGraw-Hill School Education LLC

Title of Material: EveryDay Math Grade 3

Author: Bell et al

ISBN #: Various **Copyright** 2016

Reviewer ID: KT LW

Core Mathematics Program- a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Core.

Other Mathematics Program- a program that substantially, but partially, meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Other.

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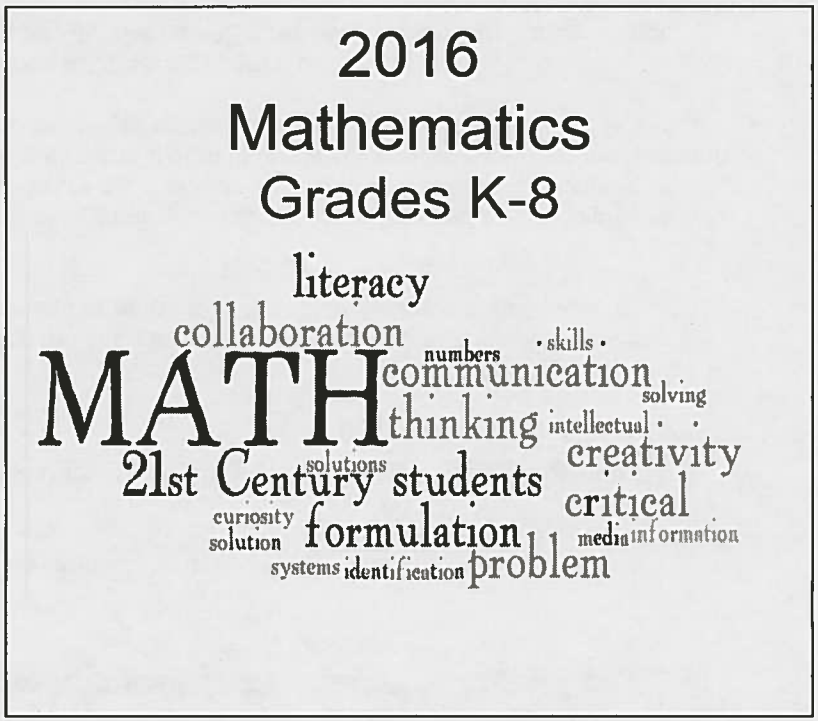
Substantial evidence clearly supports the designation of this program as Component.

Intervention Program- a program designed and intended to target and support students' specific needs.
Substantial evidence clearly supports the designation of this program as Intervention.



- Evaluation Form adapted from Instructional Materials Evaluation Toolkit (IMET).

The IMET was developed by Student Achievement Partners. Educators may use or adapt. http://creativecommons.org/licenses/by/3.0/ Download this tool at http://achievethecore.org/IMET

Instructional Materials Evaluation Tool

Mathematics, Grades K-8

What Are the Purposes of the IMET?

This Math IMET is designed to help educators determine whether instructional materials are aligned to the Shifts and major features of the Common Core State Standards (CCSS). The substantial instructional Shifts (http://www.corestandards.org/other-resources/key-shifts-inmathematics/) at the heart of the Common Core State Standards are:

- **Focus** strongly where the Standards focus
- **Coherence**: Think across grades and link to major topics within the grade
- **Rigor**: In major topics, pursue conceptual understanding, procedural skill and fluency, and application with equal intensity.

The IMET draws directly from the following documents:

- Common Core State Standards for Mathematics (www.corestandards.org/Math)
- Publishers' Criteria for the Common Core State Standards in Mathematics grade K-8 (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)

When to use the IMET

1. Purchasing materials: Many factors go into local purchasing decisions. Alignment to the Standards is a critical factor to consider. This tool is designed to evaluate alignment of instructional materials to the Shifts and the major features of the CCSS. It also provides suggestions of additional indicators to consider in the materials evaluation and purchasing process.

2. Evaluating materials currently in use: The IMET can be used to analyze the degree of alignment of existing materials and help to highlight specific, concrete flaws in alignment. Even where materials and tools currently in use fail to meet one or more of these criteria, the pattern of failure is likely to be informative. States and districts can use the evaluation to create a thoughtful plan to modify or combine existing resources in such a way that students' actual learning experiences approach the focus, coherence, and rigor of the Standards.

3. Developing programs: Those developing new programs can use this tool as guidance for creating aligned curricula.
Please note this tool was designed for evaluating comprehensive curricula (including any supplemental or ancillary materials), but it was not designed for the evaluation of standalone supplemental materials.

Who Uses the IMET?

Evaluating instructional materials requires both subject-matter and pedagogical expertise. Evaluators should be well versed in the Standards (www.corestandards.org/Math) for all grades in which materials are being evaluated. This includes understanding the Major Work of the grade (www.achievethecore/focus), the Supporting and Additional work, how the content fits into the progressions in the Standards (www.achievethecore.org/progressions), and the expectations of the Standards with respect to conceptual understanding, procedural skill and fluency, and application. Evaluators also should be familiar with the substantial instructional Shifts (http:// www.corestandards.org/other-resources/key-shifts-in-mathematics/) of Focus, Coherence and Rigor that are listed above.

Getting Started

Prior to Evaluation

Assemble all of the materials necessary for the evaluation. It is essential for evaluators to have materials for all grades covered by the program, as some criteria cannot be rated without having access to each grade. In addition, each evaluator should have a reference copy of the Common Core State Standards for Mathematics (CCSSM) and the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013).

2015-16 Interim Mathematics Review

Mathematics Evaluation Tool Grades K-8

Publisher: McGraw-Hill School Education, LLC

Title of Material: Everyday Math Grade 3

Author: Bell et al.

ISBN #: Various **Copyright:** 2016

Reviewer ID: ____KT__LW

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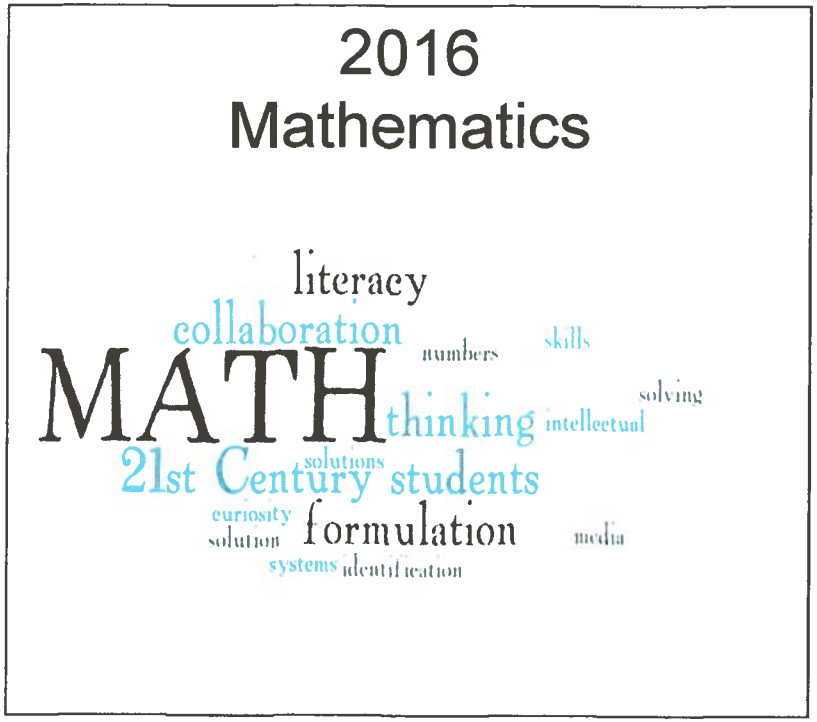

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Getting Started
Prior to Evaluation

Assemble all of the materials necessary for the evaluation. It is essential for evaluators to have materials for all grades covered by the program, as some criteria cannot be rated without having access to each grade. In addition, each evaluator should have a reference copy of the Common Core State Standards for Mathematics (CCSSM) and the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013).

Before conducting the evaluation itself, it is important to develop a protocol for the evaluation process. The protocol should include having evaluators study the Publishers' Criteria and the IMET. It will also be helpful for evaluators to get a sense of each program overall before beginning the process. At a minimum, this would include reading the front matter of the text, looking at the table of contents and paging through multiple chapters.

Sections 1-3 below should be completed to produce a comprehensive picture of the strengths and weaknesses of the materials under evaluation. Information about areas in need of improvement or supplementation should be shared with internal and external stakeholders.

Navigating the Tool

Begin with Section 1: Non-Negotiable Alignment Criteria

- The Non-Negotiable Alignment Criteria must each be met in full for materials to be considered aligned to the Shifts and the major features of the Common Core State Standards. Each Non-Negotiable Alignment Criterion has one or more metrics associated with it; every one of these metrics must be met in order for the criterion as a whole to be met.

- Examine the relevant materials and use evidence to rate the materials against each criterion and its associated metric(s).

- Record and explain the evidence upon which the rating is based.

Continue to Section 2: Alignment Criteria

- The Alignment Criteria must each be met for materials to be considered aligned to the Shifts and the major features of the Common Core State Standards. Each Alignment Criterion has one or more metric associated with it; a specific number of these metrics must be met or partially met in order for the criterion as a whole to be met.

- Examine the materials in relation to these criteria, assigning each metric a point value. Rate the criterion as "Meets" or "Does Note Meet" based on the number of points assigned. The more points the materials receive on the alignment Criteria, the better they are aligned.

- Record and explain the evidence upon which the rating is based.

Proceed to Section 4: Indicators of Quality

- Indicators of Quality are important considerations that will help evaluators better understand the overall quality of instructional materials. These considerations are not criteria for alignment to the CCSS, but they provide valuable information about additional program characteristics. Evaluators may want to add their own indicators to the examples provided.

Directions for Non-Negotiable 1

Freedom from Obstacles to Focus

Criterion	Evidence- Give specific examples.	Rating: (Reviewer only.)
Non-Negotiable 1: **Freedom from Obstacles to Focus** **Materials must reflect the content architecture of the Standards by not assessing the topics named before the grade level where they first appear in the Standards.** The Standards foster students' progress to algebra by focusing strongly on arithmetic. Consistent with this focus, certain topics from outside of arithmetic appear only in later grades. Thus, to be aligned, materials must reflect the content architecture of the Standards by not assessing the topics named before the grade level where they first appear in the Standards. In this criterion, "topics named" means the topics that are explicitly named in Metric 1A. No other topics should be added to the list in Metric 1A. (Note that other topics in the standards are addressed in criterion NN2.)	**Required Materials** • Common Core State Standards for Mathematics (www.corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf) • From the materials being evaluated: teacher guides and all assessment components	**Rating this Criterion**: Non-Negotiable 1 is rated as Meets or Does Not Meet. To rate Non-Negotiable 1, begin by rating Metric 1A. Since Metric 1A is the only metric for Non-Negotiable 1, the rating for Non-Negotiable 1 is the same as the rating for Metric 1A. If Metric 1A is rated as Does Not Meet, include evidence of when the named topic(s) is/are assessed. If the metric is rated as Meets, list the grade(s) examined in the evaluation.

Metric NN1A: **Materials reflect the basic architecture of the Standards by not assessing the listed topics before the grade level indicated.** • Probability, including chance, likely outcomes, probability models. (Introduced in the CCSSM in grade 7) • Statistical distributions, including center, variation, clumping, outliers, mean, median, mode, range, quartiles; and statistical association or trends, including two-way tables, bivariate measurement data, scatter plots, trend line, line of best fit, correlation. (Introduced in the CCSSM in grade 6) • Similarity, congruence, or geometric transformations. (Introduced in the CCSSM in grade 8) • Symmetry of shapes, including line/ reflection symmetry, rotational symmetry. (Introduced in the CCSSM in grade 4) **How to Find the Evidence:** Evaluate the table of contents, all chapter tests, all unit tests, and other such assessment components (including rubrics). For context, read Criterion #2 from the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013). NOTE: Grade alignments of other topics are addressed in Non-Negotiable 2, Focus and Coherence.) In this criterion, "topics named" means the topics that are explicitly named in Metric 1A. No other topics should be added to the list in Metric 1A. (Note that other topics in the standards are addressed in criterion NN2.)	**Evidence-** **No indication of assessments for the following topics was found: probability, statistical distributions, geometry for grade 8 (similarity, congruence, or geometric transformations), or symmetry of shapes. The text does not assess listed topics before the indicated grade level.** **1) Each assessment identifies specific grade-level standards that are being assessed.** **2) All lessons and practice identify specific grade-level standards that are being taught**	**(Reviewer only.)** **__X__Meets** **____Does Not Meet**
Non-Negotiable 1: Materials must reflect the content architecture of the Standards by not assessing the topics named* before the grade level where they first appear in the Standards. **NN 1** If Metric 1A was rated as Meets, then rate Non-Negotiable 1 as Meets. If Metric 1A was rated as Does Not Meet, then rate Non- Negotiable 1 as Does Not Meet. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion.**(Reviewer only.)** **Before moving to Non-Negotiable 2, record the final Meets or Does Not Meet rating in the Evaluation Summary.**		**(Reviewer only.)** **__X__Meets** **____Does Not Meet** **Strengths/Weaknesses:**

Directions for Non-Negotiable 2

Focus and Coherence

Non-Negotiable 2:

Focus and Coherence

Materials must focus coherently on the Major Work of the grade in a way that is consistent with the progressions in the Standards.

Focus and coherence are the two major evidence-based design principles of the Common Core State Standards for Mathematics (CCSSM, p. 3). Focus is necessary in order to fulfill the ambitious promise the states have made to their students by adopting the Standards: greater achievement at the college and career ready level; greater depth of understanding of mathematics; and a rich classroom environment in which reasoning, sense-making, applications, and a range of mathematical practices flourish. In simpler terms, a mile-wide, inch-deep curriculum translates to less time per topic. Less time means less depth and moving on without many students. Thus, materials must focus coherently on the Major Work of the grade in a way that is consistent with the progressions in the Standards.

Required Materials

- Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf)
- Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)
- Focus by Grade Level for the grade being evaluated (www.achievethecore.org/focus)
- From the materials being evaluated: teacher guides, student texts and workbooks

Rating this Criterion:

Non-Negotiable 2 is rated as Meets or Does Not Meet.

To rate Non-Negotiable 2, first rate metrics 2A–2H. Each of these eight metrics must be rated as Meets in order for Non-Negotiable 2 to be rated as Meets. Rate each metric 2A-2H as Meets or Does Not Meet/Insufficient Evidence. If the evidence examined shows that the Criterion is met, then mark the Criterion Meets. If the evidence examined shows that the Criterion is not met—or if there is insufficient evidence to make a determination—then mark the Criterion as Does Not Meet/Insufficient Evidence. Support all ratings with evidence.

Metric NN2A: **In each grad[illegible]8, students and teachers using the materials as designed devote the large majority of time to the Major Work of the grade.** **How to Find the Evidence:** Familiarize yourself with the Major Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, lessons, homework assignments, and assessments. (Evaluate both student and teacher materials.) Consider time spent on the Major Work of the grade and judge qualitatively whether students and teachers using the materials as designed will devote the large majority of time to the Major Work of the grade. For context, read Criterion #1 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013)	**Evidence-** **The Major Works for Grade 3 include Operations and Algebraic Thinking, Number and Operations with Fractions, and in Measurement and Data, solve problems involving measurement and estimation of intervals of time, liquid volumes, and masses of objects as well as geometric measurement: understand concepts of area and relate area to multiplication and to addition. Supporting works include represent and interpret data and reason with shapes and their attributes. Additional clusters include geometric measurement to recognize perimeter as an attribute of plane figures and distinguish between linear and area measures as well as using place value understanding and properties of operations to perform multi-digit arithmetic.** 1) **Approx. 97% of instruction is focused on Major Work** 2) **At least five of the nine units target Major Works with components of the Major work in all units**	**(Reviewer only.)** **__X__Meets** **____Does Not Meet/** **Insufficient Evidence**
Metric NN2B: **Supporting Work, where present, enhances focus and coherence simultaneously by also engaging students in the Major Work of the grade.** **How to Find the Evidence:** Familiarize yourself with the Major Work and Supporting Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate chapters and lessons that focus on Supporting Work. NOTE: Example of evaluating this Criterion might include looking at whether materials for K–5 generally treat data displays as an occasion for solving grade-level word problems using the four operations (e.g., see 3.MD.B.3); or whether materials for grade 7 take advantage of opportunities to use probability to support ratios, proportions, and percentages. For context, read Criterion #3 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** **The text uses supporting work to make connections with Major Works. While the supporting work has sufficient time given to it. It appeared to be more standalone content, not as well coordinated with the major work of the grade.** 1) **Connections in represent and interpret data are not as strong** 2) **Place value works with performing multi-digit arithemetic.**	**(Reviewer only.)** **__X__Meets** **____Does Not Meet/** **Insufficient Evidence**

Metric NN2C: **Materials ba[illegible]ontent progressions on the grade-by-grade progressions in the Standards. Content from previous or future grades does not unduly interfere with or displace on-grade-level content.** **How to Find the Evidence:** Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, and lessons in both student and teacher materials. NOTE: In some cases it may be possible that aligned materials might address some aspects of a topic in a strategic way before or after the grade level in which the topic is central in the Standards' progressions; for example, a curriculum author might purposefully choose to explore adding fractions with unlike denominators in a way appropriate to grade four, recognizing that this work is not really required until the next grade. However, any such purposeful discrepancies in content progressions should enhance the required learning in each grade; not unduly interfere with or displace grade-level content; and be clearly aimed at helping students meet the Standards as written rather than effectively rewriting the progressions in the Standards. And in all cases, note that Non-Negotiable 1 must be met for materials to be aligned. For context, read Criterion #5a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** **The progression in text matches the progression within the standards. Any earlier grade level materials are introduced to omit gaps in students' understanding. Furthermore, material towards subsequent grade levels is provided in preparation for that upcoming grade. Differentiation requires meeting student needs. Content from previous grades is reviewed in the Warm-Up section of the lesson and does not interfere or detract from grade level content or the progression through the grade level standards. Future grade level content does not interfere at all.** **1) Students work beyond grade-level multiplication problems to develop the connections between the multiplication strategies they are learning and the upcoming multi-digit multiplication.** **2) Readiness and Enrichment activities**	**(Reviewer only.)** **__X__Meets** **____Does Not Meet/ Insufficient Evidence**
Metric NN2D: **Materials give all students extensive work with on-grade-level problems.** **How to Find the Evidence:** Evaluate both student and teacher materials. If the materials provide resources for differentiated learning, consider whether lower-performing students have opportunities to engage with grade-level problems. Also consider whether higher-performing students are given opportunities to learn current grade-level content in greater depth. For context, read Criterion #5b in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** **The materials contain sufficient practice with grade level appropriate problems. Although differentiation is offered in each lesson, Readiness, Enrichment, and Extra Practice, all students receive grade-level instruction that is developmentally appropriate instruction that deepens grade level mathematical understanding.** **1) Readiness, Enrichment, Extra Practice**	**(Reviewer only.)** **__X__Meets** **____Does Not Meet/ Insufficient Evidence**

Metric NN2E: **Materials rel[illegible]n-grade-level concepts explicitly to prior knowledge from earlier grades.** **How to Find the Evidence:** Evaluate both student and teacher materials. NOTE: Examples of evaluating this Criterion might include looking at the way the materials extend basic ideas of place value across the decimal point; or the role that properties of operations play when the materials extend arithmetic beyond whole numbers to fractions, variables, and expressions. More generally, cluster headings in the Standards sometimes signal key moments where reorganizing and extending previous knowledge is important in order to accommodate new knowledge (e.g., see cluster headings that use the phrase "Apply and extend previous understanding"). For context, read Criterion #5c in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** **Materials relate on-grade-level concepts explicitly to prior knowledge from earlier grades.** **1) Multiplication and division work relates to addition and subtraction from previous grade level.** **2) Problem solving using the four operations connects with prior knowledge and strategies** **3) P. EM2 of each volume explains if students are extending or developing an understanding of a concept. Extending indicates a continuation of instruction from previous grade level and developing indicates it is introduced during the current grade level** **4) TE Grades 3-4 games correlation (pp. EM12-13)** **5) At the beginning of each lesson there is a Spiral Snapshot**	**(Reviewer only.)** **__X__Meets** **____Does Not Meet/ Insufficient Evidence**
Metric NN2F: **Review of material from previous grades is clearly identified as such to the teacher, and teacher and students can see what their specific responsibility is for the current year.** **How to Find the Evidence:** Evaluate the table of contents, but do not stop there; also evaluate units, chapters, lessons, homework assignments and assessments. (Evaluate both student and teacher materials.) Identify any content from previous grades and check whether it is identified as such. For context, read Criterion #5a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** **The year-to-year and current grade level instructional and standards progression is evident in the Unit Organizer which indicates the standards, domains, clusters, and MPs for the unit, individual lessons, games, the Spiral Trace, and through the Mathematical Background PD section.** **1) Previous grade materials are typically used in Readiness activities if at all and do not constitute the main focus of the lesson** **2) Text indicates if strategies have been introduced in previous grades with italicized text within the lesson ex. "Note that Second Grade Mathematics introduced all of these strategies." (p. 29, p. 250 TE). However, it can be difficult to see and there are not many of them that I could identify.** **3) Beginning of the year pre-assessments tend to have materials from the previous year of instruction.**	**(Reviewer only.)** **__X__Meets** **____Does Not Meet/ Insufficient Evidence**

Metric NN2G: **Materials include learning objectives that are visibly shaped by CCSSM cluster headings.** **How to Find the Evidence:** Select several clusters from the Major Work in the grade being evaluated. Evaluate teacher and student materials in relation to these clusters. For context, read Criterion #6a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** **The learning objectives are clearly shaped by the CCSS domains, clusters, and MPs. However, they are not clearly identifiable and easy to access** **1) The learning objectives are called Goals for Mathematical Content (GMCs) and relate directly to the standards (pp. EM3-5)** **2) The start of each unit and lesson outlines the CCSS cluster and domains.** **3) TE each lesson begins with a "Focus Cluster" connected with CCSS** **4) Student Resource Book and Journal do not include learning objectives.**	**(Reviewer only.)** **_X___Meets** **____Does Not Meet/** **Insufficient Evidence**
Metric NN2H: **Materials include problems and activities that serve to connect two or more clusters in a domain, or two or more domains in a grade, in cases where these connections are natural and important.** **How to Find the Evidence:** In the grade being evaluated, choose two or more clusters or two or more domains for which connections are natural and important. Evaluate the units, chapters, and lessons that deal with the chosen topics, looking for problems and activities that serve to connect the chosen clusters or domains. NOTE: An example of evaluating this Criterion might include looking at whether problems in grade 4 sometimes or often involve students applying their developing computation skills (detailed in domain NBT) in the context of solving word problems (detailed in domain OA). For context, read Criterion #6b in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** **Connection within the text are mathematically natural and significant.** **1) Most lessons, if not all, address multiple clusters and highlighting the existing mathematical connections.** **2) Strategies and operations are connected to real world problems in order to develop a working solution** **3) Multiplication and division are utilized in word problems** **4) Volume is also used to practice addition and subtraction**	**(Reviewer only.)** **__X__Meets** **____Does Not Meet/** **Insufficient Evidence**

Non-Negotiable 2:

Focus and Coherence

Materials must focus coherently on the Major Work of the grade in a way that is consistent with the progressions in the Standards.

NN 2 If all Metrics 2A – 2H were rated as Meets, then rate Non-Negotiable 2 as Meets. If one or more Metric was rated Does Not Meet/Insufficient Evidence, then rate Non-Negotiable 2 as Does Not Meet. Check the final rating.
Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)**

Before moving to Alignment Criterion 1, record the final Meets or Does Not Meet rating in the Evaluation Summary.

(Reviewer only.)

__X__Meets

____Does Not Meet

Strengths/Weaknesses:

Weaknesses Learning Objectives though present use a different terminology and are not easily identifiable within the TE and are not present in SE.

Now continue by evaluating the Alignment Criterion 1 for Rigor and Balance.

Directions for Alignment Criterion 1

Rigor and Balance

Alignment Criterion 1: Rigor and Balance

Materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.

The Standards set expectations for attention to all three aspects of rigor: conceptual understanding, procedural skill and fluency, and applications. Thus, materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.

Required Materials

- Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf)
- Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)
- Focus by Grade Level for the grade being evaluated (achievethecore.org/focus)
- Situation Types for the Operations in Word Problems (achievethecore.org/situation-types)
- From the materials being evaluated: teacher guides, student texts and workbooks

Rating this Criterion:

Alignment Criterion 1 is rated as Meets or Does Not Meet.

To rate Alignment Criterion 1, first rate metrics 1A, 1B, and 1C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). For each metric, guiding questions are provided to aid in gathering evidence.
Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 1 if the materials rate 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as rigor and balance, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.

Metric AC1A: **The material[illegible]pport the development of students' conceptual understanding of key mathematical concepts, especially where called for in specific content Standards or cluster headings.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Major Work for the grade being evaluated that relate specifically conceptual understanding to use throughout the questions associated with this metric. NOTE: Some examples of clusters or Standards that call for conceptual understanding include: K.OA.A.1, (1.NBT.B, 1.NBT.C), (2.NBT.A, 2.NBT.B), (3.OA.A.1, 3.OA.A.2), 4.NF.A, (4.NBT.A, 4.NBT.B), 5.NF.B, (5.NBT.A, 5.NBT.B), 6.RP.A, 6.EE.A.3, 7.NS.A, 7.EE.A, 8.EE.B, 8.F.A, 8.G.A Clusters or Standards grouped by parentheses are closely connected and could be analyzed together. For context, read Criterion #4a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	-Choose a cluster/Standard from the Major Work that is aligned to each aspect of rigor and use [illegible]valuate these metrics. It is most helpful if the same clusters/Standards are chosen for all of the programs being evaluated. (Guidance in choosing clusters/Standards is included in "How to Find the Evidence".)	**Use the questions for AC Metric 1A to evaluate Metric 1A. Record evidence for ea[illegible]uestion and rate Metric 1A.** **__X__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Is conceptual understanding attended to thoroughly where the Standards set explicit expectations for understanding or interpreting? Evaluate lessons, chapter/unit assessments and homework assignments, paying attention to work aligned to Standards that explicitly call for understanding or interpreting. NOTE: Examples of evaluating this Criterion might include looking at how well the multi-digit addition and subtraction algorithms are developed and explained on the basis of place value and properties of operations; or how well the multi-digit multiplication and division algorithms are developed and explained on the basis of place value and properties of operations; or how well solving equations is presented and explained as a process of reasoning.	**Evidence-** **Classroom discussion about problems offers opportunities to engage in MPs for constructing and critiquing arguments. Conceptual understanding is well-developed.** **1) TE Sharing Strategies section within the lessons (p. 150) and other such classroom discussion opportunities have sample answers** **2) The MPs and the specific goals for the particular MPs are listed at the start of each lesson in the TE as a reminder.** **3) The two-day Open Response/Reengagement lesson in each unit requires students to use multiple strategies to solve a word problem. A simple rubric in the TE helps the teacher identify if students are meeting grade-level expectations (pp. 386-394)** **4) Multi-digit addition and subtraction algorithm are developed and explained on the basis of place value**	

Do the materials feature high-quality conceptual problems and conceptual discu questions? Evaluate lessons, chapter/unit assessments, and homework assignments. NOTE: Example of conceptual problems might include such questions as "Find a number greater than 1/5 and less than 1/4," or "If the divisor does not change and the dividend increases, what happens to the quotient?"	**Evidence-** **Very rarely do students just provide a single answer response. Several questions are open-ended or require more than just a single number solution. Answers can vary.** **1) See 3) above** **2) Math Message requires students to solve a problem they haven't been shown how to solve** **3) Common Misconceptions helps teachers differentiate and could help lead to conceptual discussion** **4) Teacher asks** **"How are the problems related?"** **"What is the same?"** **"What do you notice?"**	
Do the materials feature opportunities to identify correspondences across mathematical representations? Evaluate lessons, chapter/unit assessments and homework assignments. NOTE: Examples of evaluating this Criterion might include looking at whether students are supported in identifying correspondences among: the verbal description of a situation, the diagrams that distill its mathematical features, and the equations that model it; or equivalent forms of numbers (e.g., 3 and 6/2) and the number line; or rational number operations and representations of them via models such as the vector model; or the expression that defines a function and the graph that shows the relationship.	**Evidence-** **Materials used within the student pages and reference book correspond to the manipulatives used for modeling strategies. The manipulatives and concrete representations enhance the mathematical understandings and are connected to the written and symbolic mathematical methods.** **1) Connections are made from story problems verbally, to drawing pictures of the problem, number lines, and to algorithm** **2) Mathematical representations are consistent within the grade level and extending across grade levels (ex. Clocks, Balance for weight, tallies, diagrams, etc.)**	
Metric AC1B: **The materials are designed so that students attain the fluencies and procedural skills required by the Standards.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Major Work for the grade being evaluated that relate specifically to fluency and procedural skill to use throughout the questions associated with this metric. NOTE: Some examples of Standards that call for procedural skill and fluency include: K.OA.A.5, 1.OA.C.6, 2.OA.B.2, 2.NBT.B.5, 3.OA.C.7, 3.NBT.A.2, 4.NBT.B.4, 5.NBT.B.5, 6.NS.B.2, and 6.NS.B.3, 6.EE.A, 7.NS.A, 7.EE.A.1,7.EE.B.4a, 8.EE.C.7, 8.EE.C.8b For context, read Criterion #4b in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).		**Use the questions for Metric 1B to evaluate Metric 1 B. Record evidence for each question and rate Metric 1B.** **(Reviewer only.)** **__X__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**

Is progress toward fluency and procedural skill interwoven with students' develo[illegible]onceptual understanding of the operations in question? Evaluate lessons, chapter/unit assessments, daily routines, and homework assignments for evidence that the development of fluency and procedural skill is supported by conceptual understanding.	**Evidence-** **Progress towards fluency and procedural skill is interwoven with students' developing conceptual understanding of the operations.** **3.OA.C.7 – Fluently multiply and divide within 100. Practice for this standard occurs from L1.1 to L9.7 and occurs approximately nine times in each lesson. There is ample practice for this standard. 3NBT also occurs at a high frequency.** **1) Each lesson begins with a progression towards fluency and reinforcement of the procedural skills with the Mental Math and Fluency exercises contained within the Warm-Up portion of the lesson.** **2) Additional practice is provided at the end of each lesson within the Practice section which often times includes Math Boxes and sometimes Home Links for support and practice at home.** **3) Fluency development is evident in each unit's Spiral Trace**	
Are purely procedural problems and exercises present that include cases in which opportunistic strategies are valuable and generic cases that require efficient algorithms present? Evaluate lessons, chapter/unit assessments, daily routines, and homework assignments. NOTE: Examples of problems in which opportunistic strategies are valuable might include the sum 698 + 240 or the system $x + y = 1$, $2x + 2y = 3$. Examples of generic cases that require efficient algorithms might include the sum 8767+2286 or the system $6y + x = x + 3$, $-x = 1 + 2y$.	**Evidence-** **Procedural problems and exercises are present throughout the program.** **1) See above** **2) Games provide an additional way to practice procedural problems**	
Do the materials in grades K–6 provide repeated practice toward attainment of fluency Standards? Evaluate lessons, daily routines, and homework assignments for evidence of repeated practice toward attainment of the following K–6 Standards that set an explicit expectation of fluent (accurate and reasonably fast) computation: K.OA.A.5, 1.OA.C.6, 2.OA.B.2, 2.NBT.B.5, 3.OA.C.7, 3.NBT.A.2, 4.NBT.B.4, 5.NBT.B.5, 6.NS.B.2, 6.NS.B.3.	**Evidence-** **The materials provide repeated practice towards attainment of fluency standards.** **1) Leveled practice (online)** **2) Extra practice worksheets for each lesson** **3) Blackline masters and lesson pages provide repeated practice** **4) Develop multiplication strategies that connect to larger multiplication problems and area models** **5) Discussions take place to develop multiple methods for problem solving and identifying efficient strategies**	

Metric AC1C: **The material[illegible]e designed so that teachers and students spend sufficient time working with engaging applications, without losing focus on the Major Work of each grade.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Major Work for the grade being evaluated that relate specifically application to use throughout the questions associated with this metric. NOTE: Some examples of clusters or Standards that call for application include: K.OA.A.2, 1.OA.A, 2.OA.A, 3.OA.A.3, 3.OA.D.8, 4.OA.A.3, 4.NF.B.3d, 4.NF.B.4c, 5.NF.B.6, 5.NF.B.7c, 6.RP.A.3, 6.NS.A.1, 6.EE.B.7, 6.EE.C.9, 7.RP.A, 7.NS.A.3, 7.EE.B.3, 8.EE.C.8c, 8.F.B For context, read Criterion #4c in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** **The text provides opportunities to meet CCSS and work with multi-step real-world problem solving. There are opportunities for practice and developing problem solving. Problems and activities are grade level appropriate. Learned content knowledge, skills, and strategies are used to develop solutions.** **1) Various types of problems and situations** **2) Numerous open-ended problems** **3.OA.D.8 – Problem solving as such begins in Unit 2 and continues through Unit 9 (p. xv)**	**Use the questions for Metric 1C to evaluate Metric 1C. Record evidence for each que[illegible] and rate Metric 1C.** **(Reviewer only.)** **__X__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Are there are single- and multi-step contextual problems, including non-routine problems, that develop the mathematics of the grade, afford opportunities for practice, and engage students in problem solving? Do the problems attend thoroughly to those places in the content Standards where expectations for multi-step and real-world problems are explicit? Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** **The grade level text works with solving number stories using applications from the Major Work (application problems) throughout. The program utilizes single and multi-step contextual problems and opportunity for practice and problem solving.**	
Do application problems particularly stress applying the Major Work of the grade? Evaluate lessons, chapter/unit assessments, and homework assignments. NOTE: Examples of evaluating this Criterion might include looking at: how well, by the end of grade 2, students using the materials as designed can represent and solve a full range of one-step addition and subtraction word problems; or how well, by the end of grade 3, students using the materials as designed can represent and solve a full range of one-step multiplication and division word problems; or how well these basic situation types for each operation are carried coherently across the grades, (e.g., with fractions and algebraic expressions); or, in all grades, whether the problems connect concepts, Standards, and domains in ways that are natural and important. For a list of situation types for one-step addition, subtraction, multiplication, and division problems, see Situation Types for the Operations in Word Problems	**Evidence-** **Students use the CCSS content knowledge to problem solve with emphasis on the Major Work for the grade. In fact, many of the quality multi-step problems use multiple operations.** **Application problems focus to a great extent focus to a great extent on the Major Work of the grade.**	
Does modeling build slowly across K–8, with applications that are relatively simple in earlier grades and when students are encountering new content? In grades 6–8, do the problems begin to provide opportunities for students to make their own assumptions or simplifications in order to model a situation mathematically? Read Standard for Mathematical Practice 4, Model with Mathematics. Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** **Models are built upon previous grade levels and prepare students for existing grade level connections and beyond. Problems and activities are grade level appropriate. Modeling is appropriate for the grade level.**	

Alignment Criterion 1: Rigor and Balance

Materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.

AC1 Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 out of 6 points, the Criterion has not been met. Check the final rating.
Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)**

Before moving to Alignment Criterion 2, record the final Meets or Does Not Meet rating in the Evaluation Summary.

(Reviewer only.)

__X__Meets

____Does Not Meet

Strengths/Weaknesses:

Weaknesses Learning Objectives though present use a different terminology and are not easily identifiable within the TE and are not present in SE.

Conceptual understanding is a strength.

Directions for Alignment Criterion 2

Standards for Mathematical Practice

Alignment Criterion 2: Standards for Mathematical Practice

Materials must demonstrate authentic connections between content Standards and practice Standards.

The Standards require that designers of instructional materials connect the mathematical practices to mathematical content in instruction. Thus, materials must demonstrate authentic connections between content Standards and practice Standards.

Required Materials:

- Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf)
- Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)
- Focus by Grade Level for the grade being evaluated (www.achievethecore.org/focus)
- From the materials being evaluated: teacher guides, student texts and workbooks

Rating this Criterion

Alignment Criterion 2 is rated as Meets or Does Not Meet.

To rate Alignment Criterion 2, first rate metrics 2A, 2B, and 2C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). For each metric, guiding questions are provided to aid in gathering evidence.

Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 2 if the materials earn 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as mathematical practices, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.

Metric AC2A: **Materials address the practice Standards in such a way as to enrich the Major Work of the grade; practices strengthen the focus on Major Work instead of detracting from it, in both teacher and student materials.** **How to Find the Evidence:** Familiarize yourself with the Major Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate teacher and student materials for evidence that the mathematical practices support and connect to the focus of the grade. NOTE: Examples of evaluating this Criterion might include looking at whether, in grades K–5, students using the materials are supported to look for and express regularity in repeated reasoning about the addition table, the multiplication table, the properties of operations, the relationship between addition and subtraction or multiplication and division, and the place value system; or whether, in grades 6–8, students using the materials are supported to look for and express regularity in repeated reasoning about proportional relationships and linear functions. For context, read Criterion #8 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013).	**Evidence-** **The use of the MPs support the focus on the Major Work for the grade level and provide coherence and connections in both TE and student pages.** **1) MPs, standards, and content are integrated for meaningful practice.** **2) Each lesson and each activity in the lesson lists the MPs and standards used (TE) and the Student Reference Book highlights the MPs** **3) Student Reference Book pp. 1-33 goes through in student friendly explanation of all the MPs to help students understand how to apply them.** **4) TE continually points out where an how to take advantage of the MPs.**	**(Reviewer only.)** **__X__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Metric AC2B: **Materials attend to the full meaning of each practice Standard.** **How to Find the Evidence:** For context, read Criterion #7 and Criterion #9 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).		**Use the questions for Metric 2B to evaluate Metric 2B. Record evidence for each question and rate Metric 2B.** **(Reviewer only.)** **__X__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Over the course of any given year of instruction, is each mathematical practice Standard meaningfully present in the form of assignments, activities, or problems that stimulate students to develop the habits of mind described in the practice Standard? Evaluate lessons, chapter/ unit assessments, and homework assignments for evidence of each mathematical practice being meaningfully present in instruction.	**Evidence-** **The MPs are connected to the content in a meaningful way. The problems assist in promoting student development of mathematical habits of mind. Discussions within the lessons support the practice of the MPs in the problem solving process.** **1) TE** **2) Student Reference Guide** **3) Lessons ask students to use numbers or pictures to show how you solved the problem or to sketch a number line or to use fraction strips to show your answer is true**	

Do the materials treat the practice Standards as developing across grades or grade bands? Are the practice Standards in early grades appropriately simple? Do they display an arc of growing sophistication across the grades?	**Evidence-** **Each unit has a practice Standard as a focus. However, within each lesson, multiple practice Standards are addressed.** **The two-day lesson Open Response/Reengagement, in each unit, offer the most in-depth practice with the MPs**	
Are there teacher-directed materials that explain the role of the practice Standards in the classroom and in students' mathematical development? Are alignments to practice Standards accurate?	**Evidence-** **The teacher-directed materials explain the role of the practice Standards in the classroom and in students' mathematical conceptual understanding based upon the standards.** **1) Mathematical Background at the start of each unit** **2) Standards and Goals for Mathematical Practice are listed at the start of each lesson by the Warm Up activity** **3) Students have explanations and expectations of the MPs in their reference book** **4) Open-response assessments** **5) Task-specific rubrics** **6) Readymade checklists** **7) Online assessments**	
Metric AC2C: **Materials support the Standards' emphasis on mathematical reasoning.** **How to Find the Evidence:** For context, read Criterion #10 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).		**Use the questions for Metric 2C to evaluate Metric 2C. Record evidence for each question and rate Metric 2C.** **(Reviewer only.)** **_X___Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Do the materials support students in constructing viable arguments and critiquing the arguments of others concerning grade-level mathematics that is detailed in the content Standards? Read Standard for Mathematical Practice 3. Evaluate teacher and student materials to ensure that students are given opportunities to reason with grade-level mathematics.	**Evidence-** **The text provides opportunities for students to reason mathematically and share their process through discussions, and some of the written work.** **Discussion activities within each lesson support constructing viable arguments and critiquing the arguments of others. Intentional support is indicated within the TE to help students develop skills needed for mathematical discussions; however, more teacher support on how to help students construct viable arguments would be helpful.**	

Do the materials support students in producing not only answers and solutions, but also in a grade-appropriate way, arguments, explanations, diagrams, mathematical models, etc., especially in the Major Work of the grade? Familiarize yourself with the Major Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate teacher and student materials, to understand the types of work students are expected to produce.	**Evidence-** **While the text has supports for students' explanations, justification, and demonstrating their problem solving process, more teacher materials could have supported the discussions and sharing of results to create better students results. Not all teachers have the knowledge or the skill to support such dialogue. The high number of open-ended questions also supports students in producing solutions and not just answers.** **1) Math Journals** **2) Open Response/Reengagement**	
Do materials explicitly attend to the specialized language of mathematics? Is the language of argument, problem solving, and mathematical explanations taught rather than assumed? Evaluate teacher and student materials, paying attention to how mathematical language is taught. NOTE: Examples of evaluating this Criterion might include looking at whether students are supported in: basing arguments on definitions; using the method of providing a counterexample; or recognizing that examples alone do not establish a general statement.	**Evidence-** **There are no modifications to the mathematical language within the TE or in the student pages that sacrifice mathematical concepts or language development.** **1) Each unit identifies vocabulary to be used** **2) Some lessons include Academic Language Development (p.223) See Index for more examples**	
Alignment Criterion 2: **Standards for Mathematical Practice** **Materials must demonstrate authentic connections between content Standards and practice Standards.** **AC2** Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 out of 6 points, the Criterion has not been met. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)** **Before moving to Alignment Criterion 3, record the final Meets or Does Not Meet rating in the Evaluation Summary.**		**(Reviewer only.)** **__X__Meets** **____Does Not Meet** **Strengths/Weaknesses:**

Alignment Criterion 3: **Access to the Standards for All Students** **Materials must provide supports for English Language Learners and other special populations.** Because Standards are for all students, alignment requires thoughtful support to ensure all students are able to meet the Standards. Thus, aligned materials must provide supports for English Language Learners and other special populations.	**Required Materials:** • Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion:** Alignment Criterion 3 is rated as Meets or Does Not Meet. To rate Alignment Criterion 3, first rate metrics 3A, 3B, and 3C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 3 if the materials earn 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as support for special population, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.
Metric AC3A: **Support for English Language Learners and other special populations is thoughtful and helps those students meet the same Standards as all other students. The language in which problems are posed is carefully considered.** **How to Find the Evidence:** Evaluate teacher and student materials, paying attention to supports offered for special populations.	**Evidence-** **ELL supports and other special populations have thoughtful and helpful supports to assist the students in meeting the grade-level standards.** **1) Supports are included with each lesson** **2) Academic Language Development notes in some lessons** **3) Common Misconceptions and differentiated instruction sections may also address the needs of ELL students**	**Reviewer only.)** **__X__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Metric AC3B: **Materials provide appropriate level and type of scaffolding, differentiation, intervention, and support for a broad range of learners with gradual removal of supports, when needed, to allow students to demonstrate their mathematical understanding independently.** **How to Find the Evidence:** Evaluate teacher and student materials, paying attention to whether materials provide differentiation that will lead all learners to engage with on-grade-level content.	**Evidence-** **Materials provide appropriate level and variation in scaffolding, differentiation, intervention, and support for a variety of learners.** **1) Each lesson has multiple differentiation options for a variety of learners Differentiate-Adjust the Lesson** **2) Readiness, Enrichment, and Extra Practice** **3) Games** **4) Sections for Adjusting the Activity** **5) Common Misconceptions** **6) Academic Language Development** **7) Online differentiations supports** **8) Online teacher support lesson guide provides expanded lesson specific suggestions for ELL and scaffolding**	**Reviewer only.)** **__X__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**

Metric AC3C: **Design of lessons recommends and facilitates a mix of instructional approaches for a variety of learners such as using multiple representations (e.g., including models, using a range of questions, checking for understanding, flexible grouping, pair-share).** **How to Find the Evidence:** Evaluate teacher materials, noting instructional approaches suggested for whole class and differentiated lessons and activities.	**Evidence-** **Lesson design recommends and facilitates a variety of instructional approaches for a variety of learners through the use of multiple representations, models, discussion questions, and flexible grouping.** **1) Written practice** **2) Classroom discussion** **3) Individual, partner, small group, and whole group work** **4) Games** **5) Multiple methods/strategies for solving problems** **6) Manipulatives are used in various activities**	**Reviewer only.)** **__X__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Alignment Criterion 3: **Access to the Standards for All Students** **Materials must provide supports for English Language Learners and other special populations.** **AC3** Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 points, the Criterion has not been met. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion.**(Reviewer only.)** **Move to the Evaluation Summary and record the final Meets or Does Not Meet rating .**		**(Reviewer only.)** **__X__Meets** **____Does Not Meet** **Strengths/Weaknesses:**

Once an evaluation for alignment to the Shifts and major features of the CCSS has been conducted using Sections 1-3, it's important to evaluate for overall quality and best practices. A starting list of Indicators of Quality are suggested below. States, districts and others evaluating instructional materials are encouraged to add to this list to ensure materials reflect local contexts. For background information on some of the Indicators of Quality in this section, refer to pp.18–21 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).

Indicators of Quality	Evidence- Give specific examples.	Rating: (Reviewers only.)

1. Lessons are thoughtfully structured and support the teacher in guiding the class through the learning paths at hand, with active participation by all students in their own learning and in the learning of their classmates.	**Evidence-** **Each unit follows a structured sequence** **Each lesson follows an appropriately structured sequence with a variety of instructional methods and activities** **1) Teacher supports are clear and easy to follow** **2) Intended sequence is evident in the TE**	**(Reviewer only.)** **___X___ Yes** **_____ No**
2. The underlying design of the materials includes both problems and exercises. (In solving problems, students learn new mathematics, whereas in working exercises, students apply what they have already learned to build mastery.) Each problem or exercise has a purpose. **NOTE: This Criterion does not require that the problems and exercises be labeled as such.**	**Evidence-** **Both problems and exercises are included in the lessons. Problems are used to introduce and develop new mathematical learning (Math Message). Exercises are used to practice, apply, and build mastery of mathematic concepts (Fluency, Math Boxes).**	**(Reviewer only.)** **___X___ Yes** **_____ No**
3. Design of assignments is not haphazard: exercises are given in intentional sequences in order to strengthen students' mathematical understanding.	**Evidence-** **Lesson design develops concepts, skills, and applications with increased number of connections between content with grade level appropriateness that spirals through the previous and upcoming grade levels. Intended sequence is evident in assignments.**	**(Reviewer only.)** **___X___ Yes** **_____ No**
4. There are separate teacher materials that support and **reward teacher study including, but not limited to: discussion of the mathematics of the units and the mathematical point of each lesson as it relates to the organizing concepts of the unit, discussion on student ways of thinking and anticipating a variety of students responses, guidance on lesson flow, guidance on questions that prompt students thinking, and discussion of desired mathematical behaviors being elicited among students.**	**Evidence-** **There are teacher materials and sections that support instruction through the discussion of the mathematics, discussions, students' thinking, and more.** **1) Professional development pieces are interwoven in the lessons and each unit has a lengthy PD section, Mathematical Background, in the Unit Organizer.** **2) Each lesson has pacing guidelines and guided instruction for supporting student learning.** **3) Digital resources include the Virtual Learning Community and Everyday Math Online.** **4) TE Observe and Discuss at the beginning of each lesson gives teachers questions to use during observation and questions to facilitate classroom discussion** **5) GMP listed in the back of TE explains goals for each lesson**	**(Reviewer only.)** **___X___ Yes** **_____ No**

5. Manipulatives suggested in the materials are faithful representations of the mathematical objects they represent and are connected to written methods.	Evidence- Manipulatives and student-generated representations are used. Connections are made between the manipulatives and problem solving strategies. Instructional strategies work to connect the appropriate manipulatives and representations and assist students in moving towards more efficient methods of problem solving. Manipulatives are faithful representations and are well-connected to written methods.	(Reviewer only.) __X____ Yes _____ No
6. Materials include a variety of curriculum-embedded assessments. Examples include pre-, formative, summative, and self-assessment resources.	Evidence- The text has a variety of embedded assessments including Preview Math Boxes and Assessment Check-In. 1) Mental Math and Fluency could be used as quick formative assessments. 2) Digital tools are also available. 3) Formative assessment opportunities are present for teacher to use while presenting each lesson 4) Self-assessments available for all units 5) Summative assessment at the end of each unit 6) Journal	(Reviewer only.) __X____ Yes _____ No
7. Assessments contain aligned rubrics, answer keys, and scoring guidelines that provide sufficient guidance for interpreting student performance.	Evidence- In addition to the embedded assessments listed above, the text also has Unit Progress Check Lessons with optional Challenge Assessments. Answers are included in the TE. Open-Response Assessments in every other unit are evaluated with a task specific rubric. The Assessment Handbook includes Progress Check masters, Interim Assessments, Record-Keeping Masters for multiplication facts, MPs, etc., Blank Exit Slips that could be used for a quick post assessment. See above.	(Reviewer only.) __X____ Yes _____ No
8. Materials assess student proficiency using methods that are accessible and unbiased, including the use of course-level language in student prompts.	Evidence- Grade level appropriate language is used in student prompts and appear to be accessible and unbiased. 1) See above 2) Math Journal 3) Answer Book	(Reviewer only.) __X____ Yes _____ No

9. Materials are carefully evaluated by qualified individuals, whose names are listed, in an effort to ensure freedom from mathematical errors and course-level appropriateness.	**Evidence-** **Authors and editors carefully evaluated materials to ensure grade level appropriateness and freedom from errors.**	**(Reviewer only.)** **___X___ Yes** **_____ No**
10. The visual design supports students in engaging thoughtfully with the subject. Navigation through the text is clear.	**Evidence-** **The hands-on activities and the visual design of the student reference book are engaging the student thoughtfully with the content. Navigation is clear. Materials are well-laid out and visually appealing.**	**(Reviewer only.)** **__X____ Yes** **_____ No**
11. The materials engage parents in appropriate ways. For example, homework assignments in elementary grades, consist of routine problems, practice with getting answers, and fluency-building exercises that parents can easily support.	**Evidence-** **Family Letters are included for each unit and include vocabulary, games, and activities.** **Home Links have practice problems from the concepts covered in class and explanations for how the content was taught.**	**(Reviewer only.)** **___X___ Yes** **_____ No**

Reviewer IMET Evaluation Summary **Title/Level: Everyday Math/ Grade 3**_____

Publisher: McGraw-Hill School Education LLC___ **Copyright: 2016**____ **ISBN: Various**_____

Reviewer ID # ___**KT**_____**LW**_____ **Date Review Completed: 2016**_____

Non-Negotiable Criteria- Each Non-Negotiable must be met in order for the Non-Negotiable Alignment Criteria to be met overall.

Non-Negotiable 1: Freedom from Obstacles to Focus	**Non- Negotiable 2: Focus and Coherence**
___X___ **Meets** _____ **Does Not Meet**	__X___ **Meets** _____ **Does Not Meet**

Non-Negotiable Overall:

___X__ Meets **_____ Does Not Meet**

Alignment Criteria- Each Alignment Criterion must be met with a sufficient number of points in order for Alignment Criteria to be labeled as "Meets" overall. The more points the materials receive on the Alignment Criteria, the better they are aligned.

Alignment Criterion 1: Rigor and Balance	**Alignment Criterion 2: Standards of Mathematical Practice**	**Alignment Criterion 3: Access to Standards for All Learners**
Points: ___6__ of 6 possible. **(Materials must receive at least 5 of 6 points to align.)** ____X___ **Meets** _____ **Does Not Meet**	**Points: __6___ of 6 possible.** **(Materials must receive at least 5 of 6 points to align.)** ____X___ **Meets** _____ **Does Not Meet**	**Points: __6___ of 6 possible.** **(Materials must receive at least 5 of 6 points to align.)** ___X____ **Meets** _____ **Does Not Meet**

Alignment Criteria Overall:

___X__ Meets **_____ Does Not Meet**

If the materials meet both Non-Negotiables and relevant Alignment Criterion, they are aligned to the Shifts and major features of the Core Standards. **Do the materials meet every Non-Negotiable and Alignment Criterion? __X___ Yes _____ No**

What are the specific areas of strength and weakness based on this evaluation? Publishers or others modifying or developing assessments can use this information to make improvements and/or to remedy gaps in the alignment of assessment materials.

2015-16 Mathematics Interim Review Recommendation & Summary

Publisher Name:	McGraw Hill School Education LLC
Title:	Everyday Math
ISBN #	978-0-02-141001-9
Grade Level(s) or Course:	4
Reviewer ID:	MH & DB

RECOMMENDED AS:

_✓_ **Core Mathematics Program-** a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials. Substantial evidence clearly supports the designation of this program as Core.

_____ **Other Mathematics Program-** a program that substantially, but partially, meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for supplemental materials. Substantial evidence clearly supports the designation of this program as Other.

_____ **Component Mathematics Program-** a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs. Substantial evidence clearly supports the designation of this program as Component.

_____ **Intervention Program-** a program designed and intended to target and support students' specific needs. Substantial evidence clearly supports the designation of this program as Intervention.

_____ **Does not meet criteria** for recommendation as a Curricular Material or Online Resource for Mathematics.

EVIDENCE SUMMARY:

FOCUS- although supporting standards sometimes use a larger portion of time than necessary, generally materials focus on major work of the grade.

COHERENCE-
Domains and clusters are clearly stated at the beginning of each unit and lesson. They address more than one standard and SMP for the lesson.

RIGOR-
Students continually work on fluency, applying that to real problems found embedded in multi-step word problems & open responses.

CONCEPTUAL UNDERSTANDING-
Students engage in content (standards) by solving contextual problems and apply concepts learned in earlier lessons / grades.

MATHEMATICAL PRACTICES-
SMP are integrated and explicitly tied to all activities in all lessons

ACCESSIBILITY OF STANDARDS TO ALL STUDENTS-
Every lesson contains multiple differentiation options to address the needs of a broad range of learners with additional activities assigned in the lesson opener.

OTHER:

2015-16 Interim Mathematics Review

Mathematics Evaluation Tool Grades K-8

Publisher: McGraw-Hill School Education, LLC

Title of Material: Everyday Math Grade 4

Author: Bell et al

ISBN #: 978-0-02141-001-1 **Copyright** 2016

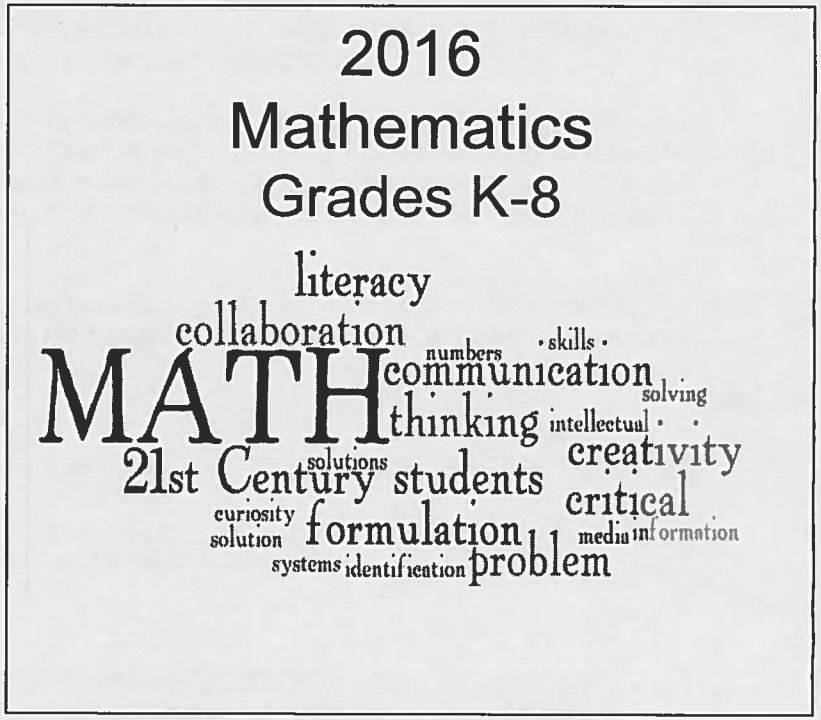
Reviewer ID: DB, MH

Core Mathematics Program- a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Core.

Other Mathematics Program- a program that substantially, but partially, meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Other.

Component Mathematics Program- a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs.
Substantial evidence clearly supports the designation of this program as Component.

Intervention Program- a program designed and intended to target and support students' specific needs.
Substantial evidence clearly supports the designation of this program as Intervention.



- Evaluation Form adapted from Instructional Materials Evaluation Toolkit (IMET).

The IMET was developed by Student Achievement Partners. Educators may use or adapt. http://creativecommons.org/licenses/by/3.0/ Download this tool at http://achievethecore.org/IMET

Instructional Materials Evaluation Tool

Mathematics, Grades K-8

What Are the Purposes of the IMET?

This Math IMET is designed to help educators determine whether instructional materials are aligned to the Shifts and major features of the Common Core State Standards (CCSS). The substantial instructional Shifts (http://www.corestandards.org/other-resources/key-shifts-inmathematics/) at the heart of the Common Core State Standards are:

- **Focus** strongly where the Standards focus
- **Coherence**: Think across grades and link to major topics within the grade
- **Rigor**: In major topics, pursue conceptual understanding, procedural skill and fluency, and application with equal intensity.

The IMET draws directly from the following documents:

- Common Core State Standards for Mathematics (www.corestandards.org/Math)
- Publishers' Criteria for the Common Core State Standards in Mathematics grade K-8 (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)

When to use the IMET

1. Purchasing materials: Many factors go into local purchasing decisions. Alignment to the Standards is a critical factor to consider. This tool is designed to evaluate alignment of instructional materials to the Shifts and the major features of the CCSS. It also provides suggestions of additional indicators to consider in the materials evaluation and purchasing process.

2. Evaluating materials currently in use: The IMET can be used to analyze the degree of alignment of existing materials and help to highlight specific, concrete flaws in alignment. Even where materials and tools currently in use fail to meet one or more of these criteria, the pattern of failure is likely to be informative. States and districts can use the evaluation to create a thoughtful plan to modify or combine existing resources in such a way that students' actual learning experiences approach the focus, coherence, and rigor of the Standards.

3. Developing programs: Those developing new programs can use this tool as guidance for creating aligned curricula.
Please note this tool was designed for evaluating comprehensive curricula (including any supplemental or ancillary materials), but it was not designed for the evaluation of standalone supplemental materials.

Who Uses the IMET?

Evaluating instructional materials requires both subject-matter and pedagogical expertise. Evaluators should be well versed in the Standards (www.corestandards.org/Math) for all grades in which materials are being evaluated. This includes understanding the Major Work of the grade (www.achievethecore/focus), the Supporting and Additional work, how the content fits into the progressions in the Standards (www.achievethecore.org/progressions), and the expectations of the Standards with respect to conceptual understanding, procedural skill and fluency, and application. Evaluators also should be familiar with the substantial instructional Shifts (http:// www.corestandards.org/other-resources/key-shifts-in-mathematics/) of Focus, Coherence and Rigor that are listed above.

Getting Started

Prior to Evaluation

Assemble all of the materials necessary for the evaluation. It is essential for evaluators to have materials for all grades covered by the program, as some criteria cannot be rated without having access to each grade. In addition, each evaluator should have a reference copy of the Common Core State Standards for Mathematics (CCSSM) and the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013).

reference copy of the Common Core State Standards for Mathematics (CCSSM) and the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013).

Before conducting the evaluation itself, it is important to develop a protocol for the evaluation process. The protocol should include having evaluators study the Publishers' Criteria and the IMET. It will also be helpful for evaluators to get a sense of each program overall before beginning the process. At a minimum, this would include reading the front matter of the text, looking at the table of contents and paging through multiple chapters.

Sections 1-3 below should be completed to produce a comprehensive picture of the strengths and weaknesses of the materials under evaluation. Information about areas in need of improvement or supplementation should be shared with internal and external stakeholders.

Navigating the Tool

Begin with Section 1: Non-Negotiable Alignment Criteria

- The Non-Negotiable Alignment Criteria must each be met in full for materials to be considered aligned to the Shifts and the major features of the Common Core State Standards. Each Non-Negotiable Alignment Criterion has one or more metrics associated with it; every one of these metrics must be met in order for the criterion as a whole to be met.

- Examine the relevant materials and use evidence to rate the materials against each criterion and its associated metric(s).

- Record and explain the evidence upon which the rating is based.

Continue to Section 2: Alignment Criteria

- The Alignment Criteria must each be met for materials to be considered aligned to the Shifts and the major features of the Common Core State Standards. Each Alignment Criterion has one or more metric associated with it; a specific number of these metrics must be met or partially met in order for the criterion as a whole to be met.

- Examine the materials in relation to these criteria, assigning each metric a point value. Rate the criterion as "Meets" or "Does Note Meet" based on the number of points assigned. The more points the materials receive on the alignment Criteria, the better they are aligned.

- Record and explain the evidence upon which the rating is based.

Proceed to Section 4: Indicators of Quality

- Indicators of Quality are important considerations that will help evaluators better understand the overall quality of instructional materials. These considerations are not criteria for alignment to the CCSS, but they provide valuable information about additional program characteristics. Evaluators may want to add their own indicators to the examples provided.

Directions for Non-Negotiable 1

Freedom from Obstacles to Focus

Criterion	Evidence- Give specific examples.	Rating: (Reviewer only.)
Non-Negotiable 1: **Freedom from Obstacles to Focus** **Materials must reflect the content architecture of the Standards by not assessing the topics named before the grade level where they first appear in the Standards.** The Standards foster students' progress to algebra by focusing strongly on arithmetic. Consistent with this focus, certain topics from outside of arithmetic appear only in later grades. Thus, to be aligned, materials must reflect the content architecture of the Standards by not assessing the topics named before the grade level where they first appear in the Standards. In this criterion, "topics named" means the topics that are explicitly named in Metric 1A. No other topics should be added to the list in Metric 1A. (Note that other topics in the standards are addressed in criterion NN2.)	**Required Materials** • Common Core State Standards for Mathematics (www.corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf) • From the materials being evaluated: teacher guides and all assessment components	**Rating this Criterion:** Non-Negotiable 1 is rated as Meets or Does Not Meet. To rate Non-Negotiable 1, begin by rating Metric 1A. Since Metric 1A is the only metric for Non-Negotiable 1, the rating for Non-Negotiable 1 is the same as the rating for Metric 1A. If Metric 1A is rated as Does Not Meet, include evidence of when the named topic(s) is/are assessed. If the metric is rated as Meets, list the grade(s) examined in the evaluation.

Metric NN1A: **Materials r[illegible]t the basic architecture of the Standards by not assessing the listed topics before the grade level indicated.** • Probability, including chance, likely outcomes, probability models. (Introduced in the CCSSM in grade 7) • Statistical distributions, including center, variation, clumping, outliers, mean, median, mode, range, quartiles; and statistical association or trends, including two-way tables, bivariate measurement data, scatter plots, trend line, line of best fit, correlation. (Introduced in the CCSSM in grade 6) • Similarity, congruence, or geometric transformations. (Introduced in the CCSSM in grade 8) • Symmetry of shapes, including line/ reflection symmetry, rotational symmetry. (Introduced in the CCSSM in grade 4) **How to Find the Evidence:** Evaluate the table of contents, all chapter tests, all unit tests, and other such assessment components (including rubrics). For context, read Criterion #2 from the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013). NOTE: Grade alignments of other topics are addressed in Non-Negotiable 2, Focus and Coherence.) In this criterion, "topics named" means the topics that are explicitly named in Metric 1A. No other topics should be added to the list in Metric 1A. (Note that other topics in the standards are addressed in criterion NN2.)	**Evidence-** **Teachers guide: p[illegible]6-147** **- Lesson 2-5 contains standards addressed,** **- includes assessment check-in, extra practice, enrichment (differentiate)** **- Unit assessment includes all standards assessed pg 202 (unit 2)** **Teachers Guide: pg 312-313 Unit 4** **- Includes standards, differentiation and assessments** **- Pg 336-spiral snapshot and spiral trace-showing where standards addressed (318-319)** **Includes beginning of year, mid-year, and end of year Assessment guide matches** ***Note: lattice method assessed on page 28 of assessment guide-shows no place value understanding!**	

Non-Negotiable 1: Materials must reflect the content architecture of the Standards by not assessing the topics named* before the grade level where they first appear in the Standards.

NN 1 If Metric 1A was rated as Meets, then rate Non-Negotiable 1 as Meets. If Metric 1A was rated as Does Not Meet, then rate Non- Negotiable 1 as Does Not Meet. Check the final rating.

Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion.**(Reviewer only.)**

Before moving to Non-Negotiable 2, record the final Meets or Does Not Meet rating in the Evaluation Summary.

(Reviewer only.)

___X_Meets

____Does Not Meet

Strengths/Weaknesses:
Includes progression of standards, with a variety of activities for students, workbook/journal allows students to "write" answers

Weakness: seems to jump around and go back and forth)

Directions for Non-Negotiable 2

Focus and Coherence

Non-Negotiable 2:
Focus and Coherence

Materials must focus coherently on the Major Work of the grade in a way that is consistent with the progressions in the Standards.

Focus and coherence are the two major evidence-based design principles of the Common Core State Standards for Mathematics (CCSSM, p. 3). Focus is necessary in order to fulfill the ambitious promise the states have made to their students by adopting the Standards: greater achievement at the college and career ready level; greater depth of understanding of mathematics; and a rich classroom environment in which reasoning, sense-making, applications, and a range of mathematical practices flourish. In simpler terms, a mile-wide, inch-deep curriculum translates to less time per topic. Less time means less depth and moving on without many students. Thus, materials must focus coherently on the Major Work of the grade in a way that is consistent with the progressions in the Standards.

Required Materials

- Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf)
- Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)
- Focus by Grade Level for the grade being evaluated (www.achievethecore.org/focus)
- From the materials being evaluated: teacher guides, student texts and workbooks

Rating this Criterion:

Non-Negotiable 2 is rated as Meets or Does Not Meet.

To rate Non-Negotiable 2, first rate metrics 2A–2H. Each of these eight metrics must be rated as Meets in order for Non-Negotiable 2 to be rated as Meets. Rate each metric 2A-2H as Meets or Does Not Meet/Insufficient Evidence. If the evidence examined shows that the Criterion is met, then mark the Criterion Meets. If the evidence examined shows that the Criterion is not met—or if there is insufficient evidence to make a determination—then mark the Criterion as Does Not Meet/Insufficient Evidence. Support all ratings with evidence.

Metric NN2A:
In each grade K–8, students and teachers using the materials as designed devote the large majority of time to the Major Work of the grade.

How to Find the Evidence:

Familiarize yourself with the Major Work of the grade being evaluated (see the Focus by Grade Level documents.)

Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, lessons, homework assignments, and assessments. (Evaluate both student and teacher materials.)

Consider time spent on the Major Work of the grade and judge qualitatively whether students and teachers using the materials as designed will devote the large majority of time to the Major Work of the grade.

For context, read Criterion #1 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013)

Evidence-

Unpacking the standards-beginning of each teachers' guide
Grade 4: introduces measurement conversions: moves between the various units using function/ratio tables so not actually asking to convert without ratio table
Fractions start with equivalent (equal sharing) 3rd grade standard to move into 4thgradestandard

Note: assessments assess more supporting clusters than major clusters Unit 5- 6 of the 15 angle or shape questions (supporting cluster)

(Reviewer only.)

___x_Meets

____Does Not Meet/

Insufficient Evidence

Metric NN2B: **Supporting Work, where present, enhances focus and coherence simultaneously by also engaging students in the Major Work of the grade.** **How to Find the Evidence:** Familiarize yourself with the Major Work and Supporting Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate chapters and lessons that focus on Supporting Work. NOTE: Example of evaluating this Criterion might include looking at whether materials for K–5 generally treat data displays as an occasion for solving grade-level word problems using the four operations (e.g., see 3.MD.B.3); or whether materials for grade 7 take advantage of opportunities to use probability to support ratios, proportions, and percentages. For context, read Criterion #3 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Supporting clusters appear only where they support and engage students in the major work of the grade and these clusters only become the focus of lessons in later units: Grade 4: 4MD.1 and 4.MD2 supporting clusters addressed in conjunction with the major work within the NBT and NF domains-Lesson 6-6 students use multi-digit multiplication (4NBT.5) to solve number stories involving conversions between ounces, pounds, and tons Note: lesson 5-10 rotations and angles in the middle of fractions-angles are taught in unit 1-unusual organization	**(Reviewer only.)** **_X_Meets** **____Does Not Meet/** **Insufficient Evidence**
Metric NN2C: **Materials base content progressions on the grade-by-grade progressions in the Standards. Content from previous or future grades does not unduly interfere with or displace on-grade-level content.** **How to Find the Evidence:** Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, and lessons in both student and teacher materials. NOTE: In some cases it may be possible that aligned materials might address some aspects of a topic in a strategic way before or after the grade level in which the topic is central in the Standards' progressions; for example, a curriculum author might purposefully choose to explore adding fractions with unlike denominators in a way appropriate to grade four, recognizing that this work is not really required until the next grade. However, any such purposeful discrepancies in content progressions should enhance the required learning in each grade; not unduly interfere with or displace grade-level content; and be clearly aimed at helping students meet the Standards as written rather than effectively rewriting the progressions in the Standards. And in all cases, note that Non-Negotiable 1 must be met for materials to be aligned. For context, read Criterion #5a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Teachers guide -contains "unpacking the standards", clearly articulates the progression of each standard in the grade -differentiation support such as Readiness and Enrichment activities that are included in each lesson assists students to reinforce skills Grade 4: content from previous grades revisited to form bridge for 4th grade content. Lesson 3-1 fraction work begins with equivalent fractions (3rd grade standard) Spiral tracker doesn't always connect to previous grades Games pg E12-14 shows correlation to 3rd grade	**(Reviewer only.)** **_X_Meets** **____Does Not Meet/** **Insufficient Evidence**

Metric NN2D: **Materials gi[illegible]ll students extensive work with on-grade-level problems.** **How to Find the Evidence:** Evaluate both student and teacher materials. If the materials provide resources for differentiated learning, consider whether lower-performing students have opportunities to engage with grade-level problems. Also consider whether higher-performing students are given opportunities to learn current grade-level content in greater depth. For context, read Criterion #5b in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Readiness activities [illegible]are students who need scaffolding for the main tasks. Extra practice provides all students with meaningful practice of grade-level content from the lesson Grade 4- Lesson 7-4 multiplying fractions by a whole number includes readiness activity of rewriting the problem as repeated addition-reinforcing the connection between adding fractions and multiplying a fraction by a whole number using fraction circles, number lines, models. Student friendly activity cards for small group/partner Assessment check-in, recommendations for interventions, open response for enrichment and differentiation No separate ELL component in print, only online	**(Reviewer only.)** **_X_Meets** **____Does Not Meet/ Insufficient Evidence**
Metric NN2E: **Materials relate on-grade-level concepts explicitly to prior knowledge from earlier grades.** **How to Find the Evidence:** Evaluate both student and teacher materials. NOTE: Examples of evaluating this Criterion might include looking at the way the materials extend basic ideas of place value across the decimal point; or the role that properties of operations play when the materials extend arithmetic beyond whole numbers to fractions, variables, and expressions. More generally, cluster headings in the Standards sometimes signal key moments where reorganizing and extending previous knowledge is important in order to accommodate new knowledge (e.g., see cluster headings that use the phrase "Apply and extend previous understanding"). For context, read Criterion #5c in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Grade 4: Unit 7 organizer states "Building upon informal strategies such as repeated addition…and using a variety of representations allows students to see that multiplying a fraction by a whole number is conceptually the same as multiplying two whole numbers." Language is relevant to Grade 4 by extending and applying previous understanding	**(Reviewer only.)** **_X_Meets** **____Does Not Meet/ Insufficient Evidence**
Metric NN2F: **Review of material from previous grades is clearly identified as such to the teacher, and teacher and students can see what their specific responsibility is for the current year.** **How to Find the Evidence:** Evaluate the table of contents, but do not stop there; also evaluate units, chapters, lessons, homework assignments and assessments. (Evaluate both student and teacher materials.) Identify any content from previous grades and check whether it is identified as such. For context, read Criterion #5a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Lessons and activities contain minimal amounts of materials from earlier grades-clearly identified as previous standards Grade 4: lessons 1-7 and 1-9 traditional addition and subtractions algorithms introduced, lesson focus begins with review of addition and subtractions strategies used as bridge for conceptual understanding of algorithm. Beginning of the year assessment-measures student knowledge and skills related to content in the first few units Differentiation support cover topics of the major clusters	**(Reviewer only.)** **_X__Meets** **____Does Not Meet/ Insufficient Evidence**

Metric NN2G: **Materials include learning objectives that are visibly shaped by CCSSM cluster headings.** **How to Find the Evidence:** Select several clusters from the Major Work in the grade being evaluated. Evaluate teacher and student materials in relation to these clusters. For context, read Criterion #6a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Lesson begins with a lesson opener which clearly outlines the CCSS cluster headings addressed in the lesson content; includes learning objectives called Goals for Mathematical Content (GMC's) that enable finer-grained tracking of student progress. GMC's are broken down versions of the standards	**(Reviewer only.)** **_X_Meets** **____Does Not Meet/** **Insufficient Evidence**
Metric NN2H: **Materials include problems and activities that serve to connect two or more clusters in a domain, or two or more domains in a grade, in cases where these connections are natural and important.** **How to Find the Evidence:** In the grade being evaluated, choose two or more clusters or two or more domains for which connections are natural and important. Evaluate the units, chapters, and lessons that deal with the chosen topics, looking for problems and activities that serve to connect the chosen clusters or domains. NOTE: An example of evaluating this Criterion might include looking at whether problems in grade 4 sometimes or often involve students applying their developing computation skills (detailed in domain NBT) in the context of solving word problems (detailed in domain OA). For context, read Criterion #6b in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** All lessons begin with identifying focus clusters. All activities list standards that are addressed in the activity and many of them connect multiple domains. Grade 4: Lesson 6-8 students interpret remainders for multidigit division problems in the context of number stories, connecting standards from 2 domains: 4.OA.3 and 4.NBT.6	**(Reviewer only.)** **X_Meets** **____Does Not Meet/** **Insufficient Evidence**

Non-Negotiable 2:
Focus and Coherence

Materials must focus coherently on the Major Work of the grade in a way that is consistent with the progressions in the Standards.

NN 2 If all Metrics 2A – 2H were rated as Meets, then rate Non-Negotiable 2 as Meets. If one or more Metric was rated Does Not Meet/Insufficient Evidence, then rate Non-Negotiable 2 as Does Not Meet. Check the final rating.
Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)**

Before moving to Alignment Criterion 1, record the final Meets or Does Not Meet rating in the Evaluation Summary.

(Reviewer only.)

_X_Meets

____Does Not Meet

Strengths/Weaknesses:
Domains/clusters are clearly stated at the beginning of each unit/lesson
Address more than one standard and SMP for each lesson

Now continue by evaluating the Alignment Criterion 1 for Rigor and Balance.

Directions for Alignment Criterion 1

Rigor and Balance

Alignment Criterion 1: Rigor and Balance

Materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.

The Standards set expectations for attention to all three aspects of rigor: conceptual understanding, procedural skill and fluency, and applications. Thus, materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.

Required Materials

- Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf)
- Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)
- Focus by Grade Level for the grade being evaluated (achievethecore.org/focus)
- Situation Types for the Operations in Word Problems (achievethecore.org/situation-types)
- From the materials being evaluated: teacher guides, student texts and workbooks

Rating this Criterion:
Alignment Criterion 1 is rated as Meets or Does Not Meet.

To rate Alignment Criterion 1, first rate metrics 1A, 1B, and 1C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). For each metric, guiding questions are provided to aid in gathering evidence.
Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 1 if the materials rate 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as rigor and balance, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.

2015-16 Mathematics Interim Review Recommendation & Summary

Publisher Name:	McGraw Hill School Education, LLC
Title:	Every Day Math Grade 5
ISBN #	978-0-02-143068
Grade Level(s) or Course:	Grade 5
Reviewer ID:	DBMH

RECOMMENDED AS:

✓ **Core Mathematics Program-** a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials. Substantial evidence clearly supports the designation of this program as Core.

_____ **Other Mathematics Program-** a program that substantially, but partially, meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for supplemental materials. Substantial evidence clearly supports the designation of this program as Other.

_____ **Component Mathematics Program-** a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs. Substantial evidence clearly supports the designation of this program as Component.

_____ **Intervention Program-** a program designed and intended to target and support students' specific needs. Substantial evidence clearly supports the designation of this program as Intervention.

_____ **Does not meet criteria** for recommendation as a Curricular Material or Online Resource for Mathematics.

EVIDENCE SUMMARY:

FOCUS- Although supporting standards sometimes ~~has~~ use a larger portion of time than necessary generally materials focus on Major Work of the grade.

COHERENCE-
Domains and clusters are clearly ~~focused~~ stated at the beginning of each unit and lesson and address more than one standard & Math Practice for each lesson.

RIGOR-
Students continually work on fluency applying that to real-world problems embedded in multi-step word problems and open-responses.

CONCEPTUAL UNDERSTANDING-
Students engage in content by solving contextual problems and apply concepts learned in earlier grades & lessons.

MATHEMATICAL PRACTICES-
Mathematical practices are integrated and explicitly tied to all activities.

ACCESSIBILITY OF STANDARDS TO ALL STUDENTS-
Every lesson contains multiple differentiation options to address the needs of a broad range of learners with additional activities described in the lesson opener.

OTHER:

2015-16 Interim Mathematics Review

Mathematics Evaluation Tool Grades K-8

Publisher: McGraw-Hill School Education, LLC

Title of Material: Everyday Math Grade 5

Author: Bell et al

ISBN #: 978-0-02-143068 **Copyright** 2016

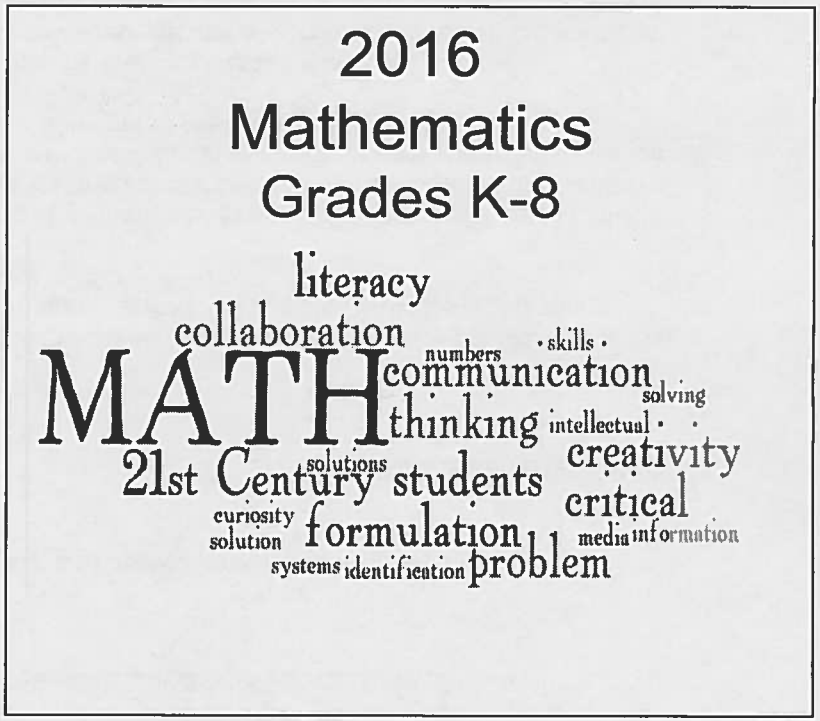
Reviewer ID: DB, MH

Core Mathematics Program- a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Core.

Other Mathematics Program- a program that substantially, but partially, meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Other.

Component Mathematics Program- a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs.
Substantial evidence clearly supports the designation of this program as Component.

Intervention Program- a program designed and intended to target and support students' specific needs.
Substantial evidence clearly supports the designation of this program as Intervention.



- Evaluation Form adapted from Instructional Materials Evaluation Toolkit (IMET).

The IMET was developed by Student Achievement Partners. Educators may use or adapt. http://creativecommons.org/licenses/by/3.0/ Download this tool at http://achievethecore.org/IMET

Instructional Materials Evaluation Tool

Mathematics, Grades K-8

What Are the Purposes of the IMET?

This Math IMET is designed to help educators determine whether instructional materials are aligned to the Shifts and major features of the Common Core State Standards (CCSS). The substantial instructional Shifts (http://www.corestandards.org/other-resources/key-shifts-inmathematics/) at the heart of the Common Core State Standards are:

- **Focus** strongly where the Standards focus
- **Coherence**: Think across grades and link to major topics within the grade
- **Rigor**: In major topics, pursue conceptual understanding, procedural skill and fluency, and application with equal intensity.

The IMET draws directly from the following documents:

- Common Core State Standards for Mathematics (www.corestandards.org/Math)
- Publishers' Criteria for the Common Core State Standards in Mathematics grade K-8 (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)

When to use the IMET

1. Purchasing materials: Many factors go into local purchasing decisions. Alignment to the Standards is a critical factor to consider. This tool is designed to evaluate alignment of instructional materials to the Shifts and the major features of the CCSS. It also provides suggestions of additional indicators to consider in the materials evaluation and purchasing process.

2. Evaluating materials currently in use: The IMET can be used to analyze the degree of alignment of existing materials and help to highlight specific, concrete flaws in alignment. Even where materials and tools currently in use fail to meet one or more of these criteria, the pattern of failure is likely to be informative. States and districts can use the evaluation to create a thoughtful plan to modify or combine existing resources in such a way that students' actual learning experiences approach the focus, coherence, and rigor of the Standards.

3. Developing programs: Those developing new programs can use this tool as guidance for creating aligned curricula.
Please note this tool was designed for evaluating comprehensive curricula (including any supplemental or ancillary materials), but it was not designed for the evaluation of standalone supplemental materials.

Who Uses the IMET?

Evaluating instructional materials requires both subject-matter and pedagogical expertise. Evaluators should be well versed in the Standards (www.corestandards.org/Math) for all grades in which materials are being evaluated. This includes understanding the Major Work of the grade (www.achievethecore/focus), the Supporting and Additional work, how the content fits into the progressions in the Standards (www.achievethecore.org/progressions), and the expectations of the Standards with respect to conceptual understanding, procedural skill and fluency, and application. Evaluators also should be familiar with the substantial instructional Shifts (http:// www.corestandards.org/other-resources/key-shifts-in-mathematics/) of Focus, Coherence and Rigor that are listed above.

Getting Started

Prior to Evaluation

Assemble all of the materials necessary for the evaluation. It is essential for evaluators to have materials for all grades covered by the program, as some criteria cannot be rated without having access to each grade. In addition, each evaluator should have a reference copy of the Common Core State Standards for Mathematics (CCSSM) and the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013).

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Getting Started
Prior to Evaluation

Assemble all of the materials necessary for the evaluation. It is essential for evaluators to have materials for all grades covered by the program, as some criteria cannot be rated without having access to each grade. In addition, each evaluator should have a

reference copy of the Common Core State Standards for Mathematics (CCSSM) and the Publishers' Criteria for the Common Core S Standards for Mathematics, Grades K-8 (Spring 2013).

Before conducting the evaluation itself, it is important to develop a protocol for the evaluation process. The protocol should include having evaluators study the Publishers' Criteria and the IMET. It will also be helpful for evaluators to get a sense of each program overall before beginning the process. At a minimum, this would include reading the front matter of the text, looking at the table of contents and paging through multiple chapters.

Sections 1-3 below should be completed to produce a comprehensive picture of the strengths and weaknesses of the materials under evaluation. Information about areas in need of improvement or supplementation should be shared with internal and external stakeholders.

Navigating the Tool

Begin with Section 1: Non-Negotiable Alignment Criteria

- The Non-Negotiable Alignment Criteria must each be met in full for materials to be considered aligned to the Shifts and the major features of the Common Core State Standards. Each Non-Negotiable Alignment Criterion has one or more metrics associated with it; every one of these metrics must be met in order for the criterion as a whole to be met.

- Examine the relevant materials and use evidence to rate the materials against each criterion and its associated metric(s).

- Record and explain the evidence upon which the rating is based.

Continue to Section 2: Alignment Criteria

- The Alignment Criteria must each be met for materials to be considered aligned to the Shifts and the major features of the Common Core State Standards. Each Alignment Criterion has one or more metric associated with it; a specific number of these metrics must be met or partially met in order for the criterion as a whole to be met.

- Examine the materials in relation to these criteria, assigning each metric a point value. Rate the criterion as "Meets" or "Does Note Meet" based on the number of points assigned. The more points the materials receive on the alignment Criteria, the better they are aligned.

Metric NN1A: **Materials re[illegible] the basic architecture of the Standards by not assessing the listed topics before the grade level indicated.** • Probability, including chance, likely outcomes, probability models. (Introduced in the CCSSM in grade 7) • Statistical distributions, including center, variation, clumping, outliers, mean, median, mode, range, quartiles; and statistical association or trends, including two-way tables, bivariate measurement data, scatter plots, trend line, line of best fit, correlation. (Introduced in the CCSSM in grade 6) • Similarity, congruence, or geometric transformations. (Introduced in the CCSSM in grade 8) • Symmetry of shapes, including line/ reflection symmetry, rotational symmetry. (Introduced in the CCSSM in grade 4) **How to Find the Evidence:** Evaluate the table of contents, all chapter tests, all unit tests, and other such assessment components (including rubrics). For context, read Criterion #2 from the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013). NOTE: Grade alignments of other topics are addressed in Non-Negotiable 2, Focus and Coherence.) In this criterion, "topics named" means the topics that are explicitly named in Metric 1A. No other topics should be added to the list in Metric 1A. (Note that other topics in the standards are addressed in criterion NN2.)	**Evidence-** ****Assessment- thou[illegible]dths are tested Unit 4, pg 33 assessment handbook- not a standard for 5th grade**	

- Record and explain the evidence upon which the rating is based.

Proceed to Section 4: Indicators of Quality

- Indicators of Quality are important considerations that will help evaluators better understand the overall quality of instructional materials. These considerations are not criteria for alignment to the CCSS, but they provide valuable information about additional program characteristics. Evaluators may want to add their own indicators to the examples provided.

Directions for Non-Negotiable 1

Freedom from Obstacles to Focus

Criterion	Evidence- Give specific examples.	Rating: (Reviewer only.)
Non-Negotiable 1: **Freedom from Obstacles to Focus** **Materials must reflect the content architecture of the Standards by not assessing the topics named before the grade level where they first appear in the Standards.** The Standards foster students' progress to algebra by focusing strongly on arithmetic. Consistent with this focus, certain topics from outside of arithmetic appear only in later grades. Thus, to be aligned, materials must reflect the content architecture of the Standards by not assessing the topics named before the grade level where they first appear in the Standards. In this criterion, "topics named" means the topics that are explicitly named in Metric 1A. No other topics should be added to the list in Metric 1A. (Note that other topics in the standards are addressed in criterion NN2.)	**Required Materials** • Common Core State Standards for Mathematics (www.corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf) • From the materials being evaluated: teacher guides and all assessment components	**Rating this Criterion**: Non-Negotiable 1 is rated as Meets or Does Not Meet. To rate Non-Negotiable 1, begin by rating Metric 1A. Since Metric 1A is the only metric for Non-Negotiable 1, the rating for Non-Negotiable 1 is the same as the rating for Metric 1A. If Metric 1A is rated as Does Not Meet, include evidence of when the named topic(s) is/are assessed. If the metric is rated as Meets, list the grade(s) examined in the evaluation.

Non-Negotiable 1: Materials must reflect the content architecture of the Standards by not assessing the topics named* before the grade level where they first appear in the Standards.

NN 1 If Metric 1A was rated as Meets, then rate Non-Negotiable 1 as Meets. If Metric 1A was rated as Does Not Meet, then rate Non- Negotiable 1 as Does Not Meet. Check the final rating.

Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion.**(Reviewer only.)**

Before moving to Non-Negotiable 2, record the final Meets or Does Not Meet rating in the Evaluation Summary.

(Reviewer only.)

__X_Meets

____Does Not Meet

Strengths/Weaknesses:

Weakness: assessing to thousandths-not a standard

Strengths: Includes progression of standards, with a variety of activities for students, workbook/journal allows students to "write" answers

Directions for Non-Negotiable 2

Focus and Coherence

Non-Negotiable 2: **Focus and Coherence** **Materials must focus coherently on the Major Work of the grade in a way that is consistent with the progressions in the Standards.** Focus and coherence are the two major evidence-based design principles of the Common Core State Standards for Mathematics (CCSSM, p. 3). Focus is necessary in order to fulfill the ambitious promise the states have made to their students by adopting the Standards: greater achievement at the college and career ready level; greater depth of understanding of mathematics; and a rich classroom environment in which reasoning, sense-making, applications, and a range of mathematical practices flourish. In simpler terms, a mile-wide, inch-deep curriculum translates to less time per topic. Less time means less depth and moving on without many students. Thus, materials must focus coherently on the Major Work of the grade in a way that is consistent with the progressions in the Standards.	**Required Materials** • Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf) • Focus by Grade Level for the grade being evaluated (www.achievethecore.org/focus) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion:** Non-Negotiable 2 is rated as Meets or Does Not Meet. To rate Non-Negotiable 2, first rate metrics 2A–2H. Each of these eight metrics must be rated as Meets in order for Non-Negotiable 2 to be rated as Meets. Rate each metric 2A-2H as Meets or Does Not Meet/Insufficient Evidence. If the evidence examined shows that the Criterion is met, then mark the Criterion Meets. If the evidence examined shows that the Criterion is not met—or if there is insufficient evidence to make a determination—then mark the Criterion as Does Not Meet/Insufficient Evidence. Support all ratings with evidence.
Metric NN2A: **In each grade K–8, students and teachers using the materials as designed devote the large majority of time to the Major Work of the grade.** **How to Find the Evidence:** Familiarize yourself with the Major Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, lessons, homework assignments, and assessments. (Evaluate both student and teacher materials.) Consider time spent on the Major Work of the grade and judge qualitatively whether students and teachers using the materials as designed will devote the large majority of time to the Major Work of the grade. For context, read Criterion #1 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013)	**Evidence-** Table of contents and publishers comments state 98% on major works	**(Reviewer only.)** **___x_Meets** **____Does Not Meet/** **Insufficient Evidence**

Metric NN2B: **Supporting work, where present, enhances focus and coherence simultaneously by also engaging students in the Major Work of the grade.** **How to Find the Evidence:** Familiarize yourself with the Major Work and Supporting Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate chapters and lessons that focus on Supporting Work. NOTE: Example of evaluating this Criterion might include looking at whether materials for K–5 generally treat data displays as an occasion for solving grade-level word problems using the four operations (e.g., see 3.MD.B.3); or whether materials for grade 7 take advantage of opportunities to use probability to support ratios, proportions, and percentages. For context, read Criterion #3 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** **Supporting clusters appear only where they support and engage students in the major work of the grade and these clusters only become the focus of lessons in later units:** **Grade 5: 5MD.1 is a supporting cluster. Lesson 6-3 students convert metric measurements (5. MD.1) in the context of solving real-world multi-step problems (5.NBT.2)** **6 of 8 units are major work.** **Note: unit 4 and 7 have large sections that are not part of the major work**	**(Reviewer only.)** **_X_Meets** **____Does Not Meet/** **Insufficient Evidence**
Metric NN2C: **Materials base content progressions on the grade-by-grade progressions in the Standards. Content from previous or future grades does not unduly interfere with or displace on-grade-level content.** **How to Find the Evidence:** Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, and lessons in both student and teacher materials. NOTE: In some cases it may be possible that aligned materials might address some aspects of a topic in a strategic way before or after the grade level in which the topic is central in the Standards' progressions; for example, a curriculum author might purposefully choose to explore adding fractions with unlike denominators in a way appropriate to grade four, recognizing that this work is not really required until the next grade. However, any such purposeful discrepancies in content progressions should enhance the required learning in each grade; not unduly interfere with or displace grade-level content; and be clearly aimed at helping students meet the Standards as written rather than effectively rewriting the progressions in the Standards. And in all cases, note that Non-Negotiable 1 must be met for materials to be aligned. For context, read Criterion #5a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Teachers guide -contains "unpacking the standards", clearly articulates the progression of each standard in the grade -differentiation support such as Readiness and Enrichment activities that are included in each lesson assists students to reinforce skills Spiral tracer (internet) doesn't have connection to previous grade, teacher edition EM1-9 only discussed grade level standards, not previous	**(Reviewer only.)** **_X_Meets** **____Does Not Meet/** **Insufficient Evidence**

Metric NN2D: **Materials gi[illegible]l students extensive work with on-grade-level problems.** **How to Find the Evidence:** Evaluate both student and teacher materials. If the materials provide resources for differentiated learning, consider whether lower-performing students have opportunities to engage with grade-level problems. Also consider whether higher-performing students are given opportunities to learn current grade-level content in greater depth. For context, read Criterion #5b in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Readiness activities-[illegible]are students who need scaffolding for the main tasks. Extra practice provides all students with meaningful practice of grade-level content from the lesson Note: no separate ELL components in print, but is online Each lesson has embedded ELL scaffoldiing	**(Reviewer only.)** **_X_Meets** **____Does Not Meet/** **Insufficient Evidence**
Metric NN2E: **Materials relate on-grade-level concepts explicitly to prior knowledge from earlier grades.** **How to Find the Evidence:** Evaluate both student and teacher materials. NOTE: Examples of evaluating this Criterion might include looking at the way the materials extend basic ideas of place value across the decimal point; or the role that properties of operations play when the materials extend arithmetic beyond whole numbers to fractions, variables, and expressions. More generally, cluster headings in the Standards sometimes signal key moments where reorganizing and extending previous knowledge is important in order to accommodate new knowledge (e.g., see cluster headings that use the phrase "Apply and extend previous understanding"). For context, read Criterion #5c in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Grade 5: Unit 3 organizer states "students build on fraction concepts from previous grades to understand fractions as division" The language reflects the language of the relevant Grade 5 cluster heading: Apply and extend previous understandings of multiplication and division to multiply and divide fractions.	**(Reviewer only.)** **_X_Meets** **____Does Not Meet/** **Insufficient Evidence**
Metric NN2F: **Review of material from previous grades is clearly identified as such to the teacher, and teacher and students can see what their specific responsibility is for the current year.** **How to Find the Evidence:** Evaluate the table of contents, but do not stop there; also evaluate units, chapters, lessons, homework assignments and assessments. (Evaluate both student and teacher materials.) Identify any content from previous grades and check whether it is identified as such. For context, read Criterion #5a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Lessons and activities contain minimal amounts of materials from earlier grades-clearly identified as previous standards Beginning of the year assessment-measures student knowledge and skills related to content in the first few units Differentiation support cover topics of the major clusters Grade 5: multiplying of fractions begins with review of multiplying by whole numbers to help bridge concept	**(Reviewer only.)** **_X__Meets** **____Does Not Meet/** **Insufficient Evidence**

Metric NN2G: **Materials in[illegible]e learning objectives that are visibly shaped by CCSSM cluster headings.** **How to Find the Evidence:** Select several clusters from the Major Work in the grade being evaluated. Evaluate teacher and student materials in relation to these clusters. For context, read Criterion #6a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Lesson begins with a[illegible]son opener which clearly outlines the CCSS cluster headings addressed in the lesson content; includes learning objectives called Goals for Mathematical Content (GMC's) that enable finer-grained tracking of student progress. GMC's are broken down versions of the standards Table of contents match objectives- but no specific mention to the terminology of "expressions"	**(Reviewer only.)** **_X_Meets** **____Does Not Meet/** **Insufficient Evidence**
Metric NN2H: **Materials include problems and activities that serve to connect two or more clusters in a domain, or two or more domains in a grade, in cases where these connections are natural and important.** **How to Find the Evidence:** In the grade being evaluated, choose two or more clusters or two or more domains for which connections are natural and important. Evaluate the units, chapters, and lessons that deal with the chosen topics, looking for problems and activities that serve to connect the chosen clusters or domains. NOTE: An example of evaluating this Criterion might include looking at whether problems in grade 4 sometimes or often involve students applying their developing computation skills (detailed in domain NBT) in the context of solving word problems (detailed in domain OA). For context, read Criterion #6b in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** All lessons begin with identifying focus clusters. All activities list standards that are addressed in the activity and many of them connect multiple domains. Grade 5: Lesson 3-3 students explore situations where it makes sense to report remainders as the fractions, connecting standards from the 2 domains: 5.NBT.6 and 5.NF3	**(Reviewer only.)** **X_Meets** **____Does Not Meet/** **Insufficient Evidence**

Non-Negotiable 2:
Focus and Coherence

Materials must focus coherently on the Major Work of the grade in a way that is consistent with the progressions in the Standards.

NN 2 If all Metrics 2A – 2H were rated as Meets, then rate Non-Negotiable 2 as Meets. If one or more Metric was rated Does Not Meet/Insufficient Evidence, then rate Non-Negotiable 2 as Does Not Meet. Check the final rating.
Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)**

Before moving to Alignment Criterion 1, record the final Meets or Does Not Meet rating in the Evaluation Summary.

(Reviewer only.)

_X_Meets

____Does Not Meet

Strengths/Weaknesses:
Weakness: ELL scaffolding
Strengths: organization at the beginning of units allows teacher knowledge of clusters and domains being taught

Now continue by evaluating the Alignment Criterion 1 for Rigor and Balance.

Directions for Alignment Criterion 1

Rigor and Balance

Alignment Criterion 1: Rigor and Balance

Materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.

The Standards set expectations for attention to all three aspects of rigor: conceptual understanding, procedural skill and fluency, and applications. Thus, materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.

Required Materials

- Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf)
- Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)
- Focus by Grade Level for the grade being evaluated (achievethecore.org/focus)
- Situation Types for the Operations in Word Problems (achievethecore.org/situation-types)
- From the materials being evaluated: teacher guides, student texts and workbooks

Rating this Criterion:
Alignment Criterion 1 is rated as Meets or Does Not Meet.

To rate Alignment Criterion 1, first rate metrics 1A, 1B, and 1C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). For each metric, guiding questions are provided to aid in gathering evidence.
Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 1 if the materials rate 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as rigor and balance, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.

Metric AC1A: **The materials support the development of students' conceptual understanding of key mathematical concepts, especially where called for in specific content Standards or cluster headings.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Major Work for the grade being evaluated that relate specifically conceptual understanding to use throughout the questions associated with this metric. NOTE: Some examples of clusters or Standards that call for conceptual understanding include: K.OA.A.1, (1.NBT.B, 1.NBT.C), (2.NBT.A, 2.NBT.B), (3.OA.A.1, 3.OA.A.2), 4.NF.A, (4.NBT.A, 4.NBT.B), 5.NF.B, (5.NBT.A, 5.NBT.B), 6.RP.A, 6.EE.A.3, 7.NS.A, 7.EE.A, 8.EE.B, 8.F.A, 8.G.A Clusters or Standards grouped by parentheses are closely connected and could be analyzed together. For context, read Criterion #4a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	-Choose a cluster/Standard from the Major Work that is aligned to each aspect of rigor and use to evaluate these metrics. It is most helpful if the same clusters/Standards are chosen for all of the programs being evaluated. (Guidance in choosing clusters/Standards is included in "How to Find the Evidence".)	**Use the questions for AC Metric 1A to evaluate Metric 1A. Record evidence for each question and rate Metric 1A.** **_x_Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Is conceptual understanding attended to thoroughly where the Standards set explicit expectations for understanding or interpreting? Evaluate lessons, chapter/unit assessments and homework assignments, paying attention to work aligned to Standards that explicitly call for understanding or interpreting. NOTE: Examples of evaluating this Criterion might include looking at how well the multi-digit addition and subtraction algorithms are developed and explained on the basis of place value and properties of operations; or how well the multi-digit multiplication and division algorithms are developed and explained on the basis of place value and properties of operations; or how well solving equations is presented and explained as a process of reasoning.	**Evidence-** Each lesson features high-quality conceptual problems as in the Open Response/Reengagement Grade 5: Open response Lesson 1-3 Quilt Area-must explain their reasoning and the others reasons (critique) Unit 5: 4 lessons on add and subtract fractions, 2 lessons on dividing fractions by a whole, algorithm 2 lessons	
Do the materials feature high-quality conceptual problems and conceptual discussion questions? Evaluate lessons, chapter/unit assessments, and homework assignments. NOTE: Example of conceptual problems might include such questions as "Find a number greater than 1/5 and less than 1/4," or "If the divisor does not change and the dividend increases, what happens to the quotient?"	**Evidence-** Grade 5: Lesson 3-12 operations involving fractions in understanding fractions as division of the numerator by the denominator, applying this in lesson 5-12 when they consider real-world situations involving multiplication of fractions Student Journal pgs 187, 233-235, 253 Daily Math messages	

Do the materials feature opportunities to identify correspondences across mathematical representations? Evaluate lessons, chapter/unit assessments and homework assignments. NOTE: Examples of evaluating this Criterion might include looking at whether students are supported in identifying correspondences among: the verbal description of a situation, the diagrams that distill its mathematical features, and the equations that model it; or equivalent forms of numbers (e.g., 3 and 6/2) and the number line; or rational number operations and representations of them via models such as the vector model; or the expression that defines a function and the graph that shows the relationship.	**Evidence-** Grade 5: Lesson 1-5 through 1-11 beginning with comparing volume to finding volume with and algorithm Student Journal: pg 253, 221, 191	
Metric AC1B: **The materials are designed so that students attain the fluencies and procedural skills required by the Standards.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Major Work for the grade being evaluated that relate specifically to fluency and procedural skill to use throughout the questions associated with this metric. NOTE: Some examples of Standards that call for procedural skill and fluency include: K.OA.A.5, 1.OA.C.6, 2.OA.B.2, 2.NBT.B.5, 3.OA.C.7, 3.NBT.A.2, 4.NBT.B.4, 5.NBT.B.5, 6.NS.B.2, and 6.NS.B.3, 6.EE.A, 7.NS.A, 7.EE.A.1,7.EE.B.4a, 8.EE.C.7, 8.EE.C.8b For context, read Criterion #4b in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).		**Use the questions for Metric 1B to evaluate Metric 1 B. Record evidence for each question and rate Metric 1B.** **(Reviewer only.)** **_X_Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Is progress toward fluency and procedural skill interwoven with students' developing conceptual understanding of the operations in question? Evaluate lessons, chapter/unit assessments, daily routines, and homework assignments for evidence that the development of fluency and procedural skill is supported by conceptual understanding.	**Evidence-** Each lesson in grades 5 begin with a mental math and fluency exercise that develops fluency with basic facts and other skills that require automaticity, see lesson 6-2 Homework link also is geared towards fluency	
Are purely procedural problems and exercises present that include cases in which opportunistic strategies are valuable and generic cases that require efficient algorithms present? Evaluate lessons, chapter/unit assessments, daily routines, and homework assignments. NOTE: Examples of problems in which opportunistic strategies are valuable might include the sum 698 + 240 or the system x + y = 1, 2x + 2y = 3. Examples of generic cases that require efficient algorithms might include the sum 8767+2286 or the system 6y + x = x + 3, – x = 1 + 2y.	**Evidence-** Lessons in grade 5 give opportunities for students to use algorithms-finding area and perimeters in grade 5 using algorithms, continuing practice with multiplication and division	

Do the materials in grades K–6 provide repeated practice toward attainment of fluency Standards? Evaluate lessons, daily routines, and homework assignments for evidence of repeated practice toward attainment of the following K–6 Standards that set an explicit expectation of fluent (accurate and reasonably fast) computation: K.OA.A.5, 1.OA.C.6, 2.OA.B.2, 2.NBT.B.5, 3.OA.C.7, 3.NBT.A.2, 4.NBT.B.4, 5.NBT.B.5, 6.NS.B.2, 6.NS.B.3.	**Evidence-** Students apply their fluency with basic facts to learning algorithms. Using learning from 3rd, students begin using partial product, then move toward the traditional algorithm in 5th grade. Mental math and fluency games continue throughout the year (note) Lesson 2-4 multiplication algorithm- 20 practice problems, only appeared 6 in unit 3, 7 in unit 4, and none in unit 5	
Metric AC1C: **The materials are designed so that teachers and students spend sufficient time working with engaging applications, without losing focus on the Major Work of each grade.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Major Work for the grade being evaluated that relate specifically application to use throughout the questions associated with this metric. NOTE: Some examples of clusters or Standards that call for application include: K.OA.A.2, 1.OA.A, 2.OA.A, 3.OA.A.3, 3.OA.D.8, 4.OA.A.3, 4.NF.B.3d, 4.NF.B.4c, 5.NF.B.6, 5.NF.B.7c, 6.RP.A.3, 6.NS.A.1, 6.EE.B.7, 6.EE.C.9, 7.RP.A, 7.NS.A.3, 7.EE.B.3, 8.EE.C.8c, 8.F.B For context, read Criterion #4c in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-**	**Use the questions for Metric 1C to evaluate Metric 1C. Record evidence for each question and rate Metric 1C.** **(Reviewer only.)** **_X Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Are there are single- and multi-step contextual problems, including non-routine problems, that develop the mathematics of the grade, afford opportunities for practice, and engage students in problem solving? Do the problems attend thoroughly to those places in the content Standards where expectations for multi-step and real-world problems are explicit? Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** Many opportunities to solve problems contextually-math boxes throughout grade level are contextual word problems. Grade 5: Lesson 2-3 contextual problems with estimating powers of 10 Student Journal pf 181, 231	

Do application problems particularly stress applying the Major Work of the grade? Eval[illegible]essons, chapter/unit assessments, and homework assignments. NOTE: Examples of evaluating this Criterion might include looking at: how well, by the end of grade 2, students using the materials as designed can represent and solve a full range of one-step addition and subtraction word problems; or how well, by the end of grade 3, students using the materials as designed can represent and solve a full range of one-step multiplication and division word problems; or how well these basic situation types for each operation are carried coherently across the grades, (e.g., with fractions and algebraic expressions); or, in all grades, whether the problems connect concepts, Standards, and domains in ways that are natural and important. For a list of situation types for one-step addition, subtraction, multiplication, and division problems, see Situation Types for the Operations in Word Problems	**Evidence-** Unit 8 is all application	
Does modeling build slowly across K–8, with applications that are relatively simple in earlier grades and when students are encountering new content? In grades 6–8, do the problems begin to provide opportunities for students to make their own assumptions or simplifications in order to model a situation mathematically? Read Standard for Mathematical Practice 4, Model with Mathematics. Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** Lesson 5-13, students engage in content covering fractions by solving contextual problems involving operations with fractions. Students apply concepts learned in earlier lessons to fraction number stories involving division. Journal pg 10, 144, 243	

Alignment Criterion 1: Rigor and Balance

Materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.

AC1 Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 out of 6 points, the Criterion has not been met. Check the final rating.
Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)**

Before moving to Alignment Criterion 2, record the final Meets or Does Not Meet rating in the Evaluation Summary.

(Reviewer only.)

____Meets

____Does Not Meet

Strengths/Weaknesses:
Thorough work within units to support standards with models as appropriate

Directions for Alignment Criterion 2

Standards for Mathematical Practice

Alignment Criterion 2: Standards for Mathematical Practice **Materials must demonstrate authentic connections between content Standards and practice Standards.** The Standards require that designers of instructional materials connect the mathematical practices to mathematical content in instruction. Thus, materials must demonstrate authentic connections between content Standards and practice Standards.	**Required Materials:** • Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf) • Focus by Grade Level for the grade being evaluated (www.achievethecore.org/focus) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion** Alignment Criterion 2 is rated as Meets or Does Not Meet. To rate Alignment Criterion 2, first rate metrics 2A, 2B, and 2C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). For each metric, guiding questions are provided to aid in gathering evidence. Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 2 if the materials earn 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as mathematical practices, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.
Metric AC2A: **Materials address the practice Standards in such a way as to enrich the Major Work of the grade; practices strengthen the focus on Major Work instead of detracting from it, in both teacher and student materials.** **How to Find the Evidence:** Familiarize yourself with the Major Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate teacher and student materials for evidence that the mathematical practices support and connect to the focus of the grade. NOTE: Examples of evaluating this Criterion might include looking at whether, in grades K–5, students using the materials are supported to look for and express regularity in repeated reasoning about the addition table, the multiplication table, the properties of operations, the relationship between addition and subtraction or multiplication and division, and the place value system; or whether, in grades 6–8, students using the materials are supported to look for and express regularity in repeated reasoning about proportional relationships and linear functions. For context, read Criterion #8 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013).	**Evidence-** Lesson6-8 engage with practice standards 8 and 5.NBT 7- they make generalizations about the relative size of decimal products and quotients, need to reason about the size of factors and make predictions about decimal products based on repeated reasoning. See TE 22-23, TE 512-513	**(Reviewer only.)** **_x__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**

Metric AC2B: **Materials at to the full meaning of each practice Standard.** **How to Find the Evidence:** For context, read Criterion #7 and Criterion #9 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).		**Use the questions for Metric 2B to evaluate Metric 2B. Record evidence for each quest and rate Metric 2B.** **(Reviewer only.)** **_x__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Over the course of any given year of instruction, is each mathematical practice Standard meaningfully present in the form of assignments, activities, or problems that stimulate students to develop the habits of mind described in the practice Standard? Evaluate lessons, chapter/ unit assessments, and homework assignments for evidence of each mathematical practice being meaningfully present in instruction.	**Evidence-** Each lesson has integrated practice standards annotated in the teachers manuals. Each unit has a focus standard. At the lesson level, multiple practice standards are clearly addressed in every activity Lesson 2-1, 2-10, 4-1	
Do the materials treat the practice Standards as developing across grades or grade bands? Are the practice Standards in early grades appropriately simple? Do they display an arc of growing sophistication across the grades?	**Evidence-** SMP are integrated and explicitly tied to all activities in every lesson. Expectations for students with regard to the MP increase in sophistication as they age. Lesson 2-10 students use the relationship between multiplication and division to mentally divide multi-digit numbers. In lesson 2-1 students create representations using expanded forms of numbers to solve problems and in 4-1 they use place-value charts to explain patterns in numbers with decimals to the thousandths place. Student reference book pg 4-34	
Are there teacher-directed materials that explain the role of the practice Standards in the classroom and in students' mathematical development? Are alignments to practice Standards accurate?	**Evidence-** Lesson 2-10 students use the relationship between multiplication and division to mentally divide multi-digit numbers. Embedded throughout lesson TE 24-25	
Metric AC2C: **Materials support the Standards' emphasis on mathematical reasoning.** **How to Find the Evidence:** For context, read Criterion #10 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).		**Use the questions for Metric 2C to evaluate Metric 2C. Record evidence for each question and rate Metric 2C.** **(Reviewer only.)** **_x_Meets (2)**

Do the materials support students in constructing viable arguments and critiquing the arguments of others concerning grade-level mathematics that is detailed in the content Standards? Read Standard for Mathematical Practice 3. Evaluate teacher and student materials to ensure that students are given opportunities to reason with grade-level mathematics.	**Evidence-** Students are encouraged to construct viable arguments and critique the reasoning of others while engaging with grade-level work lesson 3-7 Students construct viable arguments while sharing how they can estimate the sums of fractions, they support their arguments and explain their reasoning while answering questions, they justify their solutions by explaining them as distances on the number line. Most lessons support academic language through the use of sentence frames embedded in the lesson Games: bullseye, TE pg 120 uses partnership	**____Partially Meets (1)** **____Does Not Meet (0)**
Do the materials support students in producing not only answers and solutions, but also, in a grade-appropriate way, arguments, explanations, diagrams, mathematical models, etc., especially in the Major Work of the grade? Familiarize yourself with the Major Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate teacher and student materials, to understand the types of work students are expected to produce.	**Evidence-** Students are encouraged to construct viable arguments and critique the reasoning of others while engaging with grade-level work Lesson 3-7 Students construct viable arguments while sharing how they can estimate the sums of fractions, they support their arguments and explain their reasoning while answering questions, they justify their solutions by explaining them as distances on the number line. Most lessons support academic language through the use of sentence frames embedded in the lesson	
Do materials explicitly attend to the specialized language of mathematics? Is the language of argument, problem solving, and mathematical explanations taught rather than assumed? Evaluate teacher and student materials, paying attention to how mathematical language is taught. NOTE: Examples of evaluating this Criterion might include looking at whether students are supported in: basing arguments on definitions; using the method of providing a counterexample; or recognizing that examples alone do not establish a general statement.	**Evidence-** Students are encouraged to construct viable arguments and critique the reasoning of others while engaging with grade-level work Lesson 3-7 Students construct viable arguments while sharing how they can estimate the sums of fractions, they support their arguments and explain their reasoning while answering questions, they justify their solutions by explaining them as distances on the number line. Most lessons support academic language through the use of sentence frames embedded in the lesson TE pgs 13, 259-260. 272, 679, 600, 472-473, 413	

Alignment Criterion 2: Standards for Mathematical Practice

Materials must demonstrate authentic connections between content Standards and practice Standards.

AC2 Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 out of 6 points, the Criterion has not been met. Check the final rating.
Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion.
(Reviewer only.)

Before moving to Alignment Criterion 3, record the final Meets or Does Not Meet rating in the Evaluation Summary.

(Reviewer only.)

_x_Meets

____Does Not Meet

Strengths/Weaknesses:

Alignment Criterion 3: Access to the Standards for All Students

Materials must provide supports for English Language Learners and other special populations.

Because Standards are for all students, alignment requires thoughtful support to ensure all students are able to meet the Standards. Thus, aligned materials must provide supports for English Language Learners and other special populations.

Required Materials:

- Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf)
- Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)
- From the materials being evaluated: teacher guides, student texts and workbooks

Rating this Criterion:
Alignment Criterion 3 is rated as Meets or Does Not Meet.

To rate Alignment Criterion 3, first rate metrics 3A, 3B, and 3C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points).

Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 3 if the materials earn 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as support for special population, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.

Metric AC3A: **Support for [illegible]lish Language Learners and other special populations is thoughtful and helps those students meet the same Standards as all other students. The language in which problems are posed is carefully considered.** **How to Find the Evidence:** Evaluate teacher and student materials, paying attention to supports offered for special populations.	**Evidence-** Every lesson contains [illegible]iple specific suggestions for with with special populations of students: ELL, students who need scaffolding, extensions, and additional practices. Additional activities for Readiness, Enrichment and Extra Practice address the differentiation needs of every student. Common misconceptions allow teachers to see potential misunderstandings that may occur when learning new concepts. Student reference books for grade 3-6 provide support for students on key concepts. Lesson 6-3 the ELL support section suggests the use of sentence frames to help students make sense of the term convert, moving the between "convert" and "change", the common misconception note provides support for students who have trouble making sense of using a "What's my Rule" table to make measurement conversions, and the Adjusting the Activity note provides teachers with additional questions to ask students to help them make conversions in context.	**Reviewer only.)** **_x__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Metric AC3B: **Materials provide appropriate level and type of scaffolding, differentiation, intervention, and support for a broad range of learners with gradual removal of supports, when needed, to allow students to demonstrate their mathematical understanding independently.** **How to Find the Evidence:** Evaluate teacher and student materials, paying attention to whether materials provide differentiation that will lead all learners to engage with on-grade-level content.	**Evidence-** Every lesson contains multiple differentiation options to address the needs of abroad range of learners with additional activities described in the lesson opener; differentiation options in every regular lesson include Readiness, Enrichment, and extra practice activities. As students develop a better understanding of a particular concept or skill supports are gradually removed. Lesson 6-3 the ELL support section suggests the use of sentence frames to help students make sense of the term convert, moving the between "convert" and "change", the common misconception note provides support for students who have trouble making sense of using a "What's my Rule" table to make measurement conversions, and the Adjusting the Activity note provides teachers with additional questions to ask students to help them make conversions in context.	**Reviewer only.)** **__X_Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Metric AC3C: **Design of lessons recommends and facilitates a mix of instructional approaches for a variety of learners such as using multiple representations (e.g., including models, using a range of questions, checking for understanding, flexible grouping, pair-share).** **How to Find the Evidence:** Evaluate teacher materials, noting instructional approaches suggested for whole class and differentiated lessons and activities.	**Evidence-** Every activity including the differentiation options provide one or more suggestions for possible instructional approaches including grouping suggestions Lesson 3-14 students play Number Top-it to build their understanding of place value relationships and expanded form (5NBT1). Observations prompts are included along with discussion questions encouraging students to explain mathematical structures in their own words Every lesson has an activity/game	**Reviewer only.)** **_X_Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**

Alignment Criterion 3: Access to the Standards for All Students **Materials must provide supports for English Language Learners and other special populations.** **AC3** Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 points, the Criterion has not been met. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion.**(Reviewer only.)** **Move to the Evaluation Summary and record the final Meets or Does Not Meet rating .**	**(Reviewer only.)** **_X__Meets** **____Does Not Meet** **Strengths/Weaknesses:** S: Active learning embedded throughout; practices/assessment checks are embedded W: odd choice of sequence

Once an evaluation for alignment to the Shifts and major features of the CCSS has been conducted using Sections 1-3, it's important to evaluate for overall quality and best practices. A starting list of Indicators of Quality are suggested below. States, districts and others evaluating instructional materials are encouraged to add to this list to ensure materials reflect local contexts. For background information on some of the Indicators of Quality in this section, refer to pp.18–21 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).

Indicators of Quality	Evidence- Give specific examples.	Rating: (Reviewers only.)
1. Lessons are thoughtfully structured and support the teacher in leading the class through the learning paths at hand, with active participation by all students in their own learning and in the learning of their classmates.	**Evidence-** Point of use instructional guidance embedded in each lesson for identifying common misconceptions Focus portion of each lesson begins with a previously unsolved problem Open resources-students are encouraged to explore, explain Math message encourages discussion and helping others reach solutions	**(Reviewer only.)** **_X__ Yes** **_____ No**
2. The underlying design of the materials includes both problems and exercises. (In solving problems, students learn new mathematics, whereas in working exercises, students apply what they have already learned to build mastery.) Each problem or exercise has a purpose. **NOTE: This Criterion does not require that the problems and exercises be labeled as such.**	**Evidence-** Each unit contains a limited number of problems to introduce and develop new mathematical learning. Begins with Math Message, students share strategies, then follow-up. Open response allow students to solve non-routine problems and delve deeply into the SMP Practice sessions include games to help provide to reinforce, mental math and fluency exercises build and maintain fluency	**(Reviewer only.)** **__X__ Yes** **_____ No**

3. Design of assignments is not haphazard: exercises are given in intentional sequences in order to strengthen students' mathematical understanding.	**Evidence-** Grade 5: unit 2 begins with place value, moves through multiplication then division, and onto fractions and decimals, all incorporating place value Note: unit 4 and 7 have lessons that don't seem to "fit" within the unit	**(Reviewer only.)** **__X__ Yes** **_____ No**
4. There are separate teacher materials that support and reward teacher study including, but not limited to: discussion of the mathematics of the units and the mathematical point of each lesson as it relates to the organizing concepts of the unit, discussion on student ways of thinking and anticipating a variety of students responses, guidance on lesson flow, guidance on questions that prompt students thinking, and discussion of desired mathematical behaviors being elicited among students.	Evidence- TE Unit organizer: pg 106-107, 440-443	**(Reviewer only.)** **_X___ Yes** **_____ No**
5. Manipulatives suggested in the materials are faithful representations of the mathematical objects they represent and are connected to written methods.	**Evidence-** Both concrete and student generated manipulatives are used Digital lessons use the evaluate feature found in digital lesson activities	**(Reviewer only.)** **__X__ Yes** **_____ No**
6. Materials include a variety of curriculum-embedded assessments. Examples include pre-, formative, summative, and self-assessment resources.	**Evidence-** Pre assessments, a beginning of the unit assessment, formative assessments. Digital curriculum components provide feedback of individual students in order to impact instruction. Summative assessments for each unit Self assessments at the beginning of each Progress check lesson (7-14, 6-14) Readiness check pg 659 TE	**(Reviewer only.)** **_X___ Yes** **_____ No**
7. Assessments contain aligned rubrics, answer keys, and scoring guidelines that provide sufficient guidance for interpreting student performance.	**Evidence-** Regular lessons contain daily assessment check in Unit progress check lessons begin with a table listing the content and practice standards assessed. Open Response Assessments –odd numbered units- address one or more content standards and one goal for mathematical practice Assessment handbook: rubrics sample student responses (A23-33)	**(Reviewer only.)** **_X__ Yes** **_____ No**

8. Materials assess student proficiency using methods that are accessible and unbiased, including the use of course-level language in student prompts.	**Evidence-** Problems presented in context that are familiar to students, differentiation options provided for scaffolding and extensions Grade 5: pg 313 Lessons include specific suggestions for grade level appropriate lessons (academic vocabulary)	**(Reviewer only.)** **___X__ Yes** **_____ No**
9. Materials are carefully evaluated by qualified individuals, whose names are listed, in an effort to ensure freedom from mathematical errors and course-level appropriateness.	**Evidence-** External reviewers list on Title page Implementation Guide, materials are extensively field-tested by qualified teachers & University of Chicago	**(Reviewer only.)** **___X_ Yes** **_____ No**
10. The visual design supports students in engaging thoughtfully with the subject. Navigation through the text is clear.	**Evidence-** Student materials are designed with font sizes and text density for the age of the child. Independent student work pages in the math journal , home links, and math masters, familiar icons refer students to specific reference book pages where they can find relevant helpful information.	**(Reviewer only.)** **__X___ Yes** **_____ No**
11. The materials engage parents in appropriate ways. For example, homework assignments in elementary grades, consist of routine problems, practice with getting answers, and fluency-building exercises that parents can easily support.	**Evidence-** Family letters for each unit include descriptions of math content, vocabulary, games, selected home-link answers (pg 27) Parent link online provide answers to FAQs and specific grade level information. Home Link pg 51, answer key pg 186	**(Reviewer only.)** **__X__ Yes** **_____ No**

Reviewer IMET Evaluation Summary **Title/Level: __Everyday Math Grade 5_____**

Publisher: ___McGraw Hill School Education LLC___ Copyright: ____2016

ISBN:__ 978-0-02-143068_____ ____

Reviewer ID # _____ Date Review Completed:___March 8, 2016_____

Non-Negotiable Criteria- Each Non-Negotiable must be met in order for the Non-Negotiable Alignment Criteria to be met overall.	
Non-Negotiable 1: Freedom from Obstacles to Focus **__x___ Meets** **_____ Does Not Meet**	**Non- Negotiable 2: Focus and Coherence** **__x_ Meets** **_____ Does Not Meet**
Non-Negotiable Overall: **__x_ Meets** **_____ Does Not Meet**	

Alignment Criteria- Each Alignment Criterion must be met with a sufficient number of points in order for Alignment Criteria to be labeled as "Meets" overall. The more points the materials receive on the Alignment Criteria, the better they are aligned.

Alignment Criterion 1: Rigor and Balance	**Alignment Criterion 2: Standards of Mathematical Practice**	**Alignment Criterion 3: Access to Standards for All Learners**
Points: ___6__ of 6 possible. **(Materials must receive at least 5 of 6 points to align.)**	**Points: _6__ of 6 possible.** **(Materials must receive at least 5 of 6 points to align.)**	**Points: __6_ of 6 possible.** **(Materials must receive at least 5 of 6 points to align.)**
___x__ Meets	**__x___ Meets**	**__x___ Meets**
_____ Does Not Meet	**_____ Does Not Meet**	**_____ Does Not Meet**

Alignment Criteria Overall:

_x__ Meets **_____ Does Not Meet**

If the materials meet both Non-Negotiables and relevant Alignment Criterion, they are aligned to the Shifts and major features of the Core Standards. **the materials meet every Non-Negotiable and Alignment Criterion? __X_ Yes _____ No**

What are the specific areas of strength and weakness based on this evaluation? Publishers or others modifying or developing assessments can use this information to make improvements and/or to remedy gaps in the alignment of assessment materials.

Weakness: hard to know when working on major or supporting works quickly, supporting work may cover too much time
Strengths: SMP are embedded throughout the lessons, differentiation/scaffolding is readily available, Home Links with family letters and help; self-assessments

2015-16 Mathematics Interim Review Recommendation & Summary

Publisher Name:	McGraw-Hill School Education, LLC
Title:	Everyday Math
ISBN #	978-0-02-143073-4 TE Vol. 1
Grade Level(s) or Course:	Grade 6
Reviewer ID:	LS, JH

RECOMMENDED AS:

____X____**Core Mathematics Program-** a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials. Substantial evidence clearly supports the designation of this program
as Core.

_____**Other Mathematics Program-** a program that substantially, but partially, meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for supplemental materials. Substantial evidence clearly supports the designation of this program
as Other.

_____**Component Mathematics Program-** a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs. Substantial evidence clearly supports the designation of this program
as Component.

_____**Intervention Program-** *a program designed and intended to target and* support students' specific needs. Substantial evidence clearly supports the designation of this program
as Intervention.

_____ **Does not meet criteria** for recommendation as a Curricular Material or Online Resource for Mathematics.

EVIDENCE SUMMARY:

FOCUS-Everyday Math focuses on building a deep framework of 6th grade standards while spending great lengths developing student reasoning and problem-solving skills.

COHERENCE-The development of the Standards is consistent with the Major Works of 6th grade. Unduly emphasis is placed on scaling to deepen understanding of ratios and proportions. Scaling is a 7th grade application standard.

RIGOR-The text provides rich discussion questions, high level conceptual problems, open-ended re-engagement tasks that have many entry points and allow students to explore the mathematics of the standards.

CONCEPTUAL UNDERSTANDING-There is a strong component of conceptual understanding that asks students to discuss and construct viable arguments, use a variety of models, and solve real world problems.

MATHEMATICAL PRACTICES-The textbook instructs teachers and students about the habits of mind associated with the mathematical practices.

ACCESSIBILITY OF STANDARDS TO ALL STUDENTS-A mix of instructional strategies is evident in the program. The sequencing of tasks, problems, and questions provide for growing understanding and fluency.

OTHER: There are several games in the manipulative that are extremely beneficial to the program.

2015-16 Interim Mathematics Review

Mathematics Evaluation Tool Grades K-8

Publisher: McGraw-Hill School Education, LLC

Title of Material: Everyday Math Grade 6

Author: Bell, et al

ISBN #: 978-0-02-143073-4 TE Vol 1 **Copyright** 2016

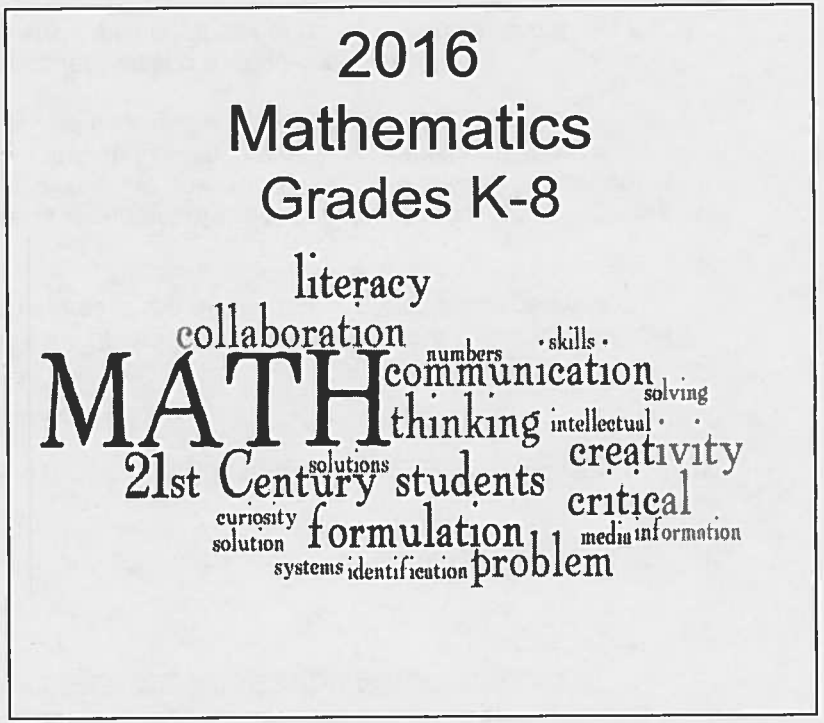
Reviewer ID: LS, JH

Core Mathematics Program- a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Core.

Other Mathematics Program- a program that substantially, but partially, meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Other.

Component Mathematics Program- a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs.
Substantial evidence clearly supports the designation of this program as Component.

Intervention Program- a program designed and intended to target and support students' specific needs.
Substantial evidence clearly supports the designation of this program as Intervention.



- Evaluation Form adapted from Instructional Materials Evaluation Toolkit (IMET).

The IMET was developed by Student Achievement Partners. Educators may use or adapt. http://creativecommons.org/licenses/by/3.0/ Download this tool at http://achievethecore.org/IMET

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Instructional Materials Evaluation Tool

Mathematics, Grades K-8

What Are the Purposes of the IMET?

This Math IMET is designed to help educators determine whether instructional materials are aligned to the Shifts and major features of the Common Core State Standards (CCSS). The substantial instructional Shifts (http://www.corestandards.org/other-resources/key-shifts-inmathematics/) at the heart of the Common Core State Standards are:

- **Focus** strongly where the Standards focus
- **Coherence**: Think across grades and link to major topics within the grade
- **Rigor**: In major topics, pursue conceptual understanding, procedural skill and fluency, and application with equal intensity.

The IMET draws directly from the following documents:

- Common Core State Standards for Mathematics (www.corestandards.org/Math)
- Publishers' Criteria for the Common Core State Standards in Mathematics grade K-8 (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)

When to use the IMET

1. Purchasing materials: Many factors go into local purchasing decisions. Alignment to the Standards is a critical factor to consider. This tool is designed to evaluate alignment of instructional materials to the Shifts and the major features of the CCSS. It also provides suggestions of additional indicators to consider in the materials evaluation and purchasing process.

2. Evaluating materials currently in use: The IMET can be used to analyze the degree of alignment of existing materials and help to highlight specific, concrete flaws in alignment. Even where materials and tools currently in use fail to meet one or more of these criteria, the pattern of failure is likely to be informative. States and districts can use the evaluation to create a thoughtful plan to modify or combine existing resources in such a way that students' actual learning experiences approach the focus, coherence, and rigor of the Standards.

3. Developing programs: Those developing new programs can use this tool as guidance for creating aligned curricula.
Please note this tool was designed for evaluating comprehensive curricula (including any supplemental or ancillary materials), but it was not designed for the evaluation of standalone supplemental materials.

Who Uses the IMET?

Evaluating instructional materials requires both subject-matter and pedagogical expertise. Evaluators should be well versed in the Standards (www.corestandards.org/Math) for all grades in which materials are being evaluated. This includes understanding the Major Work of the grade (www.achievethecore/focus), the Supporting and Additional work, how the content fits into the progressions in the Standards (www.achievethecore.org/progressions), and the expectations of the Standards with respect to conceptual understanding, procedural skill and fluency, and application. Evaluators also should be familiar with the substantial instructional Shifts (http:// www.corestandards.org/other-resources/key-shifts-in-mathematics/) of Focus, Coherence and Rigor that are listed above.

Getting Started

Prior to Evaluation

Assemble all of the materials necessary for the evaluation. It is essential for evaluators to have materials for all grades covered by the program as some criteria cannot be rated without having access to each grade. In addition, each evaluator should have a reference copy of the Common Core State Standards for Mathematics (CCSSM) and the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013).

Before conducting the evaluation itself, it is important to develop a protocol for the evaluation process. The protocol should include having evaluators study the Publishers' Criteria and the IMET. It will also be helpful for evaluators to get a sense of each program overall before beginning the process. At a minimum, this would include reading the front matter of the text, looking at the table of contents and paging through multiple chapters.

Sections 1-3 below should be completed to produce a comprehensive picture of the strengths and weaknesses of the materials under evaluation. Information about areas in need of improvement or supplementation should be shared with internal and external stakeholders.

Navigating the Tool

Begin with Section 1: Non-Negotiable Alignment Criteria

- The Non-Negotiable Alignment Criteria must each be met in full for materials to be considered aligned to the Shifts and the major features of the Common Core State Standards. Each Non-Negotiable Alignment Criterion has one or more metrics associated with it; every one of these metrics must be met in order for the criterion as a whole to be met.

- Examine the relevant materials and use evidence to rate the materials against each criterion and its associated metric(s).

- Record and explain the evidence upon which the rating is based.

Continue to Section 2: Alignment Criteria

- The Alignment Criteria must each be met for materials to be considered aligned to the Shifts and the major features of the Common Core State Standards. Each Alignment Criterion has one or more metric associated with it; a specific number of these metrics must be met or partially met in order for the criterion as a whole to be met.

- Examine the materials in relation to these criteria, assigning each metric a point value. Rate the criterion as "Meets" or "Does Note Meet" based on the number of points assigned. The more points the materials receive on the alignment Criteria, the better they are aligned.

- Record and explain the evidence upon which the rating is based.

Proceed to Section 4: Indicators of Quality

- Indicators of Quality are important considerations that will help evaluators better understand the overall quality of instructional materials. These considerations are not criteria for alignment to the CCSS, but they provide valuable information about additional program characteristics. Evaluators may want to add their own indicators to the examples provided.

Directions for Non-Negotiable 1

Freedom from Obstacles to Focus

Criterion	Evidence- Give specific examples.	Rating: (Reviewer only.)
Non-Negotiable 1: **Freedom from Obstacles to Focus** **Materials must reflect the content architecture of the Standards by not assessing the topics named before the grade level where they first appear in the Standards.** The Standards foster students' progress to algebra by focusing strongly on arithmetic. Consistent with this focus, certain topics from outside of arithmetic appear only in later grades. Thus, to be aligned, materials must reflect the content architecture of the Standards by not assessing the topics named before the grade level where they first appear in the Standards. In this criterion, "topics named" means the topics that are explicitly named in Metric 1A. No other topics should be added to the list in Metric 1A. (Note that other topics in the standards are addressed in criterion NN2.)	Required Materials • Common Core State Standards for Mathematics (www.corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf) • From the materials being evaluated: teacher guides and all assessment components	Rating this Criterion: Non-Negotiable 1 is rated as Meets or Does Not Meet. To rate Non-Negotiable 1, begin by rating Metric 1A. Since Metric 1A is the only metric for Non-Negotiable 1, the rating for Non-Negotiable 1 is the same as the rating for Metric 1A. If Metric 1A is rated as Does Not Meet, include evidence of when the named topic(s) is/are assessed. If the metric is rated as Meets, list the grade(s) examined in the evaluation.
Metric NN1A: **Materials reflect the basic architecture of the Standards by not assessing the listed topics before the grade level indicated.**	**Evidence-** A review of the assessments provided for the textbook reveals all content related to the work of 6th grade. Standards from upper grades are not assessed.	**(Reviewer only.)** **_X_Meets**

• Probabi[illegible]ncluding chance, likely outcomes, probability models. (I[illegible]oduced in the CCSSM in grade 7) • Statistical distributions, including center, variation, clumping, outliers, mean, median, mode, range, quartiles; and statistical association or trends, including two-way tables, bivariate measurement data, scatter plots, trend line, line of best fit, correlation. (Introduced in the CCSSM in grade 6) • Similarity, congruence, or geometric transformations. (Introduced in the CCSSM in grade 8) • Symmetry of shapes, including line/ reflection symmetry, rotational symmetry. (Introduced in the CCSSM in grade 4) **How to Find the Evidence:** Evaluate the table of contents, all chapter tests, all unit tests, and other such assessment components (including rubrics). For context, read Criterion #2 from the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013). NOTE: Grade alignments of other topics are addressed in Non- Negotiable 2, Focus and Coherence.) In this criterion, "topics named" means the topics that are explicitly named in Metric 1A. No other topics should be added to the list in Metric 1A. (Note that other topics in the standards are addressed in criterion NN2.)	Probability, including chance, likely outcomes, and probability models are not included. Similarity, congruence, and geometric transformations are not included.	____**Does Not Meet**

Non-Negotiable 1: Materials must reflect the content architecture of the Standards by not assessing the topics named* before the grade level where they first appear in the Standards.

NN 1 If Metric 1A was rated as Meets, then rate Non-Negotiable 1 as Meets. If Metric 1A was rated as Does Not Meet, then rate Non- Negotiable 1 as Does Not Meet. Check the final rating.

Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion.**(Reviewer only.)**

Before moving to Non-Negotiable 2, record the final Meets or Does Not Meet rating in the Evaluation Summary.

(Reviewer only.)

__x__Meets

____Does Not Meet

Strengths/Weaknesses:
Standards are broken down to create a framework for students' learning. Lessons build on prior knowledge from previous lessons in the curriculum. There are multiple opportunities for students to explore and discover and then discuss their strategies. The assessments reflect only 6th grade CCSS content.

Directions for Non-Negotiable 2

Focus and Coherence

Non-Negotiable 2:

Focus and Coherence

Materials must focus coherently on the Major Work of the grade in a way that is consistent with the progressions in the Standards.

Focus and coherence are the two major evidence-based design principles of the Common Core State Standards for Mathematics (CCSSM, p. 3). Focus is necessary in order to fulfill the ambitious promise the states have made to their students by adopting the Standards: greater achievement at the college and career ready level; greater depth of understanding of mathematics; and a rich classroom environment in which reasoning, sense-making, applications, and a range of mathematical practices flourish. In simpler terms, a mile-wide, inch-deep curriculum translates to less time per topic. Less time means less depth and moving on without many students. Thus, materials must focus coherently on the Major Work of the grade in a way that is consistent with the progressions in the Standards.

Required Materials

- Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf)
- Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)
- Focus by Grade Level for the grade being evaluated (www.achievethecore.org/focus)
- From the materials being evaluated: teacher guides, student texts and workbooks

Rating this Criterion:
Non-Negotiable 2 is rated as Meets or Does Not Meet.

To rate Non-Negotiable 2, first rate metrics 2A–2H. Each of these eight metrics must be rated as Meets in order for Non-Negotiable 2 to be rated as Meets. Rate each metric 2A-2H as Meets or Does Not Meet/Insufficient Evidence. If the evidence examined shows that the Criterion is met, then mark the Criterion Meets. If the evidence examined shows that the Criterion is not met—or if there is insufficient evidence to make a determination—then mark the Criterion as Does Not Meet/Insufficient Evidence. Support all ratings with evidence.

Metric NN2A:
In each grade K–8, students and teachers using the materials as designed devote the large majority of time to the Major Work of the grade.

How to Find the Evidence:
Familiarize yourself with the Major Work of the grade being evaluated (see the Focus by Grade Level documents.)
Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, lessons, homework assignments, and assessments. (Evaluate both student and teacher materials.)
Consider time spent on the Major Work of the grade and judge qualitatively whether students and teachers using the materials as designed will devote the large majority of time to the Major Work of the grade.
For context, read Criterion #1 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013)

Evidence-
The first seven units are directly linked with the Major work of the 6th grade. The authors seemed to develop the units around the four critical areas identified in the CCSS. The last unit includes lessons related to scaling. This topic is suggested for 7th grade in the Progression document for Ratios and Proportional Reasoning.

(Reviewer only.)

__x__Meets

____Does Not Meet/

Insufficient Evidence

Metric N[illegible]3: **Supporting Work, where present, enhances focus and coherence simultaneously by also engaging students in the Major Work of the grade.** How to Find the Evidence: Familiarize yourself with the Major Work and Supporting Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate chapters and lessons that focus on Supporting Work. NOTE: Example of evaluating this Criterion might include looking at whether materials for K–5 generally treat data displays as an occasion for solving grade-level word problems using the four operations (e.g., see 3.MD.B.3); or whether materials for grade 7 take advantage of opportunities to use probability to support ratios, proportions, and percentages. For context, read Criterion #3 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** The four supporting clusters are integrated throughout the units. There is a spiraling review and reinforcement of computation with multi-digit numbers. The problems related to area, surface area, and volume require computation with fractions and decimals. The unit on statistics introduces students to multiple models and leads to work with number lines and integers and eventually to the coordinate plane.	(Reviewer only.) __x__Meets ____Does Not Meet/ Insufficient Evidence
Metric NN2C: **Materials base content progressions on the grade-by-grade progressions in the Standards. Content from previous or future grades does not unduly interfere with or displace on-grade-level content.** How to Find the Evidence: Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, and lessons in both student and teacher materials. NOTE: In some cases it may be possible that aligned materials might address some aspects of a topic in a strategic way before or after the grade level in which the topic is central in the Standards' progressions; for example, a curriculum author might purposefully choose to explore adding fractions with unlike denominators in a way appropriate to grade four, recognizing that this work is not really required until the next grade. However, any such purposeful discrepancies in content progressions should enhance the required learning in each grade; not unduly interfere with or displace grade-level content; and be clearly aimed at helping students meet the Standards as written rather than effectively rewriting the progressions in the Standards. And in all cases, note that Non-Negotiable 1 must be met for materials to be aligned. For context, read Criterion #5a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Content from previous grades is used daily as a warm-up activity and is related to the 6th grade content in the lesson. The 6th grade content is faithful to the progressions document. This is particularly evident in the lessons related to ratios and proportional reasoning. The textbook extends proportional reasoning to ideas about scaling in the last unit. This topic's placement at the end of the textbook comes after significant at the end of the textbook comes after significant work with ratio tables. This would be an appropriate extension for higher achieving students. Scaling is also present, along with similarity of rectangles, in the second unit. Again, this could be used for higher achieving students. Similarity is not included in the assessment.	(Reviewer only.) __x__Meets ____Does Not Meet/ Insufficient Evidence
Metric NN2D: **Materials give all students extensive work with on-grade-level problems.** How to Find the Evidence: Evaluate both student and teacher materials. If the materials provide resources for differentiated learning, consider whether lower-performing students have opportunities to engage with grade-level problems. Also consider whether higher-performing students are given opportunities to learn current grade-level content in greater depth.	**Evidence-** Each lesson includes differentiation opportunities for all students. Readiness activities of each unit addresses grade level standards in a simplified manner for learners who need additional scaffolding. See Unit 3 Lesson 8 which has students complete a hands-on activity dropping pennies and writing out ratios followed by a discussion. The Enrichment activities for each	(Reviewer only.) __x__Meets ____Does Not Meet/ Insufficient Evidence

For context, read Criterion #5b in the Publishers' Criteria for the Common Core St[illegible]andards for Mathematics, Grades K–8 (Spring 2013).	unit address[illegible]ade level standards for students who need a [illegible]allenge. Games that practice grad-level problems are included in the manipulative kit for additional practice for all leveled learners. There are also differentiation tips for the teacher in the margins of the teacher edition. The teacher edition also includes information about adjusting the assessments to provide appropriate scaffolding. In all cases, this is consistent with on grade level work. Problems and tasks that encourage higher achieving students to go deeper are also provided.	
Metric NN2E: **Materials relate on-grade-level concepts explicitly to prior knowledge from earlier grades.** How to Find the Evidence: Evaluate both student and teacher materials. NOTE: Examples of evaluating this Criterion might include looking at the way the materials extend basic ideas of place value across the decimal point; or the role that properties of operations play when the materials extend arithmetic beyond whole numbers to fractions, variables, and expressions. More generally, cluster headings in the Standards sometimes signal key moments where reorganizing and extending previous knowledge is important in order to accommodate new knowledge (e.g., see cluster headings that use the phrase "Apply and extend previous understanding"). For context, read Criterion #5c in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** The Warm Up for each lesson asks students to complete review problems that the 6th grade lesson will build on. Unit 3 Lesson 6 Exploring Long Division with Decimals builds on students previous knowledge of multiplying decimals and long division with whole numbers. Each lesson begins with a Readiness Activity that sets the foundation for linking new learning with old learning. This is often in the form of a game. For example, the student s play Fraction Capture to review equivalent fractions and renaming fractions and mixed numbers before dividing fractions with common denominators. The "within grade" level spiral tracker lets a teacher know exactly where a student is relative to mastery of the standard. Less attention is given to how a progression continues to develop across grade levels. Practice problems on fifth grade skills.	(Reviewer only.) **__x__Meets** **____Does Not Meet/ Insufficient Evidence**
Metric NN2F: **Review of material from previous grades is clearly identified as such to the teacher, and teacher and students can see what their specific responsibility is for the current year.** How to Find the Evidence: Evaluate the table of contents, but do not stop there; also evaluate units, chapters, lessons, homework assignments and assessments. (Evaluate	**Evidence-** The responsibility for the current year is explicit and specific as shown in the Unit Overview, Lesson Overview, Spiral Trace, and the Focus Clusters for each lesson. Previous grades' standards may be included in the Readiness activities and in the Spiral Trace. To see how mastery develops for all standards teachers are	(Reviewer only.) **_x___Meets** **____Does Not Meet/ Insufficient Evidence**

both stude[illegible]d teacher materials.) Identify any content from previous grades and [illegible]ck whether it is identified as such. For context, read Criterion #5a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	directed to go[illegible]line. Fifth grade content is clearly labeled as such in the Readiness activities. It takes careful reading to find other references to links with 5th grade work. For example, of the 8 lessons related to multiplication and division of fractions, 3 are focused on models the progression documents suggest for fifth grade. This is detailed in the Teacher Edition Mathematical Background: Content pages. To say that this look back is "clearly identified" is a stretch. It has to be assumed that the teacher will provide this information to the student as they are playing or doing the Readiness activities. The letters to the parents are an effective tool for helping parents understand how new learning will be connected to prior learning (5th grade).	
Metric NN2G: **Materials include learning objectives that are visibly shaped by CCSSM cluster headings.** How to Find the Evidence: Select several clusters from the Major Work in the grade being evaluated. Evaluate teacher and student materials in relation to these clusters. For context, read Criterion #6a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Learning objectives are not formally stated, but the teacher edition lifts language from the clusters so the teacher understands the focus. There is also a Spiral Snapshot to show how this lesson's focus fits in with the standard as a whole The lessons are definitely linked to the clusters. Unit 5 Lesson 5 states the Focus Cluster: Solve real-world and mathematical problems involving area, surface area, and volume which is clearly aligned with 6.G.4. Unit 7 Lesson 5's Focus Cluster states "Understand ratio concepts and use ratio reasoning to solve problems" which is clearly aligned with 6.RP.3b	(Reviewer only.) **_x___Meets** **____Does Not Meet/ Insufficient Evidence**
Metric NN2H: **Materials include problems and activities that serve to connect two or more clusters in a domain, or two or more domains in a grade, in cases where these connections are natural and important.** How to Find the Evidence: In the grade being evaluated, choose two or more clusters or two or more domains for which connections are natural and important. Evaluate the units, chapters, and lessons that deal with the chosen topics, looking for problems and activities that serve to connect the chosen	**Evidence-** Problems and activities connect clusters where natural and important. Expressions and Equations are integrated throughout as students are asked regularly to supply an equation for application problems from multiple domains. Making Box Plots and Finding Interquartile Range is not included in the unit focusing on Statistics. Instead, this topic's introduction is	(Reviewer only.) **__x__Meets** **____Does Not Meet/ Insufficient Evidence**

clusters or ins. NOTE: An example of evaluating this Criterion might include look at whether problems in grade 4 sometimes or often involve students applying their developing computational skills (detailed in domain NBT) in the context of solving word problems (detailed in domain OA). For context, read Criterion #6b in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	included after erating with fractions and percents. Surface area and volume problems require students to apply multiplication of decimals and fractions.	

Non-Negotiable 2:

Focus and Coherence

Materials must focus coherently on the Major Work of the grade in a way that is consistent with the progressions in the Standards.

NN 2 If all Metrics 2A – 2H were rated as Meets, then rate Non-Negotiable 2 as Meets. If one or more Metric was rated Does Not Meet/Insufficient Evidence, then rate Non-Negotiable 2 as Does Not Meet. Check the final rating.
Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)**

Before moving to Alignment Criterion 1, record the final Meets or Does Not Meet rating in the Evaluation Summary.

(Reviewer only.)

__x__Meets

____Does Not Meet

Strengths/Weaknesses:

Strength: The standards are covered in a variety of strategies to meet the learning needs of below level and grade level students. The manipulative kit includes games that will allow students at all levels to deepen their conceptual understanding. Standards are clustered together where necessary. Previous grade level standards are included in the Readiness activities and Math Boxes. Teachers are referred to the textbook website for a full list of standard's development.

Weakness: The spiraling nature of this textbook makes it hard to understand the coherence without extensive study of the Math Background pages. To be effective with this textbook, a teacher would need to spend considerable time to ensure deep understanding of the math content.

Now continue by evaluating the A[illegible]ment Criterion 1 for Rigor and Balance.

Directions for Alignment Criterion 1

Rigor and Balance

Alignment Criterion 1: Rigor and Balance

Materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.

The Standards set expectations for attention to all three aspects of rigor: conceptual understanding, procedural skill and fluency, and applications. Thus, materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.

Required Materials

- Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf)
- Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)
- Focus by Grade Level for the grade being evaluated (achievethecore.org/focus)
- Situation Types for the Operations in Word Problems (achievethecore.org/situation-types)
- From the materials being evaluated: teacher guides, student texts and workbooks

Rating this Criterion:

Alignment Criterion 1 is rated as Meets or Does Not Meet.

To rate Alignment Criterion 1, first rate metrics 1A, 1B, and 1C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). For each metric, guiding questions are provided to aid in gathering evidence.

Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 1 if the materials rate 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as rigor and balance, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.

Metric AC1A:

The materials support the development of students' conceptual understanding of key mathematical concepts, especially where called for in specific content Standards or cluster headings.

How to Find the Evidence:

Select one or more cluster(s) or Standard(s) from the Major Work for the grade being evaluated that relate specifically conceptual understanding to use throughout the questions associated with this metric. NOTE: Some examples of clusters or Standards that call for conceptual understanding include: K.OA.A.1, (1.NBT.B, 1.NBT.C), (2.NBT.A, 2.NBT.B), (3.OA.A.1, 3.OA.A.2), 4.NF.A, (4.NBT.A, 4.NBT.B), 5.NF.B, (5.NBT.A, 5.NBT.B), 6.RP.A, 6.EE.A.3, 7.NS.A, 7.EE.A, 8.EE.B, 8.F.A, 8.G.A

Clusters or Standards grouped by parentheses are closely connected and could be analyzed together.

For context, read Criterion #4a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).

-Choose a cluster/Standard from the Major Work that is aligned to each aspect of rigor and use it to evaluate these metrics. It is most helpful if the same clusters/Standards are chosen for all of the programs being evaluated. (Guidance in choosing clusters/Standards is included in "How to Find the Evidence".)

Use the questions for AC Metric 1A to evaluate Metric 1A. Record evidence for each question and rate Metric 1A.

_2___Meets (2)

____Partially Meets (1)

____Does Not Meet (0)

	Math Masters bo Using Ratios to Make Fruit Cups, students are asked to create a recipe that would taste the same as Recipe B, but uses more than 11 cups of fruit. Students have worked through several problems already and are familiar with Recipe B. Math Masters book: Using Properties to Simplify Expressions, students are asked to create their own expressions using fractions as coefficients. Similar questions are found throughout.	
Do the materials feature opportunities to identify correspondences across mathematical representations? Evaluate lessons, chapter/unit assessments and homework assignments. NOTE: Examples of evaluating this Criterion might include looking at whether students are supported in identifying correspondences among: the verbal description of a situation, the diagrams that distill its mathematical features, and the equations that model it; or equivalent forms of numbers (e.g., 3 and 6/2) and the number line; or rational number operations and representations of them via models such as the vector model; or the expression that defines a function and the graph that shows the relationship.	**Evidence-** The students are asked to use multiple models for ratios- ratio tables, pictures, and tape diagrams. They are asked to use related mathematical vocabulary and then the related symbols. The problems presented are contextual based and students are asked to translate the information in a representational model, words, and with ratio notation. Unit 7 Assessment asks students to connect their learning of reading line graphs, plotting in the coordinate plane, and writing equations. Units are also developed with a spiral learning plan so students are reinforcing Idaho Core Standards from one unit to the next. For example: 6.RP.3d is introduced, practiced, and mastered across Unit 2 Lessons 11, 13, 15, Unit 3 Lessons 1, 7, Unit 5 Lessons 4, 10, 11, 13, and Unit 7 Lessons 5, 6, and 12. Similar spiral learning for all major works. Each lesson has "Math Boxes" in the student journal that reviews skills and concepts the students have already learned as well as "Preview Math Boxes" which focus student learning for upcoming concepts.	
Metric AC1B: **The materials are designed so that students attain the fluencies and procedural skills required by the Standards.** How to Find the Evidence: Select one or more cluster(s) or Standard(s) from the Major Work for the grade being evaluated that relate specifically to fluency and		Use the questions for Metric 1B to evaluate Metric 1 B. Record evidence for each question and rate Metric 1B. (Reviewer only.) **__2__Meets (2)**

Is conceptual understanding attended to thoroughly where the Standards set explicit expectations for understanding or interpreting? Evaluate lessons, chapter/unit assessments and homework assignments, paying attention to work aligned to Standards that explicitly call for understanding or interpreting. NOTE: Examples of evaluating this Criterion might include looking at how well the multi-digit addition and subtraction algorithms are developed and explained on the basis of place value and properties of operations; or how well the multi-digit multiplication and division algorithms are developed and explained on the basis of place value and properties of operations; or how well solving equations is presented and explained as a process of reasoning.	**Evidence-** 6.RP.A Students are provided an opportunity to develop a conceptual understanding of ratios as they connect ratio language (on each, for, to per) with drawings and models. The teacher edition specifically explains the delay of the use of fraction notation. Students are asked to explain the difference between additive and multiplicative reasoning. There are opportunities for partner work as well as whole group instruction, with discussion questions provided. Tape diagrams and ratio tables are introduced. There is extensive us of MP3, MP4, and MP5. Pictures are used to aid in the development of equivalent ratios. Students are given tasks and problems but are not given specific directions with regard to operations of multiplication and division. Fractional notation is delayed until students have had some experiences with equivalent ratios.	
Do the materials feature high-quality conceptual problems and conceptual discussion questions? Evaluate lessons, chapter/unit assessments, and homework assignments. NOTE: Example of conceptual problems might include such questions as "Find a number greater than 1/5 and less than 1/4," or "If the divisor does not change and the dividend increases, what happens to the quotient?"	**Evidence-** 6.RP.A Rich discussion questions are provided throughout and the tasks are open so that there are multiple entry points. Students are asked to compare additive and multiplicative reasoning. Students are also asked to compare the advantages of different models. There are multiple opportunities in each Unit for students to deepen their conceptual learning. Unit 2 Cumulative Assessment #8 Create a dot plot with at least 5 data points. The maximum is 10. The balance point for the set of data needs to be 6, but none of the points can be located at 6. Unit 4 Cumulative Assessment #4 Name a number between each pair of numbers. 4a) 0.3 and 0.4 4b) ½ and ⅓ . Unit 6 Challenge #2 Find three consecutive numbers whose sum is 90. Unit 6 Cumulative Assessment #1 Find two numbers between each pair of numbers.	

procedural[illegible]p use throughout the questions associated with this metric. NO[illegible]ome examples of Standards that call for procedural skill and fluency include: K.OA.A.5, 1.OA.C.6, 2.OA.B.2, 2.NBT.B.5, 3.OA.C.7, 3.NBT.A.2, 4.NBT.B.4, 5.NBT.B.5, 6.NS.B.2, and 6.NS.B.3, 6.EE.A, 7.NS.A, 7.EE.A.1,7.EE.B.4a, 8.EE.C.7, 8.EE.C.8b For context, read Criterion #4b in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).		____**Partially Meets (1)** ____**Does Not Meet (0)**
Is progress toward fluency and procedural skill interwoven with students' developing conceptual understanding of the operations in question? Evaluate lessons, chapter/unit assessments, daily routines, and homework assignments for evidence that the development of fluency and procedural skill is supported by conceptual understanding.	**Evidence-** The procedural practices from the Major Works are interwoven with conceptual learning throughout each Unit. 6.NS.B.2 & 6.NS.B.3 In the development of the long division algorithm, students are asked to compare the traditional algorithm with partial quotients. This work is preceded by finding quotients using mental math. Scaffolding is suggested to support struggling learners. This skill is part of the spiraling nature of the textbook and will appear in many homework assignments throughout the year. Fluency with decimal operations reflects the same pattern-related warm up with whole numbers; a focus on estimation, and then work toward the traditional algorithms. There is heavy reliance on number sense.	
Are purely procedural problems and exercises present that include cases in which opportunistic strategies are valuable and generic cases that require efficient algorithms present? Evaluate lessons, chapter/unit assessments, daily routines, and homework assignments. NOTE: Examples of problems in which opportunistic strategies are valuable might include the sum 698 + 240 or the system $x + y = 1$, $2x + 2y = 3$. Examples of generic cases that require efficient algorithms might include the sum 8767+2286 or the system $6y + x = x + 3$, $-x = 1 + 2y$.	**Evidence-** The bulk of the mental math problems are part of the warm up activity. This textbook relies on distributed review and problems requiring efficient algorithms are included throughout the year in homework and practice.	
Do the materials in grades K–6 provide repeated practice toward attainment of fluency Standards? Evaluate lessons, daily routines, and homework assignments for evidence of repeated practice toward attainment of the following K–6 Standards that set an explicit expectation of fluent (accurate and reasonably fast) computation: K.OA.A.5, 1.OA.C.6, 2.OA.B.2, 2.NBT.B.5, 3.OA.C.7, 3.NBT.A.2, 4.NBT.B.4, 5.NBT.B.5, 6.NS.B.2, 6.NS.B.3.	**Evidence-** The text provides sufficient practice to support fluency standards as evident in warm-ups, below level differentiation lessons,and homework assignments.	
Metric AC1C: **The materials are designed so that teachers and students spend sufficient time working with engaging applications, without losing focus on the Major Work of each grade.**	The content is taught through contextual based problems so that students work with engaging applications when introduced to a topic and also in	**Use the questions for Metric 1C to evaluate Metric 1C. Record evidence for each question and rate Metric 1C.** **(Reviewer only.)**

How to Find Evidence: Select one or more cluster(s) or Standard(s) from the Major Work for the grade being evaluated that relate specifically application to use throughout the questions associated with this metric. NOTE: Some examples of clusters or Standards that call for application include: K.OA.A.2, 1.OA.A, 2.OA.A, 3.OA.A.3, 3.OA.D.8, 4.OA.A.3, 4.NF.B.3d, 4.NF.B.4c, 5.NF.B.6, 5.NF.B.7c, 6.RP.A.3, 6.NS.A.1, 6.EE.B.7, 6.EE.C.9, 7.RP.A, 7.NS.A.3, 7.EE.B.3, 8.EE.C.8c, 8.F.B For context, read Criterion #4c in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	more formal applications. For example, the students work with ratio tables in a variety of contexts and then complete an independent "paint mixing" task. The same models for ratios and proportional reasoning are used in application tasks involving unit rates. The same is true for percent problems.	**_2___Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Are there are single- and multi-step contextual problems, including non-routine problems, that develop the mathematics of the grade, afford opportunities for practice, and engage students in problem solving? Do the problems attend thoroughly to those places in the content Standards where expectations for multi-step and real-world problems are explicit? Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** Two day open response and re-engagement tasks are provided as non-routine problems that engage students in problem solving. Students are asked to solve real world problems in assessments, in homework, and in daily practice.	
Do application problems particularly stress applying the Major Work of the grade? Evaluate lessons, chapter/unit assessments, and homework assignments. NOTE: Examples of evaluating this Criterion might include looking at: how well, by the end of grade 2, students using the materials as designed can represent and solve a full range of one-step addition and subtraction word problems; or how well, by the end of grade 3, students using the materials as designed can represent and solve a full range of one-step multiplication and division word problems; or how well these basic situation types for each operation are carried coherently across the grades, (e.g., with fractions and algebraic expressions); or, in all grades, whether the problems connect concepts, Standards, and domains in ways that are natural and important. For a list of situation types for one-step addition, subtraction, multiplication, and division problems, see Situation Types for the Operations in Word Problems	**Evidence-** The Major Work of the grade is represented in application problems. The is is particularly evident in the ratio problems and the percent problems. Division problems precede ratio problems to provide a natural connection. In the same manner, interquartile ranges are introduced after work with fractions and division. The statistical problems are directly tied to contexts familiar to and important to 6th grade students.	
Does modeling build slowly across K–8, with applications that are relatively simple in earlier grades and when students are encountering new content? In grades 6–8, do the problems begin to provide opportunities for students to make their own assumptions or simplifications in order to model a situation mathematically? Read Standard for Mathematical Practice 4, Model with Mathematics. Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** Models are directly provided and students are asked to make sense of the model. Later, students are asked to make and use models that make sense to them given a context. MP4 is evident in all introductory lessons.	
Alignment Criterion 1: **Rigor and Balance** **Materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.**		(Reviewer only.) **__6__Meets** **____Does Not Meet**

AC1 Mate[illegible] must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn[illegible] than 5 out of 6 points, the Criterion has not been met. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)** **Before moving to Alignment Criterion 2, record the final Meets or Does Not Meet rating in the Evaluation Summary.**	**Strengths/Weaknesses:** Strength: The curriculum is focused on the Major Works with ample opportunities for students to explore strategies and deepen their conceptual understanding. Conceptual understanding and application metrics are particularly strong for this textbook. Weakness: Some teachers would be concerned that there are not enough opportunities for procedural fluency to develop.

Directions for Alignment Criterion 2

Standards for Mathematical Practice

Alignment Criterion 2: Standards for Mathematical Practice **Materials must demonstrate authentic connections between content Standards and practice Standards.** The Standards require that designers of instructional materials connect the mathematical practices to mathematical content in instruction. Thus, materials must demonstrate authentic connections between content Standards and practice Standards.	**Required Materials:** • Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf) • Focus by Grade Level for the grade being evaluated (www.achievethecore.org/focus) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion** Alignment Criterion 2 is rated as Meets or Does Not Meet. To rate Alignment Criterion 2, first rate metrics 2A, 2B, and 2C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). For each metric, guiding questions are provided to aid in gathering evidence. Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 2 if the materials earn 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as mathematical practices, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.

Metric AC1A: **Materials address the practice Standards in such a way as to enrich the Major Work of the grade; practices strengthen the focus on Major Work instead of detracting from it, in both teacher and student materials.** How to Find the Evidence: Familiarize yourself with the Major Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate teacher and student materials for evidence that the mathematical practices support and connect to the focus of the grade. NOTE: Examples of evaluating this Criterion might include looking at whether, in grades K–5, students using the materials are supported to look for and express regularity in repeated reasoning about the addition table, the multiplication table, the properties of operations, the relationship between addition and subtraction or multiplication and division, and the place value system; or whether, in grades 6–8, students using the materials are supported to look for and express regularity in repeated reasoning about proportional relationships and linear functions. For context, read Criterion #8 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013).	**Evidence-** Mathematical practices are clearly present throughout the curriculum. The Practices are marked in the Unit Organizer, in the Mathematical Background: Practices, and the beginning of each Lesson. But it doesn't stop there, throughout the lessons in the Teacher's Edition the practices are marked to allow teachers to focus different parts of the lesson on the Practices where necessary. Unit 2 Lesson 1 largely focuses on MP6: attend to precision, MP7: look for and make use of structure whereas Unit 2 Lesson 5 largely focuses on MP2: reason abstractly and quantitatively, MP3: construct viable arguments and critique the reasoning of others. Unit 3 Lesson 11 focuses on MP2: reason abstractly and quantitatively and MP4: model with mathematics. All practices are represented sufficiently throughout the curriculum, not only the Practices mentioned.	(Reviewer only.) **__2__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Metric AC2B: **Materials attend to the full meaning of each practice Standard.** How to Find the Evidence: For context, read Criterion #7 and Criterion #9 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).		Use the questions for Metric 2B to evaluate Metric 2B. Record evidence for each question and rate Metric 2B. (Reviewer only.) **__2__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Over the course of any given year of instruction, is each mathematical practice Standard meaningfully present in the form of assignments, activities, or problems that stimulate students to develop the habits of mind described in the practice Standard? Evaluate lessons, chapter/ unit assessments, and homework assignments for evidence of each mathematical practice being meaningfully present in instruction.	**Evidence-** Sufficient time and focus are given to the Mathematical Practices throughout the year. The Practice Standards are integrated in each lesson, with each standard the focus at different points in the unit. The assessments require students to demonstrate the Practice Standards. Unit 2 Lesson 1 largely focuses on MP6: attend to precision, MP7: look for and make use of structure whereas Unit 2 Lesson 5 largely focuses on MP2: reason abstractly and quantitatively, MP3: construct viable arguments and critique the reasoning of others. Unit 3 Lesson	

	11 focuses on M reason abstractly and quantitatively and MP4: model with mathematics. All practices are represented sufficiently throughout the curriculum, not only the Practices mentioned.	
Do the materials treat the practice Standards as developing across grades or grade bands? Are the practice Standards in early grades appropriately simple? Do they display an arc of growing sophistication across the grades?	**Evidence-** The Student Reference Book shows the student what the Practice Standard looks like at the intermediate level. It is difficult to determine if there is a growing arc of sophistication across the grades.	
Are there teacher-directed materials that explain the role of the practice Standards in the classroom and in students' mathematical development? Are alignments to practice Standards accurate?	**Evidence-** The Mathematical Practices are outlined in the Teacher's Edition Unit organizers as well as the Mathematical Background sections which are present in all units. Alignment is accurate.	
Metric AC2C: **Materials support the Standards' emphasis on mathematical reasoning.** **How to Find the Evidence:** For context, read Criterion #10 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).		**Use the questions for Metric 2C to evaluate Metric 2C. Record evidence for each question and rate Metric 2C.** **(Reviewer only.)** **__2__Meets (2)**
Do the materials support students in constructing viable arguments and critiquing the arguments of others concerning grade-level mathematics that is detailed in the content Standards? Read Standard for Mathematical Practice 3. Evaluate teacher and student materials to ensure that students are given opportunities to reason with grade-level mathematics.	**Evidence-** Reasoning is at the heart of the instruction in the textbook. Students are routinely asked to explain their thinking. Students critique the reasoning of others as they engage in the Open Response and Re-engagement activities. Students are tasked to construct viable arguments and critiquing the arguments of others throughout the curriculum. Unit 1 Lesson 9, Unit 2 Lesson 8, Unit 3 Lesson 3, Unit 4 Lesson 8, Unit 5 Lesson 5, Unit 6 Lesson 4, Unit 7 Lesson 7, Unit 8 Lesson 7	**____Partially Meets (1)** **____Does Not Meet (0)**
Do the materials support students in producing not only answers and solutions, but also, in a grade-appropriate way, arguments, explanations, diagrams, mathematical models, etc., especially in the Major Work of the grade? Familiarize yourself with the Major Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate teacher and student materials, to understand the types of work students are expected to produce.	**Evidence-** Students are asked to provide models and representations and to explain each. They are taught how to provide a mathematical argument through conjectures and explanations of reasoning. They are asked to critique the reasoning of others as they analyze student errors. Every Unit has an open ended lesson that spans at least 2 days and	

	asks students to [illegible]erate patterns and models on day 1. Day 2 focuses on examining their classmates' work, discussing, and revising their work.	
Do materials explicitly attend to the specialized language of mathematics? Is the language of argument, problem solving, and mathematical explanations taught rather than assumed? Evaluate teacher and student materials, paying attention to how mathematical language is taught. NOTE: Examples of evaluating this Criterion might include looking at whether students are supported in: basing arguments on definitions; using the method of providing a counterexample; or recognizing that examples alone do not establish a general statement.	**Evidence-** Every unit includes a list of vocabulary in the Mathematical Background section at the beginning of the unit and are expected to use the vocabulary as they explain their reasoning. There are ample opportunities for students to discuss and defend mathematics with the teacher and with other students. Models and representations are objects used to explain reasoning.	
Alignment Criterion 2: **Standards for Mathematical Practice** **Materials must demonstrate authentic connections between content Standards and practice Standards.** AC2 Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 out of 6 points, the Criterion has not been met. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. (Reviewer only.) **Before moving to Alignment Criterion 3, record the final Meets or Does Not Meet rating in the Evaluation Summary.**		(Reviewer only.) **__6__Meets** **____Does Not Meet** **Strengths/Weaknesses:** The Mathematical Practices have a strong presence throughout the curriculum and all Practices are adequately represented and built on. This textbook instructs teachers and students about the habits of mind associated with the mathematical practices. It also assesses the student's performance of the Practice Standards.
Alignment Criterion 3: **Access to the Standards for All Students**	**Required Materials:** • Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.	**Rating this Criterion:** Alignment Criterion 3 is rated as Meets or Does Not Meet. To rate Alignment Criterion 3, first rate metrics 3A, 3B, and 3C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points).

Materi[illegible]must provide supports for English Language Learners and other special populations. Because Standards are for all students, alignment requires thoughtful support to ensure all students are able to meet the Standards. Thus, aligned materials must provide supports for English Language Learners and other special populations.	corestandards.org/w[illegible]tent/uploads/Math_Publishers_ Criteria_K-8_Spring_[illegible]_FINAL1.pdf) • From the materials being evaluated: teacher guides, student texts and workbooks	Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 3 if the materials earn 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as support for special population, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.
Metric AC3A: **Support for English Language Learners and other special populations is thoughtful and helps those students meet the same Standards as all other students. The language in which problems are posed is carefully considered.** How to Find the Evidence: Evaluate teacher and student materials, paying attention to supports offered for special populations.	**Evidence-** Every lesson has differentiated instruction activities for English Language Learners and other special populations. the textbook identifies specific points in instruction where support will be needed for English Language Learners. Often this is based on providing visual information. Reading support is also suggested throughout and the problems are deliberately presented in simple language. Common misconceptions are identified in the teacher edition along with strategies to address the misconceptions. The games provided in the manipulative kit allow all special populations above and below grade level to practice and deepen their understanding of the Standards on their level.	Reviewer only.) **__2__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Metric AC3B: **Materials provide appropriate level and type of scaffolding, differentiation, intervention, and support for a broad range of learners with gradual removal of supports, when needed, to allow students to demonstrate their mathematical understanding independently.** How to Find the Evidence: Evaluate teacher and student materials, paying attention to whether materials provide differentiation that will lead all learners to engage with on-grade-level content.	**Evidence-** The curriculum is laced with spiral learning that allows appropriate scaffolding and support for all learners. Each lesson begins with three levels of Readiness activities. Often these are engaging games from the manipulative kit. Students work in pairs and as a whole on problems and homework or Math Boxes provide independent practice. During instruction, there are notes in the teacher edition for adjusting the activity, addressing misconceptions and the development of academic vocabulary. Games provide further opportunities for differentiation and there are Assessment Check-ins which inform the teacher about needed support or scaffolding. The spiral/distributed review allows for the gradual removal of supports.	Reviewer only.) **__2__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**

Metric A[illegible]C: **Design of lessons recommends and facilitates a mix of instructional approaches for a variety of learners such as using multiple representations (e.g., including models, using a range of questions, checking for understanding, flexible grouping, pair-share).** How to Find the Evidence: Evaluate teacher materials, noting instructional approaches suggested for whole class and differentiated lessons and activities.	**Evidence-** There are a variety of lesson strategies used throughout each lesson identified in the teacher's manual including whole group, small group, partner, or independent work. Additionally the questions provided are consistently higher order and there are multiple opportunities for checking for understanding through models, open ended tasks, questioning, and written responses.	Reviewer only.) **__2__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Alignment Criterion 3: **Access to the Standards for All Students** **Materials must provide supports for English Language Learners and other special populations.** AC3 Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 points, the Criterion has not been met. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion.**(Reviewer only.)** **Move to the Evaluation Summary and record the final Meets or Does Not Meet rating .**		(Reviewer only.) **__6__Meets** **____Does Not Meet** **Strengths/Weaknesses:** Strengths: The program includes a variety of instructional strategies. The sequencing of tasks, problems, and questions provide for growing understanding and fluency.

Once an evaluation for alignment to the Shifts and major features of the CCSS has been conducted using Sections 1-3, it's important to evaluate for overall quality and best practices. A starting list of Indicators of Quality are suggested below. States, districts and others evaluating instructional materials are encouraged to add to this list to ensure materials reflect local contexts. For background information on some of the Indicators of Quality in this section, refer to pp.18–21 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).

Indicators of Quality	**Evidence- Give specific examples.**	**Rating: (Reviewers only.)**
1. Lessons are thoughtfully structured and support the teacher in leading the class through the learning paths at hand, with active participation by all students in their own learning and in the learning of their classmates.	**Evidence-** Each unit has a sufficient guide for the teacher including the Unit Organizer: Standards, Mathematical Practices, Contents (Lessons),list of materials for each lesson, Problem Solving, list of Assessment and Differentiation, as well as	(Reviewer only.) **___x___ Yes** **_____ No**

	Ongoing Practice and how the Games provided can be used for the unit, Mathematical Background of standards and practices, and a Spiral Trace of Standards that are reviewed compared with Standards that are introduced. The lessons in each unit broken down into Warm-Up activities, Focus work and class instruction, Practice opportunities for students in class, and conclude with Math Boxes (aka homework) and a Home Link. Students are consistently engaged through problem solving. The questions strategies provided lead to student engagement and problems/tasks have multiple entry points.	
2. The underlying design of the materials includes both problems and exercises. (In solving problems, students learn new mathematics, whereas in working exercises, students apply what they have already learned to build mastery.) Each problem or exercise has a purpose. **NOTE: This Criterion does not require that the problems and exercises be labeled as such.**	**Evidence-** Problems and exercises are given in the Focus portion of the lessons as well as in the Practices section where students turn to their Math Journal and Math Masters books. The introduction of ratios provides an example of learning new mathematics through problem solving. The lessons associated with operations with decimals provide examples of working exercises to build mastery.	**(Reviewer only.)** **___x___ Yes** **_____ No**
3. Design of assignments is not haphazard: exercises are given in intentional sequences in order to strengthen students' mathematical understanding.	**Evidence-** Overall, the approach is systematic and follows a logical sequence. The sequence in all lessons is carefully designed to build student understanding and fluency. The distributed review and Readiness activities are intentionally sequenced as well.	**(Reviewer only.)** **____x__ Yes** **_____ No**
4. There are separate teacher materials that support and **reward teacher study including, but not limited to: discussion of the mathematics of the units and the mathematical point of each lesson as it relates to the organizing concepts of the unit, discussion on student ways of thinking and anticipating a variety of students responses, guidance on lesson flow, guidance on questions that prompt students thinking, and discussion of desired mathematical behaviors being elicited among students.**	**Evidence-** Lessons provide mathematical background on the content taught, "possible student responses" and questions to guide discussion. questions are provided to guide student thinking along with strategies to address misconceptions. Specific points when students should demonstrate the Mathematical Practices are identified.	**(Reviewer only.)** **__x____ Yes** **_____ No**

5. Manipulatives suggested in the materials are faithful representations of the mathematical objects they represent and are connected to written methods.	**Evidence-** The manipulatives provided are aligned with the mathematical focus of the unit. Online manipulatives are also provided. Students are asked to connect representations with written methods.	(Reviewer only.) ___x___ **Yes** _____ **No**
6. Materials include a variety of curriculum-embedded assessments. Examples include pre-, formative, summative, and self-assessment resources.	**Evidence-** In addition to frequent teacher observations, every lesson offers an Assessment Check-In to gauge students' performance on one or more of the standards. The textbook contains the identified curriculum embedded assessments. The Assessment Handbook offers a student Self Assessment, Assessment with procedural and conceptual problems, Challenge Assessment with open ended questions, and a Cumulative Unit Assessment. Additionally there are Beginning-of-Year, Mid-Year, and End-of-Year Assessments each with an outlining of goal Standards that are covered in the assessment.	(Reviewer only.) __x____ **Yes** _____ **No**
7. Assessments contain aligned rubrics, answer keys, and scoring guidelines that provide sufficient guidance for interpreting student performance.	**Evidence-** Rubrics and scoring guidelines with student samples are included in the Assessment Handbook, but the rubrics are generic. Answer keys for the Assessment Check-In questions and Summative Assessments are available in the Teacher Edition of the textbook. Assessment of the Mathematical Practices is provided along with assessment of the math content.	(Reviewer only.) ___x___ **Yes** _____ **No**
8. Materials assess student proficiency using methods that are accessible and unbiased, including the use of course-level language in student prompts.	**Evidence-** Questions that assess student performance model the language in the textbook.	(Reviewer only.) ___x___ **Yes** _____ **No**
9. Materials are carefully evaluated by qualified individuals, whose names are listed, in an effort to ensure freedom from mathematical errors and course-level appropriateness.	**Evidence-** Evaluators, both from the project as well as outside, are included are listed on the copyright page of the Teacher's' Edition.	(Reviewer only.) __x____ **Yes**

		_____ No
10. The visual design supports students in engaging thoughtfully with the subject. Navigation through the text is clear.	**Evidence-** The Student Journal is simple and clear. Models are simple and students are asked to provide their own models.	(Reviewer only.) __x____ **Yes** _____ **No**
11. The materials engage parents in appropriate ways. For example, homework assignments in elementary grades, consist of routine problems, practice with getting answers, and fluency-building exercises that parents can easily support.	**Evidence-** The Math Masters student book includes a parent letter for each unit which includes an outline of the text content, an overview of data displays, vocabulary, do-anytime activities, games to play at home, and a guide to helping your child with homework including an answer key to homework problems. The Student Reference Book will also serve as a "Parent" Reference Book.	(Reviewer only.) ___x___ **Yes** _____ **No**

Publisher: Mc-Graw Hill Copyright: Mc-Graw Hill Education ISBN: 978-0-02-143073-4 other various

Reviewer ID # ____LS, JH_____ Date Review Completed:__03/08/16_____

Non-Negotiable Criteria- Each Non-Negotiable must be met in order for the Non-Negotiable Alignment Criteria to be met overall.

Non-Negotiable 1: Freedom from Obstacles to Focus	Non- Negotiable 2: Focus and Coherence
___x____ Meets _____ Does Not Meet	__x___ Meets _____ Does Not Meet

Non-Negotiable Overall:

__x___ Meets _____ Does Not Meet

Alignment Criteria- Each Alignment Criterion must be met with a sufficient number of points in order for Alignment Criteria to be labeled as "Meets" overall. The more points the materials receive on the Alignment Criteria, the better they are aligned.

Alignment Criterion 1: Rigor and Balance	Alignment Criterion 2: Standards of Mathematical Practice	Alignment Criterion 3: Access to Standards for All Learners
Points: __6___ of 6 possible. (Materials must receive at least 5 of 6 points to align.) ____x___ Meets _____ Does Not Meet	Points: __6___ of 6 possible. (Materials must receive at least 5 of 6 points to align.) ___x____ Meets _____ Does Not Meet	Points: __6___ of 6 possible. (Materials must receive at least 5 of 6 points to align.) ____x___ Meets _____ Does Not Meet

Alignment Criteria Overall:

__x (18/18)___ Meets _____ Does Not Meet

If the materials meet both Non-Negotiables and relevant Alignment Criterion, they are aligned to the Shifts and major features of the Core Standards. **Do the materials meet every Non-Negotiable and Alignment Criterion? __x___ Yes _____ No**

What are the specific areas of strength and weakness based on this evaluation? Publishers or others modifying or developing assessments can use this information to make improvements and/or to remedy gaps in the alignment of assessment materials.

Strengths:
Curriculum is well developed and aligned to Common Core State Standards covering a variety of problems and strategies both procedural and conceptual. The text provides great opportunity for teachers to use student thinking to develop conceptual understanding. Student reasoning plays a key role throughout the textbook. Teachers are equipped with a variety of materials and support to teach the lessons. The Teacher's' Edition includes a chart of the Standards and which lesson they are covered, Unit Organizer which further breaks down the lessons taught and the Standards included, a Spiral Trace of review and new concept lessons, and a breakdown of the Mathematical Practices for the each lesson. Materials are listed at the beginning of each lesson. The Manipulative Kit is very extensive, versatile and adaptive to a variety of lessons and situations. There are math games included in the Kit that are accessible for all levels of learners. The Student Reference Book is not consumable and focuses on student-led learning. The Student Math Journal and Math Masters books are well organized with parent letters and strategies to use at home.

Weaknesses:
The Student Math Journal and Math Masters books are consumable. Some applications are actually in the 7th grade standards: scaling is used to develop ideas about proportional reasoning and this is a specific 7th grade application.

2015-16 Mathematics Interim Review Recommendation & Summary

Publisher Name:	McGraw Hill School Education, LLC
Title:	Number Worlds - Level A
ISBN #	various
Grade Level(s) or Course:	Level A
Reviewer ID:	DY, BKC

RECOMMENDED AS:

_____**Core Mathematics Program-** a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials. Substantial evidence clearly supports the designation of this program as Core.

_____**Other Mathematics Program-** a program that substantially, but partially, meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for supplemental materials. Substantial evidence clearly supports the designation of this program as Other.

_____**Component Mathematics Program-** a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs. Substantial evidence clearly supports the designation of this program as Component.

_____x___**Intervention Program-** a program designed and intended to target and support students' specific needs. Substantial evidence clearly supports the designation of this program as Intervention.

_____ **Does not meet criteria** for recommendation as a Curricular Material or Online Resource for Mathematics.

EVIDENCE SUMMARY:

FOCUS-
Pre-skills are assessed before they are taught to students.

COHERENCE-
Materials do focus coherently on the Major Work of the grade level.

RIGOR-
Program offers many opportunities to practice skills through lessons, activities , assessments and projects.

CONCEPTUAL UNDERSTANDING-
Program offers opportunities for students to reflect on their learning and explain their thinking.

MATHEMATICAL PRACTICES-
The mathematical practices are embedded in all activites.

ACCESSIBILITY OF STANDARDS TO ALL STUDENTS-
Differentiation and practice in every lesson is evident. Students are supported to demonstrate their learning in a variety of ways.

OTHER:
Vocabulary flash cards are available to purchase, however, this is not a necessity to the success of the program.

2015-16 Interim Mathematics Review

Mathematics Evaluation Tool Grades K-8

Publisher: McGraw Hill School Education, LLC

Title of Material: Number Worlds - Level A

Author: Griffin

ISBN #: various **Copyright** 2015

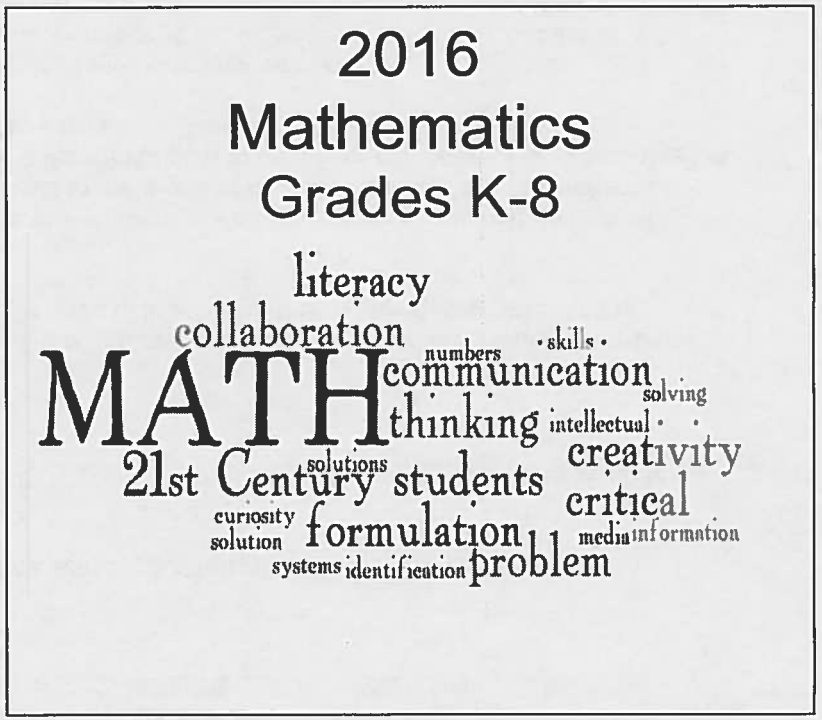
Reviewer ID: DY, ~~CNF~~ BKC

Core Mathematics Program- a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Core.

Other Mathematics Program- a program that substantially, but partially, meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Other.

Component Mathematics Program- a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs.
Substantial evidence clearly supports the designation of this program as Component.

Intervention Program- a program designed and intended to target and support students' specific needs.
Substantial evidence clearly supports the designation of this program as Intervention.



- Evaluation Form adapted from Instructional Materials Evaluation Toolkit (IMET).

The IMET was developed by Student Achievement Partners. Educators may use or adapt. http://creativecommons.org/licenses/by/3.0/ Download this tool at http://achievethecore.org/IMET

Instructional Materials Evaluation Tool
Mathematics, Grades K-8

What Are the Purposes of the IMET?

This Math IMET is designed to help educators determine whether instructional materials are aligned to the Shifts and major features of the Common Core State Standards (CCSS). The substantial instructional Shifts (http://www.corestandards.org/other-resources/key-shifts-inmathematics/) at the heart of the Common Core State Standards are:

- **Focus** strongly where the Standards focus
- **Coherence**: Think across grades and link to major topics within the grade
- **Rigor**: In major topics, pursue conceptual understanding, procedural skill and fluency, and application with equal intensity.

The IMET draws directly from the following documents:

- Common Core State Standards for Mathematics (www.corestandards.org/Math)
- Publishers' Criteria for the Common Core State Standards in Mathematics grade K-8 (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)

When to use the IMET

1. Purchasing materials: Many factors go into local purchasing decisions. Alignment to the Standards is a critical factor to consider. This tool is designed to evaluate alignment of instructional materials to the Shifts and the major features of the CCSS. It also provides suggestions of additional indicators to consider in the materials evaluation and purchasing process.

2. Evaluating materials currently in use: The IMET can be used to analyze the degree of alignment of existing materials and help to highlight specific, concrete flaws in alignment. Even where materials and tools currently in use fail to meet one or more of these criteria, the pattern of failure is likely to be informative. States and districts can use the evaluation to create a thoughtful plan to modify or combine existing resources in such a way that students' actual learning experiences approach the focus, coherence, and rigor of the Standards.

3. Developing programs: Those developing new programs can use this tool as guidance for creating aligned curricula.
Please note this tool was designed for evaluating comprehensive curricula (including any supplemental or ancillary materials), but it was not designed for the evaluation of standalone supplemental materials.

Who Uses the IMET?

Evaluating instructional materials requires both subject-matter and pedagogical expertise. Evaluators should be well versed in the Standards (www.corestandards.org/Math) for all grades in which materials are being evaluated. This includes understanding the Major Work of the grade (www.achievethecore/focus), the Supporting and Additional work, how the content fits into the progressions in the Standards (www.achievethecore.org/progressions), and the expectations of the Standards with respect to conceptual understanding, procedural skill and fluency, and application. Evaluators also should be familiar with the substantial instructional Shifts (http:// www.corestandards.org/other-resources/key-shifts-in-mathematics/) of Focus, Coherence and Rigor that are listed above.

Getting Started
Prior to Evaluation

Assemble all of the materials necessary for the evaluation. It is essential for evaluators to have materials for all grades covered by the program, as some criteria cannot be rated without having access to each grade. In addition, each evaluator should have a reference copy of the Common Core State Standards for Mathematics (CCSSM) and the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013).

Before conducting the evaluation itself, it is important to develop a protocol for the evaluation process. The protocol should include having evaluators study the Publishers' Criteria and the IMET. It will also be helpful for evaluators to get a sense of each program overall before beginning the process. At a minimum, this would include reading the front matter of the text, looking at the table of contents and paging through multiple chapters.

Sections 1-3 below should be completed to produce a comprehensive picture of the strengths and weaknesses of the materials under evaluation. Information about areas in need of improvement or supplementation should be shared with internal and external stakeholders.

Navigating the Tool

Begin with Section 1: Non-Negotiable Alignment Criteria

- The Non-Negotiable Alignment Criteria must each be met in full for materials to be considered aligned to the Shifts and the major features of the Common Core State Standards. Each Non-Negotiable Alignment Criterion has one or more metrics associated with it; every one of these metrics must be met in order for the criterion as a whole to be met.

- Examine the relevant materials and use evidence to rate the materials against each criterion and its associated metric(s).

- Record and explain the evidence upon which the rating is based.

Continue to Section 2: Alignment Criteria

- The Alignment Criteria must each be met for materials to be considered aligned to the Shifts and the major features of the Common Core State Standards. Each Alignment Criterion has one or more metric associated with it; a specific number of these metrics must be met or partially met in order for the criterion as a whole to be met.

- Examine the materials in relation to these criteria, assigning each metric a point value. Rate the criterion as "Meets" or "Does Note Meet" based on the number of points assigned. The more points the materials receive on the alignment Criteria, the better they are aligned.

Record and explain the evidence upon which the rating is based.

Proceed to Section 4: Indicators of Quality

- Indicators of Quality are important considerations that will help evaluators better understand the overall quality of instructional materials. These considerations are not criteria for alignment to the CCSS, but they provide valuable information about additional program characteristics. Evaluators may want to add their own indicators to the examples provided.

Directions for Non-Negotiable 1

Freedom from Obstacles to Focus

Criterion	Evidence- Give specific examples.	Rating: (Reviewer only.)
Non-Negotiable 1: **Freedom from Obstacles to Focus** **Materials must reflect the content architecture of the Standards by not assessing the topics named before the grade level where they first appear in the Standards.** The Standards foster students' progress to algebra by focusing strongly on arithmetic. Consistent with this focus, certain topics from outside of arithmetic appear only in later grades. Thus, to be aligned, materials must reflect the content architecture of the Standards by not assessing the topics named before the grade level where they first appear in the Standards. In this criterion, "topics named" means the topics that are explicitly named in Metric 1A. No other topics should be added to the list in Metric 1A. (Note that other topics in the standards are addressed in criterion NN2.)	**Required Materials** • Common Core State Standards for Mathematics (www.corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf) • From the materials being evaluated: teacher guides and all assessment components	**Rating this Criterion:** Non-Negotiable 1 is rated as Meets or Does Not Meet. To rate Non-Negotiable 1, begin by rating Metric 1A. Since Metric 1A is the only metric for Non-Negotiable 1, the rating for Non-Negotiable 1 is the same as the rating for Metric 1A. If Metric 1A is rated as Does Not Meet, include evidence of when the named topic(s) is/are assessed. If the metric is rated as Meets, list the grade(s) examined in the evaluation.

Metric NN1A **Materials reflect the basic architecture of the Standards by not assessing the listed topics before the grade level indicated.** • Probability, including chance, likely outcomes, probability models. (Introduced in the CCSSM in grade 7) • Statistical distributions, including center, variation, clumping, outliers, mean, median, mode, range, quartiles; and statistical association or trends, including two-way tables, bivariate measurement data, scatter plots, trend line, line of best fit, correlation. (Introduced in the CCSSM in grade 6) • Similarity, congruence, or geometric transformations. (Introduced in the CCSSM in grade 8) • Symmetry of shapes, including line/ reflection symmetry, rotational symmetry. (Introduced in the CCSSM in grade 4) **How to Find the Evidence:** Evaluate the table of contents, all chapter tests, all unit tests, and other such assessment components (including rubrics). For context, read Criterion #2 from the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013). NOTE: Grade alignments of other topics are addressed in Non-Negotiable 2, Focus and Coherence.) In this criterion, "topics named" means the topics that are explicitly named in Metric 1A. No other topics should be added to the list in Metric 1A. (Note that other topics in the standards are addressed in criterion NN2.)	**Evidence-** **No skills were assessed prior to teaching the standards. Program designed as an intervention program.**	**(Reviewer only.)** **___x_Meets** **____Does Not Meet**
Non-Negotiable 1: Materials must reflect the content architecture of the Standards by not assessing the topics named* before the grade level where they first appear in the Standards. **NN 1** If Metric 1A was rated as Meets, then rate Non-Negotiable 1 as Meets. If Metric 1A was rated as Does Not Meet, then rate Non- Negotiable 1 as Does Not Meet. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion.**(Reviewer only.)** **Before moving to Non-Negotiable 2, record the final Meets or Does Not Meet rating in the Evaluation Summary.**		**(Reviewer only.)** **__x__Meets** **____Does Not Meet** **Strengths/Weaknesses:**

Directions for Non-Negotiable 2

Focus and Coherence

Non-Negotiable 2: **Focus and Coherence** **Materials must focus coherently on the Major Work of the grade in a way that is consistent with the progressions in the Standards.** Focus and coherence are the two major evidence-based design principles of the Common Core State Standards for Mathematics (CCSSM, p. 3). Focus is necessary in order to fulfill the ambitious promise the states have made to their students by adopting the Standards: greater achievement at the college and career ready level; greater depth of understanding of mathematics; and a rich classroom environment in which reasoning, sense-making, applications, and a range of mathematical practices flourish. In simpler terms, a mile-wide, inch-deep curriculum translates to less time per topic. Less time means less depth and moving on without many students. Thus, materials must focus coherently on the Major Work of the grade in a way that is consistent with the progressions in the Standards.	**Required Materials** • Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf) • Focus by Grade Level for the grade being evaluated (www.achievethecore.org/focus) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion:** Non-Negotiable 2 is rated as Meets or Does Not Meet. To rate Non-Negotiable 2, first rate metrics 2A–2H. Each of these eight metrics must be rated as Meets in order for Non-Negotiable 2 to be rated as Meets. Rate each metric 2A-2H as Meets or Does Not Meet/Insufficient Evidence. If the evidence examined shows that the Criterion is met, then mark the Criterion Meets. If the evidence examined shows that the Criterion is not met—or if there is insufficient evidence to make a determination—then mark the Criterion as Does Not Meet/Insufficient Evidence. Support all ratings with evidence.
Metric NN2A: **In each grade K–8, students and teachers using the materials as designed devote the large majority of time to the Major Work of the grade.** **How to Find the Evidence:** Familiarize yourself with the Major Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, lessons, homework assignments, and assessments. (Evaluate both student and teacher materials.) Consider time spent on the Major Work of the grade and judge qualitatively whether students and teachers using the materials as designed will devote the large majority of time to the Major Work of the grade. For context, read Criterion #1 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013)	**Evidence-** **28 of the 32 weeks covered the major works for Kindergarten.** **Placement assessments to be given to students.**	**(Reviewer only.)** **___x_Meets** **____Does Not Meet/** **Insufficient Evidence**

Metric NN2[illegible] **Supporting [illegible]k, where present, enhances focus and coherence simultaneously by also engaging students in the Major Work of the grade.** **How to Find the Evidence:** Familiarize yourself with the Major Work and Supporting Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate chapters and lessons that focus on Supporting Work. NOTE: Example of evaluating this Criterion might include looking at whether materials for K–5 generally treat data displays as an occasion for solving grade-level word problems using the four operations (e.g., see 3.MD.B.3); or whether materials for grade 7 take advantage of opportunities to use probability to support ratios, proportions, and percentages. For context, read Criterion #3 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** **The vast amount of [illegible] program is aimed to center on the clusters for grade level because it is an intervention program.**	**(Reviewer only.)** **__x__Meets** **____Does Not Meet/ Insufficient Evidence**
Metric NN2C: **Materials base content progressions on the grade-by-grade progressions in the Standards. Content from previous or future grades does not unduly interfere with or displace on-grade-level content.** **How to Find the Evidence:** Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, and lessons in both student and teacher materials. NOTE: In some cases it may be possible that aligned materials might address some aspects of a topic in a strategic way before or after the grade level in which the topic is central in the Standards' progressions; for example, a curriculum author might purposefully choose to explore adding fractions with unlike denominators in a way appropriate to grade four, recognizing that this work is not really required until the next grade. However, any such purposeful discrepancies in content progressions should enhance the required learning in each grade; not unduly interfere with or displace grade-level content; and be clearly aimed at helping students meet the Standards as written rather than effectively rewriting the progressions in the Standards. And in all cases, note that Non-Negotiable 1 must be met for materials to be aligned. For context, read Criterion #5a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** **Content from previous of future grades not interfere with grade level content**	**(Reviewer only.)** **___x_Meets** **____Does Not Meet/ Insufficient Evidence**

Metric NN2D: **Materials give all students extensive work with on-grade-level problems.** **How to Find the Evidence:** Evaluate both student and teacher materials. If the materials provide resources for differentiated learning, consider whether lower-performing students have opportunities to engage with grade-level problems. Also consider whether higher-performing students are given opportunities to learn current grade-level content in greater depth. For context, read Criterion #5b in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** **On grade level problems are the main focus in the "engage" step grade level problems are given. There was differentiated instruction for each lesson. "If…then" statements given to help teachers with scaffolding.**	(Reviewer only.) __x__Meets ____Does Not Meet/ Insufficient Evidence
Metric NN2E: **Materials relate on-grade-level concepts explicitly to prior knowledge from earlier grades.** **How to Find the Evidence:** Evaluate both student and teacher materials. NOTE: Examples of evaluating this Criterion might include looking at the way the materials extend basic ideas of place value across the decimal point; or the role that properties of operations play when the materials extend arithmetic beyond whole numbers to fractions, variables, and expressions. More generally, cluster headings in the Standards sometimes signal key moments where reorganizing and extending previous knowledge is important in order to accommodate new knowledge (e.g., see cluster headings that use the phrase "Apply and extend previous understanding"). For context, read Criterion #5c in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** **Placement test shows teachers where to place students within the program.**	(Reviewer only.) ___x_Meets ____Does Not Meet/ Insufficient Evidence
Metric NN2F: **Review of material from previous grades is clearly identified as such to the teacher, and teacher and students can see what their specific responsibility is for the current year.** **How to Find the Evidence:** Evaluate the table of contents, but do not stop there; also evaluate units, chapters, lessons, homework assignments and assessments. (Evaluate both student and teacher materials.) Identify any content from previous grades and check whether it is identified as such. For context, read Criterion #5a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** **Standards are clearly shown the teacher know grade level or standard for the skill, CCSS, utilizing "Skills Trace" in Teaching for Understanding.**	(Reviewer only.) __x__Meets ____Does Not Meet/ Insufficient Evidence

Metric NN2C **Materials include learning objectives that are visibly shaped by CCSSM cluster headings.** **How to Find the Evidence:** Select several clusters from the Major Work in the grade being evaluated. Evaluate teacher and student materials in relation to these clusters. For context, read Criterion #6a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** **Unit overview provides objective and standards for the week and again in the daily plan.**	**(Reviewer only.)** **_x___Meets** **____Does Not Meet/ Insufficient Evidence**
Metric NN2H: **Materials include problems and activities that serve to connect two or more clusters in a domain, or two or more domains in a grade, in cases where these connections are natural and important.** **How to Find the Evidence:** In the grade being evaluated, choose two or more clusters or two or more domains for which connections are natural and important. Evaluate the units, chapters, and lessons that deal with the chosen topics, looking for problems and activities that serve to connect the chosen clusters or domains. NOTE: An example of evaluating this Criterion might include looking at whether problems in grade 4 sometimes or often involve students applying their developing computation skills (detailed in domain NBT) in the context of solving word problems (detailed in domain OA). For context, read Criterion #6b in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** **Every 4 weeks standards learned combined for Project Based Learning to help deepen understanding for the concepts learned. Some projects cover two domains and some covered 2-3 clusters.**	**(Reviewer only.)** **__x__Meets** **____Does Not Meet/ Insufficient Evidence**
Non-Negotiable 2: **Focus and Coherence** **Materials must focus coherently on the Major Work of the grade in a way that is consistent with the progressions in the Standards.** **NN 2** If all Metrics 2A – 2H were rated as Meets, then rate Non-Negotiable 2 as Meets. If one or more Metric was rated Does Not Meet/Insufficient Evidence, then rate Non-Negotiable 2 as Does Not Meet. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)** **Before moving to Alignment Criterion 1, record the final Meets or Does Not Meet rating in the Evaluation Summary.**		**(Reviewer only.)** **___x_Meets** **____Does Not Meet** **Strengths/Weaknesses:**

Now continue by evaluating the Alignment Criterion 1 for Rigor and Balance.

Directions for Alignment Criterion 1

Rigor and Balance

Alignment Criterion 1: Rigor and Balance **Materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.** The Standards set expectations for attention to all three aspects of rigor: conceptual understanding, procedural skill and fluency, and applications. Thus, materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.	**Required Materials** • Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf) • Focus by Grade Level for the grade being evaluated (achievethecore.org/focus) • Situation Types for the Operations in Word Problems (achievethecore.org/situation-types) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion:** Alignment Criterion 1 is rated as Meets or Does Not Meet. To rate Alignment Criterion 1, first rate metrics 1A, 1B, and 1C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). For each metric, guiding questions are provided to aid in gathering evidence. Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 1 if the materials rate 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as rigor and balance, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.
Metric AC1A: **The materials support the development of students' conceptual understanding of key mathematical concepts, especially where called for in specific content Standards or cluster headings.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Major Work for the grade being evaluated that relate specifically conceptual understanding to use throughout the questions associated with this metric. NOTE: Some examples of clusters or Standards that call for conceptual understanding include: K.OA.A.1, (1.NBT.B, 1.NBT.C), (2.NBT.A, 2.NBT.B), (3.OA.A.1, 3.OA.A.2), 4.NF.A, (4.NBT.A, 4.NBT.B), 5.NF.B, (5.NBT.A, 5.NBT.B), 6.RP.A, 6.EE.A.3, 7.NS.A, 7.EE.A, 8.EE.B, 8.F.A, 8.G.A Clusters or Standards grouped by parentheses are closely connected and could be analyzed together. For context, read Criterion #4a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	-Choose a cluster/Standard from the Major Work that is aligned to each aspect of rigor and use it to evaluate these metrics. It is most helpful if the same clusters/Standards are chosen for all of the programs being evaluated. (Guidance in choosing clusters/Standards is included in "How to Find the Evidence".)	**Use the questions for AC Metric 1A to evaluate Metric 1A. Record evidence for each question and rate Metric 1A.** **____Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**

Is conceptual understanding attended to thoroughly where the Standards set expectations for understanding or interpreting? Evaluate lessons, chapter/unit assessments and homework assignments, paying attention to work aligned to Standards that explicitly call for understanding or interpreting. NOTE: Examples of evaluating this Criterion might include looking at how well the multi-digit addition and subtraction algorithms are developed and explained on the basis of place value and properties of operations; or how well the multi-digit multiplication and division algorithms are developed and explained on the basis of place value and properties of operations; or how well solving equations is presented and explained as a process of reasoning.	**Evidence-** Number sense as the foundation for program. 3 levels of conceptual instruction daily.	
Do the materials feature high-quality conceptual problems and conceptual discussion questions? Evaluate lessons, chapter/unit assessments, and homework assignments. NOTE: Example of conceptual problems might include such questions as "Find a number greater than 1/5 and less than 1/4," or "If the divisor does not change and the dividend increases, what happens to the quotient?"	**Evidence-** Activity cards given with questions to ask for each lesson. Reflects steps in the workbook push students to understand and explain their thinking.	
Do the materials feature opportunities to identify correspondences across mathematical representations? Evaluate lessons, chapter/unit assessments and homework assignments. NOTE: Examples of evaluating this Criterion might include looking at whether students are supported in identifying correspondences among: the verbal description of a situation, the diagrams that distill its mathematical features, and the equations that model it; or equivalent forms of numbers (e.g., 3 and 6/2) and the number line; or rational number operations and representations of them via models such as the vector model; or the expression that defines a function and the graph that shows the relationship.	**Evidence-** All lessons feature opportunities to identify correspondences across mathematical representations.	
Metric AC1B: **The materials are designed so that students attain the fluencies and procedural skills required by the Standards.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Major Work for the grade being evaluated that relate specifically to fluency and procedural skill to use throughout the questions associated with this metric. NOTE: Some examples of Standards that call for procedural skill and fluency include: K.OA.A.5, 1.OA.C.6, 2.OA.B.2, 2.NBT.B.5, 3.OA.C.7, 3.NBT.A.2, 4.NBT.B.4, 5.NBT.B.5, 6.NS.B.2, and 6.NS.B.3, 6.EE.A, 7.NS.A, 7.EE.A.1,7.EE.B.4a, 8.EE.C.7, 8.EE.C.8b For context, read Criterion #4b in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).		**Use the questions for Metric 1B to evaluate Metric 1 B. Record evidence for each question and rate Metric 1B.** **(Reviewer only.)** **___x_Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**

Is progress towa[illegible]ency and procedural skill interwoven with students' develo[illegible]conceptual understanding of the operations in question? Evaluate lessons, chapter/unit assessments, daily routines, and homework assignments for evidence that the development of fluency and procedural skill is supported by conceptual understanding.	**Evidence-** **Many opportunities f[illegible]uency practice, games, and manipulatives also algorithms included in each lesson.**	
Are purely procedural problems and exercises present that include cases in which opportunistic strategies are valuable and generic cases that require efficient algorithms present? Evaluate lessons, chapter/unit assessments, daily routines, and homework assignments. NOTE: Examples of problems in which opportunistic strategies are valuable might include the sum 698 + 240 or the system x + y = 1, 2x + 2y = 3. Examples of generic cases that require efficient algorithms might include the sum 8767+2286 or the system 6y + x = x + 3, – x = 1 + 2y.	**Evidence-** **Opportunities to use different strategies.**	
Do the materials in grades K–6 provide repeated practice toward attainment of fluency Standards? Evaluate lessons, daily routines, and homework assignments for evidence of repeated practice toward attainment of the following K–6 Standards that set an explicit expectation of fluent (accurate and reasonably fast) computation: K.OA.A.5, 1.OA.C.6, 2.OA.B.2, 2.NBT.B.5, 3.OA.C.7, 3.NBT.A.2, 4.NBT.B.4, 5.NBT.B.5, 6.NS.B.2, 6.NS.B.3.	**Evidence-** **Repeated practice and fluency in all lessons.**	
Metric AC1C: **The materials are designed so that teachers and students spend sufficient time working with engaging applications, without losing focus on the Major Work of each grade.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Major Work for the grade being evaluated that relate specifically application to use throughout the questions associated with this metric. NOTE: Some examples of clusters or Standards that call for application include: K.OA.A.2, 1.OA.A, 2.OA.A, 3.OA.A.3, 3.OA.D.8, 4.OA.A.3, 4.NF.B.3d, 4.NF.B.4c, 5.NF.B.6, 5.NF.B.7c, 6.RP.A.3, 6.NS.A.1, 6.EE.B.7, 6.EE.C.9, 7.RP.A, 7.NS.A.3, 7.EE.B.3, 8.EE.C.8c, 8.F.B For context, read Criterion #4c in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).		**Use the questions for Metric 1C to evaluate Metric 1C. Record evidence for each question and rate Metric 1C.** **(Reviewer only.)** **__x__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Are there are single- and multi-step contextual problems, including non-routine problems, that develop the mathematics of the grade, afford opportunities for practice, and engage students in problem solving? Do the problems attend thoroughly to those places in the content Standards where expectations for multi-step and real-world problems are explicit? Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** **Many opportunities for multi-step word problems and extended response questions. Students need critical thinking to solve problems.**	

Do application problems particularly stress applying the Major Work of the grade? Evaluate lessons, chapter/unit assessments, and homework assignments. NOTE: Examples of evaluating this Criterion might include looking at: how well, by the end of grade 2, students using the materials as designed can represent and solve a full range of one-step addition and subtraction word problems; or how well, by the end of grade 3, students using the materials as designed can represent and solve a full range of one-step multiplication and division word problems; or how well these basic situation types for each operation are carried coherently across the grades, (e.g., with fractions and algebraic expressions); or, in all grades, whether the problems connect concepts, Standards, and domains in ways that are natural and important. For a list of situation types for one-step addition, subtraction, multiplication, and division problems, see Situation Types for the Operations in Word Problems	**Evidence-** **Focus is on standards of the Major Works and since it was an intervention program it is preparing students to be on grade level.**	
Does modeling build slowly across K–8, with applications that are relatively simple in earlier grades and when students are encountering new content? In grades 6–8, do the problems begin to provide opportunities for students to make their own assumptions or simplifications in order to model a situation mathematically? Read Standard for Mathematical Practice 4, Model with Mathematics. Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** Modeling builds appropriately for grade level, giving students multiple opportunities for use of hands-on and virtual manipulatives.	

Alignment Criterion 1: Rigor and Balance

Materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.

(Reviewer only.)

___x_Meets

____Does Not Meet

Strengths/Weaknesses:

AC1 Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 out of 6 points, the Criterion has not been met. Check the final rating.
Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)**

Before moving to Alignment Criterion 2, record the final Meets or Does Not Meet rating in the Evaluation Summary.

Directions for Alignment Criterion 2

Standards for Mathematical Practice

Alignment Criterion 2: Standards for Mathematical Practice

Materials must demonstrate authentic connections between content Standards and practice Standards.

The Standards require that designers of instructional materials connect the mathematical practices to mathematical content in instruction. Thus, materials must demonstrate authentic connections between content Standards and practice Standards.

Required Materials:

- Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf)
- Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)
- Focus by Grade Level for the grade being evaluated (www.achievethecore.org/focus)
- From the materials being evaluated: teacher guides, student texts and workbooks

Rating this Criterion

Alignment Criterion 2 is rated as Meets or Does Not Meet.

To rate Alignment Criterion 2, first rate metrics 2A, 2B, and 2C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). For each metric, guiding questions are provided to aid in gathering evidence.

Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 2 if the materials earn 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as mathematical practices, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.

Metric AC2A:

Materials address the practice Standards in such a way as to enrich the Major Work of the grade; practices strengthen the focus on Major Work instead of detracting from it, in both teacher and student materials.

How to Find the Evidence:

Familiarize yourself with the Major Work of the grade being evaluated (see the Focus by Grade Level documents.)

Evaluate teacher and student materials for evidence that the mathematical practices support and connect to the focus of the grade.

NOTE: Examples of evaluating this Criterion might include looking at whether, in grades K–5, students using the materials are supported to look for and express regularity in repeated reasoning about the addition table, the multiplication table, the properties of operations, the relationship between addition and subtraction or multiplication and division, and the place value system; or whether, in grades 6–8, students using the materials are supported to look for and express regularity in repeated reasoning about proportional relationships and linear functions.

For context, read Criterion #8 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013).

Evidence-

Materials address the practice standards which strengthen the focus of the Major Work for the grade level.

(Reviewer only.)

___x_Meets (2)

____Partially Meets (1)

____Does Not Meet (0)

Metric AC2B **Materials at[illegible] to the full meaning of each practice Standard.** **How to Find the Evidence:** For context, read Criterion #7 and Criterion #9 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).		**Use the questions for Metric 2B to [illegible]uate Metric 2B. Record evidence for each que[illegible] and rate Metric 2B.** **(Reviewer only.)** **___x_Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Over the course of any given year of instruction, is each mathematical practice Standard meaningfully present in the form of assignments, activities, or problems that stimulate students to develop the habits of mind described in the practice Standard? Evaluate lessons, chapter/ unit assessments, and homework assignments for evidence of each mathematical practice being meaningfully present in instruction.	**Evidence-** **Standards are meaningfully present at all grade levels, age appropriate and spark interest in students.**	
Do the materials treat the practice Standards as developing across grades or grade bands? Are the practice Standards in early grades appropriately simple? Do they display an arc of growing sophistication across the grades?	**Evidence-** **Standards were developed across grade levels and increased in complexity.**	
Are there teacher-directed materials that explain the role of the practice Standards in the classroom and in students' mathematical development? Are alignments to practice Standards accurate?	**Evidence-** **On-line resources were avasilable.**	
Metric AC2C: **Materials support the Standards' emphasis on mathematical reasoning.** **How to Find the Evidence:** For context, read Criterion #10 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).		**Use the questions for Metric 2C to evaluate Metric 2C. Record evidence for each question and rate Metric 2C.** **(Reviewer only.)** **__x__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Do the materials support students in constructing viable arguments and critiquing the arguments of others concerning grade-level mathematics that is detailed in the content Standards? Read Standard for Mathematical Practice 3. Evaluate teacher and student materials to ensure that students are given opportunities to reason with grade-level mathematics.	**Evidence-** **Extended Response and Critical Thinking sections evident in all lessons.**	
Do the materials support students in producing not only answers and solutions, but also, in a grade-appropriate way, arguments, explanations, diagrams, mathematical models, etc., especially in the Major Work of the grade? Familiarize yourself with the Major Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate teacher and student materials, to understand the types of work students are expected to produce.	**Evidence-** **Extended Response and Critical Thinking sections evident in all lessons.**	

Do materials ex attend to the specialized language of mathematics? Is anguage of argument, problem solving, and mathematical explanations taught rather than assumed? Evaluate teacher and student materials, paying attention to how mathematical language is taught. NOTE: Examples of evaluating this Criterion might include looking at whether students are supported in: basing arguments on definitions; using the method of providing a counterexample; or recognizing that examples alone do not establish a general statement.	**Evidence-** **Vocabulary at the be ing of each lesson is provided. Words are intended to be used throughout the lesson.**	
Alignment Criterion 2: **Standards for Mathematical Practice** **Materials must demonstrate authentic connections between content Standards and practice Standards.** **AC2** Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 out of 6 points, the Criterion has not been met. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)** **Before moving to Alignment Criterion 3, record the final Meets or Does Not Meet rating in the Evaluation Summary.**		**(Reviewer only.)** **___x_Meets** **____Does Not Meet** **Strengths/Weaknesses:**
Alignment Criterion 3: **Access to the Standards for All Students** **Materials must provide supports for English Language Learners and other special populations.** Because Standards are for all students, alignment requires thoughtful support to ensure all students are able to meet the Standards. Thus, aligned materials must provide supports for English Language Learners and other special populations.	**Required Materials:** • Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion:** Alignment Criterion 3 is rated as Meets or Does Not Meet. To rate Alignment Criterion 3, first rate metrics 3A, 3B, and 3C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 3 if the materials earn 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as support for special population, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.

Metric AC3A **Support for English Language Learners and other special populations is thoughtful and helps those students meet the same Standards as all other students. The language in which problems are posed is carefully considered.** **How to Find the Evidence:** Evaluate teacher and student materials, paying attention to supports offered for special populations.	**Evidence-** Support for ELL and special populations is evident. (ELL support guide, Spanish and English letters for home provided along with progress monitoring. Building Blocks also in Spanish.)	**Reviewer only.)** **__x__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Metric AC3B: **Materials provide appropriate level and type of scaffolding, differentiation, intervention, and support for a broad range of learners with gradual removal of supports, when needed, to allow students to demonstrate their mathematical understanding independently.** **How to Find the Evidence:** Evaluate teacher and student materials, paying attention to whether materials provide differentiation that will lead all learners to engage with on-grade-level content.	**Evidence-** Differentiation and practice in each lesson.	**Reviewer only.)** **__x__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Metric AC3C: **Design of lessons recommends and facilitates a mix of instructional approaches for a variety of learners such as using multiple representations (e.g., including models, using a range of questions, checking for understanding, flexible grouping, pair-share).** **How to Find the Evidence:** Evaluate teacher materials, noting instructional approaches suggested for whole class and differentiated lessons and activities.	**Evidence-** Design of lessons pushes students to demonstrate understanding in a variety of ways including oral, written, and discussion. Also hands-on games, etc.	**Reviewer only.)** **__x__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**

Alignment Criterion 3: Access to the Standards for All Students **Materials must provide supports for English Language Learners and other special populations.** **AC3** Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 points, the Criterion has not been met. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion.**(Reviewer only.)** **Move to the Evaluation Summary and record the final Meets or Does Not Meet rating .**	**(Reviewer only.)** **__x__Meets** **____Does Not Meet** **Strengths/Weaknesses:**

Once an evaluation for alignment to the Shifts and major features of the CCSS has been conducted using Sections 1-3, it's important to evaluate for overall quality and best practices. A starting list of Indicators of Quality are suggested below. States, districts and others evaluating instructional materials are encouraged to add to this list to ensure materials reflect local contexts. For background information on some of the Indicators of Quality in this section, refer to pp.18–21 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).

Indicators of Quality	Evidence- Give specific examples.	Rating: (Reviewers only.)
1. Lessons are thoughtfully structured and support the teacher in leading the class through the learning paths at hand, with active participation by all students in their own learning and in the learning of their classmates.	**Evidence-** **Each lesson provides an easy to use format for the teacher to follow. The components of the lesson are warm-up, engage, reflect, and assess encourages active participation from all students.**	**(Reviewer only.)** **____x__ Yes** **_____ No**
2. The underlying design of the materials includes both problems and exercises. (In solving problems, students learn new mathematics, whereas in working exercises, students apply what they have already learned to build mastery.) Each problem or exercise has a purpose. **NOTE: This Criterion does not require that the problems and exercises be labeled as such.**	**Evidence-** **In the Engage section students develop new concepts and then they practice their new learning.**	**(Reviewer only.)** **____x__ Yes** **_____ No**

3. Design of assignments is not haphazard: exercises are given in intentional sequences in order to strengthen students' mathematical understanding.	Evidence- Knowledge and placement tests are given and program consists of 5 six-week lessons per grade level.	(Reviewer only.) ____x__ Yes _____ No
4. There are separate teacher materials that support and reward teacher study including, but not limited to: discussion of the mathematics of the units and the mathematical point of each lesson as it relates to the organizing concepts of the unit, discussion on student ways of thinking and anticipating a variety of students responses, guidance on lesson flow, guidance on questions that prompt students thinking, and discussion of desired mathematical behaviors being elicited among students.	Evidence- There is an on-line Teachers edition which includes a discussion board and interactive models and professional development to support the teacher	(Reviewer only.) _____x_ Yes _____ No
5. Manipulatives suggested in the materials are faithful representations of the mathematical objects they represent and are connected to written methods.	Evidence- Manipulatives provided were appropriate for the grade level and promoted connections to written methods. Materials needed are clear and listed at the beginning of each lesson.	(Reviewer only.) ____x__ Yes _____ No
6. Materials include a variety of curriculum-embedded assessments. Examples include pre-, formative, summative, and self-assessment resources.	Evidence- There are entry level placements tests to be given prior to beginning of program. The formal assessments given at the end of each week and informal assessments given at the end of each lesson.	(Reviewer only.) ___x___ Yes _____ No
7. Assessments contain aligned rubrics, answer keys, and scoring guidelines that provide sufficient guidance for interpreting student performance.	Evidence- The placement test guide gives instructions on how to administer and score tests. Answer keys given in the Teacher's Guide for each practice sheet.	(Reviewer only.) __x____ Yes _____ No
8. Materials assess student proficiency using methods that are accessible and unbiased, including the use of course-level language in student prompts.	Evidence- Assessments are accessible and unbiased and include the course-level language.	(Reviewer only.) ____x__ Yes _____ No

9. Materials are carefully evaluated by qualified individuals, whose names are listed, in an effort to ensure freedom from mathematical errors and course-level appropriateness.	**Evidence-** **The authors were listed on page B2-B5 of the Teacher's Guide.**	**(Reviewer only.)** **____x__ Yes** **_____ No**
10. The visual design supports students in engaging thoughtfully with the subject. Navigation through the text is clear.	**Evidence-** **Activities and pictures are engaging. Questions are age appropriate and pictures catch the attention of students.**	**(Reviewer only.)** **____x__ Yes** **_____ No**
11. The materials engage parents in appropriate ways. For example, homework assignments in elementary grades, consist of routine problems, practice with getting answers, and fluency-building exercises that parents can easily support.	**Evidence-** **Letter home provided for parents in both Spanish and English which includes easy home activities that encourage extra practice and involvement.**	**(Reviewer only.)** **_____x_ Yes** **_____ No**

Reviewer IMET Evaluation Summary Title/Level/Number Worlds Level B A

Publisher: McGraw Hill School Education, LLC Copyright: 2015

ISBN: various

Reviewer ID # BKC, DY Date Review Completed: March 8, 2016

Non-Negotiable Criteria- Each Non-Negotiable must be met in order for the Non-Negotiable Alignment Criteria to be met overall.

Non-Negotiable 1: Freedom from Obstacles to Focus	Non- Negotiable 2: Focus and Coherence
____x___ Meets _____ Does Not Meet	___x__ Meets _____ Does Not Meet

Non-Negotiable Overall:

____x_ Meets _____ Does Not Meet

Alignment Criteria- Each Alignment Criterion must be met with a sufficient number of points in order for Alignment Criteria to be labeled as "Meets" overall. The more points the materials receive on the Alignment Criteria, the better they are aligned.

Alignment Criterion 1: Rigor and Balance	Alignment Criterion 2: Standards of Mathematical Practice	Alignment Criterion 3: Access to Standards for All Learners
Points: ___6__ of 6 possible. (Materials must receive at least 5 of 6 points to align.) _____ Meets _____ Does Not Meet	Points: __6___ of 6 possible. (Materials must receive at least 5 of 6 points to align.) _____ Meets _____ Does Not Meet	Points: __6___ of 6 possible. (Materials must receive at least 5 of 6 points to align.) _____ Meets _____ Does Not Meet

Alignment Criteria Overall:

__x___ Meets _____ Does Not Meet

If the mater[illegible] meet both Non-Negotiables and relevant Alignment C[illegible]ion, they are aligned to the Shifts and major features o[illegible]e Core Standards. **[illegible] the materials meet every Non-Negotiable and Alig[illegible]ent Criterion? __x___ Yes _____ No**

What are the specific areas of strength and weakness based on this evaluation? Publishers or others modifying or developing assessments can use this information to make improvements and/or to remedy gaps in the alignment of assessment materials.

2015-16 Mathematics Interim Review Recommendation & Summary

Publisher Name:	McGraw Hill School Education, LLC
Title:	Number Worlds - Level B
ISBN #	various
Grade Level(s) or Course:	Level B
Reviewer ID:	BKC, DY

RECOMMENDED AS:

_____**Core Mathematics Program-** a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials. Substantial evidence clearly supports the designation of this program as Core.

_____**Other Mathematics Program-** a program that substantially, but partially, meets the focus, *coherence and rigor of the Idaho Core Mathematics Standards, with some need for* supplemental materials. Substantial evidence clearly supports the designation of this program as Other.

_____**Component Mathematics Program-** a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs. Substantial evidence clearly supports the designation of this program as Component.

_____x___**Intervention Program-** a program designed and intended to target and support students' specific needs. Substantial evidence clearly supports the designation of this program as Intervention.

_____ **Does not meet criteria** for recommendation as a Curricular Material or Online Resource for Mathematics.

EVIDENCE SUMMARY:

FOCUS-
No skills are assessed before they are taught to students.

COHERENCE-
Materials do focus coherently on the Major Work of the grade level.

RIGOR-
Program offers many opportunities to practice skills through lessons, activities , assessments and projects.

CONCEPTUAL UNDERSTANDING-
Program offers opportunities for students to reflect on their learning and explain their thinking.

MATHEMATICAL PRACTICES-
The mathematical practices are embedded in all activites.

ACCESSIBILITY OF STANDARDS TO ALL STUDENTS-
Differentiation and practice in every lesson is evident. Students are supported to demonstrate their learning in a variety of ways.

OTHER:
Vocabulary flash cards are available to purchase, however, this is not a necessity to the success of the program.

2015-16 Interim Mathematics Review

Mathematics Evaluation Tool Grades K-8

Publisher: McGraw Hill School Education, LLC

Title of Material: Number Worlds - Level B

Author: Griffin

ISBN #: various **Copyright** 2015

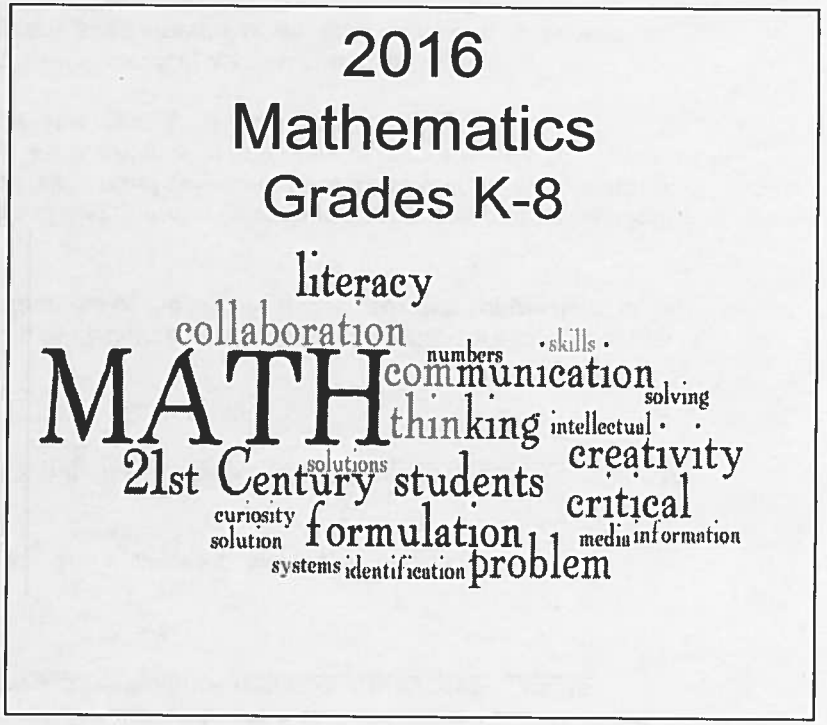
Reviewer ID: BKC, DY

Core Mathematics Program- a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Core.

Other Mathematics Program- a program that substantially, but partially, meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Other.

Component Mathematics Program- a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs.
Substantial evidence clearly supports the designation of this program as Component.

Intervention Program- a program designed and intended to target and support students' specific needs.
Substantial evidence clearly supports the designation of this program as Intervention.



- Evaluation Form adapted from Instructional Materials Evaluation Toolkit (IMET).

The IMET was developed by Student Achievement Partners. Educators may use or adapt. http://creativecommons.org/licenses/by/3.0/ Download this tool at http://achievethecore.org/IMET

Instructional Materials Evaluation Tool
Mathematics, Grades K-8

What Are the Purposes of the IMET?

This Math IMET is designed to help educators determine whether instructional materials are aligned to the Shifts and major features of the Common Core State Standards (CCSS). The substantial instructional Shifts (http://www.corestandards.org/other-resources/key-shifts-inmathematics/) at the heart of the Common Core State Standards are:

- **Focus** strongly where the Standards focus
- **Coherence**: Think across grades and link to major topics within the grade
- **Rigor**: In major topics, pursue conceptual understanding, procedural skill and fluency, and application with equal intensity.

The IMET draws directly from the following documents:

- Common Core State Standards for Mathematics (www.corestandards.org/Math)
- Publishers' Criteria for the Common Core State Standards in Mathematics grade K-8 (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)

When to use the IMET

1. Purchasing materials: Many factors go into local purchasing decisions. Alignment to the Standards is a critical factor to consider. This tool is designed to evaluate alignment of instructional materials to the Shifts and the major features of the CCSS. It also provides suggestions of additional indicators to consider in the materials evaluation and purchasing process.

2. Evaluating materials currently in use: The IMET can be used to analyze the degree of alignment of existing materials and help to highlight specific, concrete flaws in alignment. Even where materials and tools currently in use fail to meet one or more of these criteria, the pattern of failure is likely to be informative. States and districts can use the evaluation to create a thoughtful plan to modify or combine existing resources in such a way that students' actual learning experiences approach the focus, coherence, and rigor of the Standards.

3. Developing programs: Those developing new programs can use this tool as guidance for creating aligned curricula.
Please note this tool was designed for evaluating comprehensive curricula (including any supplemental or ancillary materials), but it was not designed for the evaluation of standalone supplemental materials.

Who Uses the IMET?

Evaluating instructional materials requires both subject-matter and pedagogical expertise. Evaluators should be well versed in the Standards (www.corestandards.org/Math) for all grades in which materials are being evaluated. This includes understanding the Major Work of the grade (www.achievethecore/focus), the Supporting and Additional work, how the content fits into the progressions in the Standards (www.achievethecore.org/progressions), and the expectations of the Standards with respect to conceptual understanding, procedural skill and fluency, and application. Evaluators also should be familiar with the substantial instructional Shifts (http:// www.corestandards.org/other-resources/key-shifts-in-mathematics/) of Focus, Coherence and Rigor that are listed above.

Getting Started
Prior to Evaluation

Assemble all of the materials necessary for the evaluation. It is essential for evaluators to have materials for all grades covered by the program, as some criteria cannot be rated without having access to each grade. In addition, each evaluator should have a reference copy of the Common Core State Standards for Mathematics (CCSSM) and the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013).

Before conducting the evaluation itself, it is important to develop a protocol for the evaluation process. The protocol should include having evaluators study the Publishers' Criteria and the IMET. It will also be helpful for evaluators to get a sense of each program overall before beginning the process. At a minimum, this would include reading the front matter of the text, looking at the table of contents and paging through multiple chapters.

Sections 1-3 below should be completed to produce a comprehensive picture of the strengths and weaknesses of the materials under evaluation. Information about areas in need of improvement or supplementation should be shared with internal and external stakeholders.

Navigating the Tool

Begin with Section 1: Non-Negotiable Alignment Criteria

- The Non-Negotiable Alignment Criteria must each be met in full for materials to be considered aligned to the Shifts and the major features of the Common Core State Standards. Each Non-Negotiable Alignment Criterion has one or more metrics associated with it; every one of these metrics must be met in order for the criterion as a whole to be met.

- Examine the relevant materials and use evidence to rate the materials against each criterion and its associated metric(s).

- Record and explain the evidence upon which the rating is based.

Continue to Section 2: Alignment Criteria

- The Alignment Criteria must each be met for materials to be considered aligned to the Shifts and the major features of the Common Core State Standards. Each Alignment Criterion has one or more metric associated with it; a specific number of these metrics must be met or partially met in order for the criterion as a whole to be met.

- Examine the materials in relation to these criteria, assigning each metric a point value. Rate the criterion as "Meets" or "Does Note Meet" based on the number of points assigned. The more points the materials receive on the alignment Criteria, the better they are aligned.

Record and explain the evidence upon which the rating is based.

Proceed to Section 4: Indicators of Quality

- Indicators of Quality are important considerations that will help evaluators better understand the overall quality of instructional materials. These considerations are not criteria for alignment to the CCSS, but they provide valuable information about additional program characteristics. Evaluators may want to add their own indicators to the examples provided.

Directions for Non-Negotiable 1

Freedom from Obstacles to Focus

Criterion	Evidence- Give specific examples.	Rating: (Reviewer only.)
Non-Negotiable 1: **Freedom from Obstacles to Focus** **Materials must reflect the content architecture of the Standards by not assessing the topics named before the grade level where they first appear in the Standards.** The Standards foster students' progress to algebra by focusing strongly on arithmetic. Consistent with this focus, certain topics from outside of arithmetic appear only in later grades. Thus, to be aligned, materials must reflect the content architecture of the Standards by not assessing the topics named before the grade level where they first appear in the Standards. In this criterion, "topics named" means the topics that are explicitly named in Metric 1A. No other topics should be added to the list in Metric 1A. (Note that other topics in the standards are addressed in criterion NN2.)	**Required Materials** • Common Core State Standards for Mathematics (www.corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf) • From the materials being evaluated: teacher guides and all assessment components	**Rating this Criterion:** Non-Negotiable 1 is rated as Meets or Does Not Meet. To rate Non-Negotiable 1, begin by rating Metric 1A. Since Metric 1A is the only metric for Non-Negotiable 1, the rating for Non-Negotiable 1 is the same as the rating for Metric 1A. If Metric 1A is rated as Does Not Meet, include evidence of when the named topic(s) is/are assessed. If the metric is rated as Meets, list the grade(s) examined in the evaluation.

Metric NN1A **Materials re[illegible] the basic architecture of the Standards by not assessing the listed topics before the grade level indicated.** • Probability, including chance, likely outcomes, probability models. (Introduced in the CCSSM in grade 7) • Statistical distributions, including center, variation, clumping, outliers, mean, median, mode, range, quartiles; and statistical association or trends, including two-way tables, bivariate measurement data, scatter plots, trend line, line of best fit, correlation. (Introduced in the CCSSM in grade 6) • Similarity, congruence, or geometric transformations. (Introduced in the CCSSM in grade 8) • Symmetry of shapes, including line/ reflection symmetry, rotational symmetry. (Introduced in the CCSSM in grade 4) **How to Find the Evidence:** Evaluate the table of contents, all chapter tests, all unit tests, and other such assessment components (including rubrics). For context, read Criterion #2 from the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013). NOTE: Grade alignments of other topics are addressed in Non-Negotiable 2, Focus and Coherence.) In this criterion, "topics named" means the topics that are explicitly named in Metric 1A. No other topics should be added to the list in Metric 1A. (Note that other topics in the standards are addressed in criterion NN2.)	**Evidence-** **No skills were asse[illegible] prior to teaching the standards. Program [illegible]esigned as an intervention program.**	**(Reviewer only.)** **___x_Meets** **____Does Not Meet**
Non-Negotiable 1: Materials must reflect the content architecture of the Standards by not assessing the topics named* before the grade level where they first appear in the Standards. **NN 1** If Metric 1A was rated as Meets, then rate Non-Negotiable 1 as Meets. If Metric 1A was rated as Does Not Meet, then rate Non- Negotiable 1 as Does Not Meet. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion.**(Reviewer only.)** **Before moving to Non-Negotiable 2, record the final Meets or Does Not Meet rating in the Evaluation Summary.**		**(Reviewer only.)** **__x__Meets** **____Does Not Meet** **Strengths/Weaknesses:**

Directions for Non-Negotiable 2

Focus and Coherence

Non-Negotiable 2: **Focus and Coherence** **Materials must focus coherently on the Major Work of the grade in a way that is consistent with the progressions in the Standards.** Focus and coherence are the two major evidence-based design principles of the Common Core State Standards for Mathematics (CCSSM, p. 3). Focus is necessary in order to fulfill the ambitious promise the states have made to their students by adopting the Standards: greater achievement at the college and career ready level; greater depth of understanding of mathematics; and a rich classroom environment in which reasoning, sense-making, applications, and a range of mathematical practices flourish. In simpler terms, a mile-wide, inch-deep curriculum translates to less time per topic. Less time means less depth and moving on without many students. Thus, materials must focus coherently on the Major Work of the grade in a way that is consistent with the progressions in the Standards.	**Required Materials** • Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf) • Focus by Grade Level for the grade being evaluated (www.achievethecore.org/focus) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion:** Non-Negotiable 2 is rated as Meets or Does Not Meet. To rate Non-Negotiable 2, first rate metrics 2A–2H. Each of these eight metrics must be rated as Meets in order for Non-Negotiable 2 to be rated as Meets. Rate each metric 2A-2H as Meets or Does Not Meet/Insufficient Evidence. If the evidence examined shows that the Criterion is met, then mark the Criterion Meets. If the evidence examined shows that the Criterion is not met—or if there is insufficient evidence to make a determination—then mark the Criterion as Does Not Meet/Insufficient Evidence. Support all ratings with evidence.
Metric NN2A: **In each grade K–8, students and teachers using the materials as designed devote the large majority of time to the Major Work of the grade.** **How to Find the Evidence:** Familiarize yourself with the Major Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, lessons, homework assignments, and assessments. (Evaluate both student and teacher materials.) Consider time spent on the Major Work of the grade and judge qualitatively whether students and teachers using the materials as designed will devote the large majority of time to the Major Work of the grade. For context, read Criterion #1 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013)	**Evidence-** **28 of the 32 weeks covered the major works for Kindergarten.** **Placement assessments to be given to students.**	**(Reviewer only.)** **___x_Meets** **____Does Not Meet/** **Insufficient Evidence**

Metric NN2B **Supporting Work, where present, enhances focus and coherence simultaneously by also engaging students in the Major Work of the grade.** **How to Find the Evidence:** Familiarize yourself with the Major Work and Supporting Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate chapters and lessons that focus on Supporting Work. NOTE: Example of evaluating this Criterion might include looking at whether materials for K–5 generally treat data displays as an occasion for solving grade-level word problems using the four operations (e.g., see 3.MD.B.3); or whether materials for grade 7 take advantage of opportunities to use probability to support ratios, proportions, and percentages. For context, read Criterion #3 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** **The vast amount of program is aimed to center on the clusters for grade level because it is an intervention program.**	(Reviewer only.) **__x__Meets** **____Does Not Meet/ Insufficient Evidence**
Metric NN2C: **Materials base content progressions on the grade-by-grade progressions in the Standards. Content from previous or future grades does not unduly interfere with or displace on-grade-level content.** **How to Find the Evidence:** Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, and lessons in both student and teacher materials. NOTE: In some cases it may be possible that aligned materials might address some aspects of a topic in a strategic way before or after the grade level in which the topic is central in the Standards' progressions; for example, a curriculum author might purposefully choose to explore adding fractions with unlike denominators in a way appropriate to grade four, recognizing that this work is not really required until the next grade. However, any such purposeful discrepancies in content progressions should enhance the required learning in each grade; not unduly interfere with or displace grade-level content; and be clearly aimed at helping students meet the Standards as written rather than effectively rewriting the progressions in the Standards. And in all cases, note that Non-Negotiable 1 must be met for materials to be aligned. For context, read Criterion #5a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** **Content from previous of future grades not interfere with grade level content**	(Reviewer only.) **___x_Meets** **____Does Not Meet/ Insufficient Evidence**

Metric NN2D **Materials gi[illegible] students extensive work with on-grade-level problems.** **How to Find the Evidence:** Evaluate both student and teacher materials. If the materials provide resources for differentiated learning, consider whether lower-performing students have opportunities to engage with grade-level problems. Also consider whether higher-performing students are given opportunities to learn current grade-level content in greater depth. For context, read Criterion #5b in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** **On grade level prob[illegible]s are the main focus in the "engage" step grade level problems are given. There was differentiated instruction for each lesson. "If...then" statements given to help teachers with scaffolding.**	(Reviewer only.) __x__Meets ____Does Not Meet/ Insufficient Evidence
Metric NN2E: **Materials relate on-grade-level concepts explicitly to prior knowledge from earlier grades.** **How to Find the Evidence:** Evaluate both student and teacher materials. NOTE: Examples of evaluating this Criterion might include looking at the way the materials extend basic ideas of place value across the decimal point; or the role that properties of operations play when the materials extend arithmetic beyond whole numbers to fractions, variables, and expressions. More generally, cluster headings in the Standards sometimes signal key moments where reorganizing and extending previous knowledge is important in order to accommodate new knowledge (e.g., see cluster headings that use the phrase "Apply and extend previous understanding"). For context, read Criterion #5c in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** **Placement test shows teachers where to place students within the program.**	(Reviewer only.) ___x_Meets ____Does Not Meet/ Insufficient Evidence
Metric NN2F: **Review of material from previous grades is clearly identified as such to the teacher, and teacher and students can see what their specific responsibility is for the current year.** **How to Find the Evidence:** Evaluate the table of contents, but do not stop there; also evaluate units, chapters, lessons, homework assignments and assessments. (Evaluate both student and teacher materials.) Identify any content from previous grades and check whether it is identified as such. For context, read Criterion #5a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** **Standards are clearly shown the teacher know grade level or standard for the skill, CCSS, utilizing "Skills Trace" in Teaching for Understanding.**	(Reviewer only.) __x__Meets ____Does Not Meet/ Insufficient Evidence

Metric NN2 **Materials inc[illegible]e learning objectives that are visibly shaped by CCSSM cluster headings.** **How to Find the Evidence:** Select several clusters from the Major Work in the grade being evaluated. Evaluate teacher and student materials in relation to these clusters. For context, read Criterion #6a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** **Unit overview provi[illegible]objective and standards for the week and again in the daily plan.**	**(Reviewer only.)** **_x___Meets** **____Does Not Meet/ Insufficient Evidence**
Metric NN2H: **Materials include problems and activities that serve to connect two or more clusters in a domain, or two or more domains in a grade, in cases where these connections are natural and important.** **How to Find the Evidence:** In the grade being evaluated, choose two or more clusters or two or more domains for which connections are natural and important. Evaluate the units, chapters, and lessons that deal with the chosen topics, looking for problems and activities that serve to connect the chosen clusters or domains. NOTE: An example of evaluating this Criterion might include looking at whether problems in grade 4 sometimes or often involve students applying their developing computation skills (detailed in domain NBT) in the context of solving word problems (detailed in domain OA). For context, read Criterion #6b in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** **Every 4 weeks standards learned combined for Project Based Learning to help deepen understanding for the concepts learned. Some projects cover two domains and some covered 2-3 clusters.**	**(Reviewer only.)** **__x__Meets** **____Does Not Meet/ Insufficient Evidence**
Non-Negotiable 2: **Focus and Coherence** **Materials must focus coherently on the Major Work of the grade in a way that is consistent with the progressions in the Standards.** NN 2 If all Metrics 2A – 2H were rated as Meets, then rate Non-Negotiable 2 as Meets. If one or more Metric was rated Does Not Meet/Insufficient Evidence, then rate Non-Negotiable 2 as Does Not Meet. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)** **Before moving to Alignment Criterion 1, record the final Meets or Does Not Meet rating in the Evaluation Summary.**		**(Reviewer only.)** **___x_Meets** **____Does Not Meet** **Strengths/Weaknesses:**

Now continue by evaluating the Alignment Criterion 1 for Rigor and Balance.

Directions for Alignment Criterion 1

Rigor and Balance

Alignment Criterion 1: Rigor and Balance **Materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.** The Standards set expectations for attention to all three aspects of rigor: conceptual understanding, procedural skill and fluency, and applications. Thus, materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.	**Required Materials** • Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf) • Focus by Grade Level for the grade being evaluated (achievethecore.org/focus) • Situation Types for the Operations in Word Problems (achievethecore.org/situation-types) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion:** Alignment Criterion 1 is rated as Meets or Does Not Meet. To rate Alignment Criterion 1, first rate metrics 1A, 1B, and 1C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). For each metric, guiding questions are provided to aid in gathering evidence. Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 1 if the materials rate 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as rigor and balance, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.
Metric AC1A: **The materials support the development of students' conceptual understanding of key mathematical concepts, especially where called for in specific content Standards or cluster headings.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Major Work for the grade being evaluated that relate specifically conceptual understanding to use throughout the questions associated with this metric. NOTE: Some examples of clusters or Standards that call for conceptual understanding include: K.OA.A.1, (1.NBT.B, 1.NBT.C), (2.NBT.A, 2.NBT.B), (3.OA.A.1, 3.OA.A.2), 4.NF.A, (4.NBT.A, 4.NBT.B), 5.NF.B, (5.NBT.A, 5.NBT.B), 6.RP.A, 6.EE.A.3, 7.NS.A, 7.EE.A, 8.EE.B, 8.F.A, 8.G.A Clusters or Standards grouped by parentheses are closely connected and could be analyzed together. For context, read Criterion #4a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	-Choose a cluster/Standard from the Major Work that is aligned to each aspect of rigor and use it to evaluate these metrics. It is most helpful if the same clusters/Standards are chosen for all of the programs being evaluated. (Guidance in choosing clusters/Standards is included in "How to Find the Evidence".)	**Use the questions for AC Metric 1A to evaluate Metric 1A. Record evidence for each question and rate Metric 1A.** **____Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**

Is conceptual understanding attended to thoroughly where the Standards set expectations for understanding or interpreting? Evaluate lessons, chapter/unit assessments and homework assignments, paying attention to work aligned to Standards that explicitly call for understanding or interpreting. NOTE: Examples of evaluating this Criterion might include looking at how well the multi-digit addition and subtraction algorithms are developed and explained on the basis of place value and properties of operations; or how well the multi-digit multiplication and division algorithms are developed and explained on the basis of place value and properties of operations; or how well solving equations is presented and explained as a process of reasoning.	**Evidence-** Number sense as the foundation for program. 3 levels of conceptual instruction daily.	
Do the materials feature high-quality conceptual problems and conceptual discussion questions? Evaluate lessons, chapter/unit assessments, and homework assignments. NOTE: Example of conceptual problems might include such questions as "Find a number greater than 1/5 and less than 1/4," or "If the divisor does not change and the dividend increases, what happens to the quotient?"	**Evidence-** Activity cards given with questions to ask for each lesson. Reflects steps in the workbook push students to understand and explain their thinking.	
Do the materials feature opportunities to identify correspondences across mathematical representations? Evaluate lessons, chapter/unit assessments and homework assignments. NOTE: Examples of evaluating this Criterion might include looking at whether students are supported in identifying correspondences among: the verbal description of a situation, the diagrams that distill its mathematical features, and the equations that model it; or equivalent forms of numbers (e.g., 3 and 6/2) and the number line; or rational number operations and representations of them via models such as the vector model; or the expression that defines a function and the graph that shows the relationship.	**Evidence-** All lessons feature opportunities to identify correspondences across mathematical representations.	
Metric AC1B: **The materials are designed so that students attain the fluencies and procedural skills required by the Standards.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Major Work for the grade being evaluated that relate specifically to fluency and procedural skill to use throughout the questions associated with this metric. NOTE: Some examples of Standards that call for procedural skill and fluency include: K.OA.A.5, 1.OA.C.6, 2.OA.B.2, 2.NBT.B.5, 3.OA.C.7, 3.NBT.A.2, 4.NBT.B.4, 5.NBT.B.5, 6.NS.B.2, and 6.NS.B.3, 6.EE.A, 7.NS.A, 7.EE.A.1,7.EE.B.4a, 8.EE.C.7, 8.EE.C.8b For context, read Criterion #4b in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).		**Use the questions for Metric 1B to evaluate Metric 1 B. Record evidence for each question and rate Metric 1B.** **(Reviewer only.)** **___x_Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**

Is progress tow[illegible]uency and procedural skill interwoven with students' develo[illegible]conceptual understanding of the operations in question? Evaluate lessons, chapter/unit assessments, daily routines, and homework assignments for evidence that the development of fluency and procedural skill is supported by conceptual understanding.	**Evidence-** **Many opportunities f[illegible]uency practice, games, and manipulatives also algorithms included in each lesson.**	
Are purely procedural problems and exercises present that include cases in which opportunistic strategies are valuable and generic cases that require efficient algorithms present? Evaluate lessons, chapter/unit assessments, daily routines, and homework assignments. NOTE: Examples of problems in which opportunistic strategies are valuable might include the sum 698 + 240 or the system x + y = 1, 2x + 2y = 3. Examples of generic cases that require efficient algorithms might include the sum 8767+2286 or the system 6y + x = x + 3, – x = 1 + 2y.	**Evidence-** **Opportunities to use different strategies.**	
Do the materials in grades K–6 provide repeated practice toward attainment of fluency Standards? Evaluate lessons, daily routines, and homework assignments for evidence of repeated practice toward attainment of the following K–6 Standards that set an explicit expectation of fluent (accurate and reasonably fast) computation: K.OA.A.5, 1.OA.C.6, 2.OA.B.2, 2.NBT.B.5, 3.OA.C.7, 3.NBT.A.2, 4.NBT.B.4, 5.NBT.B.5, 6.NS.B.2, 6.NS.B.3.	**Evidence-** **Repeated practice and fluency in all lessons.**	
Metric AC1C: **The materials are designed so that teachers and students spend sufficient time working with engaging applications, without losing focus on the Major Work of each grade.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Major Work for the grade being evaluated that relate specifically application to use throughout the questions associated with this metric. NOTE: Some examples of clusters or Standards that call for application include: K.OA.A.2, 1.OA.A, 2.OA.A, 3.OA.A.3, 3.OA.D.8, 4.OA.A.3, 4.NF.B.3d, 4.NF.B.4c, 5.NF.B.6, 5.NF.B.7c, 6.RP.A.3, 6.NS.A.1, 6.EE.B.7, 6.EE.C.9, 7.RP.A, 7.NS.A.3, 7.EE.B.3, 8.EE.C.8c, 8.F.B For context, read Criterion #4c in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).		**Use the questions for Metric 1C to evaluate Metric 1C. Record evidence for each question and rate Metric 1C.** **(Reviewer only.)** **__x__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Are there are single- and multi-step contextual problems, including non-routine problems, that develop the mathematics of the grade, afford opportunities for practice, and engage students in problem solving? Do the problems attend thoroughly to those places in the content Standards where expectations for multi-step and real-world problems are explicit? Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** **Many opportunities for multi-step word problems and extended response questions. Students need critical thinking to solve problems.**	

Do application problems particularly stress applying the Major Work of the grade? Evaluate lessons, chapter/unit assessments, and homework assignments. NOTE: Examples of evaluating this Criterion might include looking at: how well, by the end of grade 2, students using the materials as designed can represent and solve a full range of one-step addition and subtraction word problems; or how well, by the end of grade 3, students using the materials as designed can represent and solve a full range of one-step multiplication and division word problems; or how well these basic situation types for each operation are carried coherently across the grades, (e.g., with fractions and algebraic expressions); or, in all grades, whether the problems connect concepts, Standards, and domains in ways that are natural and important. For a list of situation types for one-step addition, subtraction, multiplication, and division problems, see Situation Types for the Operations in Word Problems	**Evidence-** **Focus is on standards of the Major Works and since it was an intervention program it is preparing students to be on grade level.**	
Does modeling build slowly across K–8, with applications that are relatively simple in earlier grades and when students are encountering new content? In grades 6–8, do the problems begin to provide opportunities for students to make their own assumptions or simplifications in order to model a situation mathematically? Read Standard for Mathematical Practice 4, Model with Mathematics. Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** Modeling builds appropriately for grade level, giving students multiple opportunities for use of hands-on and virtual manipulatives.	

Alignment Criterion 1: Rigor and Balance

Materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.

AC1 Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 out of 6 points, the Criterion has not been met. Check the final rating.
Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)**

Before moving to Alignment Criterion 2, record the final Meets or Does Not Meet rating in the Evaluation Summary.

(Reviewer only.)

___x_Meets

____Does Not Meet

Strengths/Weaknesses:

Directions for Alignment Criterion 2

Standards for Mathematical Practice

Alignment Criterion 2: Standards for Mathematical Practice

Materials must demonstrate authentic connections between content Standards and practice Standards.

The Standards require that designers of instructional materials connect the mathematical practices to mathematical content in instruction. Thus, materials must demonstrate authentic connections between content Standards and practice Standards.

Required Materials:

- Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf)
- Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)
- Focus by Grade Level for the grade being evaluated (www.achievethecore.org/focus)
- From the materials being evaluated: teacher guides, student texts and workbooks

Rating this Criterion

Alignment Criterion 2 is rated as Meets or Does Not Meet.

To rate Alignment Criterion 2, first rate metrics 2A, 2B, and 2C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). For each metric, guiding questions are provided to aid in gathering evidence.

Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 2 if the materials earn 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as mathematical practices, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.

Metric AC2A:

Materials address the practice Standards in such a way as to enrich the Major Work of the grade; practices strengthen the focus on Major Work instead of detracting from it, in both teacher and student materials.

How to Find the Evidence:

Familiarize yourself with the Major Work of the grade being evaluated (see the Focus by Grade Level documents.)

Evaluate teacher and student materials for evidence that the mathematical practices support and connect to the focus of the grade.

NOTE: Examples of evaluating this Criterion might include looking at whether, in grades K–5, students using the materials are supported to look for and express regularity in repeated reasoning about the addition table, the multiplication table, the properties of operations, the relationship between addition and subtraction or multiplication and division, and the place value system; or whether, in grades 6–8, students using the materials are supported to look for and express regularity in repeated reasoning about proportional relationships and linear functions.

For context, read Criterion #8 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013).

Evidence-

Materials address the practice standards which strengthen the focus of the Major Work for the grade level.

(Reviewer only.)

___x_Meets (2)

____Partially Meets (1)

____Does Not Meet (0)

Metric AC2B: **Materials attend to the full meaning of each practice Standard.** **How to Find the Evidence:** For context, read Criterion #7 and Criterion #9 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).		**Use the questions for Metric 2B to evaluate Metric 2B. Record evidence for each question and rate Metric 2B.** **(Reviewer only.)** **___x_Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Over the course of any given year of instruction, is each mathematical practice Standard meaningfully present in the form of assignments, activities, or problems that stimulate students to develop the habits of mind described in the practice Standard? Evaluate lessons, chapter/ unit assessments, and homework assignments for evidence of each mathematical practice being meaningfully present in instruction.	**Evidence-** **Standards are meaningfully present at all grade levels, age appropriate and spark interest in students.**	
Do the materials treat the practice Standards as developing across grades or grade bands? Are the practice Standards in early grades appropriately simple? Do they display an arc of growing sophistication across the grades?	**Evidence-** **Standards were developed across grade levels and increased in complexity.**	
Are there teacher-directed materials that explain the role of the practice Standards in the classroom and in students' mathematical development? Are alignments to practice Standards accurate?	**Evidence-** **On-line resources were avasilable.**	
Metric AC2C: **Materials support the Standards' emphasis on mathematical reasoning.** **How to Find the Evidence:** For context, read Criterion #10 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).		**Use the questions for Metric 2C to evaluate Metric 2C. Record evidence for each question and rate Metric 2C.** **(Reviewer only.)** **__x__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Do the materials support students in constructing viable arguments and critiquing the arguments of others concerning grade-level mathematics that is detailed in the content Standards? Read Standard for Mathematical Practice 3. Evaluate teacher and student materials to ensure that students are given opportunities to reason with grade-level mathematics.	**Evidence-** **Extended Response and Critical Thinking sections evident in all lessons.**	
Do the materials support students in producing not only answers and solutions, but also, in a grade-appropriate way, arguments, explanations, diagrams, mathematical models, etc., especially in the Major Work of the grade? Familiarize yourself with the Major Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate teacher and student materials, to understand the types of work students are expected to produce.	**Evidence-** **Extended Response and Critical Thinking sections evident in all lessons.**	

Do materials explicitly attend to the specialized language of mathematics? Is the language of argument, problem solving, and mathematical explanations taught rather than assumed? Evaluate teacher and student materials, paying attention to how mathematical language is taught. NOTE: Examples of evaluating this Criterion might include looking at whether students are supported in: basing arguments on definitions; using the method of providing a counterexample; or recognizing that examples alone do not establish a general statement.	**Evidence-** **Vocabulary at the beginning of each lesson is provided. Words are intended to be used throughout the lesson.**	
Alignment Criterion 2: **Standards for Mathematical Practice** **Materials must demonstrate authentic connections between content Standards and practice Standards.** **AC2** Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 out of 6 points, the Criterion has not been met. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)** **Before moving to Alignment Criterion 3, record the final Meets or Does Not Meet rating in the Evaluation Summary.**		**(Reviewer only.)** **___x_Meets** **____Does Not Meet** **Strengths/Weaknesses:**
Alignment Criterion 3: **Access to the Standards for All Students** **Materials must provide supports for English Language Learners and other special populations.** Because Standards are for all students, alignment requires thoughtful support to ensure all students are able to meet the Standards. Thus, aligned materials must provide supports for English Language Learners and other special populations.	**Required Materials:** • Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion:** Alignment Criterion 3 is rated as Meets or Does Not Meet. To rate Alignment Criterion 3, first rate metrics 3A, 3B, and 3C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 3 if the materials earn 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as support for special population, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.

Metric AC3A **Support for English Language Learners and other special populations is thoughtful and helps those students meet the same Standards as all other students. The language in which problems are posed is carefully considered.** **How to Find the Evidence:** Evaluate teacher and student materials, paying attention to supports offered for special populations.	**Evidence-** Support for ELL and special populations is evident. (ELL support guide, Spanish and English letters for home provided along with progress monitoring. Building Blocks also in Spanish.)	**Reviewer only.)** **__x__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Metric AC3B: **Materials provide appropriate level and type of scaffolding, differentiation, intervention, and support for a broad range of learners with gradual removal of supports, when needed, to allow students to demonstrate their mathematical understanding independently.** **How to Find the Evidence:** Evaluate teacher and student materials, paying attention to whether materials provide differentiation that will lead all learners to engage with on-grade-level content.	**Evidence-** Differentiation and practice in each lesson.	**Reviewer only.)** **__x__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Metric AC3C: **Design of lessons recommends and facilitates a mix of instructional approaches for a variety of learners such as using multiple representations (e.g., including models, using a range of questions, checking for understanding, flexible grouping, pair-share).** **How to Find the Evidence:** Evaluate teacher materials, noting instructional approaches suggested for whole class and differentiated lessons and activities.	**Evidence-** Design of lessons pushes students to demonstrate understanding in a variety of ways including oral, written, and discussion. Also hands-on games, etc.	**Reviewer only.)** **__x__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**

Alignment Criterion 3: Access to the Standards for All Students **Materials must provide supports for English Language Learners and other special populations.** AC3 Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 points, the Criterion has not been met. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion.**(Reviewer only.)** **Move to the Evaluation Summary and record the final Meets or Does Not Meet rating .**	**(Reviewer only.)** **__x__Meets** **____Does Not Meet** **Strengths/Weaknesses:**

Once an evaluation for alignment to the Shifts and major features of the CCSS has been conducted using Sections 1-3, it's important to evaluate for overall quality and best practices. A starting list of Indicators of Quality are suggested below. States, districts and others evaluating instructional materials are encouraged to add to this list to ensure materials reflect local contexts. For background information on some of the Indicators of Quality in this section, refer to pp.18–21 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).

Indicators of Quality	Evidence- Give specific examples.	Rating: (Reviewers only.)
1. Lessons are thoughtfully structured and support the teacher in leading the class through the learning paths at hand, with active participation by all students in their own learning and in the learning of their classmates.	**Evidence-** **Each lesson provides an easy to use format for the teacher to follow. The components of the lesson are warm-up, engage, reflect, and assess encourages active participation from all students.**	**(Reviewer only.)** **____x__ Yes** **_____ No**
2. The underlying design of the materials includes both problems and exercises. (In solving problems, students learn new mathematics, whereas in working exercises, students apply what they have already learned to build mastery.) Each problem or exercise has a purpose. **NOTE: This Criterion does not require that the problems and exercises be labeled as such.**	**Evidence-** **In the Engage section students develop new concepts and then they practice their new learning.**	**(Reviewer only.)** **____x__ Yes** **_____ No**

3. Design of assignments is not haphazard: exercises are given in intentional sequences in order to strengthen students' mathematical understanding.	Evidence- Knowledge and placement tests are given and program consists of 5 six-week lessons per grade level.	(Reviewer only.) ____x__ Yes _____ No
4. There are separate teacher materials that support and reward teacher study including, but not limited to: discussion of the mathematics of the units and the mathematical point of each lesson as it relates to the organizing concepts of the unit, discussion on student ways of thinking and anticipating a variety of students responses, guidance on lesson flow, guidance on questions that prompt students thinking, and discussion of desired mathematical behaviors being elicited among students.	Evidence- There is an on-line Teachers edition which includes a discussion board and interactive models and professional development to support the teacher	(Reviewer only.) _____x_ Yes _____ No
5. Manipulatives suggested in the materials are faithful representations of the mathematical objects they represent and are connected to written methods.	Evidence- Manipulatives provided were appropriate for the grade level and promoted connections to written methods. Materials needed are clear and listed at the beginning of each lesson.	(Reviewer only.) ____x__ Yes _____ No
6. Materials include a variety of curriculum-embedded assessments. Examples include pre-, formative, summative, and self-assessment resources.	Evidence- There are entry level placements tests to be given prior to beginning of program. The formal assessments given at the end of each week and informal assessments given at the end of each lesson.	(Reviewer only.) ___x___ Yes _____ No
7. Assessments contain aligned rubrics, answer keys, and scoring guidelines that provide sufficient guidance for interpreting student performance.	Evidence- The placement test guide gives instructions on how to administer and score tests. Answer keys given in the Teacher's Guide for each practice sheet.	(Reviewer only.) __x____ Yes _____ No
8. Materials assess student proficiency using methods that are accessible and unbiased, including the use of course-level language in student prompts.	Evidence- Assessments are accessible and unbiased and include the course-level language.	(Reviewer only.) ____x__ Yes _____ No

9. Materials are carefully evaluated by qualified individuals, whose names are listed, in an effort to ensure freedom from mathematical errors and course-level appropriateness.	**Evidence-** **The authors were listed on page B2-B5 of the Teacher's Guide.**	**(Reviewer only.)** **____x__ Yes** **_____ No**
10. The visual design supports students in engaging thoughtfully with the subject. Navigation through the text is clear.	**Evidence-** **Activities and pictures are engaging. Questions are age appropriate and pictures catch the attention of students.**	**(Reviewer only.)** **____x__ Yes** **_____ No**
11. The materials engage parents in appropriate ways. For example, homework assignments in elementary grades, consist of routine problems, practice with getting answers, and fluency-building exercises that parents can easily support.	**Evidence-** **Letter home provided for parents in both Spanish and English which includes easy home activities that encourage extra practice and involvement.**	**(Reviewer only.)** **_____x_ Yes** **_____ No**

Reviewer IMET Evaluation Summary Title/Level Number Worlds Level B

Publisher: McGraw Hill School Education, LLC Copyright: 2015

ISBN: various

Reviewer ID # BKC, DY Date Review Completed: March 8, 2016

Non-Negotiable Criteria- Each Non-Negotiable must be met in order for the Non-Negotiable Alignment Criteria to be met overall.

Non-Negotiable 1: Freedom from Obstacles to Focus	Non- Negotiable 2: Focus and Coherence
____x___ Meets _____ Does Not Meet	___x__ Meets _____ Does Not Meet

Non-Negotiable Overall:

____x_ Meets _____ Does Not Meet

Alignment Criteria- Each Alignment Criterion must be met with a sufficient number of points in order for Alignment Criteria to be labeled as "Meets" overall. The more points the materials receive on the Alignment Criteria, the better they are aligned.

Alignment Criterion 1: Rigor and Balance	Alignment Criterion 2: Standards of Mathematical Practice	Alignment Criterion 3: Access to Standards for All Learners
Points: ___6__ of 6 possible. (Materials must receive at least 5 of 6 points to align.) _____ Meets _____ Does Not Meet	Points: __6___ of 6 possible. (Materials must receive at least 5 of 6 points to align.) _____ Meets _____ Does Not Meet	Points: __6___ of 6 possible. (Materials must receive at least 5 of 6 points to align.) _____ Meets _____ Does Not Meet

Alignment Criteria Overall:

__x___ Meets _____ Does Not Meet

If the materials meet both Non-Negotiables and relevant Alignment Criterion, they are aligned to the Shifts and major features of the Core Standards. **Do the materials meet every Non-Negotiable and Alignment Criterion? __x___ Yes _____ No**

What are the specific areas of strength and weakness based on this evaluation? Publishers or others modifying or developing assessments can use this information to make improvements and/or to remedy gaps in the alignment of assessment materials.

2015-16 Mathematics Interim Review Recommendation & Summary

Publisher Name:	McGraw Hill School Education, LLC
Title:	Number Worlds - Level C
ISBN #	various
Grade Level(s) or Course:	Level C
Reviewer ID:	KC, DY

RECOMMENDED AS:

_____**Core Mathematics Program-** a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials. Substantial evidence clearly supports the designation of this program as Core.

_____**Other Mathematics Program-** a program that substantially, but partially, meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for supplemental materials. Substantial evidence clearly supports the designation of this program as Other.

_____**Component Mathematics Program-** a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs. Substantial evidence clearly supports the designation of this program as Component.

_____x___**Intervention Program-** a program designed and intended to target and support students' specific needs. Substantial evidence clearly supports the designation of this program as Intervention.

_____ **Does not meet criteria** for recommendation as a Curricular Material or Online Resource for Mathematics.

EVIDENCE SUMMARY:

FOCUS-
Most skills are assessed before they are taught to students.

COHERENCE-
Materials do not focus coherently on the Major Work of the grade level.

RIGOR-
Program offers many opportunities to practice skills through lessons, activities, assessments and projects.

CONCEPTUAL UNDERSTANDING-
Program offers opportunities for students to reflect on their learning and explain their thinking.

MATHEMATICAL PRACTICES-
The mathematical practices are embedded in all activities.

ACCESSIBILITY OF STANDARDS TO ALL STUDENTS-
Differentiation and practice in every lesson is evident. Students are supported to demonstrate their learning in a variety of ways.

OTHER:
Vocabulary flash cards are available to purchase, however, this is not a necessity to the success of the program.

Focused on Major Works of Kindergarten instead of 1st grade.

2015-16 Interim Mathematics Review

Mathematics Evaluation Tool Grades K-8

Publisher: McGraw Hill School Education, LLC

Title of Material: Number Worlds - Level C

Author: Griffin

ISBN #: Various **Copyright** 2015

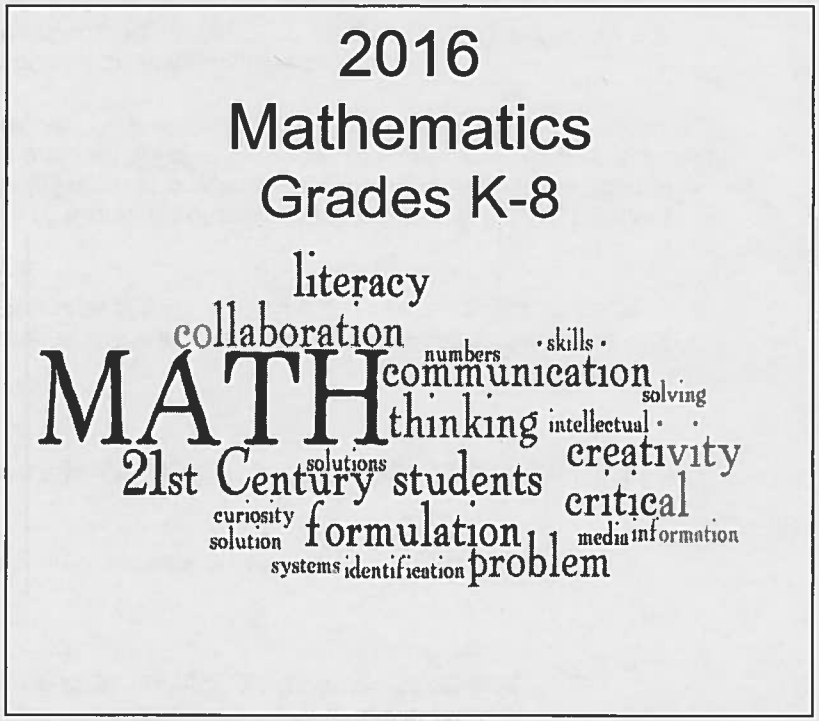
Reviewer ID: KC, DY

Core Mathematics Program- a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Core.

Other Mathematics Program- a program that substantially, but partially, meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Other.

Component Mathematics Program- a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs.
Substantial evidence clearly supports the designation of this program as Component.

Intervention Program- a program designed and intended to target and support students' specific needs.
Substantial evidence clearly supports the designation of this program as Intervention.



- Evaluation Form adapted from Instructional Materials Evaluation Toolkit (IMET).

The IMET was developed by Student Achievement Partners. Educators may use or adapt. http://creativecommons.org/licenses/by/3.0/ Download this tool at http://achievethecore.org/IMET

Instructional Materials Evaluation Tool

Mathematics, Grades K-8

What Are the Purposes of the IMET?

This Math IMET is designed to help educators determine whether instructional materials are aligned to the Shifts and major features of the Common Core State Standards (CCSS). The substantial instructional Shifts (http://www.corestandards.org/other-resources/key-shifts-inmathematics/) at the heart of the Common Core State Standards are:

- **Focus** strongly where the Standards focus
- **Coherence**: Think across grades and link to major topics within the grade
- **Rigor**: In major topics, pursue conceptual understanding, procedural skill and fluency, and application with equal intensity.

The IMET draws directly from the following documents:

- Common Core State Standards for Mathematics (www.corestandards.org/Math)
- Publishers' Criteria for the Common Core State Standards in Mathematics grade K-8 (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)

When to use the IMET

1. Purchasing materials: Many factors go into local purchasing decisions. Alignment to the Standards is a critical factor to consider. This tool is designed to evaluate alignment of instructional materials to the Shifts and the major features of the CCSS. It also provides suggestions of additional indicators to consider in the materials evaluation and purchasing process.

2. Evaluating materials currently in use: The IMET can be used to analyze the degree of alignment of existing materials and help to highlight specific, concrete flaws in alignment. Even where materials and tools currently in use fail to meet one or more of these criteria, the pattern of failure is likely to be informative. States and districts can use the evaluation to create a thoughtful plan to modify or combine existing resources in such a way that students' actual learning experiences approach the focus, coherence, and rigor of the Standards.

3. Developing programs: Those developing new programs can use this tool as guidance for creating aligned curricula.
Please note this tool was designed for evaluating comprehensive curricula (including any supplemental or ancillary materials), but it was not designed for the evaluation of standalone supplemental materials.

Who Uses the IMET?

Evaluating instructional materials requires both subject-matter and pedagogical expertise. Evaluators should be well versed in the Standards (www.corestandards.org/Math) for all grades in which materials are being evaluated. This includes understanding the Major Work of the grade (www.achievethecore/focus), the Supporting and Additional work, how the content fits into the progressions in the Standards (www.achievethecore.org/progressions), and the expectations of the Standards with respect to conceptual understanding, procedural skill and fluency, and application. Evaluators also should be familiar with the substantial instructional Shifts (http:// www.corestandards.org/other-resources/key-shifts-in-mathematics/) of Focus, Coherence and Rigor that are listed above.

Getting Started

Prior to Evaluation

Assemble all of the materials necessary for the evaluation. It is essential for evaluators to have materials for all grades covered by the program, as some criteria cannot be rated without having access to each grade. In addition, each evaluator should have a reference copy of the Common Core State Standards for Mathematics (CCSSM) and the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013).

2015-16 Interim Mathematics Review

Mathematics Evaluation Tool Grades K-8

Publisher: Mc Graw Hill School Education, LLC

Title of Material: Number Worlds – Level C

Author: Griffin

ISBN #: various **Copyright** 2015

Reviewer ID: KC,DY

Core Mathematics Program- a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Core.

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Substantial evidence clearly supports the designation of this program as Other.

Component Mathematics Program- a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs.
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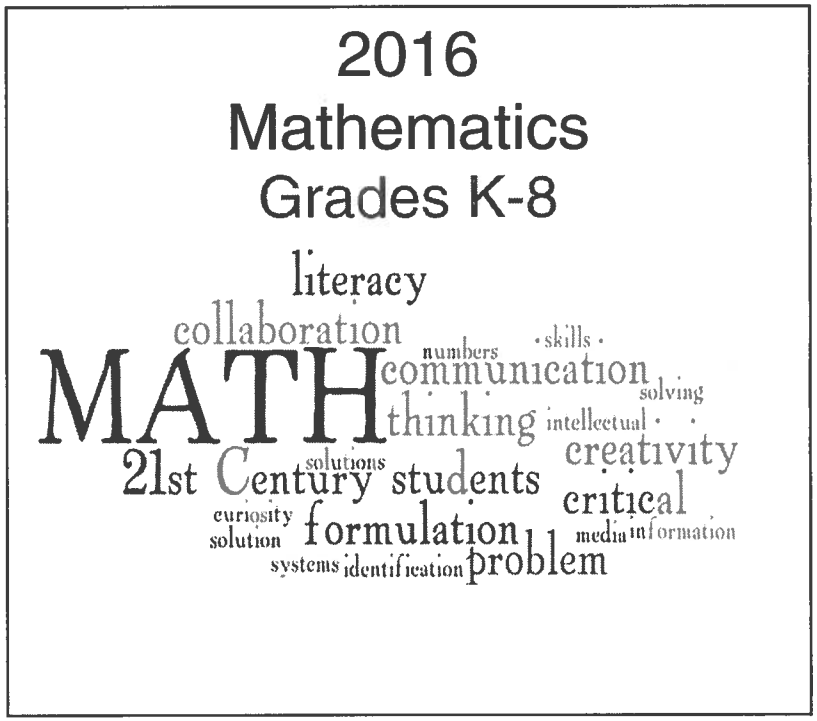
Intervention Program- a program designed and intended to target and support students' specific needs.
Substantial evidence clearly supports the designation of this program as Intervention.



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Instructional Materials Evaluation Tool

Mathematics, Grades K-8

What Are the Purposes of the IMET?

This Math IMET is designed to help educators determine whether instructional materials are aligned to the Shifts and major features of the Common Core State Standards (CCSS). The substantial instructional Shifts (http://www.corestandards.org/other-resources/key-shifts-inmathematics/) at the heart of the Common Core State Standards are:

- **Focus** strongly where the Standards focus
- **Coherence**: Think across grades and link to major topics within the grade
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- Common Core State Standards for Mathematics (www.corestandards.org/Math)
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When to use the IMET

1. Purchasing materials: Many factors go into local purchasing decisions. Alignment to the Standards is a critical factor to consider. This tool is designed to evaluate alignment of instructional materials to the Shifts and the major features of the CCSS. It also provides suggestions of additional indicators to consider in the materials evaluation and purchasing process.

2. Evaluating materials currently in use: The IMET can be used to analyze the degree of alignment of existing materials and help to highlight specific, concrete flaws in alignment. Even where materials and tools currently in use fail to meet one or more of these criteria, the pattern of failure is likely to be informative. States and districts can use the evaluation to create a thoughtful plan to modify or combine existing resources in such a way that students' actual learning experiences approach the focus, coherence, and rigor of the Standards.

3. Developing programs: Those developing new programs can use this tool as guidance for creating aligned curricula.
Please note this tool was designed for evaluating comprehensive curricula (including any supplemental or ancillary materials), but it was not designed for the evaluation of standalone supplemental materials.

Who Uses the IMET?

Evaluating instructional materials requires both subject-matter and pedagogical expertise. Evaluators should be well versed in the Standards (www.corestandards.org/Math) for all grades in which materials are being evaluated. This includes understanding the Major Work of the grade (www.achievethecore/focus), the Supporting and Additional work, how the content fits into the progressions in the Standards (www.achievethecore.org/progressions), and the expectations of the Standards with respect to conceptual understanding, procedural skill and fluency, and application. Evaluators also should be familiar with the substantial instructional Shifts (http:// www.corestandards.org/other-resources/key-shifts-in-mathematics/) of Focus, Coherence and Rigor that are listed above.

Getting Started

Prior to Evaluation

Assemble all of the materials necessary for the evaluation. It is essential for evaluators to have materials for all grades covered by the program, as some criteria cannot be rated without having access to each grade. In addition, each evaluator should have a reference copy of the Common Core State Standards for Mathematics (CCSSM) and the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013).

Before conducting the evaluation itself, it is important to develop a protocol for the evaluation process. The protocol should include having evaluators study the Publishers' Criteria and the IMET. It will also be helpful for evaluators to get a sense of each program overall before beginning the process. At a minimum, this would include reading the front matter of the text, looking at the table of contents and paging through multiple chapters.

Sections 1-3 below should be completed to produce a comprehensive picture of the strengths and weaknesses of the materials under evaluation. Information about areas in need of improvement or supplementation should be shared with internal and external stakeholders.

Navigating the Tool

Begin with Section 1: Non-Negotiable Alignment Criteria

- The Non-Negotiable Alignment Criteria must each be met in full for materials to be considered aligned to the Shifts and the major features of the Common Core State Standards. Each Non-Negotiable Alignment Criterion has one or more metrics associated with it; every one of these metrics must be met in order for the criterion as a whole to be met.

- Examine the relevant materials and use evidence to rate the materials against each criterion and its associated metric(s).

- Record and explain the evidence upon which the rating is based.

Continue to Section 2: Alignment Criteria

- The Alignment Criteria must each be met for materials to be considered aligned to the Shifts and the major features of the Common Core State Standards. Each Alignment Criterion has one or more metric associated with it; a specific number of these metrics must be met or partially met in order for the criterion as a whole to be met.

- Examine the materials in relation to these criteria, assigning each metric a point value. Rate the criterion as "Meets" or "Does Note Meet" based on the number of points assigned. The more points the materials receive on the alignment Criteria, the better they are aligned.

- Record and explain the evidence upon which the rating is based.

Proceed to Section 4: Indicators of Quality

- Indicators of Quality are important considerations that will help evaluators better understand the overall quality of instructional materials. These considerations are not criteria for alignment to the CCSS, but they provide valuable information about additional program characteristics. Evaluators may want to add their own indicators to the examples provided.

Directions for Non-Negotiable 1

Freedom from Obstacles to Focus

Criterion	Evidence- Give specific examples.	Rating: (Reviewer only.)
Non-Negotiable 1: **Freedom from Obstacles to Focus** **Materials must reflect the content architecture of the Standards by not assessing the topics named before the grade level where they first appear in the Standards.** The Standards foster students' progress to algebra by focusing strongly on arithmetic. Consistent with this focus, certain topics from outside of arithmetic appear only in later grades. Thus, to be aligned, materials must reflect the content architecture of the Standards by not assessing the topics named before the grade level where they first appear in the Standards. In this criterion, "topics named" means the topics that are explicitly named in Metric 1A. No other topics should be added to the list in Metric 1A. (Note that other topics in the standards are addressed in criterion NN2.)	**Required Materials** • Common Core State Standards for Mathematics (www.corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf) • From the materials being evaluated: teacher guides and all assessment components	**Rating this Criterion:** Non-Negotiable 1 is rated as Meets or Does Not Meet. To rate Non-Negotiable 1, begin by rating Metric 1A. Since Metric 1A is the only metric for Non-Negotiable 1, the rating for Non-Negotiable 1 is the same as the rating for Metric 1A. If Metric 1A is rated as Does Not Meet, include evidence of when the named topic(s) is/are assessed. If the metric is rated as Meets, list the grade(s) examined in the evaluation.

Metric NN1A: **Materials reflect the basic architecture of the Standards by not assessing the listed topics before the grade level indicated.** • Probability, including chance, likely outcomes, probability models. (Introduced in the CCSSM in grade 7) • Statistical distributions, including center, variation, clumping, outliers, mean, median, mode, range, quartiles; and statistical association or trends, including two-way tables, bivariate measurement data, scatter plots, trend line, line of best fit, correlation. (Introduced in the CCSSM in grade 6) • Similarity, congruence, or geometric transformations. (Introduced in the CCSSM in grade 8) • Symmetry of shapes, including line/ reflection symmetry, rotational symmetry. (Introduced in the CCSSM in grade 4) **How to Find the Evidence:** Evaluate the table of contents, all chapter tests, all unit tests, and other such assessment components (including rubrics). For context, read Criterion #2 from the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013). NOTE: Grade alignments of other topics are addressed in Non-Negotiable 2, Focus and Coherence.) In this criterion, "topics named" means the topics that are explicitly named in Metric 1A. No other topics should be added to the list in Metric 1A. (Note that other topics in the standards are addressed in criterion NN2.)	**Evidence-** **No skills were assessed prior to teaching the standards. Program designed as an intervention program.**	**(Reviewer only.)** **___x_Meets** **____Does Not Meet**
Non-Negotiable 1: Materials must reflect the content architecture of the Standards by not assessing the topics named* before the grade level where they first appear in the Standards. **NN 1** If Metric 1A was rated as Meets, then rate Non-Negotiable 1 as Meets. If Metric 1A was rated as Does Not Meet, then rate Non- Negotiable 1 as Does Not Meet. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion.**(Reviewer only.)** **Before moving to Non-Negotiable 2, record the final Meets or Does Not Meet rating in the Evaluation Summary.**		**(Reviewer only.)** **__x__Meets** **____Does Not Meet** **Strengths/Weaknesses:**

Directions for Non-Negotiable 2

Focus and Coherence

Non-Negotiable 2: **Focus and Coherence** **Materials must focus coherently on the Major Work of the grade in a way that is consistent with the progressions in the Standards.** Focus and coherence are the two major evidence-based design principles of the Common Core State Standards for Mathematics (CCSSM, p. 3). Focus is necessary in order to fulfill the ambitious promise the states have made to their students by adopting the Standards: greater achievement at the college and career ready level; greater depth of understanding of mathematics; and a rich classroom environment in which reasoning, sense-making, applications, and a range of mathematical practices flourish. In simpler terms, a mile-wide, inch-deep curriculum translates to less time per topic. Less time means less depth and moving on without many students. Thus, materials must focus coherently on the Major Work of the grade in a way that is consistent with the progressions in the Standards.	**Required Materials** • Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf) • Focus by Grade Level for the grade being evaluated (www.achievethecore.org/focus) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion:** Non-Negotiable 2 is rated as Meets or Does Not Meet. To rate Non-Negotiable 2, first rate metrics 2A–2H. Each of these eight metrics must be rated as Meets in order for Non-Negotiable 2 to be rated as Meets. Rate each metric 2A-2H as Meets or Does Not Meet/Insufficient Evidence. If the evidence examined shows that the Criterion is met, then mark the Criterion Meets. If the evidence examined shows that the Criterion is not met—or if there is insufficient evidence to make a determination—then mark the Criterion as Does Not Meet/Insufficient Evidence. Support all ratings with evidence.
Metric NN2A: **In each grade K–8, students and teachers using the materials as designed devote the large majority of time to the Major Work of the grade.** **How to Find the Evidence:** Familiarize yourself with the Major Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, lessons, homework assignments, and assessments. (Evaluate both student and teacher materials.) Consider time spent on the Major Work of the grade and judge qualitatively whether students and teachers using the materials as designed will devote the large majority of time to the Major Work of the grade. For context, read Criterion #1 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013)	**Evidence-** **10 of the 32 weeks covered the major works for 1st Grade. 22 of the 32 weeks covered the major works for Kindergarten.** **Placement assessments to be given to students.**	**(Reviewer only.)** **____Meets** **___x_Does Not Meet/** **Insufficient Evidence**

Metric NN2B: **Supporting work, where present, enhances focus and coherence simultaneously by also engaging students in the Major Work of the grade.** **How to Find the Evidence:** Familiarize yourself with the Major Work and Supporting Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate chapters and lessons that focus on Supporting Work. NOTE: Example of evaluating this Criterion might include looking at whether materials for K–5 generally treat data displays as an occasion for solving grade-level word problems using the four operations (e.g., see 3.MD.B.3); or whether materials for grade 7 take advantage of opportunities to use probability to support ratios, proportions, and percentages. For context, read Criterion #3 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** **There are 10 weeks instruction that center on standards included in the 1st grade major work.**	(Reviewer only.) **____Meets** **___x_Does Not Meet/** **Insufficient Evidence**
Metric NN2C: **Materials base content progressions on the grade-by-grade progressions in the Standards. Content from previous or future grades does not unduly interfere with or displace on-grade-level content.** **How to Find the Evidence:** Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, and lessons in both student and teacher materials. NOTE: In some cases it may be possible that aligned materials might address some aspects of a topic in a strategic way before or after the grade level in which the topic is central in the Standards' progressions; for example, a curriculum author might purposefully choose to explore adding fractions with unlike denominators in a way appropriate to grade four, recognizing that this work is not really required until the next grade. However, any such purposeful discrepancies in content progressions should enhance the required learning in each grade; not unduly interfere with or displace grade-level content; and be clearly aimed at helping students meet the Standards as written rather than effectively rewriting the progressions in the Standards. And in all cases, note that Non-Negotiable 1 must be met for materials to be aligned. For context, read Criterion #5a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** **Content from previous or future grades does not interfere with grade level content**	(Reviewer only.) **___x_Meets** **____Does Not Meet/** **Insufficient Evidence**

Metric NN2D: **Materials give all students extensive work with on-grade-level problems.** **How to Find the Evidence:** Evaluate both student and teacher materials. If the materials provide resources for differentiated learning, consider whether lower-performing students have opportunities to engage with grade-level problems. Also consider whether higher-performing students are given opportunities to learn current grade-level content in greater depth. For context, read Criterion #5b in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** **On grade level problems are the main focus in the "engage" step grade level problems are given. There was differentiated instruction for each lesson. "If…then" statements given to help teachers with scaffolding.**	(Reviewer only.) **__x__Meets** **_____Does Not Meet/** **Insufficient Evidence**
Metric NN2E: **Materials relate on-grade-level concepts explicitly to prior knowledge from earlier grades.** **How to Find the Evidence:** Evaluate both student and teacher materials. NOTE: Examples of evaluating this Criterion might include looking at the way the materials extend basic ideas of place value across the decimal point; or the role that properties of operations play when the materials extend arithmetic beyond whole numbers to fractions, variables, and expressions. More generally, cluster headings in the Standards sometimes signal key moments where reorganizing and extending previous knowledge is important in order to accommodate new knowledge (e.g., see cluster headings that use the phrase "Apply and extend previous understanding"). For context, read Criterion #5c in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** **Placement test shows teachers where to place students within the program.**	(Reviewer only.) **___x_Meets** **_____Does Not Meet/** **Insufficient Evidence**
Metric NN2F: **Review of material from previous grades is clearly identified as such to the teacher, and teacher and students can see what their specific responsibility is for the current year.** **How to Find the Evidence:** Evaluate the table of contents, but do not stop there; also evaluate units, chapters, lessons, homework assignments and assessments. (Evaluate both student and teacher materials.) Identify any content from previous grades and check whether it is identified as such. For context, read Criterion #5a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** **Standards are clearly shown the teacher know grade level or standard for the skill, CCSS, utilizing "Skills Trace" in Teaching for Understanding.**	(Reviewer only.) **__x__Meets** **_____Does Not Meet/** **Insufficient Evidence**

Metric NN2G: **Materials include learning objectives that are visibly shaped by CCSSM cluster headings.** **How to Find the Evidence:** Select several clusters from the Major Work in the grade being evaluated. Evaluate teacher and student materials in relation to these clusters. For context, read Criterion #6a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** **Unit overview provides objective and standards for the week and again in the daily plan.**	(Reviewer only.) **_x___Meets** **_____Does Not Meet/ Insufficient Evidence**
Metric NN2H: **Materials include problems and activities that serve to connect two or more clusters in a domain, or two or more domains in a grade, in cases where these connections are natural and important.** **How to Find the Evidence:** In the grade being evaluated, choose two or more clusters or two or more domains for which connections are natural and important. Evaluate the units, chapters, and lessons that deal with the chosen topics, looking for problems and activities that serve to connect the chosen clusters or domains. NOTE: An example of evaluating this Criterion might include looking at whether problems in grade 4 sometimes or often involve students applying their developing computation skills (detailed in domain NBT) in the context of solving word problems (detailed in domain OA). For context, read Criterion #6b in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** **Every 4 weeks standards learned combined for Project Based Learning to help deepen understanding for the concepts learned. Some projects cover two domains and some covered 2-3 clusters.**	(Reviewer only.) **__x__Meets** **_____Does Not Meet/ Insufficient Evidence**
Non-Negotiable 2: **Focus and Coherence** **Materials must focus coherently on the Major Work of the grade in a way that is consistent with the progressions in the Standards.** **NN 2** If all Metrics 2A – 2H were rated as Meets, then rate Non-Negotiable 2 as Meets. If one or more Metric was rated Does Not Meet/Insufficient Evidence, then rate Non-Negotiable 2 as Does Not Meet. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)** **Before moving to Alignment Criterion 1, record the final Meets or Does Not Meet rating in the Evaluation Summary.**		(Reviewer only.) **_____Meets** **__x__Does Not Meet** **Strengths/Weaknesses:**
Now continue by evaluating the Alignment Criterion 1 for Rigor and Balance.		

Directions for Alignment Criterion 1

Rigor and Balance

Alignment Criterion 1: Rigor and Balance

Materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.

The Standards set expectations for attention to all three aspects of rigor: conceptual understanding, procedural skill and fluency, and applications. Thus, materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.

Required Materials

- Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf)
- Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)
- Focus by Grade Level for the grade being evaluated (achievethecore.org/focus)
- Situation Types for the Operations in Word Problems (achievethecore.org/situation-types)
- From the materials being evaluated: teacher guides, student texts and workbooks

Rating this Criterion:

Alignment Criterion 1 is rated as Meets or Does Not Meet.

To rate Alignment Criterion 1, first rate metrics 1A, 1B, and 1C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). For each metric, guiding questions are provided to aid in gathering evidence.
Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 1 if the materials rate 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as rigor and balance, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.

Metric AC1A:

The materials support the development of students' conceptual understanding of key mathematical concepts, especially where called for in specific content Standards or cluster headings.

How to Find the Evidence:

Select one or more cluster(s) or Standard(s) from the Major Work for the grade being evaluated that relate specifically conceptual understanding to use throughout the questions associated with this metric. NOTE: Some examples of clusters or Standards that call for conceptual understanding include: K.OA.A.1, (1.NBT.B, 1.NBT.C), (2.NBT.A, 2.NBT.B), (3.OA.A.1, 3.OA.A.2), 4.NF.A, (4.NBT.A, 4.NBT.B), 5.NF.B, (5.NBT.A, 5.NBT.B), 6.RP.A, 6.EE.A.3, 7.NS.A, 7.EE.A, 8.EE.B, 8.F.A, 8.G.A

Clusters or Standards grouped by parentheses are closely connected and could be analyzed together.

For context, read Criterion #4a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).

-Choose a cluster/Standard from the Major Work that is aligned to each aspect of rigor and use it to evaluate these metrics. It is most helpful if the same clusters/Standards are chosen for all of the programs being evaluated. (Guidance in choosing clusters/Standards is included in "How to Find the Evidence".)

Use the questions for AC Metric 1A to evaluate Metric 1A. Record evidence for each question and rate Metric 1A.

____Meets (2)

____Partially Meets (1)

____Does Not Meet (0)

Is conceptual understanding attended to thoroughly where the Standards set explicit expectations for understanding or interpreting? Evaluate lessons, chapter/unit assessments and homework assignments, paying attention to work aligned to Standards that explicitly call for understanding or interpreting. NOTE: Examples of evaluating this Criterion might include looking at how well the multi-digit addition and subtraction algorithms are developed and explained on the basis of place value and properties of operations; or how well the multi-digit multiplication and division algorithms are developed and explained on the basis of place value and properties of operations; or how well solving equations is presented and explained as a process of reasoning.	**Evidence-** Number sense as the foundation for program. 3 levels of conceptual instruction daily.	
Do the materials feature high-quality conceptual problems and conceptual discussion questions? Evaluate lessons, chapter/unit assessments, and homework assignments. NOTE: Example of conceptual problems might include such questions as "Find a number greater than 1/5 and less than 1/4," or "If the divisor does not change and the dividend increases, what happens to the quotient?"	**Evidence-** Activity cards given with questions to ask for each lesson. Reflects steps in the workbook push students to understand and explain their thinking.	
Do the materials feature opportunities to identify correspondences across mathematical representations? Evaluate lessons, chapter/unit assessments and homework assignments. NOTE: Examples of evaluating this Criterion might include looking at whether students are supported in identifying correspondences among: the verbal description of a situation, the diagrams that distill its mathematical features, and the equations that model it; or equivalent forms of numbers (e.g., 3 and 6/2) and the number line; or rational number operations and representations of them via models such as the vector model; or the expression that defines a function and the graph that shows the relationship.	**Evidence-** All lessons feature opportunities to identify correspondences across mathematical representations.	
Metric AC1B: **The materials are designed so that students attain the fluencies and procedural skills required by the Standards.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Major Work for the grade being evaluated that relate specifically to fluency and procedural skill to use throughout the questions associated with this metric. NOTE: Some examples of Standards that call for procedural skill and fluency include: K.OA.A.5, 1.OA.C.6, 2.OA.B.2, 2.NBT.B.5, 3.OA.C.7, 3.NBT.A.2, 4.NBT.B.4, 5.NBT.B.5, 6.NS.B.2, and 6.NS.B.3, 6.EE.A, 7.NS.A, 7.EE.A.1,7.EE.B.4a, 8.EE.C.7, 8.EE.C.8b For context, read Criterion #4b in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).		**Use the questions for Metric 1B to evaluate Metric 1 B. Record evidence for each question and rate Metric 1B.** **(Reviewer only.)** **___x_Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**

Is progress toward fluency and procedural skill interwoven with students' developing conceptual understanding of the operations in question? Evaluate lessons, chapter/unit assessments, daily routines, and homework assignments for evidence that the development of fluency and procedural skill is supported by conceptual understanding.	**Evidence-** **Many opportunities for fluency practice, games, and manipulatives also algorithms included in each lesson.**	
Are purely procedural problems and exercises present that include cases in which opportunistic strategies are valuable and generic cases that require efficient algorithms present? Evaluate lessons, chapter/unit assessments, daily routines, and homework assignments. NOTE: Examples of problems in which opportunistic strategies are valuable might include the sum 698 + 240 or the system $x + y = 1$, $2x + 2y = 3$. Examples of generic cases that require efficient algorithms might include the sum 8767+2286 or the system $6y + x = x + 3$, $-x = 1 + 2y$.	**Evidence-** **Opportunities to use different strategies.**	
Do the materials in grades K–6 provide repeated practice toward attainment of fluency Standards? Evaluate lessons, daily routines, and homework assignments for evidence of repeated practice toward attainment of the following K–6 Standards that set an explicit expectation of fluent (accurate and reasonably fast) computation: K.OA.A.5, 1.OA.C.6, 2.OA.B.2, 2.NBT.B.5, 3.OA.C.7, 3.NBT.A.2, 4.NBT.B.4, 5.NBT.B.5, 6.NS.B.2, 6.NS.B.3.	**Evidence-** **Repeated practice and fluency in all lessons.**	
Metric AC1C: **The materials are designed so that teachers and students spend sufficient time working with engaging applications, without losing focus on the Major Work of each grade.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Major Work for the grade being evaluated that relate specifically application to use throughout the questions associated with this metric. NOTE: Some examples of clusters or Standards that call for application include: K.OA.A.2, 1.OA.A, 2.OA.A, 3.OA.A.3, 3.OA.D.8, 4.OA.A.3, 4.NF.B.3d, 4.NF.B.4c, 5.NF.B.6, 5.NF.B.7c, 6.RP.A.3, 6.NS.A.1, 6.EE.B.7, 6.EE.C.9, 7.RP.A, 7.NS.A.3, 7.EE.B.3, 8.EE.C.8c, 8.F.B For context, read Criterion #4c in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).		**Use the questions for Metric 1C to evaluate Metric 1C. Record evidence for each question and rate Metric 1C.** **(Reviewer only.)** **____Meets (2)** **___x_Partially Meets (1)** **____Does Not Meet (0)**
Are there are single- and multi-step contextual problems, including non-routine problems, that develop the mathematics of the grade, afford opportunities for practice, and engage students in problem solving? Do the problems attend thoroughly to those places in the content Standards where expectations for multi-step and real-world problems are [illegible]sit? Evaluate lessons, chapter/unit assessments, and homework [illegible]signments.	**Evidence-** **Many opportunities for multi-step word problems and extended response questions. Students need critical thinking to solve problems.**	

Do application problems particularly stress applying the Major Work of the grade? Evaluate lessons, chapter/unit assessments, and homework assignments. NOTE: Examples of evaluating this Criterion might include looking at: how well, by the end of grade 2, students using the materials as designed can represent and solve a full range of one-step addition and subtraction word problems; or how well, by the end of grade 3, students using the materials as designed can represent and solve a full range of one-step multiplication and division word problems; or how well these basic situation types for each operation are carried coherently across the grades, (e.g., with fractions and algebraic expressions); or, in all grades, whether the problems connect concepts, Standards, and domains in ways that are natural and important. For a list of situation types for one-step addition, subtraction, multiplication, and division problems, see Situation Types for the Operations in Word Problems	**Evidence-** **Problems span from Kindergarten to 1st grade. All of the major work of 1st grade is not covered.**	
Does modeling build slowly across K–8, with applications that are relatively simple in earlier grades and when students are encountering new content? In grades 6–8, do the problems begin to provide opportunities for students to make their own assumptions or simplifications in order to model a situation mathematically? Read Standard for Mathematical Practice 4, Model with Mathematics. Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** **Modeling builds appropriately for grade level, giving students multiple opportunities for use of hands-on and virtual manipulatives.**	

Alignment Criterion 1: Rigor and Balance

Materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.

AC1 Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 out of 6 points, the Criterion has not been met. Check the final rating.
Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)**

Before moving to Alignment Criterion 2, record the final Meets or Does Not Meet rating in the Evaluation Summary.

(Reviewer only.)

___x_Meets

____Does Not Meet

Strengths/Weaknesses:

Directions for Alignment Criterion 2

Standards for Mathematical Practice

Alignment Criterion 2: Standards for Mathematical Practice

Materials must demonstrate authentic connections between content Standards and practice Standards.

The Standards require that designers of instructional materials connect the mathematical practices to mathematical content in instruction. Thus, materials must demonstrate authentic connections between content Standards and practice Standards.

Required Materials:

- Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf)
- Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)
- Focus by Grade Level for the grade being evaluated (www.achievethecore.org/focus)
- From the materials being evaluated: teacher guides, student texts and workbooks

Rating this Criterion

Alignment Criterion 2 is rated as Meets or Does Not Meet.

To rate Alignment Criterion 2, first rate metrics 2A, 2B, and 2C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). For each metric, guiding questions are provided to aid in gathering evidence.

Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 2 if the materials earn 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as mathematical practices, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.

Metric AC2A:
Materials address the practice Standards in such a way as to enrich the Major Work of the grade; practices strengthen the focus on Major Work instead of detracting from it, in both teacher and student materials.

How to Find the Evidence:

Familiarize yourself with the Major Work of the grade being evaluated (see the Focus by Grade Level documents.)

Evaluate teacher and student materials for evidence that the mathematical practices support and connect to the focus of the grade.

NOTE: Examples of evaluating this Criterion might include looking at whether, in grades K–5, students using the materials are supported to look for and express regularity in repeated reasoning about the addition table, the multiplication table, the properties of operations, the relationship between addition and subtraction or multiplication and division, and the place value system; or whether, in grades 6–8, students using the materials are supported to look for and express regularity in repeated reasoning about proportional relationships and linear functions.

For context, read Criterion #8 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013).

Evidence-

Materials address the practice standards which strengthen the focus of the Major Work for the grade level.

(Reviewer only.)

___x_Meets (2)

____Partially Meets (1)

____Does Not Meet (0)

Metric AC2B: **Materials a[illegible]d to the full meaning of each practice Standard.** **How to Find the Evidence:** For context, read Criterion #7 and Criterion #9 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).		**Use the questions for Metric 2B to evaluate Metric 2B. Record evidence for each qu[illegible]n and rate Metric 2B.** **(Reviewer only.)** **___x_Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Over the course of any given year of instruction, is each mathematical practice Standard meaningfully present in the form of assignments, activities, or problems that stimulate students to develop the habits of mind described in the practice Standard? Evaluate lessons, chapter/ unit assessments, and homework assignments for evidence of each mathematical practice being meaningfully present in instruction.	**Evidence-** **Standards are meaningfully present at all grade levels, age appropriate and spark interest in students.**	
Do the materials treat the practice Standards as developing across grades or grade bands? Are the practice Standards in early grades appropriately simple? Do they display an arc of growing sophistication across the grades?	**Evidence-** **Standards were developed across grade levels and increased in complexity.**	
Are there teacher-directed materials that explain the role of the practice Standards in the classroom and in students' mathematical development? Are alignments to practice Standards accurate?	**Evidence-** **On-line resources were avasilable.**	
Metric AC2C: **Materials support the Standards' emphasis on mathematical reasoning.** **How to Find the Evidence:** For context, read Criterion #10 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).		**Use the questions for Metric 2C to evaluate Metric 2C. Record evidence for each question and rate Metric 2C.** **(Reviewer only.)** **__x__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Do the materials support students in constructing viable arguments and critiquing the arguments of others concerning grade-level mathematics that is detailed in the content Standards? Read Standard for Mathematical Practice 3. Evaluate teacher and student materials to ensure that students are given opportunities to reason with grade-level mathematics.	**Evidence-** **Extended Response and Critical Thinking sections evident in all lessons.**	
Do the materials support students in producing not only answers and solutions, but also, in a grade-appropriate way, arguments, explanations, diagrams, mathematical models, etc., especially in the Major Work of the grade? Familiarize yourself with the Major Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate teacher and student materials, to understand the types of work students are expected to produce.	**Evidence-** **Extended Response and Critical Thinking sections evident in all lessons.**	

Do materials explicitly attend to the specialized language of mathematics? Is the language of argument, problem solving, and mathematical explanations taught rather than assumed? Evaluate teacher and student materials, paying attention to how mathematical language is taught. NOTE: Examples of evaluating this Criterion might include looking at whether students are supported in: basing arguments on definitions; using the method of providing a counterexample; or recognizing that examples alone do not establish a general statement.	**Evidence-** **Vocabulary at the beginning of each lesson is provided. Words are intended to be used throughout the lesson.**	
Alignment Criterion 2: **Standards for Mathematical Practice** **Materials must demonstrate authentic connections between content Standards and practice Standards.** **AC2** Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 out of 6 points, the Criterion has not been met. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)** **Before moving to Alignment Criterion 3, record the final Meets or Does Not Meet rating in the Evaluation Summary.**		**(Reviewer only.)** **___x_Meets** **____Does Not Meet** **Strengths/Weaknesses:**
Alignment Criterion 3: **Access to the Standards for All Students** **Materials must provide supports for English Language Learners and other special populations.** Because Standards are for all students, alignment requires thoughtful support to ensure all students are able to meet the Standards. Thus, aligned materials must provide supports for English Language Learners and other special populations.	**Required Materials:** • Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion:** Alignment Criterion 3 is rated as Meets or Does Not Meet. To rate Alignment Criterion 3, first rate metrics 3A, 3B, and 3C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 3 if the materials earn 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as support for special population, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.

Metric AC3A: **Support for English Language Learners and other special populations is thoughtful and helps those students meet the same Standards as all other students. The language in which problems are posed is carefully considered.** **How to Find the Evidence:** Evaluate teacher and student materials, paying attention to supports offered for special populations.	**Evidence-** Support for ELL and special populations is evident. (ELL support guide, Spanish and English letters for home provided along with progress monitoring. Building Blocks also in Spanish.)	**Reviewer only.)** **__x__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Metric AC3B: **Materials provide appropriate level and type of scaffolding, differentiation, intervention, and support for a broad range of learners with gradual removal of supports, when needed, to allow students to demonstrate their mathematical understanding independently.** **How to Find the Evidence:** Evaluate teacher and student materials, paying attention to whether materials provide differentiation that will lead all learners to engage with on-grade-level content.	**Evidence-** Differentiation and practice in each lesson.	**Reviewer only.)** **__x__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Metric AC3C: **Design of lessons recommends and facilitates a mix of instructional approaches for a variety of learners such as using multiple representations (e.g., including models, using a range of questions, checking for understanding, flexible grouping, pair-share).** **How to Find the Evidence:** Evaluate teacher materials, noting instructional approaches suggested for whole class and differentiated lessons and activities.	**Evidence-** Design of lessons pushes students to demonstrate understanding in a variety of ways including oral, written, and discussion. Also hands-on games, etc.	**Reviewer only.)** **__x__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**

Alignment Criterion 3: **Access to the Standards for All Students** **Materials must provide supports for English Language Learners and other special populations.** **AC3** Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 points, the Criterion has not been met. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion.**(Reviewer only.)** **Move to the Evaluation Summary and record the final Meets or Does Not Meet rating .**	**(Reviewer only.)** **__x__Meets** **_____Does Not Meet** **Strengths/Weaknesses:**

Once an evaluation for alignment to the Shifts and major features of the CCSS has been conducted using Sections 1-3, it's important to evaluate for overall quality and best practices. A starting list of Indicators of Quality are suggested below. States, districts and others evaluating instructional materials are encouraged to add to this list to ensure materials reflect local contexts. For background information on some of the Indicators of Quality in this section, refer to pp.18–21 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).

Indicators of Quality	**Evidence- Give specific examples.**	**Rating: (Reviewers only.)**
1. Lessons are thoughtfully structured and support the teacher in leading the class through the learning paths at hand, with active participation by all students in their own learning and in the learning of their classmates.	**Evidence-** **Each lesson provides an easy to use format for the teacher to follow. The components of the lesson are warm-up, engage, reflect, and assess encourages active participation from all students.**	**(Reviewer only.)** **____x__ Yes** **_____ No**
2. The underlying design of the materials includes both problems and exercises. (In solving problems, students learn new mathematics, whereas in working exercises, students apply what they have already learned to build mastery.) Each problem or exercise has a purpose. **NOTE: This Criterion does not require that the problems a[illegible]exercises be labeled as such.**	**Evidence-** **In the Engage section students develop new concepts and then they practice their new learning.**	**(Reviewer only.)** **____x__ Yes** **_____ No**

3. Design of assignments is not haphazard: exercises are given in intentional sequences in order to strengthen students' mathematical understanding.	Evidence- Knowledge and placement tests are given and program consists of 5 six-week lessons per grade level.	(Reviewer only.) ____x__ Yes _____ No
4. There are separate teacher materials that support and reward teacher study including, but not limited to: discussion of the mathematics of the units and the mathematical point of each lesson as it relates to the organizing concepts of the unit, discussion on student ways of thinking and anticipating a variety of students responses, guidance on lesson flow, guidance on questions that prompt students thinking, and discussion of desired mathematical behaviors being elicited among students.	Evidence- There is an on-line Teachers edition which includes a discussion board and interactive models and professional development to support the teacher	(Reviewer only.) _____x_ Yes _____ No
5. Manipulatives suggested in the materials are faithful representations of the mathematical objects they represent and are connected to written methods.	Evidence- Manipulatives provided were appropriate for the grade level and promoted connections to written methods. Materials needed are clear and listed at the beginning of each lesson.	(Reviewer only.) ____x__ Yes _____ No
6. Materials include a variety of curriculum-embedded assessments. Examples include pre-, formative, summative, and self-assessment resources.	Evidence- There are entry level placements tests to be given prior to beginning of program. The formal assessments given at the end of each week and informal assessments given at the end of each lesson.	(Reviewer only.) ___x___ Yes _____ No
7. Assessments contain aligned rubrics, answer keys, and scoring guidelines that provide sufficient guidance for interpreting student performance.	Evidence- The placement test guide gives instructions on how to administer and score tests. Answer keys given in the Teacher's Guide for each practice sheet.	(Reviewer only.) __x____ Yes _____ No
8. Materials assess student proficiency using methods that are accessible and unbiased, including the use of course-level language in student prompts.	Evidence- Assessments are accessible and unbiased and include the course-level language.	(Reviewer only.) ____x__ Yes _____ No

9. Materials are carefully evaluated by qualified individuals, whose names are listed, in an effort to ensure freedom from mathematical errors and course-level appropriateness.	**Evidence-** **The authors were listed on page B2-B5 of the Teacher's Guide.**	**(Reviewer only.)** **____x__ Yes** **_____ No**
10. The visual design supports students in engaging thoughtfully with the subject. Navigation through the text is clear.	**Evidence-** **Activities and pictures are engaging. Questions are age appropriate and pictures catch the attention of students.**	**(Reviewer only.)** **____x__ Yes** **_____ No**
11. The materials engage parents in appropriate ways. For example, homework assignments in elementary grades, consist of routine problems, practice with getting answers, and fluency-building exercises that parents can easily support.	**Evidence-** **Letter home provided for parents in both Spanish and English which includes easy home activities that encourage extra practice and involvement.**	**(Reviewer only.)** **_____x_ Yes** **_____ No**

Reviewer IMET Evaluation Summary Title/Level Number Worlds Level

Publisher: McGraw Hill School Education, LLC Copyright: 2015

ISBN: various

Reviewer ID # BKC, DY Date Review Completed: March 8, 2016

Non-Negotiable Criteria- Each Non-Negotiable must be met in order for the Non-Negotiable Alignment Criteria to be met overall.

Non-Negotiable 1: Freedom from Obstacles to Focus	Non- Negotiable 2: Focus and Coherence
____x___ Meets _____ Does Not Meet	____ Meets ___x__ Does Not Meet

Non-Negotiable Overall:

_____ Meets _____x_ Does Not Meet

Alignment Criteria- Each Alignment Criterion must be met with a sufficient number of points in order for Alignment Criteria to be labeled as "Meets" overall. The more points the materials receive on the Alignment Criteria, the better they are aligned.

Alignment Criterion 1: Rigor and Balance	Alignment Criterion 2: Standards of Mathematical Practice	Alignment Criterion 3: Access to Standards for All Learners
Points: ___5__ of 6 possible. (Materials must receive at least 5 of 6 points to align.) _____x_ Meets _____ Does Not Meet	Points: __6___ of 6 possible. (Materials must receive at least 5 of 6 points to align.) ___x____ Meets _____ Does Not Meet	Points: __6___ of 6 possible. (Materials must receive at least 5 of 6 points to align.) ___x____ Meets _____ Does Not Meet

Alignment Criteria Overall:

__x___ Meets _____ Does Not Meet

If the materials meet both Non-Negotiables and relevant Alignment Criterion, they are aligned to the Shifts and major features of the Core Standards. **Do the materials meet every Non-Negotiable and Alignment Criterion? _____ Yes __x___ No**

What are the specific areas of strength and weakness based on this evaluation? Publishers or others modifying or developing assessments can use this information to make improvements and/or to remedy gaps in the alignment of assessment materials.

This program is a 1st grade intervention program, however, it focuses on Kindergarten major works. We are concerned that students will not be exposed to the 1st grade major works.

2015-16 Mathematics Interim Review Recommendation & Summary

Publisher Name:	McGraw Hill School Education, LLC
Title:	Number Worlds
ISBN #	various
Grade Level(s) or Course:	Level D
Reviewer ID:	DY, CN

RECOMMENDED AS:

_____**Core Mathematics Program-** a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials. Substantial evidence clearly supports the designation of this program as Core.

_____**Other Mathematics Program-** a program that substantially, but partially, meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for supplemental materials. Substantial evidence clearly supports the designation of this program as Other.

_____**Component Mathematics Program-** a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs. Substantial evidence clearly supports the designation of this program as Component.

_____**x**___**Intervention Program-** a program designed and intended to target and support students' specific needs. Substantial evidence clearly supports the designation of this program as Intervention.

_____ **Does not meet criteria** for recommendation as a Curricular Material or Online Resource for Mathematics.

EVIDENCE SUMMARY:

FOCUS-
Most skills are assessed before they are taught to students.

COHERENCE-
Materials do focus coherently on the Major Work of the grade level.

RIGOR-
Program offers many opportunities to practice skills through lessons, activities , assessments and projects.

CONCEPTUAL UNDERSTANDING-
Program offers opportunities for students to reflect on their learning and explain their thinking.

MATHEMATICAL PRACTICES-
The mathematical practices are embedded in all activites.

ACCESSIBILITY OF STANDARDS TO ALL STUDENTS-
Differentiation and practice in every lesson is evident. Students are supported to demonstrate their learning in a variety of ways.

OTHER:
Vocabulary flash cards are available to purchase, however, this is not a necessity to the success of the program.

2015-16 Interim Mathematics Review

Mathematics Evaluation Tool Grades K-8

Publisher: McGraw Hill School Education, LLC

Title of Material: Number Worlds - Level D

Author: Griffin

ISBN #: various **Copyright** 2015

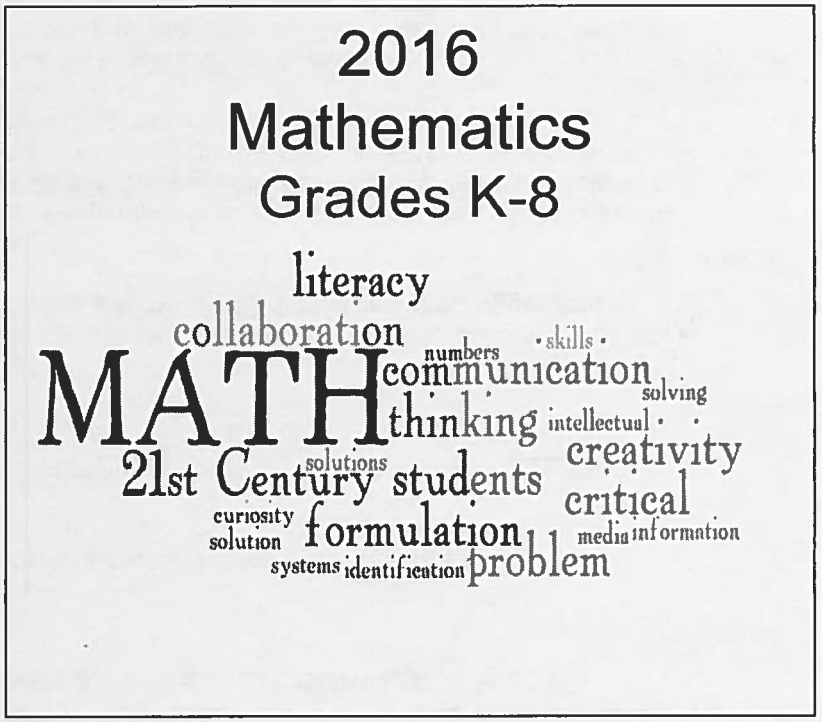
Reviewer ID: DY, CN

Core Mathematics Program- a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Core.

Other Mathematics Program- a program that substantially, but partially, meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Other.

Component Mathematics Program- a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs.
Substantial evidence clearly supports the designation of this program as Component.

Intervention Program- a program designed and intended to target and support students' specific needs.
Substantial evidence clearly supports the designation of this program as Intervention.



- Evaluation Form adapted from Instructional Materials Evaluation Toolkit (IMET).

The IMET was developed by Student Achievement Partners. Educators may use or adapt. http://creativecommons.org/licenses/by/3.0/ Download this tool at http://achievethecore.org/IMET

Instructional Materials Evaluation Tool

Mathematics, Grades K-8

What Are the Purposes of the IMET?

This Math IMET is designed to help educators determine whether instructional materials are aligned to the Shifts and major features of the Common Core State Standards (CCSS). The substantial instructional Shifts (http://www.corestandards.org/other-resources/key-shifts-inmathematics/) at the heart of the Common Core State Standards are:

- **Focus** strongly where the Standards focus
- **Coherence**: Think across grades and link to major topics within the grade
- **Rigor**: In major topics, pursue conceptual understanding, procedural skill and fluency, and application with equal intensity.

The IMET draws directly from the following documents:

- Common Core State Standards for Mathematics (www.corestandards.org/Math)
- Publishers' Criteria for the Common Core State Standards in Mathematics grade K-8 (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)

When to use the IMET

1. Purchasing materials: Many factors go into local purchasing decisions. Alignment to the Standards is a critical factor to consider. This tool is designed to evaluate alignment of instructional materials to the Shifts and the major features of the CCSS. It also provides suggestions of additional indicators to consider in the materials evaluation and purchasing process.

2. Evaluating materials currently in use: The IMET can be used to analyze the degree of alignment of existing materials and help to highlight specific, concrete flaws in alignment. Even where materials and tools currently in use fail to meet one or more of these criteria, the pattern of failure is likely to be informative. States and districts can use the evaluation to create a thoughtful plan to modify or combine existing resources in such a way that students' actual learning experiences approach the focus, coherence, and rigor of the Standards.

3. Developing programs: Those developing new programs can use this tool as guidance for creating aligned curricula.
Please note this tool was designed for evaluating comprehensive curricula (including any supplemental or ancillary materials), but it was not designed for the evaluation of standalone supplemental materials.

Who Uses the IMET?

Evaluating instructional materials requires both subject-matter and pedagogical expertise. Evaluators should be well versed in the Standards (www.corestandards.org/Math) for all grades in which materials are being evaluated. This includes understanding the Major Work of the grade (www.achievethecore/focus), the Supporting and Additional work, how the content fits into the progressions in the Standards (www.achievethecore.org/progressions), and the expectations of the Standards with respect to conceptual understanding, procedural skill and fluency, and application. Evaluators also should be familiar with the substantial instructional Shifts (http:// www.corestandards.org/other-resources/key-shifts-in-mathematics/) of Focus, Coherence and Rigor that are listed above.

Getting Started

Prior to Evaluation

Assemble all of the materials necessary for the evaluation. It is essential for evaluators to have materials for all grades covered by the program, as some criteria cannot be rated without having access to each grade. In addition, each evaluator should have a reference copy of the Common Core State Standards for Mathematics (CCSSM) and the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013).

Before conducting the evaluation itself, it is important to develop a protocol for the evaluation process. The protocol should include having evaluators study the Publishers' Criteria and the IMET. It will also be helpful for evaluators to get a sense of each program overall before beginning the process. At a minimum, this would include reading the front matter of the text, looking at the table of contents and paging through multiple chapters.

Sections 1-3 below should be completed to produce a comprehensive picture of the strengths and weaknesses of the materials under evaluation. Information about areas in need of improvement or supplementation should be shared with internal and external stakeholders.

Navigating the Tool

Begin with Section 1: Non-Negotiable Alignment Criteria

- The Non-Negotiable Alignment Criteria must each be met in full for materials to be considered aligned to the Shifts and the major features of the Common Core State Standards. Each Non-Negotiable Alignment Criterion has one or more metrics associated with it; every one of these metrics must be met in order for the criterion as a whole to be met.

- Examine the relevant materials and use evidence to rate the materials against each criterion and its associated metric(s).

- Record and explain the evidence upon which the rating is based.

Continue to Section 2: Alignment Criteria

- The Alignment Criteria must each be met for materials to be considered aligned to the Shifts and the major features of the Common Core State Standards. Each Alignment Criterion has one or more metric associated with it; a specific number of these metrics must be met or partially met in order for the criterion as a whole to be met.

- Examine the materials in relation to these criteria, assigning each metric a point value. Rate the criterion as "Meets" or "Does Note Meet" based on the number of points assigned. The more points the materials receive on the alignment Criteria, the better they are aligned.

- Record and explain the evidence upon which the rating is based.

Proceed to Section 4: Indicators of Quality

- Indicators of Quality are important considerations that will help evaluators better understand the overall quality of instructional materials. These considerations are not criteria for alignment to the CCSS, but they provide valuable information about additional program characteristics. Evaluators may want to add their own indicators to the examples provided.

Directions for Non-Negotiable 1

Freedom from Obstacles to Focus

Criterion	Evidence- Give specific examples.	Rating: (Reviewer only.)
Non-Negotiable 1: **Freedom from Obstacles to Focus** **Materials must reflect the content architecture of the Standards by not assessing the topics named before the grade level where they first appear in the Standards.** The Standards foster students' progress to algebra by focusing strongly on arithmetic. Consistent with this focus, certain topics from outside of arithmetic appear only in later grades. Thus, to be aligned, materials must reflect the content architecture of the Standards by not assessing the topics named before the grade level where they first appear in the Standards. In this criterion, "topics named" means the topics that are explicitly named in Metric 1A. No other topics should be added to the list in Metric 1A. (Note that other topics in the standards are addressed in criterion NN2.)	**Required Materials** • Common Core State Standards for Mathematics (www.corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf) • From the materials being evaluated: teacher guides and all assessment components	**Rating this Criterion:** Non-Negotiable 1 is rated as Meets or Does Not Meet. To rate Non-Negotiable 1, begin by rating Metric 1A. Since Metric 1A is the only metric for Non-Negotiable 1, the rating for Non-Negotiable 1 is the same as the rating for Metric 1A. If Metric 1A is rated as Does Not Meet, include evidence of when the named topic(s) is/are assessed. If the metric is rated as Meets, list the grade(s) examined in the evaluation.

Metric NN1A: **Materials reflect the basic architecture of the Standards by not assessing the listed topics before the grade level indicated.** • Probability, including chance, likely outcomes, probability models. (Introduced in the CCSSM in grade 7) • Statistical distributions, including center, variation, clumping, outliers, mean, median, mode, range, quartiles; and statistical association or trends, including two-way tables, bivariate measurement data, scatter plots, trend line, line of best fit, correlation. (Introduced in the CCSSM in grade 6) • Similarity, congruence, or geometric transformations. (Introduced in the CCSSM in grade 8) • Symmetry of shapes, including line/ reflection symmetry, rotational symmetry. (Introduced in the CCSSM in grade 4) **How to Find the Evidence:** Evaluate the table of contents, all chapter tests, all unit tests, and other such assessment components (including rubrics). For context, read Criterion #2 from the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013). NOTE: Grade alignments of other topics are addressed in Non-Negotiable 2, Focus and Coherence.) In this criterion, "topics named" means the topics that are explicitly named in Metric 1A. No other topics should be added to the list in Metric 1A. (Note that other topics in the standards are addressed in criterion NN2.)	**Evidence-** **No skills were assessed prior to teaching the standards. Program designed as an intervention program.**	**(Reviewer only.)** **___x_Meets** **____Does Not Meet**
Non-Negotiable 1: Materials must reflect the content architecture of the Standards by not assessing the topics named* before the grade level where they first appear in the Standards. **NN 1** If Metric 1A was rated as Meets, then rate Non-Negotiable 1 as Meets. If Metric 1A was rated as Does Not Meet, then rate Non- Negotiable 1 as Does Not Meet. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion.**(Reviewer only.)** **Before moving to Non-Negotiable 2, record the final Meets or Does Not Meet rating in the Evaluation Summary.**		**(Reviewer only.)** **__x__Meets** **____Does Not Meet** **Strengths/Weaknesses:**

Directions for Non-Negotiable 2

Focus and Coherence

Non-Negotiable 2: **Focus and Coherence** **Materials must focus coherently on the Major Work of the grade in a way that is consistent with the progressions in the Standards.** Focus and coherence are the two major evidence-based design principles of the Common Core State Standards for Mathematics (CCSSM, p. 3). Focus is necessary in order to fulfill the ambitious promise the states have made to their students by adopting the Standards: greater achievement at the college and career ready level; greater depth of understanding of mathematics; and a rich classroom environment in which reasoning, sense-making, applications, and a range of mathematical practices flourish. In simpler terms, a mile-wide, inch-deep curriculum translates to less time per topic. Less time means less depth and moving on without many students. Thus, materials must focus coherently on the Major Work of the grade in a way that is consistent with the progressions in the Standards.	**Required Materials** • Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf) • Focus by Grade Level for the grade being evaluated (www.achievethecore.org/focus) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion:** Non-Negotiable 2 is rated as Meets or Does Not Meet. To rate Non-Negotiable 2, first rate metrics 2A–2H. Each of these eight metrics must be rated as Meets in order for Non-Negotiable 2 to be rated as Meets. Rate each metric 2A-2H as Meets or Does Not Meet/Insufficient Evidence. If the evidence examined shows that the Criterion is met, then mark the Criterion Meets. If the evidence examined shows that the Criterion is not met—or if there is insufficient evidence to make a determination—then mark the Criterion as Does Not Meet/Insufficient Evidence. Support all ratings with evidence.
Metric NN2A: **In each grade K–8, students and teachers using the materials as designed devote the large majority of time to the Major Work of the grade.** **How to Find the Evidence:** Familiarize yourself with the Major Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, lessons, homework assignments, and assessments. (Evaluate both student and teacher materials.) Consider time spent on the Major Work of the grade and judge qualitatively whether students and teachers using the materials as designed will devote the large majority of time to the Major Work of the grade. For context, read Criterion #1 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013)	**Evidence-** **28 of the 32 weeks covered the major works for Kindergarten.** **Placement assessments to be given to students.**	**(Reviewer only.)** **___x_Meets** **____Does Not Meet/** **Insufficient Evidence**

Metric NN2B: **Supporting [illegible]k, where present, enhances focus and coherence simultaneously by also engaging students in the Major Work of the grade.** **How to Find the Evidence:** Familiarize yourself with the Major Work and Supporting Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate chapters and lessons that focus on Supporting Work. NOTE: Example of evaluating this Criterion might include looking at whether materials for K–5 generally treat data displays as an occasion for solving grade-level word problems using the four operations (e.g., see 3.MD.B.3); or whether materials for grade 7 take advantage of opportunities to use probability to support ratios, proportions, and percentages. For context, read Criterion #3 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** **The vast amount of [illegible] program is aimed to center on the clusters for grade level because it is an intervention program.**	(Reviewer only.) **__x__Meets** **____Does Not Meet/** **Insufficient Evidence**
Metric NN2C: **Materials base content progressions on the grade-by-grade progressions in the Standards. Content from previous or future grades does not unduly interfere with or displace on-grade-level content.** **How to Find the Evidence:** Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, and lessons in both student and teacher materials. NOTE: In some cases it may be possible that aligned materials might address some aspects of a topic in a strategic way before or after the grade level in which the topic is central in the Standards' progressions; for example, a curriculum author might purposefully choose to explore adding fractions with unlike denominators in a way appropriate to grade four, recognizing that this work is not really required until the next grade. However, any such purposeful discrepancies in content progressions should enhance the required learning in each grade; not unduly interfere with or displace grade-level content; and be clearly aimed at helping students meet the Standards as written rather than effectively rewriting the progressions in the Standards. And in all cases, note that Non-Negotiable 1 must be met for materials to be aligned. For context, read Criterion #5a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** **Content from previous of future grades not interfere with grade level content**	(Reviewer only.) **___x_Meets** **____Does Not Meet/** **Insufficient Evidence**

Metric NN2D: **Materials give all students extensive work with on-grade-level problems.** **How to Find the Evidence:** Evaluate both student and teacher materials. If the materials provide resources for differentiated learning, consider whether lower-performing students have opportunities to engage with grade-level problems. Also consider whether higher-performing students are given opportunities to learn current grade-level content in greater depth. For context, read Criterion #5b in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** **On grade level problems are the main focus in the "engage" step grade level problems are given. There was differentiated instruction for each lesson. "If…then" statements given to help teachers with scaffolding.**	(Reviewer only.) **__x__Meets** **____Does Not Meet/** **Insufficient Evidence**
Metric NN2E: **Materials relate on-grade-level concepts explicitly to prior knowledge from earlier grades.** **How to Find the Evidence:** Evaluate both student and teacher materials. NOTE: Examples of evaluating this Criterion might include looking at the way the materials extend basic ideas of place value across the decimal point; or the role that properties of operations play when the materials extend arithmetic beyond whole numbers to fractions, variables, and expressions. More generally, cluster headings in the Standards sometimes signal key moments where reorganizing and extending previous knowledge is important in order to accommodate new knowledge (e.g., see cluster headings that use the phrase "Apply and extend previous understanding"). For context, read Criterion #5c in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** **Placement test shows teachers where to place students within the program.**	(Reviewer only.) **___x_Meets** **____Does Not Meet/** **Insufficient Evidence**
Metric NN2F: **Review of material from previous grades is clearly identified as such to the teacher, and teacher and students can see what their specific responsibility is for the current year.** **How to Find the Evidence:** Evaluate the table of contents, but do not stop there; also evaluate units, chapters, lessons, homework assignments and assessments. (Evaluate both student and teacher materials.) Identify any content from previous grades and check whether it is identified as such. For context, read Criterion #5a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** **Standards are clearly shown the teacher know grade level or standard for the skill, CCSS, utilizing "Skills Trace" in Teaching for Understanding.**	(Reviewer only.) **__x__Meets** **____Does Not Meet/** **Insufficient Evidence**

Metric NN2G: **Materials include learning objectives that are visibly shaped by CCSSM cluster headings.** **How to Find the Evidence:** Select several clusters from the Major Work in the grade being evaluated. Evaluate teacher and student materials in relation to these clusters. For context, read Criterion #6a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** **Unit overview provides objective and standards for the week and again in the daily plan.**	(Reviewer only.) **_x___Meets** **_____Does Not Meet/** **Insufficient Evidence**
Metric NN2H: **Materials include problems and activities that serve to connect two or more clusters in a domain, or two or more domains in a grade, in cases where these connections are natural and important.** **How to Find the Evidence:** In the grade being evaluated, choose two or more clusters or two or more domains for which connections are natural and important. Evaluate the units, chapters, and lessons that deal with the chosen topics, looking for problems and activities that serve to connect the chosen clusters or domains. NOTE: An example of evaluating this Criterion might include looking at whether problems in grade 4 sometimes or often involve students applying their developing computation skills (detailed in domain NBT) in the context of solving word problems (detailed in domain OA). For context, read Criterion #6b in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** **Every 4 weeks standards learned combined for Project Based Learning to help deepen understanding for the concepts learned. Some projects cover two domains and some covered 2-3 clusters.**	(Reviewer only.) **__x__Meets** **_____Does Not Meet/** **Insufficient Evidence**
Non-Negotiable 2: **Focus and Coherence** **Materials must focus coherently on the Major Work of the grade in a way that is consistent with the progressions in the Standards.** **NN 2** If all Metrics 2A – 2H were rated as Meets, then rate Non-Negotiable 2 as Meets. If one or more Metric was rated Does Not Meet/Insufficient Evidence, then rate Non-Negotiable 2 as Does Not Meet. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)** **Before moving to Alignment Criterion 1, record the final Meets or Does Not Meet rating in the Evaluation Summary.**		(Reviewer only.) **___x_Meets** **_____Does Not Meet** **Strengths/Weaknesses:**
Now continue by evaluating the Alignment Criterion 1 for Rigor and Balance.		

Directions for Alignment Criterion 1

Rigor and Balance

Alignment Criterion 1: Rigor and Balance

Materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.

The Standards set expectations for attention to all three aspects of rigor: conceptual understanding, procedural skill and fluency, and applications. Thus, materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.

Required Materials

- Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf)
- Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)
- Focus by Grade Level for the grade being evaluated (achievethecore.org/focus)
- Situation Types for the Operations in Word Problems (achievethecore.org/situation-types)
- From the materials being evaluated: teacher guides, student texts and workbooks

Rating this Criterion:

Alignment Criterion 1 is rated as Meets or Does Not Meet.

To rate Alignment Criterion 1, first rate metrics 1A, 1B, and 1C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). For each metric, guiding questions are provided to aid in gathering evidence.
Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 1 if the materials rate 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as rigor and balance, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.

Metric AC1A:
The materials support the development of students' conceptual understanding of key mathematical concepts, especially where called for in specific content Standards or cluster headings.

How to Find the Evidence:

Select one or more cluster(s) or Standard(s) from the Major Work for the grade being evaluated that relate specifically conceptual understanding to use throughout the questions associated with this metric. NOTE: Some examples of clusters or Standards that call for conceptual understanding include: K.OA.A.1, (1.NBT.B, 1.NBT.C), (2.NBT.A, 2.NBT.B), (3.OA.A.1, 3.OA.A.2), 4.NF.A, (4.NBT.A, 4.NBT.B), 5.NF.B, (5.NBT.A, 5.NBT.B), 6.RP.A, 6.EE.A.3, 7.NS.A, 7.EE.A, 8.EE.B, 8.F.A, 8.G.A

Clusters or Standards grouped by parentheses are closely connected and could be analyzed together.

For context, read Criterion #4a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).

-Choose a cluster/Standard from the Major Work that is aligned to each aspect of rigor and use it to evaluate these metrics. It is most helpful if the same clusters/Standards are chosen for all of the programs being evaluated. (Guidance in choosing clusters/Standards is included in "How to Find the Evidence".)

Use the questions for AC Metric 1A to evaluate Metric 1A. Record evidence for each question and rate Metric 1A.

____**Meets (2)**

____**Partially Meets (1)**

____**Does Not Meet (0)**

Is conceptual understanding attended to thoroughly where the Standards set explicit expectations for understanding or interpreting? Evaluate lessons, chapter/unit assessments and homework assignments, paying attention to work aligned to Standards that explicitly call for understanding or interpreting. NOTE: Examples of evaluating this Criterion might include looking at how well the multi-digit addition and subtraction algorithms are developed and explained on the basis of place value and properties of operations; or how well the multi-digit multiplication and division algorithms are developed and explained on the basis of place value and properties of operations; or how well solving equations is presented and explained as a process of reasoning.	**Evidence-** Number sense as the foundation for program. 3 levels of conceptual instruction daily.	
Do the materials feature high-quality conceptual problems and conceptual discussion questions? Evaluate lessons, chapter/unit assessments, and homework assignments. NOTE: Example of conceptual problems might include such questions as "Find a number greater than 1/5 and less than 1/4," or "If the divisor does not change and the dividend increases, what happens to the quotient?"	**Evidence-** Activity cards given with questions to ask for each lesson. Reflects steps in the workbook push students to understand and explain their thinking.	
Do the materials feature opportunities to identify correspondences across mathematical representations? Evaluate lessons, chapter/unit assessments and homework assignments. NOTE: Examples of evaluating this Criterion might include looking at whether students are supported in identifying correspondences among: the verbal description of a situation, the diagrams that distill its mathematical features, and the equations that model it; or equivalent forms of numbers (e.g., 3 and 6/2) and the number line; or rational number operations and representations of them via models such as the vector model; or the expression that defines a function and the graph that shows the relationship.	**Evidence-** All lessons feature opportunities to identify correspondences across mathematical representations.	
Metric AC1B: **The materials are designed so that students attain the fluencies and procedural skills required by the Standards.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Major Work for the grade being evaluated that relate specifically to fluency and procedural skill to use throughout the questions associated with this metric. NOTE: Some examples of Standards that call for procedural skill and fluency include: K.OA.A.5, 1.OA.C.6, 2.OA.B.2, 2.NBT.B.5, 3.OA.C.7, 3.NBT.A.2, 4.NBT.B.4, 5.NBT.B.5, 6.NS.B.2, and 6.NS.B.3, 6.EE.A, 7.NS.A, 7.EE.A.1,7.EE.B.4a, 8.EE.C.7, 8.EE.C.8b For context, read Criterion #4b in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).		**Use the questions for Metric 1B to evaluate Metric 1 B. Record evidence for each question and rate Metric 1B.** **(Reviewer only.)** **___x_Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**

Is progress toward fluency and procedural skill interwoven with students' developing conceptual understanding of the operations in question? Evaluate lessons, chapter/unit assessments, daily routines, and homework assignments for evidence that the development of fluency and procedural skill is supported by conceptual understanding.	**Evidence-** **Many opportunities for fluency practice, games, and manipulatives also algorithms included in each lesson.**	
Are purely procedural problems and exercises present that include cases in which opportunistic strategies are valuable and generic cases that require efficient algorithms present? Evaluate lessons, chapter/unit assessments, daily routines, and homework assignments. NOTE: Examples of problems in which opportunistic strategies are valuable might include the sum 698 + 240 or the system $x + y = 1$, $2x + 2y = 3$. Examples of generic cases that require efficient algorithms might include the sum 8767+2286 or the system $6y + x = x + 3$, $-x = 1 + 2y$.	**Evidence-** **Opportunities to use different strategies.**	
Do the materials in grades K–6 provide repeated practice toward attainment of fluency Standards? Evaluate lessons, daily routines, and homework assignments for evidence of repeated practice toward attainment of the following K–6 Standards that set an explicit expectation of fluent (accurate and reasonably fast) computation: K.OA.A.5, 1.OA.C.6, 2.OA.B.2, 2.NBT.B.5, 3.OA.C.7, 3.NBT.A.2, 4.NBT.B.4, 5.NBT.B.5, 6.NS.B.2, 6.NS.B.3.	**Evidence-** **Repeated practice and fluency in all lessons.**	
Metric AC1C: **The materials are designed so that teachers and students spend sufficient time working with engaging applications, without losing focus on the Major Work of each grade.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Major Work for the grade being evaluated that relate specifically application to use throughout the questions associated with this metric. NOTE: Some examples of clusters or Standards that call for application include: K.OA.A.2, 1.OA.A, 2.OA.A, 3.OA.A.3, 3.OA.D.8, 4.OA.A.3, 4.NF.B.3d, 4.NF.B.4c, 5.NF.B.6, 5.NF.B.7c, 6.RP.A.3, 6.NS.A.1, 6.EE.B.7, 6.EE.C.9, 7.RP.A, 7.NS.A.3, 7.EE.B.3, 8.EE.C.8c, 8.F.B For context, read Criterion #4c in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).		**Use the questions for Metric 1C to evaluate Metric 1C. Record evidence for each question and rate Metric 1C.** **(Reviewer only.)** **__x__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Are there are single- and multi-step contextual problems, including non-routine problems, that develop the mathematics of the grade, afford opportunities for practice, and engage students in problem solving? Do the problems attend thoroughly to those places in the content Standards where expectations for multi-step and real-world problems are explicit? Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** **Many opportunities for multi-step word problems and extended response questions. Students need critical thinking to solve problems.**	

Do application problems particularly stress applying the Major Work of the grade? Evaluate lessons, chapter/unit assessments, and homework assignments. NOTE: Examples of evaluating this Criterion might include looking at: how well, by the end of grade 2, students using the materials as designed can represent and solve a full range of one-step addition and subtraction word problems; or how well, by the end of grade 3, students using the materials as designed can represent and solve a full range of one-step multiplication and division word problems; or how well these basic situation types for each operation are carried coherently across the grades, (e.g., with fractions and algebraic expressions); or, in all grades, whether the problems connect concepts, Standards, and domains in ways that are natural and important. For a list of situation types for one-step addition, subtraction, multiplication, and division problems, see Situation Types for the Operations in Word Problems	**Evidence-** **Focus is on standards the Major Works and since it was an intervention program it is preparing students to be on grade level.**	
Does modeling build slowly across K–8, with applications that are relatively simple in earlier grades and when students are encountering new content? In grades 6–8, do the problems begin to provide opportunities for students to make their own assumptions or simplifications in order to model a situation mathematically? Read Standard for Mathematical Practice 4, Model with Mathematics. Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** Modeling builds appropriately for grade level, giving students multiple opportunities for use of hands-on and virtual manipulatives.	

Alignment Criterion 1: Rigor and Balance

Materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.

AC1 Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 out of 6 points, the Criterion has not been met. Check the final rating.
Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)**

Before moving to Alignment Criterion 2, record the final Meets or Does Not Meet rating in the Evaluation Summary.

(Reviewer only.)

___x_Meets

____Does Not Meet

Strengths/Weaknesses:

Directions for Alignment Criterion 2

Standards for Mathematical Practice

Alignment Criterion 2: Standards for Mathematical Practice **Materials must demonstrate authentic connections between content Standards and practice Standards.** The Standards require that designers of instructional materials connect the mathematical practices to mathematical content in instruction. Thus, materials must demonstrate authentic connections between content Standards and practice Standards.	**Required Materials:** • Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf) • Focus by Grade Level for the grade being evaluated (www.achievethecore.org/focus) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion** Alignment Criterion 2 is rated as Meets or Does Not Meet. To rate Alignment Criterion 2, first rate metrics 2A, 2B, and 2C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). For each metric, guiding questions are provided to aid in gathering evidence. Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 2 if the materials earn 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as mathematical practices, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.
Metric AC2A: **Materials address the practice Standards in such a way as to enrich the Major Work of the grade; practices strengthen the focus on Major Work instead of detracting from it, in both teacher and student materials.** **How to Find the Evidence:** Familiarize yourself with the Major Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate teacher and student materials for evidence that the mathematical practices support and connect to the focus of the grade. NOTE: Examples of evaluating this Criterion might include looking at whether, in grades K–5, students using the materials are supported to look for and express regularity in repeated reasoning about the addition table, the multiplication table, the properties of operations, the relationship between addition and subtraction or multiplication and division, and the place value system; or whether, in grades 6–8, students using the materials are supported to look for and express regularity in repeated reasoning about proportional relationships and linear functions. For context, read Criterion #8 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013).	**Evidence-** Materials address the practice standards which strengthen the focus of the Major Work for the grade level.	**(Reviewer only.)** **___x_Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**

Metric AC2B: **Materials attend to the full meaning of each practice Standard.** **How to Find the Evidence:** For context, read Criterion #7 and Criterion #9 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).		**Use the questions for Metric 2B to evaluate Metric 2B. Record evidence for each question and rate Metric 2B.** **(Reviewer only.)** **___x_Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Over the course of any given year of instruction, is each mathematical practice Standard meaningfully present in the form of assignments, activities, or problems that stimulate students to develop the habits of mind described in the practice Standard? Evaluate lessons, chapter/ unit assessments, and homework assignments for evidence of each mathematical practice being meaningfully present in instruction.	**Evidence-** **Standards are meaningfully present at all grade levels, age appropriate and spark interest in students.**	
Do the materials treat the practice Standards as developing across grades or grade bands? Are the practice Standards in early grades appropriately simple? Do they display an arc of growing sophistication across the grades?	**Evidence-** **Standards were developed across grade levels and increased in complexity.**	
Are there teacher-directed materials that explain the role of the practice Standards in the classroom and in students' mathematical development? Are alignments to practice Standards accurate?	**Evidence-** **On-line resources were avasilable.**	
Metric AC2C: **Materials support the Standards' emphasis on mathematical reasoning.** **How to Find the Evidence:** For context, read Criterion #10 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).		**Use the questions for Metric 2C to evaluate Metric 2C. Record evidence for each question and rate Metric 2C.** **(Reviewer only.)** **__x__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Do the materials support students in constructing viable arguments and critiquing the arguments of others concerning grade-level mathematics that is detailed in the content Standards? Read Standard for Mathematical Practice 3. Evaluate teacher and student materials to ensure that students are given opportunities to reason with grade-level mathematics.	**Evidence-** **Extended Response and Critical Thinking sections evident in all lessons.**	
Do the materials support students in producing not only answers and solutions, but also, in a grade-appropriate way, arguments, explanations, diagrams, mathematical models, etc., especially in the Major Work of the grade? Familiarize yourself with the Major Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate teacher and student materials, to understand the types of work students are expected to produce.	**Evidence-** **Extended Response and Critical Thinking sections evident in all lessons.**	

Do materials explicitly attend to the specialized language of mathematics? Is the language of argument, problem solving, and mathematical explanations taught rather than assumed? Evaluate teacher and student materials, paying attention to how mathematical language is taught. NOTE: Examples of evaluating this Criterion might include looking at whether students are supported in: basing arguments on definitions; using the method of providing a counterexample; or recognizing that examples alone do not establish a general statement.	**Evidence-** **Vocabulary at the beginning of each lesson is provided. Words are intended to be used throughout the lesson.**	
Alignment Criterion 2: **Standards for Mathematical Practice** **Materials must demonstrate authentic connections between content Standards and practice Standards.** **AC2** Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 out of 6 points, the Criterion has not been met. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)** **Before moving to Alignment Criterion 3, record the final Meets or Does Not Meet rating in the Evaluation Summary.**		**(Reviewer only.)** **___x_Meets** **____Does Not Meet** **Strengths/Weaknesses:**
Alignment Criterion 3: **Access to the Standards for All Students** **Materials must provide supports for English Language Learners and other special populations.** Because Standards are for all students, alignment requires thoughtful support to ensure all students are able to meet the Standards. Thus, aligned materials must provide supports for English Language Learners and other special populations.	**Required Materials:** • Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion:** Alignment Criterion 3 is rated as Meets or Does Not Meet. To rate Alignment Criterion 3, first rate metrics 3A, 3B, and 3C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 3 if the materials earn 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as support for special population, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.

Metric AC3A: **Support for English Language Learners and other special populations is thoughtful and helps those students meet the same Standards as all other students. The language in which problems are posed is carefully considered.** **How to Find the Evidence:** Evaluate teacher and student materials, paying attention to supports offered for special populations.	**Evidence-** Support for ELL and special populations is evident. (ELL support guide, Spanish and English letters for home provided along with progress monitoring. Building Blocks also in Spanish.)	**Reviewer only.)** **__x__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Metric AC3B: **Materials provide appropriate level and type of scaffolding, differentiation, intervention, and support for a broad range of learners with gradual removal of supports, when needed, to allow students to demonstrate their mathematical understanding independently.** **How to Find the Evidence:** Evaluate teacher and student materials, paying attention to whether materials provide differentiation that will lead all learners to engage with on-grade-level content.	**Evidence-** Differentiation and practice in each lesson.	**Reviewer only.)** **__x__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Metric AC3C: **Design of lessons recommends and facilitates a mix of instructional approaches for a variety of learners such as using multiple representations (e.g., including models, using a range of questions, checking for understanding, flexible grouping, pair-share).** **How to Find the Evidence:** Evaluate teacher materials, noting instructional approaches suggested for whole class and differentiated lessons and activities.	**Evidence-** Design of lessons pushes students to demonstrate understanding in a variety of ways including oral, written, and discussion. Also hands-on games, etc.	**Reviewer only.)** **__x__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**

Alignment Criterion 3: **Access to the Standards for All Students** **Materials must provide supports for English Language Learners and other special populations.** **AC3** Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 points, the Criterion has not been met. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion.**(Reviewer only.)** **Move to the Evaluation Summary and record the final Meets or Does Not Meet rating .**	**(Reviewer only.)** **__x__Meets** **____Does Not Meet** **Strengths/Weaknesses:**

Once an evaluation for alignment to the Shifts and major features of the CCSS has been conducted using Sections 1-3, it's important to evaluate for overall quality and best practices. A starting list of Indicators of Quality are suggested below. States, districts and others evaluating instructional materials are encouraged to add to this list to ensure materials reflect local contexts. For background information on some of the Indicators of Quality in this section, refer to pp.18–21 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).

Indicators of Quality	**Evidence- Give specific examples.**	**Rating: (Reviewers only.)**
1. Lessons are thoughtfully structured and support the teacher in leading the class through the learning paths at hand, with active participation by all students in their own learning and in the learning of their classmates.	**Evidence-** **Each lesson provides an easy to use format for the teacher to follow. The components of the lesson are warm-up, engage, reflect, and assess encourages active participation from all students.**	**(Reviewer only.)** **____x__ Yes** **_____ No**
2. The underlying design of the materials includes both problems and exercises. (In solving problems, students learn new mathematics, whereas in working exercises, students apply what they have already learned to build mastery.) Each problem or exercise has a purpose. **NOTE: This Criterion does not require that the problems and exercises be labeled as such.**	**Evidence-** **In the Engage section students develop new concepts and then they practice their new learning.**	**(Reviewer only.)** **____x__ Yes** **_____ No**

3. Design of assignments is not haphazard: exercises are given in intentional sequences in order to strengthen students' mathematical understanding.	Evidence- Knowledge and placement tests are given and program consists of 5 six-week lessons per grade level.	(Reviewer only.) ____x__ Yes _____ No
4. There are separate teacher materials that support and reward teacher study including, but not limited to: discussion of the mathematics of the units and the mathematical point of each lesson as it relates to the organizing concepts of the unit, discussion on student ways of thinking and anticipating a variety of students responses, guidance on lesson flow, guidance on questions that prompt students thinking, and discussion of desired mathematical behaviors being elicited among students.	Evidence- There is an on-line Teachers edition which includes a discussion board and interactive models and professional development to support the teacher	(Reviewer only.) _____x_ Yes _____ No
5. Manipulatives suggested in the materials are faithful representations of the mathematical objects they represent and are connected to written methods.	Evidence- Manipulatives provided were appropriate for the grade level and promoted connections to written methods. Materials needed are clear and listed at the beginning of each lesson.	(Reviewer only.) ____x__ Yes _____ No
6. Materials include a variety of curriculum-embedded assessments. Examples include pre-, formative, summative, and self-assessment resources.	Evidence- There are entry level placements tests to be given prior to beginning of program. The formal assessments given at the end of each week and informal assessments given at the end of each lesson.	(Reviewer only.) ___x___ Yes _____ No
7. Assessments contain aligned rubrics, answer keys, and scoring guidelines that provide sufficient guidance for interpreting student performance.	Evidence- The placement test guide gives instructions on how to administer and score tests. Answer keys given in the Teacher's Guide for each practice sheet.	(Reviewer only.) __x____ Yes _____ No
8. Materials assess student proficiency using methods that are accessible and unbiased, including the use of course-level language in student prompts.	Evidence- Assessments are accessible and unbiased and include the course-level language.	(Reviewer only.) ____x__ Yes _____ No

9. Materials are carefully evaluated by qualified individuals, whose names are listed, in an effort to ensure freedom from mathematical errors and course-level appropriateness.	**Evidence-** **The authors were listed on page B2-B5 of the Teacher's Guide.**	**(Reviewer only.)** **____x__ Yes** **_____ No**
10. The visual design supports students in engaging thoughtfully with the subject. Navigation through the text is clear.	**Evidence-** **Activities and pictures are engaging. Questions are age appropriate and pictures catch the attention of students.**	**(Reviewer only.)** **____x__ Yes** **_____ No**
11. The materials engage parents in appropriate ways. For example, homework assignments in elementary grades, consist of routine problems, practice with getting answers, and fluency-building exercises that parents can easily support.	**Evidence-** **Letter home provided for parents in both Spanish and English which includes easy home activities that encourage extra practice and involvement.**	**(Reviewer only.)** **_____x_ Yes** **_____ No**

Reviewer IMET Evaluation Summary Title/Level Number Worlds Level D

Publisher: McGraw Hill School Education, LLC Copyright: 2015

ISBN: various

Reviewer ID # BKC, DY Date Review Completed: March 8, 2016

Non-Negotiable Criteria- Each Non-Negotiable must be met in order for the Non-Negotiable Alignment Criteria to be met overall.

Non-Negotiable 1: Freedom from Obstacles to Focus	Non- Negotiable 2: Focus and Coherence
____x___ Meets _____ Does Not Meet	___x__ Meets _____ Does Not Meet

Non-Negotiable Overall:

____x_ Meets _____ Does Not Meet

Alignment Criteria- Each Alignment Criterion must be met with a sufficient number of points in order for Alignment Criteria to be labeled as "Meets" overall. The more points the materials receive on the Alignment Criteria, the better they are aligned.

Alignment Criterion 1: Rigor and Balance	Alignment Criterion 2: Standards of Mathematical Practice	Alignment Criterion 3: Access to Standards for All Learners
Points: ___6__ of 6 possible. (Materials must receive at least 5 of 6 points to align.) __X___ Meets _____ Does Not Meet	Points: __6___ of 6 possible. (Materials must receive at least 5 of 6 points to align.) ___X__ Meets _____ Does Not Meet	Points: __6___ of 6 possible. (Materials must receive at least 5 of 6 points to align.) __X___ Meets _____ Does Not Meet

Alignment Criteria Overall:

__x___ Meets _____ Does Not Meet

If the materials meet both Non-Negotiables and relevant Alignment Criterion, they are aligned to the Shifts and major features of the Core Standards. **Do the materials meet every Non-Negotiable and Alignment Criterion? __x___ Yes _____ No**

What are the specific areas of strength and weakness based on this evaluation? Publishers or others modifying or developing assessments can use this information to make improvements and/or to remedy gaps in the alignment of assessment materials.

2015-16 Mathematics Interim Review Recommendation & Summary

Publisher Name:	McGraw Hill School Education, LLC
Title:	Number Worlds
ISBN #	various
Grade Level(s) or Course:	Level E
Reviewer ID:	LC, CN

RECOMMENDED AS:

_____**Core Mathematics Program-** a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials. Substantial evidence clearly supports the designation of this program as Core.

_____**Other Mathematics Program-** a program that substantially, but partially, meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for supplemental materials. Substantial evidence clearly supports the designation of this program as Other.

_____**Component Mathematics Program-** a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs. Substantial evidence clearly supports the designation of this program as Component.

_____x___**Intervention Program-** a program designed and intended to target and support students' specific needs. Substantial evidence clearly supports the designation of this program as Intervention.

_____ **Does not meet criteria** for recommendation as a Curricular Material or Online Resource for Mathematics.

EVIDENCE SUMMARY:

FOCUS-
Most skills are assessed before they are taught to students.

COHERENCE-
Materials do not focus coherently on the Major Work of the grade level.

RIGOR-
Program offers many opportunities to practice skills through lessons, activities, assessments and projects.

CONCEPTUAL UNDERSTANDING-
Program offers opportunities for students to reflect on their learning and explain their thinking.

MATHEMATICAL PRACTICES-
The mathematical practices are embedded in all activities.

ACCESSIBILITY OF STANDARDS TO ALL STUDENTS-
Differentiation and practice in every lesson is evident. Students are supported to demonstrate their learning in a variety of ways.

OTHER:
Vocabulary flash cards are available to purchase, however, this is not a necessity to the success of the program.

Focused on Major Works of Kindergarten instead of 1st grade.

2015-16 Interim Mathematics Review

Mathematics Evaluation Tool Grades K-8

Publisher: McGraw Hill School Education, LLC

Title of Material: Number Worlds - Level E

Author: Griffin

ISBN #: Various **Copyright** 2015

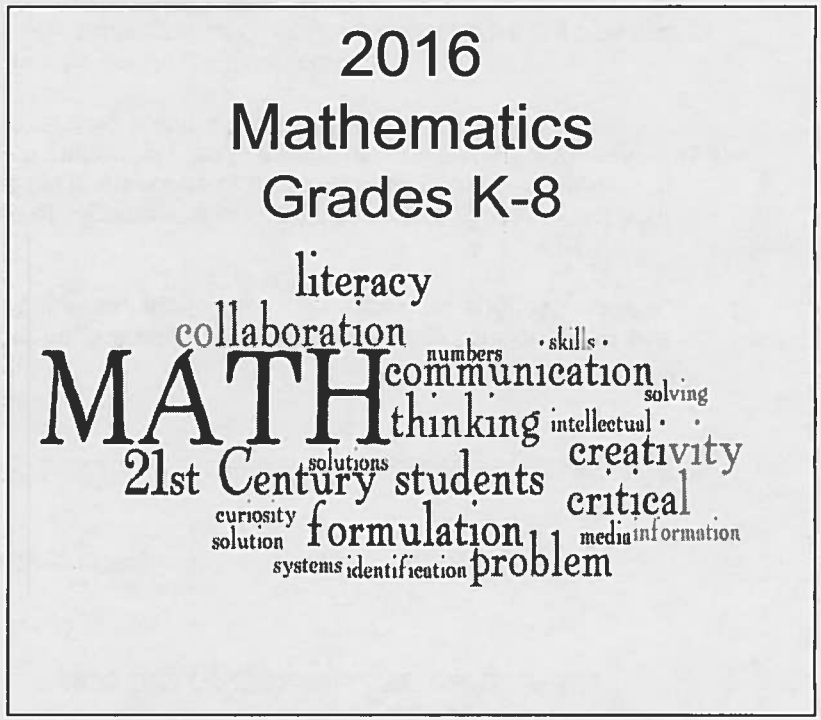
Reviewer ID: LC, CN

Core Mathematics Program- a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Core.

Other Mathematics Program- a program that substantially, but partially, meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Other.

Component Mathematics Program- a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs.
Substantial evidence clearly supports the designation of this program as Component.

Intervention Program- a program designed and intended to target and support students' specific needs.
Substantial evidence clearly supports the designation of this program as Intervention.



- Evaluation Form adapted from Instructional Materials Evaluation Toolkit (IMET).

The IMET was developed by Student Achievement Partners. Educators may use or adapt. http://creativecommons.org/licenses/by/3.0/ Download this tool at http://achievethecore.org/IMET

Instructional Materials Evaluation Tool

Mathematics, Grades K-8

What Are the Purposes of the IMET?

This Math IMET is designed to help educators determine whether instructional materials are aligned to the Shifts and major features of the Common Core State Standards (CCSS). The substantial instructional Shifts (http://www.corestandards.org/other-resources/key-shifts-inmathematics/) at the heart of the Common Core State Standards are:

- **Focus** strongly where the Standards focus
- **Coherence**: Think across grades and link to major topics within the grade
- **Rigor**: In major topics, pursue conceptual understanding, procedural skill and fluency, and application with equal intensity.

The IMET draws directly from the following documents:

- Common Core State Standards for Mathematics (www.corestandards.org/Math)
- Publishers' Criteria for the Common Core State Standards in Mathematics grade K-8 (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)

When to use the IMET

1. Purchasing materials: Many factors go into local purchasing decisions. Alignment to the Standards is a critical factor to consider. This tool is designed to evaluate alignment of instructional materials to the Shifts and the major features of the CCSS. It also provides suggestions of additional indicators to consider in the materials evaluation and purchasing process.

2. Evaluating materials currently in use: The IMET can be used to analyze the degree of alignment of existing materials and help to highlight specific, concrete flaws in alignment. Even where materials and tools currently in use fail to meet one or more of these criteria, the pattern of failure is likely to be informative. States and districts can use the evaluation to create a thoughtful plan to modify or combine existing resources in such a way that students' actual learning experiences approach the focus, coherence, and rigor of the Standards.

3. Developing programs: Those developing new programs can use this tool as guidance for creating aligned curricula.
Please note this tool was designed for evaluating comprehensive curricula (including any supplemental or ancillary materials), but it was not designed for the evaluation of standalone supplemental materials.

Who Uses the IMET?

Evaluating instructional materials requires both subject-matter and pedagogical expertise. Evaluators should be well versed in the Standards (www.corestandards.org/Math) for all grades in which materials are being evaluated. This includes understanding the Major Work of the grade (www.achievethecore/focus), the Supporting and Additional work, how the content fits into the progressions in the Standards (www.achievethecore.org/progressions), and the expectations of the Standards with respect to conceptual understanding, procedural skill and fluency, and application. Evaluators also should be familiar with the substantial instructional Shifts (http:// www.corestandards.org/other-resources/key-shifts-in-mathematics/) of Focus, Coherence and Rigor that are listed above.

Getting Started

Prior to Evaluation

Assemble all of the materials necessary for the evaluation. It is essential for evaluators to have materials for all grades covered by the program, as some criteria cannot be rated without having access to each grade. In addition, each evaluator should have a reference copy of the Common Core State Standards for Mathematics (CCSSM) and the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013).

Before conducting the evaluation itself, it is important to develop a protocol for the evaluation process. The protocol should include having evaluators study the Publishers' Criteria and the IMET. It will also be helpful for evaluators to get a sense of each program overall before beginning the process. At a minimum, this would include reading the front matter of the text, looking at the table of contents and paging through multiple chapters.

Sections 1-3 below should be completed to produce a comprehensive picture of the strengths and weaknesses of the materials under evaluation. Information about areas in need of improvement or supplementation should be shared with internal and external stakeholders.

Navigating the Tool

Begin with Section 1: Non-Negotiable Alignment Criteria

- The Non-Negotiable Alignment Criteria must each be met in full for materials to be considered aligned to the Shifts and the major features of the Common Core State Standards. Each Non-Negotiable Alignment Criterion has one or more metrics associated with it; every one of these metrics must be met in order for the criterion as a whole to be met.

- Examine the relevant materials and use evidence to rate the materials against each criterion and its associated metric(s).

- Record and explain the evidence upon which the rating is based.

Continue to Section 2: Alignment Criteria

- The Alignment Criteria must each be met for materials to be considered aligned to the Shifts and the major features of the Common Core State Standards. Each Alignment Criterion has one or more metric associated with it; a specific number of these metrics must be met or partially met in order for the criterion as a whole to be met.

- Examine the materials in relation to these criteria, assigning each metric a point value. Rate the criterion as "Meets" or "Does Note Meet" based on the number of points assigned. The more points the materials receive on the alignment Criteria, the better they are aligned.

- Record and explain the evidence upon which the rating is based.

Proceed to Section 4: Indicators of Quality

- Indicators of Quality are important considerations that will help evaluators better understand the overall quality of instructional materials. These considerations are not criteria for alignment to the CCSS, but they provide valuable information about additional program characteristics. Evaluators may want to add their own indicators to the examples provided.

Directions for Non-Negotiable 1

Freedom from Obstacles to Focus

Criterion	Evidence- Give specific examples.	Rating: (Reviewer only.)
Non-Negotiable 1: **Freedom from Obstacles to Focus** **Materials must reflect the content architecture of the Standards by not assessing the topics named before the grade level where they first appear in the Standards.** The Standards foster students' progress to algebra by focusing strongly on arithmetic. Consistent with this focus, certain topics from outside of arithmetic appear only in later grades. Thus, to be aligned, materials must reflect the content architecture of the Standards by not assessing the topics named before the grade level where they first appear in the Standards. In this criterion, "topics named" means the topics that are explicitly named in Metric 1A. No other topics should be added to the list in Metric 1A. (Note that other topics in the standards are addressed in criterion NN2.)	**Required Materials** • Common Core State Standards for Mathematics (www.corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf) • From the materials being evaluated: teacher guides and all assessment components	**Rating this Criterion:** Non-Negotiable 1 is rated as Meets or Does Not Meet. To rate Non-Negotiable 1, begin by rating Metric 1A. Since Metric 1A is the only metric for Non-Negotiable 1, the rating for Non-Negotiable 1 is the same as the rating for Metric 1A. If Metric 1A is rated as Does Not Meet, include evidence of when the named topic(s) is/are assessed. If the metric is rated as Meets, list the grade(s) examined in the evaluation.

Metric NN1A: **Materials re[illegible] the basic architecture of the Standards by not assessing the listed topics before the grade level indicated.** • Probability, including chance, likely outcomes, probability models. (Introduced in the CCSSM in grade 7) • Statistical distributions, including center, variation, clumping, outliers, mean, median, mode, range, quartiles; and statistical association or trends, including two-way tables, bivariate measurement data, scatter plots, trend line, line of best fit, correlation. (Introduced in the CCSSM in grade 6) • Similarity, congruence, or geometric transformations. (Introduced in the CCSSM in grade 8) • Symmetry of shapes, including line/ reflection symmetry, rotational symmetry. (Introduced in the CCSSM in grade 4) **How to Find the Evidence:** Evaluate the table of contents, all chapter tests, all unit tests, and other such assessment components (including rubrics). For context, read Criterion #2 from the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013). NOTE: Grade alignments of other topics are addressed in Non-Negotiable 2, Focus and Coherence.) In this criterion, "topics named" means the topics that are explicitly named in Metric 1A. No other topics should be added to the list in Metric 1A. (Note that other topics in the standards are addressed in criterion NN2.)	**Evidence-** **No skills were asse[illegible]d prior to teaching the standards. Program designed as an intervention program.**	**(Reviewer only.)** **___x_Meets** **____Does Not Meet**
Non-Negotiable 1: Materials must reflect the content architecture of the Standards by not assessing the topics named* before the grade level where they first appear in the Standards. **NN 1** If Metric 1A was rated as Meets, then rate Non-Negotiable 1 as Meets. If Metric 1A was rated as Does Not Meet, then rate Non- Negotiable 1 as Does Not Meet. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion.**(Reviewer only.)** **Before moving to Non-Negotiable 2, record the final Meets or Does Not Meet rating in the Evaluation Summary.**		**(Reviewer only.)** **__x__Meets** **____Does Not Meet** **Strengths/Weaknesses:**

Directions for Non-Negotiable 2

Focus and Coherence

Non-Negotiable 2:
Focus and Coherence

Materials must focus coherently on the Major Work of the grade in a way that is consistent with the progressions in the Standards.

Focus and coherence are the two major evidence-based design principles of the Common Core State Standards for Mathematics (CCSSM, p. 3). Focus is necessary in order to fulfill the ambitious promise the states have made to their students by adopting the Standards: greater achievement at the college and career ready level; greater depth of understanding of mathematics; and a rich classroom environment in which reasoning, sense-making, applications, and a range of mathematical practices flourish. In simpler terms, a mile-wide, inch-deep curriculum translates to less time per topic. Less time means less depth and moving on without many students. Thus, materials must focus coherently on the Major Work of the grade in a way that is consistent with the progressions in the Standards.

Required Materials

- Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf)
- Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)
- Focus by Grade Level for the grade being evaluated (www.achievethecore.org/focus)
- From the materials being evaluated: teacher guides, student texts and workbooks

Rating this Criterion:

Non-Negotiable 2 is rated as Meets or Does Not Meet.

To rate Non-Negotiable 2, first rate metrics 2A–2H. Each of these eight metrics must be rated as Meets in order for Non-Negotiable 2 to be rated as Meets. Rate each metric 2A-2H as Meets or Does Not Meet/Insufficient Evidence. If the evidence examined shows that the Criterion is met, then mark the Criterion Meets. If the evidence examined shows that the Criterion is not met—or if there is insufficient evidence to make a determination—then mark the Criterion as Does Not Meet/Insufficient Evidence. Support all ratings with evidence.

Metric NN2A:
In each grade K–8, students and teachers using the materials as designed devote the large majority of time to the Major Work of the grade.

How to Find the Evidence:

Familiarize yourself with the Major Work of the grade being evaluated (see the Focus by Grade Level documents.)

Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, lessons, homework assignments, and assessments. (Evaluate both student and teacher materials.)

Consider time spent on the Major Work of the grade and judge qualitatively whether students and teachers using the materials as designed will devote the large majority of time to the Major Work of the grade.

For context, read Criterion #1 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013)

Evidence-
28 of the 30 weeks covered the major works for 3rd Grade.
Placement assessments to be given to students.

(Reviewer only.)

___x_Meets

____Does Not Meet/

Insufficient Evidence

Metric NN2B: **Supporting work, where present, enhances focus and coherence simultaneously by also engaging students in the Major Work of the grade.** **How to Find the Evidence:** Familiarize yourself with the Major Work and Supporting Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate chapters and lessons that focus on Supporting Work. NOTE: Example of evaluating this Criterion might include looking at whether materials for K–5 generally treat data displays as an occasion for solving grade-level word problems using the four operations (e.g., see 3.MD.B.3); or whether materials for grade 7 take advantage of opportunities to use probability to support ratios, proportions, and percentages. For context, read Criterion #3 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** **The vast amount of program is aimed to center on the clusters for grade level because it is an intervention program.**	(Reviewer only.) **__x__Meets** **____Does Not Meet/** **Insufficient Evidence**
Metric NN2C: **Materials base content progressions on the grade-by-grade progressions in the Standards. Content from previous or future grades does not unduly interfere with or displace on-grade-level content.** **How to Find the Evidence:** Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, and lessons in both student and teacher materials. NOTE: In some cases it may be possible that aligned materials might address some aspects of a topic in a strategic way before or after the grade level in which the topic is central in the Standards' progressions; for example, a curriculum author might purposefully choose to explore adding fractions with unlike denominators in a way appropriate to grade four, recognizing that this work is not really required until the next grade. However, any such purposeful discrepancies in content progressions should enhance the required learning in each grade; not unduly interfere with or displace grade-level content; and be clearly aimed at helping students meet the Standards as written rather than effectively rewriting the progressions in the Standards. And in all cases, note that Non-Negotiable 1 must be met for materials to be aligned. For context, read Criterion #5a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** **Content from previous of future grades not interfere with grade level content**	(Reviewer only.) **___x_Meets** **____Does Not Meet/** **Insufficient Evidence**

Metric NN2D: **Materials give all students extensive work with on-grade-level problems.** **How to Find the Evidence:** Evaluate both student and teacher materials. If the materials provide resources for differentiated learning, consider whether lower-performing students have opportunities to engage with grade-level problems. Also consider whether higher-performing students are given opportunities to learn current grade-level content in greater depth. For context, read Criterion #5b in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** **On grade level problems are the main focus in the "engage" step grade level problems are given. There was differentiated instruction for each lesson. "If…then" statements given to help teachers with scaffolding.**	(Reviewer only.) **__x__Meets** **____Does Not Meet/** **Insufficient Evidence**
Metric NN2E: **Materials relate on-grade-level concepts explicitly to prior knowledge from earlier grades.** **How to Find the Evidence:** Evaluate both student and teacher materials. NOTE: Examples of evaluating this Criterion might include looking at the way the materials extend basic ideas of place value across the decimal point; or the role that properties of operations play when the materials extend arithmetic beyond whole numbers to fractions, variables, and expressions. More generally, cluster headings in the Standards sometimes signal key moments where reorganizing and extending previous knowledge is important in order to accommodate new knowledge (e.g., see cluster headings that use the phrase "Apply and extend previous understanding"). For context, read Criterion #5c in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** **Placement test shows teachers where to place students within the program.**	(Reviewer only.) **___x_Meets** **____Does Not Meet/** **Insufficient Evidence**
Metric NN2F: **Review of material from previous grades is clearly identified as such to the teacher, and teacher and students can see what their specific responsibility is for the current year.** **How to Find the Evidence:** Evaluate the table of contents, but do not stop there; also evaluate units, chapters, lessons, homework assignments and assessments. (Evaluate both student and teacher materials.) Identify any content from previous grades and check whether it is identified as such. For context, read Criterion #5a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** **Standards are clearly shown the teacher know grade level or standard for the skill, CCSS, utilizing "Skills Trace" in Teaching for Understanding.**	(Reviewer only.) **__x__Meets** **____Does Not Meet/** **Insufficient Evidence**

Metric NN2G: **Materials include learning objectives that are visibly shaped by CCSSM cluster headings.** **How to Find the Evidence:** Select several clusters from the Major Work in the grade being evaluated. Evaluate teacher and student materials in relation to these clusters. For context, read Criterion #6a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** **Unit overview provides objective and standards for the week and again in the daily plan.**	(Reviewer only.) **_x___Meets** **_____Does Not Meet/** **Insufficient Evidence**
Metric NN2H: **Materials include problems and activities that serve to connect two or more clusters in a domain, or two or more domains in a grade, in cases where these connections are natural and important.** **How to Find the Evidence:** In the grade being evaluated, choose two or more clusters or two or more domains for which connections are natural and important. Evaluate the units, chapters, and lessons that deal with the chosen topics, looking for problems and activities that serve to connect the chosen clusters or domains. NOTE: An example of evaluating this Criterion might include looking at whether problems in grade 4 sometimes or often involve students applying their developing computation skills (detailed in domain NBT) in the context of solving word problems (detailed in domain OA). For context, read Criterion #6b in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** **Every 4 weeks standards learned combined for Project Based Learning to help deepen understanding for the concepts learned. Some projects cover two domains and some covered 2-3 clusters.**	(Reviewer only.) **__x__Meets** **_____Does Not Meet/** **Insufficient Evidence**
Non-Negotiable 2: **Focus and Coherence** **Materials must focus coherently on the Major Work of the grade in a way that is consistent with the progressions in the Standards.** **NN 2** If all Metrics 2A – 2H were rated as Meets, then rate Non-Negotiable 2 as Meets. If one or more Metric was rated Does Not Meet/Insufficient Evidence, then rate Non-Negotiable 2 as Does Not Meet. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)** **Before moving to Alignment Criterion 1, record the final Meets or Does Not Meet rating in the Evaluation Summary.**		(Reviewer only.) **___x_Meets** **_____Does Not Meet** **Strengths/Weaknesses:**
Now continue by evaluating the Alignment Criterion 1 for Rigor and Balance.		

Directions for Alignment Criterion 1

Rigor and Balance

Alignment Criterion 1: Rigor and Balance

Materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.

The Standards set expectations for attention to all three aspects of rigor: conceptual understanding, procedural skill and fluency, and applications. Thus, materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.

Required Materials

- Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf)
- Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)
- Focus by Grade Level for the grade being evaluated (achievethecore.org/focus)
- Situation Types for the Operations in Word Problems (achievethecore.org/situation-types)
- From the materials being evaluated: teacher guides, student texts and workbooks

Rating this Criterion:

Alignment Criterion 1 is rated as Meets or Does Not Meet.

To rate Alignment Criterion 1, first rate metrics 1A, 1B, and 1C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). For each metric, guiding questions are provided to aid in gathering evidence.

Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 1 if the materials rate 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as rigor and balance, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.

Metric AC1A:
The materials support the development of students' conceptual understanding of key mathematical concepts, especially where called for in specific content Standards or cluster headings.

How to Find the Evidence:

Select one or more cluster(s) or Standard(s) from the Major Work for the grade being evaluated that relate specifically conceptual understanding to use throughout the questions associated with this metric. NOTE: Some examples of clusters or Standards that call for conceptual understanding include: K.OA.A.1, (1.NBT.B, 1.NBT.C), (2.NBT.A, 2.NBT.B), (3.OA.A.1, 3.OA.A.2), 4.NF.A, (4.NBT.A, 4.NBT.B), 5.NF.B, (5.NBT.A, 5.NBT.B), 6.RP.A, 6.EE.A.3, 7.NS.A, 7.EE.A, 8.EE.B, 8.F.A, 8.G.A

Clusters or Standards grouped by parentheses are closely connected and could be analyzed together.

For context, read Criterion #4a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).

-Choose a cluster/Standard from the Major Work that is aligned to each aspect of rigor and use it to evaluate these metrics. It is most helpful if the same clusters/Standards are chosen for all of the programs being evaluated. (Guidance in choosing clusters/Standards is included in "How to Find the Evidence".)

Use the questions for AC Metric 1A to evaluate Metric 1A. Record evidence for each question and rate Metric 1A.

____Meets (2)

____Partially Meets (1)

____Does Not Meet (0)

Is conceptual understanding attended to thoroughly where the Standards set explicit expectations for understanding or interpreting? Evaluate lessons, chapter/unit assessments and homework assignments, paying attention to work aligned to Standards that explicitly call for understanding or interpreting. NOTE: Examples of evaluating this Criterion might include looking at how well the multi-digit addition and subtraction algorithms are developed and explained on the basis of place value and properties of operations; or how well the multi-digit multiplication and division algorithms are developed and explained on the basis of place value and properties of operations; or how well solving equations is presented and explained as a process of reasoning.	**Evidence-** Number sense as the foundation for program. 3 levels of conceptual instruction daily.	
Do the materials feature high-quality conceptual problems and conceptual discussion questions? Evaluate lessons, chapter/unit assessments, and homework assignments. NOTE: Example of conceptual problems might include such questions as "Find a number greater than 1/5 and less than 1/4," or "If the divisor does not change and the dividend increases, what happens to the quotient?"	**Evidence-** Activity cards given with questions to ask for each lesson. Reflects steps in the workbook push students to understand and explain their thinking.	
Do the materials feature opportunities to identify correspondences across mathematical representations? Evaluate lessons, chapter/unit assessments and homework assignments. NOTE: Examples of evaluating this Criterion might include looking at whether students are supported in identifying correspondences among: the verbal description of a situation, the diagrams that distill its mathematical features, and the equations that model it; or equivalent forms of numbers (e.g., 3 and 6/2) and the number line; or rational number operations and representations of them via models such as the vector model; or the expression that defines a function and the graph that shows the relationship.	**Evidence-** All lessons feature opportunities to identify correspondences across mathematical representations.	
Metric AC1B: **The materials are designed so that students attain the fluencies and procedural skills required by the Standards.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Major Work for the grade being evaluated that relate specifically to fluency and procedural skill to use throughout the questions associated with this metric. NOTE: Some examples of Standards that call for procedural skill and fluency include: K.OA.A.5, 1.OA.C.6, 2.OA.B.2, 2.NBT.B.5, 3.OA.C.7, 3.NBT.A.2, 4.NBT.B.4, 5.NBT.B.5, 6.NS.B.2, and 6.NS.B.3, 6.EE.A, 7.NS.A, 7.EE.A.1,7.EE.B.4a, 8.EE.C.7, 8.EE.C.8b For context, read Criterion #4b in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).		**Use the questions for Metric 1B to evaluate Metric 1 B. Record evidence for each question and rate Metric 1B.** **(Reviewer only.)** **___x_Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**

Is progress toward fluency and procedural skill interwoven with students' developing conceptual understanding of the operations in question? Evaluate lessons, chapter/unit assessments, daily routines, and homework assignments for evidence that the development of fluency and procedural skill is supported by conceptual understanding.	**Evidence-** **Many opportunities for fluency practice, games, and manipulatives also algorithms included in each lesson.**	
Are purely procedural problems and exercises present that include cases in which opportunistic strategies are valuable and generic cases that require efficient algorithms present? Evaluate lessons, chapter/unit assessments, daily routines, and homework assignments. NOTE: Examples of problems in which opportunistic strategies are valuable might include the sum 698 + 240 or the system x + y = 1, 2x + 2y = 3. Examples of generic cases that require efficient algorithms might include the sum 8767+2286 or the system 6y + x = x + 3, – x = 1 + 2y.	**Evidence-** **Opportunities to use different strategies.**	
Do the materials in grades K–6 provide repeated practice toward attainment of fluency Standards? Evaluate lessons, daily routines, and homework assignments for evidence of repeated practice toward attainment of the following K–6 Standards that set an explicit expectation of fluent (accurate and reasonably fast) computation: K.OA.A.5, 1.OA.C.6, 2.OA.B.2, 2.NBT.B.5, 3.OA.C.7, 3.NBT.A.2, 4.NBT.B.4, 5.NBT.B.5, 6.NS.B.2, 6.NS.B.3.	**Evidence-** **Repeated practice and fluency in all lessons.**	
Metric AC1C: **The materials are designed so that teachers and students spend sufficient time working with engaging applications, without losing focus on the Major Work of each grade.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Major Work for the grade being evaluated that relate specifically application to use throughout the questions associated with this metric. NOTE: Some examples of clusters or Standards that call for application include: K.OA.A.2, 1.OA.A, 2.OA.A, 3.OA.A.3, 3.OA.D.8, 4.OA.A.3, 4.NF.B.3d, 4.NF.B.4c, 5.NF.B.6, 5.NF.B.7c, 6.RP.A.3, 6.NS.A.1, 6.EE.B.7, 6.EE.C.9, 7.RP.A, 7.NS.A.3, 7.EE.B.3, 8.EE.C.8c, 8.F.B For context, read Criterion #4c in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).		**Use the questions for Metric 1C to evaluate Metric 1C. Record evidence for each question and rate Metric 1C.** **(Reviewer only.)** **__x__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Are there are single- and multi-step contextual problems, including non-routine problems, that develop the mathematics of the grade, afford opportunities for practice, and engage students in problem solving? Do the problems attend thoroughly to those places in the content Standards where expectations for multi-step and real-world problems are e[illegible]it? Evaluate lessons, chapter/unit assessments, and homework [illegible]ignments.	**Evidence-** **Many opportunities for multi-step word problems and extended response questions. Students need critical thinking to solve problems.**	

Do application problems particularly stress applying the Major Work of the grade? Evaluate lessons, chapter/unit assessments, and homework assignments. NOTE: Examples of evaluating this Criterion might include looking at: how well, by the end of grade 2, students using the materials as designed can represent and solve a full range of one-step addition and subtraction word problems; or how well, by the end of grade 3, students using the materials as designed can represent and solve a full range of one-step multiplication and division word problems; or how well these basic situation types for each operation are carried coherently across the grades, (e.g., with fractions and algebraic expressions); or, in all grades, whether the problems connect concepts, Standards, and domains in ways that are natural and important. For a list of situation types for one-step addition, subtraction, multiplication, and division problems, see Situation Types for the Operations in Word Problems	**Evidence-** **Focus is on standards the Major Works and since it was an intervention program it is preparing students to be on grade level.**	
Does modeling build slowly across K–8, with applications that are relatively simple in earlier grades and when students are encountering new content? In grades 6–8, do the problems begin to provide opportunities for students to make their own assumptions or simplifications in order to model a situation mathematically? Read Standard for Mathematical Practice 4, Model with Mathematics. Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** Modeling builds appropriately for grade level, giving students multiple opportunities for use of hands-on and virtual manipulatives.	

Alignment Criterion 1: Rigor and Balance

Materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.

AC1 Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 out of 6 points, the Criterion has not been met. Check the final rating.
Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)**

Before moving to Alignment Criterion 2, record the final Meets or Does Not Meet rating in the Evaluation Summary.

(Reviewer only.)

___x_Meets

____Does Not Meet

Strengths/Weaknesses:

Directions for Alignment Criterion 2

Standards for Mathematical Practice

Alignment Criterion 2: Standards for Mathematical Practice **Materials must demonstrate authentic connections between content Standards and practice Standards.** The Standards require that designers of instructional materials connect the mathematical practices to mathematical content in instruction. Thus, materials must demonstrate authentic connections between content Standards and practice Standards.	**Required Materials:** • Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf) • Focus by Grade Level for the grade being evaluated (www.achievethecore.org/focus) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion** Alignment Criterion 2 is rated as Meets or Does Not Meet. To rate Alignment Criterion 2, first rate metrics 2A, 2B, and 2C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). For each metric, guiding questions are provided to aid in gathering evidence. Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 2 if the materials earn 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as mathematical practices, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.
Metric AC2A: **Materials address the practice Standards in such a way as to enrich the Major Work of the grade; practices strengthen the focus on Major Work instead of detracting from it, in both teacher and student materials.** **How to Find the Evidence:** Familiarize yourself with the Major Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate teacher and student materials for evidence that the mathematical practices support and connect to the focus of the grade. NOTE: Examples of evaluating this Criterion might include looking at whether, in grades K–5, students using the materials are supported to look for and express regularity in repeated reasoning about the addition table, the multiplication table, the properties of operations, the relationship between addition and subtraction or multiplication and division, and the place value system; or whether, in grades 6–8, students using the materials are supported to look for and express regularity in repeated reasoning about proportional relationships and linear functions. For context, read Criterion #8 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013).	**Evidence-** Materials address the practice standards which strengthen the focus of the Major Work for the grade level.	**(Reviewer only.)** **___x_Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**

Metric AC2B: **Materials a[illegible]d to the full meaning of each practice Standard.** **How to Find the Evidence:** For context, read Criterion #7 and Criterion #9 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).		**Use the questions for Metric 2B to evaluate Metric 2B. Record evidence for each qu[illegible]n and rate Metric 2B.** **(Reviewer only.)** **___x_Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Over the course of any given year of instruction, is each mathematical practice Standard meaningfully present in the form of assignments, activities, or problems that stimulate students to develop the habits of mind described in the practice Standard? Evaluate lessons, chapter/ unit assessments, and homework assignments for evidence of each mathematical practice being meaningfully present in instruction.	**Evidence-** **Standards are meaningfully present at all grade levels, age appropriate and spark interest in students.**	
Do the materials treat the practice Standards as developing across grades or grade bands? Are the practice Standards in early grades appropriately simple? Do they display an arc of growing sophistication across the grades?	**Evidence-** **Standards were developed across grade levels and increased in complexity.**	
Are there teacher-directed materials that explain the role of the practice Standards in the classroom and in students' mathematical development? Are alignments to practice Standards accurate?	**Evidence-** **On-line resources were avasilable.**	
Metric AC2C: **Materials support the Standards' emphasis on mathematical reasoning.** **How to Find the Evidence:** For context, read Criterion #10 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).		**Use the questions for Metric 2C to evaluate Metric 2C. Record evidence for each question and rate Metric 2C.** **(Reviewer only.)** **__x__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Do the materials support students in constructing viable arguments and critiquing the arguments of others concerning grade-level mathematics that is detailed in the content Standards? Read Standard for Mathematical Practice 3. Evaluate teacher and student materials to ensure that students are given opportunities to reason with grade-level mathematics.	**Evidence-** **Extended Response and Critical Thinking sections evident in all lessons.**	
Do the materials support students in producing not only answers and solutions, but also, in a grade-appropriate way, arguments, explanations, diagrams, mathematical models, etc., especially in the Major Work of the grade? Familiarize yourself with the Major Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate teacher and student materials, to understand the types of work students are expected to produce.	**Evidence-** **Extended Response and Critical Thinking sections evident in all lessons.**	

Do materials explicitly attend to the specialized language of mathematics? Is the language of argument, problem solving, and mathematical explanations taught rather than assumed? Evaluate teacher and student materials, paying attention to how mathematical language is taught. NOTE: Examples of evaluating this Criterion might include looking at whether students are supported in: basing arguments on definitions; using the method of providing a counterexample; or recognizing that examples alone do not establish a general statement.	**Evidence-** **Vocabulary at the beginning of each lesson is provided. Words are intended to be used throughout the lesson.**	
Alignment Criterion 2: **Standards for Mathematical Practice** **Materials must demonstrate authentic connections between content Standards and practice Standards.** **AC2** Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 out of 6 points, the Criterion has not been met. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)** **Before moving to Alignment Criterion 3, record the final Meets or Does Not Meet rating in the Evaluation Summary.**		**(Reviewer only.)** **___x_Meets** **____Does Not Meet** **Strengths/Weaknesses:**
Alignment Criterion 3: **Access to the Standards for All Students** **Materials must provide supports for English Language Learners and other special populations.** Because Standards are for all students, alignment requires thoughtful support to ensure all students are able to meet the Standards. Thus, aligned materials must provide supports for English Language Learners and other special populations.	**Required Materials:** • Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion:** Alignment Criterion 3 is rated as Meets or Does Not Meet. To rate Alignment Criterion 3, first rate metrics 3A, 3B, and 3C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 3 if the materials earn 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as support for special population, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.

Metric AC3A: **Support for English Language Learners and other special populations is thoughtful and helps those students meet the same Standards as all other students. The language in which problems are posed is carefully considered.** **How to Find the Evidence:** Evaluate teacher and student materials, paying attention to supports offered for special populations.	**Evidence-** Support for ELL and special populations is evident. (ELL support guide, Spanish and English letters for home provided along with progress monitoring. Building Blocks also in Spanish.)	**Reviewer only.)** **__x__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Metric AC3B: **Materials provide appropriate level and type of scaffolding, differentiation, intervention, and support for a broad range of learners with gradual removal of supports, when needed, to allow students to demonstrate their mathematical understanding independently.** **How to Find the Evidence:** Evaluate teacher and student materials, paying attention to whether materials provide differentiation that will lead all learners to engage with on-grade-level content.	**Evidence-** Differentiation and practice in each lesson.	**Reviewer only.)** **__x__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Metric AC3C: **Design of lessons recommends and facilitates a mix of instructional approaches for a variety of learners such as using multiple representations (e.g., including models, using a range of questions, checking for understanding, flexible grouping, pair-share).** **How to Find the Evidence:** Evaluate teacher materials, noting instructional approaches suggested for whole class and differentiated lessons and activities.	**Evidence-** Design of lessons pushes students to demonstrate understanding in a variety of ways including oral, written, and discussion. Also hands-on games, etc.	**Reviewer only.)** **__x__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**

Alignment Criterion 3: Access to the Standards for All Students Materials must provide supports for English Language Learners and other special populations. **AC3** Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 points, the Criterion has not been met. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion.**(Reviewer only.)** **Move to the Evaluation Summary and record the final Meets or Does Not Meet rating .**	**(Reviewer only.)** **__x__Meets** **____Does Not Meet** **Strengths/Weaknesses:**

Once an evaluation for alignment to the Shifts and major features of the CCSS has been conducted using Sections 1-3, it's important to evaluate for overall quality and best practices. A starting list of Indicators of Quality are suggested below. States, districts and others evaluating instructional materials are encouraged to add to this list to ensure materials reflect local contexts. For background information on some of the Indicators of Quality in this section, refer to pp.18–21 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).

Indicators of Quality	Evidence- Give specific examples.	Rating: (Reviewers only.)
1. Lessons are thoughtfully structured and support the teacher in leading the class through the learning paths at hand, with active participation by all students in their own learning and in the learning of their classmates.	**Evidence-** **Each lesson provides an easy to use format for the teacher to follow. The components of the lesson are warm-up, engage, reflect, and assess encourages active participation from all students.**	**(Reviewer only.)** **____x__ Yes** **_____ No**
2. The underlying design of the materials includes both problems and exercises. (In solving problems, students learn new mathematics, whereas in working exercises, students apply what they have already learned to build mastery.) Each problem or exercise has a purpose. **NOTE: This Criterion does not require that the problems a[illegible]exercises be labeled as such.**	**Evidence-** **In the Engage section students develop new concepts and then they practice their new learning.**	**(Reviewer only.)** **____x__ Yes** **_____ No**

3. Design of assignments is not haphazard: exercises are given in intentional sequences in order to strengthen students' mathematical understanding.	Evidence- Knowledge and placement tests are given and program consists of 5 six-week lessons per grade level.	(Reviewer only.) ____x__ Yes _____ No
4. There are separate teacher materials that support and reward teacher study including, but not limited to: discussion of the mathematics of the units and the mathematical point of each lesson as it relates to the organizing concepts of the unit, discussion on student ways of thinking and anticipating a variety of students responses, guidance on lesson flow, guidance on questions that prompt students thinking, and discussion of desired mathematical behaviors being elicited among students.	Evidence- There is an on-line Teachers edition which includes a discussion board and interactive models and professional development to support the teacher	(Reviewer only.) _____x_ Yes _____ No
5. Manipulatives suggested in the materials are faithful representations of the mathematical objects they represent and are connected to written methods.	Evidence- Manipulatives provided were appropriate for the grade level and promoted connections to written methods. Materials needed are clear and listed at the beginning of each lesson.	(Reviewer only.) ____x__ Yes _____ No
6. Materials include a variety of curriculum-embedded assessments. Examples include pre-, formative, summative, and self-assessment resources.	Evidence- There are entry level placements tests to be given prior to beginning of program. The formal assessments given at the end of each week and informal assessments given at the end of each lesson.	(Reviewer only.) ___x___ Yes _____ No
7. Assessments contain aligned rubrics, answer keys, and scoring guidelines that provide sufficient guidance for interpreting student performance.	Evidence- The placement test guide gives instructions on how to administer and score tests. Answer keys given in the Teacher's Guide for each practice sheet.	(Reviewer only.) __x____ Yes _____ No
8. Materials assess student proficiency using methods that are accessible and unbiased, including the use of course-level language in student prompts.	Evidence- Assessments are accessible and unbiased and include the course-level language.	(Reviewer only.) ____x__ Yes _____ No

9. Materials are carefully evaluated by qualified individuals, whose names are listed, in an effort to ensure freedom from mathematical errors and course-level appropriateness.	**Evidence-** **The authors were listed on page B2-B5 of the Teacher's Guide.**	**(Reviewer only.)** **____x__ Yes** **_____ No**
10. The visual design supports students in engaging thoughtfully with the subject. Navigation through the text is clear.	**Evidence-** **Activities and pictures are engaging. Questions are age appropriate and pictures catch the attention of students.**	**(Reviewer only.)** **____x__ Yes** **_____ No**
11. The materials engage parents in appropriate ways. For example, homework assignments in elementary grades, consist of routine problems, practice with getting answers, and fluency-building exercises that parents can easily support.	**Evidence-** **Letter home provided for parents in both Spanish and English which includes easy home activities that encourage extra practice and involvement.**	**(Reviewer only.)** **_____x_ Yes** **_____ No**

Reviewer IMET Evaluation Summary Title/Level Number Worlds Level E

Publisher: McGraw Hill School Education, LLC Copyright: 2015

ISBN: various

Reviewer ID # BKC, DY Date Review Completed: March 8, 2016

Non-Negotiable Criteria- Each Non-Negotiable must be met in order for the Non-Negotiable Alignment Criteria to be met overall.

Non-Negotiable 1: Freedom from Obstacles to Focus	Non- Negotiable 2: Focus and Coherence
____x___ Meets _____ Does Not Meet	___x__ Meets _____ Does Not Meet

Non-Negotiable Overall:

____x_ Meets _____ Does Not Meet

Alignment Criteria- Each Alignment Criterion must be met with a sufficient number of points in order for Alignment Criteria to be labeled as "Meets" overall. The more points the materials receive on the Alignment Criteria, the better they are aligned.

Alignment Criterion 1: Rigor and Balance	Alignment Criterion 2: Standards of Mathematical Practice	Alignment Criterion 3: Access to Standards for All Learners
Points: ___6__ of 6 possible. (Materials must receive at least 5 of 6 points to align.) __X___ Meets _____ Does Not Meet	Points: __6___ of 6 possible. (Materials must receive at least 5 of 6 points to align.) __X___ Meets _____ Does Not Meet	Points: __6___ of 6 possible. (Materials must receive at least 5 of 6 points to align.) __X___ Meets _____ Does Not Meet

Alignment Criteria Overall:

__x___ Meets _____ Does Not Meet

If the materials meet both Non-Negotiables and relevant Alignment Criterion, they are aligned to the Shifts and major features of the Core Standards. **Do the materials meet every Non-Negotiable and Alignment Criterion? __x___ Yes _____ No**

What are the specific areas of strength and weakness based on this evaluation? Publishers or others modifying or developing assessments can use this information to make improvements and/or to remedy gaps in the alignment of assessment materials.

2015-16 Mathematics Interim Review Recommendation & Summary

Publisher Name:	McGraw-Hill Education
Title:	Number Worlds Level F
ISBN #	TE 978-0-02-129479-4
Grade Level(s) or Course:	Level F
Reviewer ID:	LS, LC

RECOMMENDED AS:

_____**Core Mathematics Program-** a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials. Substantial evidence clearly supports the designation of this program as Core.

_____**Other Mathematics Program-** a program that substantially, but partially, meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for supplemental materials. Substantial evidence clearly supports the designation of this program as Other.

_____**Component Mathematics Program-** a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs. Substantial evidence clearly supports the designation of this program as Component.

__X__**Intervention Program-** a program designed and intended to target and support students' specific needs. Substantial evidence clearly supports the designation of this program as Intervention.

_____ **Does not meet criteria** for recommendation as a Curricular Material or Online Resource for Mathematics.

EVIDENCE SUMMARY:

FOCUS- The topics listed are not assessed before grade level, nor are other topics outside of grade level primarily assessed.

COHERENCE- The Number Worlds Program is faithful to the Major Work of the grade level.

RIGOR- The program builds a framework for conceptual understanding overtime with sufficient problems dedicated to procedure and fluency.

CONCEPTUAL UNDERSTANDING- There are sufficient amounts of high quality conceptual problems to build a framework for students and deeper understanding.

MATHEMATICAL PRACTICES- The mathematical practices are not explicitly adhered to in Number Worlds.

ACCESSIBILITY OF STANDARDS TO ALL STUDENTS- All materials are accessible to students who require opportunities outside a core program to solidify a framework in mathematical concepts

OTHER:

The activity cards in the manipulative kit are necessary for each lesson.

2015-16 Interim Mathematics Review

Mathematics Evaluation Tool Grades K-8

Publisher: McGraw-Hill Education

Title of Material: Number Worlds Level F

Author: Griffin, Clements + Sarama.

ISBN #: TE 978-0-02-129479-4 **Copyright** 2015

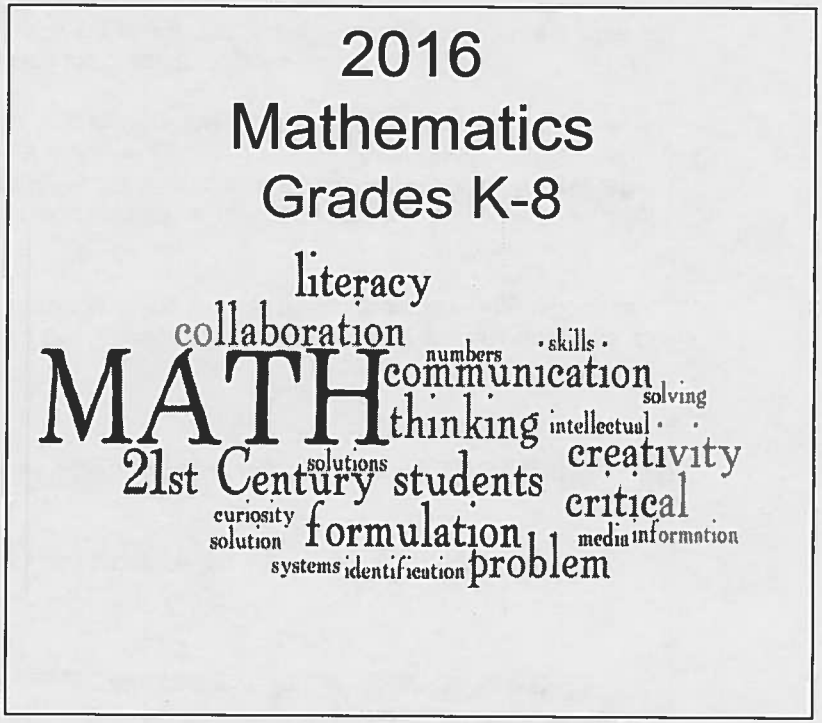
Reviewer ID: LS + LC

Core Mathematics Program- a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Core.

Other Mathematics Program- a program that substantially, but partially, meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Other.

Component Mathematics Program- a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs.
Substantial evidence clearly supports the designation of this program as Component.

Intervention Program- a program designed and intended to target and support students' specific needs.
Substantial evidence clearly supports the designation of this program as Intervention.



- Evaluation Form adapted from Instructional Materials Evaluation Toolkit (IMET).

The IMET was developed by Student Achievement Partners. Educators may use or adapt. http://creativecommons.org/licenses/by/3.0/ Download this tool at http://achievethecore.org/IMET

Instructional Materials Evaluation Tool

Mathematics, Grades K-8

What Are the Purposes of the IMET?

This Math IMET is designed to help educators determine whether instructional materials are aligned to the Shifts and major features of the Common Core State Standards (CCSS). The substantial instructional Shifts (http://www.corestandards.org/other-resources/key-shifts-inmathematics/) at the heart of the Common Core State Standards are:

- **Focus** strongly where the Standards focus
- **Coherence**: Think across grades and link to major topics within the grade
- **Rigor**: In major topics, pursue conceptual understanding, procedural skill and fluency, and application with equal intensity.

The IMET draws directly from the following documents:

- Common Core State Standards for Mathematics (www.corestandards.org/Math)
- Publishers' Criteria for the Common Core State Standards in Mathematics grade K-8 (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)

When to use the IMET

1. Purchasing materials: Many factors go into local purchasing decisions. Alignment to the Standards is a critical factor to consider. This tool is designed to evaluate alignment of instructional materials to the Shifts and the major features of the CCSS. It also provides suggestions of additional indicators to consider in the materials evaluation and purchasing process.

2. Evaluating materials currently in use: The IMET can be used to analyze the degree of alignment of existing materials and help to highlight specific, concrete flaws in alignment. Even where materials and tools currently in use fail to meet one or more of these criteria, the pattern of failure is likely to be informative. States and districts can use the evaluation to create a thoughtful plan to modify or combine existing resources in such a way that students' actual learning experiences approach the focus, coherence, and rigor of the Standards.

3. Developing programs: Those developing new programs can use this tool as guidance for creating aligned curricula.
Please note this tool was designed for evaluating comprehensive curricula (including any supplemental or ancillary materials), but it was not designed for the evaluation of standalone supplemental materials.

Who Uses the IMET?

Evaluating instructional materials requires both subject-matter and pedagogical expertise. Evaluators should be well versed in the Standards (www.corestandards.org/Math) for all grades in which materials are being evaluated. This includes understanding the Major Work of the grade (www.achievethecore/focus), the Supporting and Additional work, how the content fits into the progressions in the Standards (www.achievethecore.org/progressions), and the expectations of the Standards with respect to conceptual understanding, procedural skill and fluency, and application. Evaluators also should be familiar with the substantial instructional Shifts (http:// www.corestandards.org/other-resources/key-shifts-in-mathematics/) of Focus, Coherence and Rigor that are listed above.

Getting Started
Prior to Evaluation

Assemble all of the materials necessary for the evaluation. It is essential for evaluators to have materials for all grades covered by the program, as some criteria cannot be rated without having access to each grade. In addition, each evaluator should have a reference copy of the Common Core State Standards for Mathematics (CCSSM) and the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013).

Assemble all of the materials necessary for the evaluation. It is essential for evaluators to have materials for all grades covered by the program, as some criteria cannot be rated without having access to each grade. In addition, each evaluator should have a reference copy of the Common Core State Standards for Mathematics (CCSSM) and the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013).

Before conducting the evaluation itself, it is important to develop a protocol for the evaluation process. The protocol should include having evaluators study the Publishers' Criteria and the IMET. It will also be helpful for evaluators to get a sense of each program overall before beginning the process. At a minimum, this would include reading the front matter of the text, looking at the table of contents and paging through multiple chapters.

Sections 1-3 below should be completed to produce a comprehensive picture of the strengths and weaknesses of the materials under evaluation. Information about areas in need of improvement or supplementation should be shared with internal and external stakeholders.

Navigating the Tool

Begin with Section 1: Non-Negotiable Alignment Criteria

- The Non-Negotiable Alignment Criteria must each be met in full for materials to be considered aligned to the Shifts and the major features of the Common Core State Standards. Each Non-Negotiable Alignment Criterion has one or more metrics associated with it; every one of these metrics must be met in order for the criterion as a whole to be met.

- Examine the relevant materials and use evidence to rate the materials against each criterion and its associated metric(s).

- Record and explain the evidence upon which the rating is based.

Continue to Section 2: Alignment Criteria

- The Alignment Criteria must each be met for materials to be considered aligned to the Shifts and the major features of the Common Core State Standards. Each Alignment Criterion has one or more metric associated with it; a specific number of these metrics must be met or partially met in order for the criterion as a whole to be met.

- **Examine the materials in relation to these criteria, assigning each metric a point value. Rate the criterion as "Meets" or "Does Note Meet" based on the number of points assigned. The more points the materials receive on the alignment Criteria, the better they are aligned.**

- **Record and explain the evidence upon which the rating is based.**

Proceed to Section 4: Indicators of Quality

- **Indicators of Quality are important considerations that will help evaluators better understand the overall quality of instructional materials. These considerations are not criteria for alignment to the CCSS, but they provide valuable information about additional program characteristics. Evaluators may want to add their own indicators to the examples provided.**

Directions for Non-Negotiable 1

Freedom from Obstacles to Focus

Criterion	Evidence- Give specific examples.	Rating: (Reviewer only.)
Non-Negotiable 1: **Freedom from Obstacles to Focus** **Materials must reflect the content architecture of the Standards by not assessing the topics named before the grade level where they first appear in the Standards.** The Standards foster students' progress to algebra by focusing strongly on arithmetic. Consistent with this focus, certain topics from outside of arithmetic appear only in later grades. Thus, to be aligned, materials must reflect the content architecture of the Standards by not assessing the topics named before the grade level where they first appear in the Standards. In this criterion, "topics named" means the topics that are explicitly named in Metric 1A. No other topics should be added to the list in Metric 1A. (Note that other topics in the standards are addressed in criterion NN2.)	**Required Materials** • Common Core State Standards for Mathematics (www corestandards org/wp-content/uploads/Math_Standards pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www. corestandards.org/wp-content/uploads/Math_Publishers_ Criteria_K-8_Spring_2013_FINAL1.pdf) • From the materials being evaluated: teacher guides and all assessment components	**Rating this Criterion:** Non-Negotiable 1 is rated as Meets or Does Not Meet. To rate Non-Negotiable 1, begin by rating Metric 1A. Since Metric 1A is the only metric for Non-Negotiable 1, the rating for Non-Negotiable 1 is the same as the rating for Metric 1A. If Metric 1A is rated as Does Not Meet, include evidence of when the named topic(s) is/are assessed. If the metric is rated as Meets, list the grade(s) examined in the evaluation.
Metric NN1A: **Materials reflect the basic architecture of the Standards by not assessing the listed topics before the grade level indic[illegible].**	**Evidence-** Number Worlds is not meant to be used during a specific grade level rather it focuses on standards t[illegible]tudents have not mastered.	**(Reviewer only.)** **_x_ Meets**

• Proba[illegible], including chance, likely outcomes, probability models. (Introduced in the CCSSM in grade 7) • Statistical distributions, including center, variation, clumping, outliers, mean, median, mode, range, quartiles; and statistical association or trends, including two-way tables, bivariate measurement data, scatter plots, trend line, line of best fit, correlation. (Introduced in the CCSSM in grade 6) • Similarity, congruence, or geometric transformations. (Introduced in the CCSSM in grade 8) • Symmetry of shapes, including line/ reflection symmetry, rotational symmetry. (Introduced in the CCSSM in grade 4) **How to Find the Evidence:** Evaluate the table of contents, all chapter tests, all unit tests, and other such assessment components (including rubrics). For context, read Criterion #2 from the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013). NOTE: Grade alignments of other topics are addressed in Non- Negotiable 2, Focus and Coherence.) In this criterion, "topics named" means the topics that are explicitly named in Metric 1A. No other topics should be added to the list in Metric 1A. (Note that other topics in the standards are addressed in criterion NN2.)	Students tak[illegible] Placement Test that identifies their level of need. Therefore, the Standards are not assessed before the grade level indicated. Level F includes many 4th grade Standards: 4.NBT.2, 4.NF.1, 4.OA5, 4.NBT.5, 4.G.2, and many more. Level F would not be used with students who have not yet been exposed to the standards it covers based on the student's performance in the Placement Test.	____**Does Not Meet**
Non-Negotiable 1: Materials must reflect the content architecture of the Standards by not assessing the topics named* before the grade level where they first appear in the Standards. **NN 1** If Metric 1A was rated as Meets, then rate Non-Negotiable 1 as Meets. If Metric 1A was rated as Does Not Meet, then rate Non- Negotiable 1 as Does Not Meet. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion.**(Reviewer only.)** **Before moving to Non-Negotiable 2, record the final Meets or Does Not Meet rating in the Evaluation Summary.**	**(Reviewer only.)** __x__**Meets** ____**Does Not Meet** **Strengths/Weaknesses:** Each unit clearly outlines the standards that are covered.

Directions for Non-Negotiable 2

Focus and Coherence

Non-Negotiable 2:

Focus and Coherence

Materials must focus coherently on the Major Work of the grade in a way that is consistent with the progressions in the Standards.

Focus and coherence are the two major evidence-based design principles of the Common Core State Standards for Mathematics (CCSSM, p. 3). Focus is necessary in order to fulfill the ambitious promise the states have made to their students by adopting the Standards: greater achievement at the college and career ready level; greater depth of understanding of mathematics; and a rich classroom environment in which reasoning, sense-making, applications, and a range of mathematical practices flourish. In simpler terms, a mile-wide, inch-deep curriculum translates to less time per topic. Less time means less depth and moving on without many students. Thus, materials must focus coherently on the Major Work of the grade in a way that is consistent with the progressions in the Standards.

Required Materials

- Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf)
- Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)
- Focus by Grade Level for the grade being evaluated (www.achievethecore.org/focus)
- From the materials being evaluated: teacher guides, student texts and workbooks

Rating this Criterion:
Non-Negotiable 2 is rated as Meets or Does Not Meet.

To rate Non-Negotiable 2, first rate metrics 2A–2H. Each of these eight metrics must be rated as Meets in order for Non-Negotiable 2 to be rated as Meets. Rate each metric 2A-2H as Meets or Does Not Meet/Insufficient Evidence. If the evidence examined shows that the Criterion is met, then mark the Criterion Meets. If the evidence examined shows that the Criterion is not met—or if there is insufficient evidence to make a determination—then mark the Criterion as Does Not Meet/Insufficient Evidence. Support all ratings with evidence.

Metric NN2A:
In each grade K–8, students and teachers using the materials as designed devote the large majority of time to the Major Work of the grade.

How to Find the Evidence:
Familiarize yourself with the Major Work of the grade being evaluated (see the Focus by Grade Level documents.)
Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, lessons, homework assignments, and assessments. (Evaluate both student and teacher materials.)
Consider time spent on the Major Work of the grade and judge qualitatively whether students and teachers using the materials as designed will devote the large majority of time to the Major Work of the grade.
For context, read Criterion #1 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013)

Evidence-
All Major Works are covered. Four out of five units are focused on the Major Works of the 4th grade:

- Unit 1 place value, equivalent fractions, Generalize place value for multi-digit whole numbers, extend understanding of fraction equivalence and ordering, build fractions from unit fractions
- Unit 2 addition and subtraction, use place value understanding and properties of operations to perform multi-digit arithmetic
- 3 multiplication, use place value understanding and properties of operations to perform multi-digit arithmetic
- Unit 4 division, use place value understanding and properties of operations to perform multi-digit arithmetic

(Reviewer only.)

_x___Meets

____Does Not Meet/

Insufficient Evidence

Metric NN2B: **Supporting Work, where present, enhances focus and coherence simultaneously by also engaging students in the Major Work of the grade.** **How to Find the Evidence:** Familiarize yourself with the Major Work and Supporting Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate chapters and lessons that focus on Supporting Work. NOTE: Example of evaluating this Criterion might include looking at whether materials for K–5 generally treat data displays as an occasion for solving grade-level word problems using the four operations (e.g., see 3.MD.B.3); or whether materials for grade 7 take advantage of opportunities to use probability to support ratios, proportions, and percentages. For context, read Criterion #3 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** The Supporting Work does not detract from the Major Work and builds to support the Major Works. • Unit 5 Geometry and Measurement covers the Supporting Work: solved problems involving measurement and conversion of measurements from a larger unit to a smaller unit, and the Additional Cluster: Geometric measurement: understand concepts of angle and measure angles, Draw and identify lines and angles, and classify shapes by properties of their lines and angles. • Unit 1 Week 3 covers the Supporting Work Gain familiarity with factors and multiples.	**(Reviewer only.)** **__x__Meets** **____Does Not Meet/ Insufficient Evidence**
Metric NN2C: **Materials base content progressions on the grade-by-grade progressions in the Standards. Content from previous or future grades does not unduly interfere with or displace on-grade-level content.** **How to Find the Evidence:** Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, and lessons in both student and teacher materials. NOTE: In some cases it may be possible that aligned materials might address some aspects of a topic in a strategic way before or after the grade level in which the topic is central in the Standards' progressions; for example, a curriculum author might purposefully choose to explore adding fractions with unlike denominators in a way appropriate to grade four, recognizing that this work is not really required until the next grade. However, any such purposeful discrepancies in content progressions should enhance the required learning in each grade; not unduly interfere with or displace grade-level content; and be clearly aimed at helping students meet the Standards as written rather than effectively rewriting the progressions in the Standards. And in all cases, note that Non-Negotiable 1 must be met for materials to be aligned. For context, read Criterion #5a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Number Worlds is designed as an intervention program to be used with small groups or whole class where Standards need reinforced to fill gaps. Students take a placement test to identify what level of Number Worlds they should begin using. According to the Implementation Guide: • Level A focuses on kindergarten standards • Level B focuses on kindergarten standards • Level C focuses on kindergarten and 1st grade standards • Level D focuses on 1st and 2nd grade standards • Level E focuses on 3rd grade standards • Level F focuses on 4th grade standards • Level G focuses on 5th grade standards • Level H focuses on 6th grade standards • Level I focuses on 7th grade standards • Level J focuses on 8th grade standards	**(Reviewer only.)** **_x___Meets** **____Does Not Meet/ Insufficient Evidence**

Metric NN2D: **Materials give all students extensive work with on-grade-level problems.** **How to Find the Evidence:** Evaluate both student and teacher materials. If the materials provide resources for differentiated learning, consider whether lower-performing students have opportunities to engage with grade-level problems. Also consider whether higher-performing students are given opportunities to learn current grade-level content in greater depth. For context, read Criterion #5b in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** The Number Worlds program intervenes in a grade level to cover Standards that a student has not mastered. Therefore, the materials from Nubmer Worlds may or may not be at the student's age grade level, but will be at their learning level based on their placement test. • A 5th grader may need extensive intervention with number sense and will be placed in Number Worlds Level F Unit 1 to deepen their understanding of the concepts of number sense.	**(Reviewer only.)** **__x__Meets** **____Does Not Meet/ Insufficient Evidence**
Metric NN2E: **Materials relate on-grade-level concepts explicitly to prior knowledge from earlier grades.** **How to Find the Evidence:** Evaluate both student and teacher materials. NOTE: Examples of evaluating this Criterion might include looking at the way the materials extend basic ideas of place value across the decimal point; or the role that properties of operations play when the materials extend arithmetic beyond whole numbers to fractions, variables, and expressions. More generally, cluster headings in the Standards sometimes signal key moments where reorganizing and extending previous knowledge is important in order to accommodate new knowledge (e.g., see cluster headings that use the phrase "Apply and extend previous understanding"). For context, read Criterion #5c in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** The Teacher's Edition includes several pages of "Key Standards by Lesson Week" for every level of their curriculum as a guide for teachers. This resource is so useful for teachers to see what Major Works are being taught in each level of the curriculum to ensure students are placed appropriately. Each unit has a pacing guide broken down into weeks and lessons within each week. Each unit has a pacing guide broken down into weeks and lessons within each week. Lessons are developed with explicit objectives, Standard covered, and context for the content. Students begin with a "Warm Up" which relates previous knowledge of the content, then move on to "Engage" for the bulk of the lesson in individual, small, or whole groups and build conceptual understanding. The lesson ends with "Reflect" and "Assess" for students to evaluate their work and learning.	**(Reviewer only.)** **_x___Meets** **____Does Not Meet/ Insufficient Evidence**
Metric NN2F: **Review of material from previous grades is clearly identified as such to the teacher, and teacher and students can see what their specific responsibility is for the current year.** **How to Find the Evidence:** Evaluate the table of contents, but do not stop there; also evaluate units, chapters, lessons, homework assignments and assessments. (Evaluate	**Evidence-** The standards covered are clearly marked at the beginning of units and lessons. However, the standards taught are not necessarily grade level standards. The program is meant to be used as intervention depending on the student skill level. The teacher will know if the standard is not at grade level based on the student placement test.	**(Reviewer only.)** **_x___Meets** **____Does Not Meet/ Insufficient Evidence**

both stu[illegible]nd teacher materials.) Identify any content from previous grades and check whether it is identified as such. For context, read Criterion #5a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).		
Metric NN2G: **Materials include learning objectives that are visibly shaped by CCSSM cluster headings.** **How to Find the Evidence:** Select several clusters from the Major Work in the grade being evaluated. Evaluate teacher and student materials in relation to these clusters. For context, read Criterion #6a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** In each weekly opener the CCSSM domain and cluster are listed. Learning objectives are placed at the beginning of each lesson just above the Standard it is based on. Objectives are shaped from the Standards. • Unit 1 Week 1 Lesson 1: Students can decompose a number into tens and ones, based on 4.NBT.2 • Unit 2 Week 1 Lesson 1: Students can add and subtract with a one- and a two-digit number, based on 4.NBT.4 • Unit 3 Week 2 Lesson 2: Students can create tree diagrams to help solve multiplication problems, based on 4.NBT.5	**(Reviewer only.)** **_x___Meets** **____Does Not Meet/** **Insufficient Evidence**
Metric NN2H: **Materials include problems and activities that serve to connect two or more clusters in a domain, or two or more domains in a grade, in cases where these connections are natural and important.** **How to Find the Evidence:** In the grade being evaluated, choose two or more clusters or two or more domains for which connections are natural and important. Evaluate the units, chapters, and lessons that deal with the chosen topics, looking for problems and activities that serve to connect the chosen clusters or domains. NOTE: An example of evaluating this Criterion might include looking at whether problems in grade 4 sometimes or often involve students applying their developing computational skills (detailed in domain NBT) in the context of solving word problems (detailed in domain OA). For context, read Criterion #6b in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Where necessary, clusters are combined to build on each other. Each cluster addresses questions for the weekly key standard. Students apply standards from several clusters at the completion of projects. • Unit 3 Week 2 Lesson 2 combines generalizing place value and performing multi-digit arithmetic allowing students to apply their developing computational skills. • Unit 3 Week 2 Lesson 1 Multiplication Strategies gives students word problems to apply their knowledge of the four operations with whole numbers, and use place value understanding to solve multiplication with the distributive property and grouping.	**(Reviewer only.)** **__x__Meets** **____Does Not Meet/** **Insufficient Evidence**
Non-Negotiable 2: **Focus and Coherence**		**(Reviewer only.)** **_x___Meets**

Materials must focus coherently on the Major Work of the grade in a way that is consistent with the progressions in the Standards.

NN 2 If all Metrics 2A – 2H were rated as Meets, then rate Non-Negotiable 2 as Meets. If one or more Metric was rated Does Not Meet/Insufficient Evidence, then rate Non-Negotiable 2 as Does Not Meet. Check the final rating.
Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)**

Before moving to Alignment Criterion 1, record the final Meets or Does Not Meet rating in the Evaluation Summary.

____Does Not Meet

Strengths/Weaknesses:
The focus and coherence of each unit is concise and explicit in the Teacher's Edition and the Student Workbook. The placement test allows interventionists to tailor lessons to the areas of need for each student based on the student's placement test performance.

Now continue by evaluating the Alignment Criterion 1 for Rigor and Balance.

Directions for Alignment Criterion 1

Rigor and Balance

Alignment Criterion 1: Rigor and Balance

Materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.

The Standards set expectations for attention to all three aspects of rigor: conceptual understanding, procedural skill and fluency, and applications. Thus, materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.

Required Materials

- Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf)
- Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)
- Focus by Grade Level for the grade being evaluated (achievethecore.org/focus)
- Situation Types for the Operations in Word Problems (achievethecore.org/situation-types)
- From the materials being evaluated: teacher guides, student texts and workbooks

Rating this Criterion:
Alignment Criterion 1 is rated as Meets or Does Not Meet.

To rate Alignment Criterion 1, first rate metrics 1A, 1B, and 1C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). For each metric, guiding questions are provided to aid in gathering evidence.
Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 1 if the materials rate 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as rigor and balance, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.

Metric AC1A: **The materials support the development of students' conceptual understanding of key mathematical concepts, especially where called for in specific content Standards or cluster headings.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Major Work for the grade being evaluated that relate specifically conceptual understanding to use throughout the questions associated with this metric. NOTE: Some examples of clusters or Standards that call for conceptual understanding include: K.OA.A.1, (1.NBT.B, 1.NBT.C), (2.NBT.A, 2.NBT.B), (3.OA.A.1, 3.OA.A.2), 4.NF.A, (4.NBT.A, 4.NBT.B), 5.NF.B, (5.NBT.A, 5.NBT.B), 6.RP.A, 6.EE.A.3, 7.NS.A, 7.EE.A, 8.EE.B, 8.F.A, 8.G.A Clusters or Standards grouped by parentheses are closely connected and could be analyzed together. For context, read Criterion #4a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	-Choose a cluster/Standard from the Major Work that is aligned to each aspect of rigor and use it to evaluate these metrics. It is most helpful if the same clusters/Standards are chosen for all of the programs being evaluated. (Guidance in choosing clusters/Standards is included in "How to Find the Evidence".)	**Use the questions for AC Metric 1A to evaluate Metric 1A. Record evidence for each question and rate Metric 1A.** **__2__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Is conceptual understanding attended to thoroughly where the Standards set explicit expectations for understanding or interpreting? Evaluate lessons, chapter/unit assessments and homework assignments, paying attention to work aligned to Standards that explicitly call for understanding or interpreting. NOTE: Examples of evaluating this Criterion might include looking at how well the multi-digit addition and subtraction algorithms are developed and explained on the basis of place value and properties of operations; or how well the multi-digit multiplication and division algorithms are developed and explained on the basis of place value and properties of operations; or how well solving equations is presented and explained as a process of reasoning.	**Evidence-** Conceptual understanding is adhered to in the Activity Cards utilized in the "Engage" portion of each lesson. The student workbook promotes conceptual understanding on and off throughout the unit. • Unit 3 Week 2 Lesson 1 Multiplication Strategies in the student workbook simply asks students to solve word problems without giving space or direction to explore the problem by grouping as practiced in the "3D City Skyline" Activity Card. However, by the end of the week in Lesson 5 students are asked to draw models and show their thinking and strategies they have practiced during the week.	

Do the materials feature high-quality conceptual problems and conceptual discussion questions? Evaluate lessons, chapter/unit assessments, and homework assignments. NOTE: Example of conceptual problems might include such questions as "Find a number greater than 1/5 and less than 1/4," or "If the divisor does not change and the dividend increases, what happens to the quotient?"	**Evidence-** The Activity Cards featured in each lesson are highly conceptual and represent real world problems. The activity promotes discussion of standards, understanding, and explanation. Think Critically address high quality problems and conceptual discussion for the class.	
Do the materials feature opportunities to identify correspondences across mathematical representations? Evaluate lessons, chapter/unit assessments and homework assignments. NOTE: Examples of evaluating this Criterion might include looking at whether students are supported in identifying correspondences among: the verbal description of a situation, the diagrams that distill its mathematical features, and the equations that model it; or equivalent forms of numbers (e.g., 3 and 6/2) and the number line; or rational number operations and representations of them via models such as the vector model; or the expression that defines a function and the graph that shows the relationship.	**Evidence-** Materials such as games, manipulatives, model and vocabulary cards along with project based learning identify correspondence across mathematical representations. Students have opportunities to infer and make connections across lessons and units. At the end of each week there is a "Project" problem for students to apply what they have practiced that week and make connections between lessons. The Projects are theme related within a Unit to build cohesive application. • By the end of Unit 1 students have experienced real world place value in "Owning a Sports Team" , estimated ticket sales, shown strategies to determine prime or composite numbers, found fractions of a playing field, explored strategies to order fractions, and made connections between patterns. • Unit 3 Week 2 is focused in multiplication strategies. Students are challenged throughout the week to explore different strategies and make connections. They also study the Associative, Commutative, and Distributive Properties to group and solve problems in a variety of ways. Activity Card 3C asks students to write the product of 24 as many ways as they can. • Unit 4 Week 4, students will divide 2- and 3-digit numbers by 1-digit numbers traditional division, models, and in Activity Card 4M students demonstrate their knowledge with manipula[illegible]es.	

Metric 1B: **The materials are designed so that students attain the fluencies and procedural skills required by the Standards.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Major Work for the grade being evaluated that relate specifically to fluency and procedural skill to use throughout the questions associated with this metric. NOTE: Some examples of Standards that call for procedural skill and fluency include: K.OA.A.5, 1.OA.C.6, 2.OA.B.2, 2.NBT.B.5, 3.OA.C.7, 3.NBT.A.2, 4.NBT.B.4, 5.NBT.B.5, 6.NS.B.2, and 6.NS.B.3, 6.EE.A, 7.NS.A, 7.EE.A.1,7.EE.B.4a, 8.EE.C.7, 8.EE.C.8b For context, read Criterion #4b in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).		**Use the questions for Metric 1B to evaluate Metric 1 B. Record evidence for each question and rate Metric 1B.** **(Reviewer only.)** **__2__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Is progress toward fluency and procedural skill interwoven with students' developing conceptual understanding of the operations in question? Evaluate lessons, chapter/unit assessments, daily routines, and homework assignments for evidence that the development of fluency and procedural skill is supported by conceptual understanding.	**Evidence-** Fluency practice opportunities for students are provided with each lesson. Students have opportunities to practice procedural understanding of the standards.The student workbook provides procedural problem practice that builds fluency. • Unit 2 Week 6: subtracting mixed numbers with regrouping • Unit 4 Week 4: dividing using the standard algorithm	
Are purely procedural problems and exercises present that include cases in which opportunistic strategies are valuable and generic cases that require efficient algorithms present? Evaluate lessons, chapter/unit assessments, daily routines, and homework assignments. NOTE: Examples of problems in which opportunistic strategies are valuable might include the sum 698 + 240 or the system $x + y = 1$, $2x + 2y = 3$. Examples of generic cases that require efficient algorithms might include the sum 8767+2286 or the system $6y + x = x + 3$, $-x = 1 + 2y$.	**Evidence-** Number Worlds provides opportunities for students to practice standard algorithms in the student practice book: listed under "additional practice" in the Teacher's Edition. Students can choose their strategy for solving problems. The curriculum also provides students with opportunities to develop their own strategies; typically these types of problems are in the Activity Cards. • Activity Card 3C: Try Another Way • Activity Card 3P Fraction Computations	
Do the materials in grades K–6 provide repeated practice toward attainment of fluency Standards? Evaluate lessons, daily routines, and homework assignments for evidence of repeated practice toward attainment of the following K–6 Standards that set an explicit expectation of fluent (accurate and reasonably fast) computation: K.OA.A.5, 1.OA.C.6, 2.OA.B.2, 2.NBT.B.5, 3.OA.C.7, 3.NBT.A.2, 4.NBT.B.4, 5.NBT.B.5, 6.NS.B.2, 6.NS.B.3.	**Evidence-** Multiple opportunities for fluency are available for students in the daily lesson routine. "Warm-up" allows students to refresh their memory, "Engage" creates a framework for learning and provides	

	practice of new skills, "Reflect" asks students to evaluate and justify their strategies, "Assess" (informal or formal) shows students and teacher what the class has learned. Fluency is built as students add to the framework throughout the Units.	
Metric AC1C: **The materials are designed so that teachers and students spend sufficient time working with engaging applications, without losing focus on the Major Work of each grade.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Major Work for the grade being evaluated that relate specifically application to use throughout the questions associated with this metric. NOTE: Some examples of clusters or Standards that call for application include: K.OA.A.2, 1.OA.A, 2.OA.A, 3.OA.A.3, 3.OA.D.8, 4.OA.A.3, 4.NF.B.3d, 4.NF.B.4c, 5.NF.B.6, 5.NF.B.7c, 6.RP.A.3, 6.NS.A.1, 6.EE.B.7, 6.EE.C.9, 7.RP.A, 7.NS.A.3, 7.EE.B.3, 8.EE.C.8c, 8.F.B For context, read Criterion #4c in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).		**Use the questions for Metric 1C to evaluate Metric 1C. Record evidence for each question and rate Metric 1C.** **(Reviewer only.)** **__2__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Are there are single- and multi-step contextual problems, including non-routine problems, that develop the mathematics of the grade, afford opportunities for practice, and engage students in problem solving? Do the problems attend thoroughly to those places in the content Standards where expectations for multi-step and real-world problems are explicit? Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** There are problem solving opportunities for skills practice with word problems that include multi-step computation and extended student response. The daily routine has a variety of strategies for students to understand, explore, and apply their knowledge of the Standards. One-step problems are heavily present throughout lessons. Multi-step problems are present but in small numbers. Real world problems are present throughout lessons and end of week projects.	
Do application problems particularly stress applying the Major Work of the grade? Evaluate lessons, chapter/unit assessments, and homework assignments. NOTE: Examples of evaluating this Criterion might include looking at: how well, by the end of grade 2, students using the materials as designed can represent and solve a full range of one-step addition and subtraction word problems; or how well, by the end of grade 3, students using the materials as designed can represent and solve a full range of one-step multiplication and division word problems; or how well these basic situation types for each operation are carried coherently across the grades, (e.g., with fractions and algebraic expressions); or, in all grades, whether the problem[illegible]nect concepts, Standards, and domains in ways that are natural a[illegible]mportant. For a list of situation types for one-step	**Evidence-** The curriculum is focused on building the Major Works of a grade level by having the large majority of those standards immersed throughout all units.	

addition, [illegible]action, multiplication, and division problems, see Situation Types for the Operations in Word Problems		
Does modeling build slowly across K–8, with applications that are relatively simple in earlier grades and when students are encountering new content? In grades 6–8, do the problems begin to provide opportunities for students to make their own assumptions or simplifications in order to model a situation mathematically? Read Standard for Mathematical Practice 4, Model with Mathematics. Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** There are developmentally appropriate models of the mathematics represented. Number Worlds Level F is based on 4th grade Standards and asks students to use arrays, model repeated addition, use factor pairs, fraction bars, and more. Not only are models used, but manipulatives such as counters, unifix cubes, dot cubes and number cubes are utilized as well.	
Alignment Criterion 1: **Rigor and Balance** **Materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.** **AC1** Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 out of 6 points, the Criterion has not been met. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)** **Before moving to Alignment Criterion 2, record the final Meets or Does Not Meet rating in the Evaluation Summary.**		**(Reviewer only.)** **_6___Meets** **____Does Not Meet** **Strengths/Weaknesses:** Strengths: The Number Worlds program is student centered allowing students to work at the level of their individual need.
Directions for Alignment Criterion 2 **Standards for Mathematical Practice**		
Alignment Criterion 2: **Standards for Mathematical Practice** **Materials must demonstrate authentic connections between content Standards and practice Standards.** The Standards require that designers of instructional materials connect the mathematical practices to mathematical content in instruction. Thus, materials must	**Required Materials:** • Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf) • Focus by Grade Level for the grade being evaluated (www.achievethecore.org/focus) • From the materials being evaluated: teacher guides, student	**Rating this Criterion** Alignment Criterion 2 is rated as Meets or Does Not Meet. To rate Alignment Criterion 2, first rate metrics 2A, 2B, and 2C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). For each metric, guiding questions are provided to aid in gathering evidence. Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 2 if the materials earn 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as

demonstrate authentic connections between content Standards and practice Standards.	texts and workbooks	mathematical practices, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.
Metric AC2A: **Materials address the practice Standards in such a way as to enrich the Major Work of the grade; practices strengthen the focus on Major Work instead of detracting from it, in both teacher and student materials.** **How to Find the Evidence:** Familiarize yourself with the Major Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate teacher and student materials for evidence that the mathematical practices support and connect to the focus of the grade. NOTE: Examples of evaluating this Criterion might include looking at whether, in grades K–5, students using the materials are supported to look for and express regularity in repeated reasoning about the addition table, the multiplication table, the properties of operations, the relationship between addition and subtraction or multiplication and division, and the place value system; or whether, in grades 6–8, students using the materials are supported to look for and express regularity in repeated reasoning about proportional relationships and linear functions. For context, read Criterion #8 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013).	**Evidence-** The practice standards are not explicitly attended to or referenced in the units; however, teachers and students will need to apply the practice standards throughout the units. MP3 is present where students provide explanations and justification of their work. MP4 is present where students are asked to draw a model or representation of their work. MP6 is present where problems require precise answers. MP7 is evident in the real world problems provided. Other practices are applicable throughout the units.	**(Reviewer only.)** **____Meets (2)** **_1___Partially Meets (1)** **____Does Not Meet (0)**
Metric AC2B: **Materials attend to the full meaning of each practice Standard.** **How to Find the Evidence:** For context, read Criterion #7 and Criterion #9 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).		**Use the questions for Metric 2B to evaluate Metric 2B. Record evidence for each question and rate Metric 2B.** **(Reviewer only.)** **____Meets (2)** **____Partially Meets (1)** **__0__Does Not Meet (0)**
Over the course of any given year of instruction, is each mathematical practice Standard meaningfully present in the form of assignments, activities, or problems that stimulate students to develop the habits of mind described in the practice Standard? Evaluate lessons, chapter/ unit assessments, and homework assignments for evidence of each mathematical practice being meaningfully present in instruction.	**Evidence-** The Mathematical Practices are inferred, but never explicitly referenced. Number Worlds provides teachers with overviews, charts, and a scope and sequence of the Major Works and Standards but fails to provide any similar resources for the Mathematical Practices.	

Do the materials treat the practice Standards as developing across grades or grade bands? Are the practice Standards in early grades appropriately simple? Do they display an arc of growing sophistication across the grades?	**Evidence-** Teachers will have to infer the Mathematical Practices for different lessons which is completely doable; however, there should be a guide to ensure that all Practices are met.	
Are there teacher-directed materials that explain the role of the practice Standards in the classroom and in students' mathematical development? Are alignments to practice Standards accurate?	**Evidence-** There are no teacher-directed materials that explain the role of the practice Standards.	
Metric AC2C: **Materials support the Standards' emphasis on mathematical reasoning.** **How to Find the Evidence:** For context, read Criterion #10 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).		**Use the questions for Metric 2C to evaluate Metric 2C. Record evidence for each question and rate Metric 2C.** **(Reviewer only.)** **____Meets (2)** **__1__Partially Meets (1)** **____Does Not Meet (0)**
Do the materials support students in constructing viable arguments and critiquing the arguments of others concerning grade-level mathematics that is detailed in the content Standards? Read Standard for Mathematical Practice 3. Evaluate teacher and student materials to ensure that students are given opportunities to reason with grade-level mathematics.	**Evidence-** Students have opportunities to explain their work, but not create an argument or defend their strategy.	
Do the materials support students in producing not only answers and solutions, but also, in a grade-appropriate way, arguments, explanations, diagrams, mathematical models, etc., especially in the Major Work of the grade? Familiarize yourself with the Major Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate teacher and student materials, to understand the types of work students are expected to produce.	**Evidence-** Students are asked to provide models such as arrays, fraction bars, and explanations in a developmentally appropriate manner; however, they are not asked create arguments or defend their strategy.	
Do materials explicitly attend to the specialized language of mathematics? Is the language of argument, problem solving, and mathematical explanations taught rather than assumed? Evaluate teacher and student materials, paying attention to how mathematical language is taught. NOTE: Examples of evaluating this Criterion might include looking at whether students are supported in: basing arguments on definitions; using the method of providing a counterexample; or recognizing that examples alone do not establish a general statement.	**Evidence-** Grade appropriate vocabulary is clear and explicit in the Teacher's Edition. Instructions and word problems use mathematical terms correctly in the Teacher's Edition and the student Practice Book.	
Alignment Criterion 2: **Standards for Mathematical Practice** **Materials must demonstrate authentic connections between content Standards and practice Standards.**		**(Reviewer only.)** **____Meets** **__x__Does Not Meet**

AC2 Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 out of 6 points, the Criterion has not been met. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)** **Before moving to Alignment Criterion 3, record the final Meets or Does Not Meet rating in the Evaluation Summary.**		**Strengths/Weaknesses:** Strengths: The Unit Overviews and Lesson Overviews provide great detail on the Standards that are taught. Charts and guides are provided for teachers to relate the Standards in each unit and lesson. Weaknesses: The Mathematical Practices are not explicit or well-linked to the content.
Alignment Criterion 3: **Access to the Standards for All Students** **Materials must provide supports for English Language Learners and other special populations.** Because Standards are for all students, alignment requires thoughtful support to ensure all students are able to meet the Standards. Thus, aligned materials must provide supports for English Language Learners and other special populations.	**Required Materials:** • Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion:** Alignment Criterion 3 is rated as Meets or Does Not Meet. To rate Alignment Criterion 3, first rate metrics 3A, 3B, and 3C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 3 if the materials earn 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as support for special population, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.
Metric AC3A: **Support for English Language Learners and other special populations is thoughtful and helps those students meet the same Standards as all other students. The language in which problems are posed is carefully considered.** **How to Find the Evidence:** Evaluate teacher and student materials, paying attention to supports offered for special populations.	**Evidence-** Support for English Language Learners is evident. A Support Guide is provided to aid teachers who are teaching English Language Learners. Number Worlds is focused on students who require intervention.	**Reviewer only.)** **__2__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**

Metric B: **Materials provide appropriate level and type of scaffolding, differentiation, intervention, and support for a broad range of learners with gradual removal of supports, when needed, to allow students to demonstrate their mathematical understanding independently.** **How to Find the Evidence:** Evaluate teacher and student materials, paying attention to whether materials provide differentiation that will lead all learners to engage with on-grade-level content.	**Evidence-** Appropriate scaffolding is present throughout lessons and units beginning with warm-up activities and group work and ending with a project to culminate their weekly learning. Teachers are encouraged to use a variety of group sizes as well as individual assignments. Each lesson gives grouping suggestions. The nature of Number Worlds is for a differentiated group of lower learners. Vocabulary is available in the Teacher's Edition and additional vocabulary is present in the English Learner Support Guide.	**Reviewer only.)** **__2__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Metric AC3C: **Design of lessons recommends and facilitates a mix of instructional approaches for a variety of learners such as using multiple representations (e.g., including models, using a range of questions, checking for understanding, flexible grouping, pair-share).** **How to Find the Evidence:** Evaluate teacher materials, noting instructional approaches suggested for whole class and differentiated lessons and activities.	**Evidence-** Lessons include a variety of instructional approaches using multiple representations: pair:share, individual, whole group, small group, hands-on, procedural, diagrams, and informal/formal assessments throughout.	**Reviewer only.)** **__2__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Alignment Criterion 3: **Access to the Standards for All Students** **Materials must provide supports for English Language Learners and other special populations.** **AC3** Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 points, the Criterion has not been met. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion.**(Reviewer only.)** **Move to the Evaluation Summary and record the final Meets or Does Not Meet rating .**		**(Reviewer only.)** **__6__Meets** **____Does Not Meet** **Strengths/Weaknesses:** Strengths: Number Worlds is well designed to address gaps in learning for students in a differentiation group. There are multiple opportunities for students to practice in a variety of ways thereby reaching a wide gamut of learners.

Once an evaluation for alignment to the Shifts and major features of the CCSS has been conducted using Sections 1-3, it's important to evaluate for overall quality and best practices. A starting list of Indicators of Quality are suggested below. States, districts and others evaluating instructional materials are encouraged to add to this list to ensure materials reflect local contexts. For background information on some of the Indicators of Quality in this section, refer to pp.18–21 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).

Indicators of Quality	**Evidence- Give specific examples.**	**Rating: (Reviewers only.)**
1. Lessons are thoughtfully structured and support the teacher in leading the class through the learning paths at hand, with active participation by all students in their own learning and in the learning of their classmates.	**Evidence-** There are clear instructions and guides for the teacher at the Unit Overview and in each lessons. The lessons hint at being too scripted.	**(Reviewer only.)** **__x____ Yes** **_____ No**
2. The underlying design of the materials includes both problems and exercises. (In solving problems, students learn new mathematics, whereas in working exercises, students apply what they have already learned to build mastery.) Each problem or exercise has a purpose. **NOTE: This Criterion does not require that the problems and exercises be labeled as such.**	**Evidence-** Students are introduced to new mathematics in the "Engage: Develop" portion of the lessons and practice their newly acquired skills in the "Engage: Practice" section as well as in the Additional Practice section.	**(Reviewer only.)** **___x___ Yes** **_____ No**
3. Design of assignments is not haphazard: exercises are given in intentional sequences in order to strengthen students' mathematical understanding.	**Evidence-** The lessons scaffold the students learning, allowing their understanding to grow and deepen in a logical way.	**(Reviewer only.)** **__x____ Yes** **_____ No**
4. There are separate teacher materials that support and **reward teacher study including, but not limited to: discussion of the mathematics of the units and the mathematical point of each lesson as it relates to the organizing concepts of the unit, discussion on student ways of thinking and anticipating a variety of students responses, guidance on lesson flow, guidance on questions that prompt students thinking, and discussion of desired mathematical behaviors being elicited among students.**	**Evidence-** Background and charts are available in the beginning and end of the Teacher's Edition.	**(Reviewer only.)** **__x____ Yes** **_____ No**

5. Manipulatives suggested in the materials are faithful representations of the mathematical objects they represent and are connected to written methods.	**Evidence-** The manipulatives are effective and well represented in the text.	**(Reviewer only.)** **__x____ Yes** **_____ No**
6. Materials include a variety of curriculum-embedded assessments. Examples include pre-, formative, summative, and self-assessment resources.	**Evidence-** The placement test is used to determine which Level of Number Worlds the students should begin. Each Unit has a Pretest and Posttest as well as Weekly Tests to give at the end of each week. Additionally, each lesson includes a Student Record for the teacher to record and monitor student learning.	**(Reviewer only.)** **___x___ Yes** **_____ No**
7. Assessments contain aligned rubrics, answer keys, and scoring guidelines that provide sufficient guidance for interpreting student performance.	**Evidence-** Answer keys are available in the Assessment handbook provided.	**(Reviewer only.)** **___x___ Yes** **_____ No**
8. Materials assess student proficiency using methods that are accessible and unbiased, including the use of course-level language in student prompts.	**Evidence-** The language used is unbiased, the math terms are developmentally appropriate.	**(Reviewer only.)** **___x___ Yes** **_____ No**
9. Materials are carefully evaluated by qualified individuals, whose names are listed, in an effort to ensure freedom from mathematical errors and course-level appropriateness.	**Evidence-** Evaluators not listed.	**(Reviewer only.)** **_____ Yes** **___x___ No**
10. The visual design supports students in engaging thoughtfully with the subject. Navigation through the text is clear.	**Evidence-** Visuals and models provided are developmentally appropriate and aid students in understanding the Standards.	**(Reviewer only.)** **___x___ Yes** **_____ No**

11. The materials engage parents in appropriate ways. For example, homework assignments in elementary grades, consist of routine problems, practice with getting answers, and fluency-building exercises that parents can easily support.	**Evidence-** Number Worlds is an intervention program and does not provide homework assignments for students. The Building Blocks software is utilized throughout the curriculum.	**(Reviewer only.)** **_____ Yes** **___x___ No**

Reviewer IMET Evaluation Summary Title/Level: _Number Worlds Level F_____

Publisher: _McGraw-Hill_____ Copyright: ___2015____ ISBN:_TE# 978-0-02-129479-4_____

Reviewer ID # __LS_____ Date Review Completed:__03/08/16_____

Non-Negotiable Criteria- Each Non-Negotiable must be met in order for the Non-Negotiable Alignment Criteria to be met overall.

Non-Negotiable 1: Freedom from Obstacles to Focus	Non- Negotiable 2: Focus and Coherence
__x_____ Meets _____ Does Not Meet	__x___ Meets _____ Does Not Meet

Non-Negotiable Overall:

_x____ Meets _____ Does Not Meet

Alignment Criteria- Each Alignment Criterion must be met with a sufficient number of points in order for Alignment Criteria to be labeled as "Meets" overall. The more points the materials receive on the Alignment Criteria, the better they are aligned.

Alignment Criterion 1: Rigor and Balance	Alignment Criterion 2: Standards of Mathematical Practice	Alignment Criterion 3: Access to Standards for All Learners
Points: ___6__ of 6 possible. (Materials must receive at least 5 of 6 points to align.) ___x____ Meets _____ Does Not Meet	Points: __2___ of 6 possible. (Materials must receive at least 5 of 6 points to align.) _____ Meets ___x____ Does Not Meet	Points: ___6__ of 6 possible. (Materials must receive at least 5 of 6 points to align.) __x_____ Meets _____ Does Not Meet

Alignment Criteria Overall:

_14/18____ Meets _____ Does Not Meet

If the materials meet both Non-Negotiables and relevant Alignment Criterion, they are aligned to the Shifts and major features of Core Standards. **Do the materials meet every Non-Negotiable and Alignment Criterion? _____ Yes __x___ No**

What are the specific areas of strength and weakness based on this evaluation? Publishers or others modifying or developing assessments can use this information to make improvements and/or to remedy gaps in the alignment of assessment materials

Strengths: The daily routine provides consistency yet offers a variety of instructional strategies such as grouping, hands-on activities, and student exploration. Number Worlds can be used along with a Core Mathematics Program and includes a "Suggestions for Implementation" guide for teachers that outlines which sections to use depending on the time allotted for intervention: 30, 45, or 60+ minutes. There are effective planning resources for the teacher: Unit overview, charts that show alignment to standards, strong student engagement, Key Standards by Lesson Week charts in the back of the Teacher's Edition for all grades.

Weaknesses: The Mathematical Practices are not explicitly addressed. Students are not asked to provide arguments or defend their work.

2015-16 Mathematics Interim Review Recommendation & Summary

Publisher Name:	McGraw-Hill Education
Title:	Number Worlds
ISBN #	TE 978-0-02-129480-0
Grade Level(s) or Course:	Level G
Reviewer ID:	LS, CB

RECOMMENDED AS:

_____**Core Mathematics Program-** a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials. Substantial evidence clearly supports the designation of this program as Core.

_____**Other Mathematics Program-** a program that substantially, but partially, meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for supplemental materials. Substantial evidence clearly supports the designation of this program as Other.

_____**Component Mathematics Program-** a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs. Substantial evidence clearly supports the designation of this program as Component.

__X__**Intervention Program-** a program designed and intended to target and support students' specific needs. Substantial evidence clearly supports the designation of this program as Intervention.

_____ **Does not meet criteria** for recommendation as a Curricular Material or Online Resource for Mathematics.

EVIDENCE SUMMARY:

FOCUS-
Number Worlds, Level G is an intervention program intended to target students who need additional scaffolding.

COHERENCE-
Major works are coherently implemented in units + lessons.

~~RIGOR:~~ Conceptual Understanding
Conceptual understanding is adhered to through multiple representations of practice.

~~CONCEPTUAL UNDERSTANDING-~~ Rigor
Work is grade appropriate with multiple types of problems + opportunities to deepen understanding.

MATHEMATICAL PRACTICES-
Practices are inferred but never explicitly referenced.

ACCESSIBILITY OF STANDARDS TO ALL STUDENTS-
This is an intervention program designed to target students with gaps in their learning

OTHER:
Manipulative Kit + teacher editions are necessary. Teacher edition references the computer program, Building Blocks.

2015-16 Interim Mathematics Review

Mathematics Evaluation Tool Grades K-8

Publisher: McGraw-Hill Education

Title of Material: Number Worlds, G

Author: Griffin

ISBN #: various **Copyright** 205

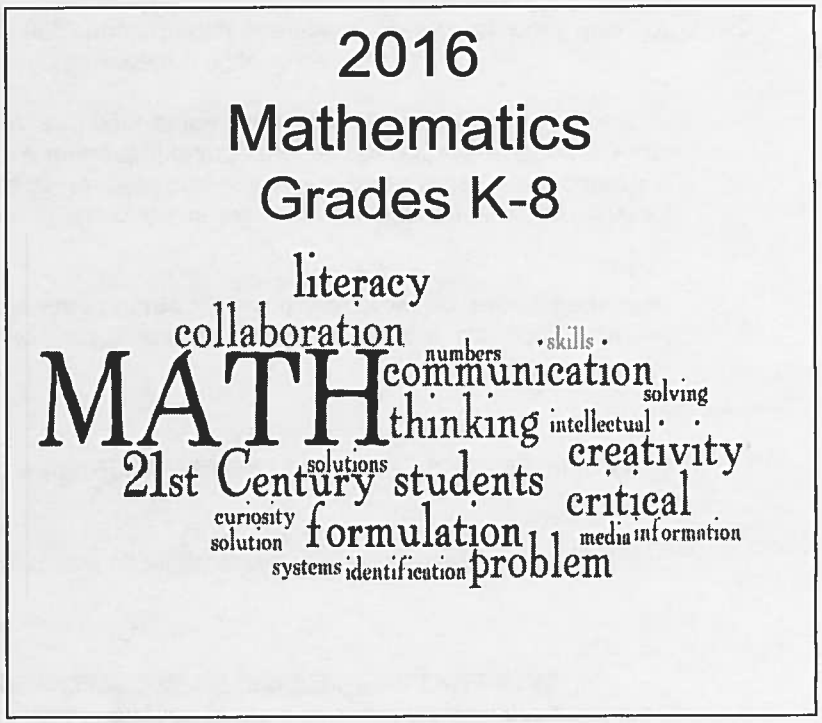
Reviewer ID: CB, LS

Core Mathematics Program- a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Core.

Other Mathematics Program- a program that substantially, but partially, meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Other.

Component Mathematics Program- a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs.
Substantial evidence clearly supports the designation of this program as Component.

Intervention Program- a program designed and intended to target and support students' specific needs.
Substantial evidence clearly supports the designation of this program as Intervention.



- Evaluation Form adapted from Instructional Materials Evaluation Toolkit (IMET).

The IMET was developed by Student Achievement Partners. Educators may use or adapt. http://creativecommons.org/licenses/by/3.0/ Download this tool at http://achievethecore.org/IMET

Instructional Materials Evaluation Tool

Mathematics, Grades K-8

What Are the Purposes of the IMET?

This Math IMET is designed to help educators determine whether instructional materials are aligned to the Shifts and major features of the Common Core State Standards (CCSS). The substantial instructional Shifts (http://www.corestandards.org/other-resources/key-shifts-inmathematics/) at the heart of the Common Core State Standards are:

- **Focus** strongly where the Standards focus
- **Coherence**: Think across grades and link to major topics within the grade
- **Rigor**: In major topics, pursue conceptual understanding, procedural skill and fluency, and application with equal intensity.

The IMET draws directly from the following documents:

- Common Core State Standards for Mathematics (www.corestandards.org/Math)
- Publishers' Criteria for the Common Core State Standards in Mathematics grade K-8 (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)

When to use the IMET

1. Purchasing materials: Many factors go into local purchasing decisions. Alignment to the Standards is a critical factor to consider. This tool is designed to evaluate alignment of instructional materials to the Shifts and the major features of the CCSS. It also provides suggestions of additional indicators to consider in the materials evaluation and purchasing process.

2. Evaluating materials currently in use: The IMET can be used to analyze the degree of alignment of existing materials and help to highlight specific, concrete flaws in alignment. Even where materials and tools currently in use fail to meet one or more of these criteria, the pattern of failure is likely to be informative. States and districts can use the evaluation to create a thoughtful plan to modify or combine existing resources in such a way that students' actual learning experiences approach the focus, coherence, and rigor of the Standards.

3. Developing programs: Those developing new programs can use this tool as guidance for creating aligned curricula.
Please note this tool was designed for evaluating comprehensive curricula (including any supplemental or ancillary materials), but it was not designed for the evaluation of standalone supplemental materials.

Who Uses the IMET?

Evaluating instructional materials requires both subject-matter and pedagogical expertise. Evaluators should be well versed in the Standards (www.corestandards.org/Math) for all grades in which materials are being evaluated. This includes understanding the Major Work of the grade (www.achievethecore/focus), the Supporting and Additional work, how the content fits into the progressions in the Standards (www.achievethecore.org/progressions), and the expectations of the Standards with respect to conceptual understanding, procedural skill and fluency, and application. Evaluators also should be familiar with the substantial instructional Shifts (http:// www.corestandards.org/other-resources/key-shifts-in-mathematics/) of Focus, Coherence and Rigor that are listed above.

Getting Started

Prior to Evaluation

Assemble all of the materials necessary for the evaluation. It is essential for evaluators to have materials for all grades covered by the program, as some criteria cannot be rated without having access to each grade. In addition, each evaluator should have a reference copy of the Common Core State Standards for Mathematics (CCSSM) and the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013).

Assem all of the materials necessary for the evaluation. It is ess al for evaluators to have materials for all grades covered b e program, as some criteria cannot be rated without having access to each grade. In addition, each evaluator should have a reference copy of the Common Core State Standards for Mathematics (CCSSM) and the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013).

Before conducting the evaluation itself, it is important to develop a protocol for the evaluation process. The protocol should include having evaluators study the Publishers' Criteria and the IMET. It will also be helpful for evaluators to get a sense of each program overall before beginning the process. At a minimum, this would include reading the front matter of the text, looking at the table of contents and paging through multiple chapters.

Sections 1-3 below should be completed to produce a comprehensive picture of the strengths and weaknesses of the materials under evaluation. Information about areas in need of improvement or supplementation should be shared with internal and external stakeholders.

Navigating the Tool

Begin with Section 1: Non-Negotiable Alignment Criteria

- The Non-Negotiable Alignment Criteria must each be met in full for materials to be considered aligned to the Shifts and the major features of the Common Core State Standards. Each Non-Negotiable Alignment Criterion has one or more metrics associated with it; every one of these metrics must be met in order for the criterion as a whole to be met.

- Examine the relevant materials and use evidence to rate the materials against each criterion and its associated metric(s).

- Record and explain the evidence upon which the rating is based.

Continue to Section 2: Alignment Criteria

- The Alignment Criteria must each be met for materials to be considered aligned to the Shifts and the major features of the Common Core State Standards. Each Alignment Criterion has one or more metric associated with it; a specific number of these metrics must be met or partially met in order for the criterion as a whole to be met.

- **Examine the materials in relation to these criteria, assigning each metric a point value. Rate the criterion as "Meets" or "Does Note Meet" based on the number of points assigned. The more points the materials receive on the alignment Criteria, the better they are aligned.**

- **Record and explain the evidence upon which the rating is based.**

Proceed to Section 4: Indicators of Quality

- **Indicators of Quality are important considerations that will help evaluators better understand the overall quality of instructional materials. These considerations are not criteria for alignment to the CCSS, but they provide valuable information about additional program characteristics. Evaluators may want to add their own indicators to the examples provided.**

Directions for Non-Negotiable 1

Freedom from Obstacles to Focus

Criterion	Evidence- Give specific examples.	Rating: (Reviewer only.)
Non-Negotiable 1: **Freedom from Obstacles to Focus** **Materials must reflect the content architecture of the Standards by not assessing the topics named before the grade level where they first appear in the Standards.** The Standards foster students' progress to algebra by focusing strongly on arithmetic. Consistent with this focus, certain topics from outside of arithmetic appear only in later grades. Thus, to be aligned, materials must reflect the content architecture of the Standards by not assessing the topics named before the grade level where they first appear in the Standards. In this criterion, "topics named" means the topics that are explicitly named in Metric 1A. No other topics should be added to the list in Metric 1A. (Note that other topics in the standards are addressed in criterion NN2.)	**Required Materials** • Common Core State Standards for Mathematics (www.corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf) • From the materials being evaluated: teacher guides and all assessment components	**Rating this Criterion:** Non-Negotiable 1 is rated as Meets or Does Not Meet. To rate Non-Negotiable 1, begin by rating Metric 1A. Since Metric 1A is the only metric for Non-Negotiable 1, the rating for Non-Negotiable 1 is the same as the rating for Metric 1A. If Metric 1A is rated as Does Not Meet, include evidence of when the named topic(s) is/are assessed. If the metric is rated as Meets, list the grade(s) examined in the evaluation.
Metric NN1A: **Materials reflect the basic architecture of the Standards by not assessing the listed topics before the grade level indica**	**Evidence-** Number Worlds is not meant to be used during a specific grade level rather it focuses on standards th[illegible]udents have not mastered. The	**(Reviewer only.)** **_x_ Meets**

• Probability including chance, likely outcomes, probability models. (Introduced in the CCSSM in grade 7) • Statistical distributions, including center, variation, clumping, outliers, mean, median, mode, range, quartiles; and statistical association or trends, including two-way tables, bivariate measurement data, scatter plots, trend line, line of best fit, correlation. (Introduced in the CCSSM in grade 6) • Similarity, congruence, or geometric transformations. (Introduced in the CCSSM in grade 8) • Symmetry of shapes, including line/ reflection symmetry, rotational symmetry. (Introduced in the CCSSM in grade 4) **How to Find the Evidence:** Evaluate the table of contents, all chapter tests, all unit tests, and other such assessment components (including rubrics). For context, read Criterion #2 from the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013). NOTE: Grade alignments of other topics are addressed in Non- Negotiable 2, Focus and Coherence.) In this criterion, "topics named" means the topics that are explicitly named in Metric 1A. No other topics should be added to the list in Metric 1A. (Note that other topics in the standards are addressed in criterion NN2.)	placement test used an entry point for teachers to accurately place students in the appropriate level. Therefore, the Standards are not assessed before the grade level indicated. Level F includes many 5th grade Standards: 5.NBT.3a, 5.OA.2, 5.NF.1, 5.G.1, and many more. Level G would not be used with students who have not yet been exposed to the Standards it covers based on the student's performance in the Placement Test.	____**Does Not Meet**
Non-Negotiable 1: Materials must reflect the content architecture of the Standards by not assessing the topics named* before the grade level where they first appear in the Standards. **NN 1** If Metric 1A was rated as Meets, then rate Non-Negotiable 1 as Meets. If Metric 1A was rated as Does Not Meet, then rate Non- Negotiable 1 as Does Not Meet. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion.**(Reviewer only.)** **Before moving to Non-Negotiable 2, record the final Meets or Does Not Meet rating in the Evaluation Summary.**		**(Reviewer only.)** __x__**Meets** ____**Does Not Meet** **Strengths/Weaknesses:** Each unit clearly outlines the standards that are covered.

Directions for Non-Negotiable 2

Focus and Coherence

Non-Negotiable 2:

Focus and Coherence

Materials must focus coherently on the Major Work of the grade in a way that is consistent with the progressions in the Standards.

Focus and coherence are the two major evidence-based design principles of the Common Core State Standards for Mathematics (CCSSM, p. 3). Focus is necessary in order to fulfill the ambitious promise the states have made to their students by adopting the Standards: greater achievement at the college and career ready level; greater depth of understanding of mathematics; and a rich classroom environment in which reasoning, sense-making, applications, and a range of mathematical practices flourish. In simpler terms, a mile-wide, inch-deep curriculum translates to less time per topic. Less time means less depth and moving on without many students. Thus, materials must focus coherently on the Major Work of the grade in a way that is consistent with the progressions in the Standards.

Required Materials

- Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf)
- Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)
- Focus by Grade Level for the grade being evaluated (www.achievethecore.org/focus)
- From the materials being evaluated: teacher guides, student texts and workbooks

Rating this Criterion:
Non-Negotiable 2 is rated as Meets or Does Not Meet.

To rate Non-Negotiable 2, first rate metrics 2A–2H. Each of these eight metrics must be rated as Meets in order for Non-Negotiable 2 to be rated as Meets. Rate each metric 2A-2H as Meets or Does Not Meet/Insufficient Evidence. If the evidence examined shows that the Criterion is met, then mark the Criterion Meets. If the evidence examined shows that the Criterion is not met—or if there is insufficient evidence to make a determination—then mark the Criterion as Does Not Meet/Insufficient Evidence. Support all ratings with evidence.

Metric NN2A:
In each grade K–8, students and teachers using the materials as designed devote the large majority of time to the Major Work of the grade.

How to Find the Evidence:
Familiarize yourself with the Major Work of the grade being evaluated (see the Focus by Grade Level documents.)
Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, lessons, homework assignments, and assessments. (Evaluate both student and teacher materials.)
Consider time spent on the Major Work of the grade and judge qualitatively whether students and teachers using the materials as designed will devote the large majority of time to the Major Work of the grade.
For context, read Criterion #1 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013)

Evidence-
All five units are focused on the Major Works of the 5th grade:

- Unit 1 place value, working with decimals, multiplying and dividing by powers of ten
- Unit 2 perform operations with multi-digit whole numbers and with decimals to hundredths, multiplication properties and strategies, division basics, division using whole numbers
- Unit 3 perform operations with multi-digit whole numbers and with decimals to hundredths, adding decimals, subtracting decimals, multiplication, and division with models and decimals
- Unit 4 use equivalent fractions as a strategy to add and subtract fractions, apply and extend previous understandings

(Reviewer only.)

_x___Meets

____Does Not Meet/

Insufficient Evidence

	of multiplication and division to multiply and divide fractions • Unit 5 understand concepts of volume and relate volume to multiplication and to addition	
Metric NN2B: **Supporting Work, where present, enhances focus and coherence simultaneously by also engaging students in the Major Work of the grade.** **How to Find the Evidence:** Familiarize yourself with the Major Work and Supporting Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate chapters and lessons that focus on Supporting Work. NOTE: Example of evaluating this Criterion might include looking at whether materials for K–5 generally treat data displays as an occasion for solving grade-level word problems using the four operations (e.g., see 3.MD.B.3); or whether materials for grade 7 take advantage of opportunities to use probability to support ratios, proportions, and percentages. For context, read Criterion #3 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** The Supporting Work does not detract from the Major Work and builds to support the Major Works. Converting like measurement units within given measurement system is 1 week; a unit or entire lesson is not devoted to the supporting work represent and interpret data, however, students do practice this standard within other lessons.	**(Reviewer only.)** **__x__Meets** **____Does Not Meet/ Insufficient Evidence**
Metric NN2C: **Materials base content progressions on the grade-by-grade progressions in the Standards. Content from previous or future grades does not unduly interfere with or displace on-grade-level content.** **How to Find the Evidence:** Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, and lessons in both student and teacher materials. NOTE: In some cases it may be possible that aligned materials might address some aspects of a topic in a strategic way before or after the grade level in which the topic is central in the Standards' progressions; for example, a curriculum author might purposefully choose to explore adding fractions with unlike denominators in a way appropriate to grade four, recognizing that this work is not really required until the next grade. However, any such purposeful discrepancies in content progressions should enhance the required learning in each grade; not unduly interfere with or displace grade-level content; and be clearly aimed at helping students meet the Standards as written rather than effectively rewriting the progressions in the Standards. And in all cases, note that Non-Negotiable 1 must be met for materials to be aligned. For context, read Criterion #5a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Number Worlds is designed as an intervention program to be used with small groups or whole class where Standards need reinforced to fill gaps. Students take a placement test to identify what level of Number Worlds they should begin using. According to the Implementation Guide: • Level A focuses on kindergarten standards • Level B focuses on kindergarten standards • Level C focuses on kindergarten and 1st grade standards • Level D focuses on 1st and 2nd grade standards • Level E focuses on 3rd grade standards • Level F focuses on 4th grade standards • Level G focuses on 5th grade standards • Level H focuses on 6th grade standards • Level I focuses on 7th grade standards • Level J focuses on 8th grade standards	**(Reviewer only.)** **_x___Meets** **____Does Not Meet/ Insufficient Evidence**

Metric NN2D: **Materials give all students extensive work with on-grade-level problems.** **How to Find the Evidence:** Evaluate both student and teacher materials. If the materials provide resources for differentiated learning, consider whether lower-performing students have opportunities to engage with grade-level problems. Also consider whether higher-performing students are given opportunities to learn current grade-level content in greater depth. For context, read Criterion #5b in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** The Number Worlds program intervenes in a grade level to cover Standards that a student has not mastered regardless of the grade that the student is currently placed. Lessons reflect on-grade-level learning. Remedial and challenge options are not evident. "Projects" sections do not extend learning. • A 6th grader may need extensive intervention with number and operations in base ten to perform operations with multi-digit whole numbers and with decimals to hundredths and will be placed in Number Worlds Level G Unit 1 to deepen their understanding of the the operations in relation to decimals even though this level covers 5th grade standards.	**(Reviewer only.)** **__x__Meets** **____Does Not Meet/ Insufficient Evidence**
Metric NN2E: **Materials relate on-grade-level concepts explicitly to prior knowledge from earlier grades.** **How to Find the Evidence:** Evaluate both student and teacher materials. NOTE: Examples of evaluating this Criterion might include looking at the way the materials extend basic ideas of place value across the decimal point; or the role that properties of operations play when the materials extend arithmetic beyond whole numbers to fractions, variables, and expressions. More generally, cluster headings in the Standards sometimes signal key moments where reorganizing and extending previous knowledge is important in order to accommodate new knowledge (e.g., see cluster headings that use the phrase "Apply and extend previous understanding"). For context, read Criterion #5c in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** The Teacher's Edition includes several pages of "Key Standards by Lesson Week" for every level of their curriculum. This resource is so useful for teachers to see what Major Works are being taught in each level of the curriculum to ensure students are placed appropriately. Each unit has a pacing guide broken down into weeks and lessons within each week. Lessons are developed with explicit objectives, Standard covered, and context for the content. Students begin with a "Warm Up" which relates previous knowledge of the content, then move on to "Engage" for the bulk of the lesson in individual, small, or whole groups and build conceptual understanding. The lesson ends with "Reflect" and "Assess" for students to evaluate their work and learning.	**(Reviewer only.)** **_x___Meets** **____Does Not Meet/ Insufficient Evidence**
Metric NN2F: **Review of material from previous grades is clearly identified as such to the teacher, and teacher and**	**Evidence-** Standards are clearly marked at the beginning of units and lessons. The Standards covered may not be on the [illegible]dent's age grade level	**(Reviewer only.)** **_x___Meets**

studen an see what their specific responsibility is for the current year. **How to Find the Evidence:** Evaluate the table of contents, but do not stop there; also evaluate units, chapters, lessons, homework assignments and assessments. (Evaluate both student and teacher materials.) Identify any content from previous grades and check whether it is identified as such. For context, read Criterion #5a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	according to t placement test because Number Worlds is an intervention program.	**____Does Not Meet/** **Insufficient Evidence**
Metric NN2G: **Materials include learning objectives that are visibly shaped by CCSSM cluster headings.** **How to Find the Evidence:** Select several clusters from the Major Work in the grade being evaluated. Evaluate teacher and student materials in relation to these clusters. For context, read Criterion #6a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Learning objectives are placed at the beginning of each lesson just above the Standard it is based on. Objectives are shaped from the Standards. • Unit 1 Week 3 Lesson 4: Students can compare two decimal numbers without the use of a place value chart. 5.NBT.3B Compare two decimals to thousandths based on meanings of the digits in each place, using >, =, and < symbols to record the results of comparisons. • Unit 2 Week 4 Lesson 1: Students can divide multi-digit numbers by single-digit divisors using manipulatives. 5.NBT.6 Find whole-number quotients of whole numbers with up to four-digit dividends and two-digit divisors, using strategies based on place value, the properties of operations, and/or the relationship between multiplication and division. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models. • Unit 3 Week 3 Lesson 2: Students can multiply a decimal number in tenths and a whole number. 5.NBT.7 Add, subtract, multiply, and divide decimals to hundredths, using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and	**(Reviewer only.)** **_x___Meets** **____Does Not Meet/** **Insufficient Evidence**

	subtraction; relate the strategy to a written method and explain the reasoning used.	
Metric NN2H: **Materials include problems and activities that serve to connect two or more clusters in a domain, or two or more domains in a grade, in cases where these connections are natural and important.** **How to Find the Evidence:** In the grade being evaluated, choose two or more clusters or two or more domains for which connections are natural and important. Evaluate the units, chapters, and lessons that deal with the chosen topics, looking for problems and activities that serve to connect the chosen clusters or domains. NOTE: An example of evaluating this Criterion might include looking at whether problems in grade 4 sometimes or often involve students applying their developing computational skills (detailed in domain NBT) in the context of solving word problems (detailed in domain OA). For context, read Criterion #6b in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Where necessary, clusters are combined to build on each other. • Unit 3 Week 3 combines understanding the place value system and performing operations with multi-digit whole numbers and with decimals to hundredths. • Unit 5 Week 2 combines understanding concepts of volume and relate volume to multiplication and to addition with converting like measurement units within a given measurement system	**(Reviewer only.)** **__x__Meets** **____Does Not Meet/ Insufficient Evidence**
Non-Negotiable 2: **Focus and Coherence** **Materials must focus coherently on the Major Work of the grade in a way that is consistent with the progressions in the Standards.** **NN 2** If all Metrics 2A – 2H were rated as Meets, then rate Non-Negotiable 2 as Meets. If one or more Metric was rated Does Not Meet/Insufficient Evidence, then rate Non-Negotiable 2 as Does Not Meet. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)** **Before moving to Alignment Criterion 1, record the final Meets or Does Not Meet rating in the Evaluation Summary.**		**(Reviewer only.)** **_x___Meets** **____Does Not Meet** **Strengths/Weaknesses:** The focus and coherence of each unit is concise and explicit in the Teacher's Edition and the Student Workbook. The placement test allows interventionists to tailor lessons to the areas of need for each student based on the student's placement test performance.
Now continue by evaluating the Alignment Criterion 1 for Rigor and Balance.		

Directions for Alignment Criterion 1

Rigor and Balance

Alignment Criterion 1: Rigor and Balance **Materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.** The Standards set expectations for attention to all three aspects of rigor: conceptual understanding, procedural skill and fluency, and applications. Thus, materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.	**Required Materials** • Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf) • Focus by Grade Level for the grade being evaluated (achievethecore.org/focus) • Situation Types for the Operations in Word Problems (achievethecore.org/situation-types) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion:** Alignment Criterion 1 is rated as Meets or Does Not Meet. To rate Alignment Criterion 1, first rate metrics 1A, 1B, and 1C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). For each metric, guiding questions are provided to aid in gathering evidence. Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 1 if the materials rate 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as rigor and balance, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.
Metric AC1A: **The materials support the development of students' conceptual understanding of key mathematical concepts, especially where called for in specific content Standards or cluster headings.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Major Work for the grade being evaluated that relate specifically conceptual understanding to use throughout the questions associated with this metric. NOTE: Some examples of clusters or Standards that call for conceptual understanding include: K.OA.A.1, (1.NBT.B, 1.NBT.C), (2.NBT.A, 2.NBT.B), (3.OA.A.1, 3.OA.A.2), 4.NF.A, (4.NBT.A, 4.NBT.B), 5.NF.B, (5.NBT.A, 5.NBT.B), 6.RP.A, 6.EE.A.3, 7.NS.A, 7.EE.A, 8.EE.B, 8.F.A, 8.G.A Clusters or Standards grouped by parentheses are closely connected and could be analyzed together. For context, read Criterion #4a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	-Choose a cluster/Standard from the Major Work that is aligned to each aspect of rigor and use it to evaluate these metrics. It is most helpful if the same clusters/Standards are chosen for all of the programs being evaluated. (Guidance in choosing clusters/Standards is included in "How to Find the Evidence".)	**Use the questions for AC Metric 1A to evaluate Metric 1A. Record evidence for each question and rate Metric 1A.** **__2__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**

Is conceptual understanding attended to thoroughly where the Standards set explicit expectations for understanding or interpreting? Evaluate lessons, chapter/unit assessments and homework assignments, paying attention to work aligned to Standards that explicitly call for understanding or interpreting. NOTE: Examples of evaluating this Criterion might include looking at how well the multi-digit addition and subtraction algorithms are developed and explained on the basis of place value and properties of operations; or how well the multi-digit multiplication and division algorithms are developed and explained on the basis of place value and properties of operations; or how well solving equations is presented and explained as a process of reasoning.	**Evidence-** Conceptual understanding is adhered to in the Activity Cards utilized in the "Engage" portion of each lesson. The student workbook promotes conceptual understanding on and off throughout the unit. Most of the conceptual understanding is practiced with the Activity Card situation proposed in the "Engage" section of the lesson. • Unit 5 Week 2 begins teaching volume with hands-on counting cubes, Activity Card 5F "Volume by Cubes" and moves to an algorithm when students understand the multiplication they are performing, Activity Card 5G "Volume by Formula"	
Do the materials feature high-quality conceptual problems and conceptual discussion questions? Evaluate lessons, chapter/unit assessments, and homework assignments. NOTE: Example of conceptual problems might include such questions as "Find a number greater than 1/5 and less than 1/4," or "If the divisor does not change and the dividend increases, what happens to the quotient?"	**Evidence-** The Activity Cards featured in each lesson are highly conceptual and promote discussion of Standards, understanding, and explanation. Written responses allow for explanation of analysis.	
Do the materials feature opportunities to identify correspondences across mathematical representations? Evaluate lessons, chapter/unit assessments and homework assignments. NOTE: Examples of evaluating this Criterion might include looking at whether students are supported in identifying correspondences among: the verbal description of a situation, the diagrams that distill its mathematical features, and the equations that model it; or equivalent forms of numbers (e.g., 3 and 6/2) and the number line; or rational number operations and representations of them via models such as the vector model; or the expression that defines a function and the graph that shows the relationship.	**Evidence-** Varied approaches to similar concepts allow for practice with varied representations and deeper understanding. Students have opportunities to infer and make connections across lessons and units. At the end of each week there is a "Project" problem for students to apply what they have practiced that week and make connections between lessons. The Projects are theme related within a Unit to build cohesive application. • By the end of Unit 4 students have doubled a recipe from a cookbook brought in for the project or found online, multiplied a specific ingredient to have enough for the whole class, and cut a recipe in half using division.	
Metric AC1B: **The materials are designed so that students attain the fluencies and procedural skills required by the Stand** **How to Find the Evidence:**		**Use the questions for Metric 1B to evaluate Metric 1 B. Record evidence for each question and rate Metric 1B.** **(Reviewer only.)**

Select one or more cluster(s) or Standard(s) from the Major Work for the grade being evaluated that relate specifically to fluency and procedural skill to use throughout the questions associated with this metric. NOTE: Some examples of Standards that call for procedural skill and fluency include: K.OA.A.5, 1.OA.C.6, 2.OA.B.2, 2.NBT.B.5, 3.OA.C.7, 3.NBT.A.2, 4.NBT.B.4, 5.NBT.B.5, 6.NS.B.2, and 6.NS.B.3, 6.EE.A, 7.NS.A, 7.EE.A.1,7.EE.B.4a, 8.EE.C.7, 8.EE.C.8b For context, read Criterion #4b in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).		**__2__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Is progress toward fluency and procedural skill interwoven with students' developing conceptual understanding of the operations in question? Evaluate lessons, chapter/unit assessments, daily routines, and homework assignments for evidence that the development of fluency and procedural skill is supported by conceptual understanding.	**Evidence-** Students have opportunities to practice procedural understanding of the Standards.The student workbook provides procedural problem practice. • Unit 3 Week 2: subtracting decimals to the hundredths place • Unit 4 Week 5: multiplying fractions by fractions	
Are purely procedural problems and exercises present that include cases in which opportunistic strategies are valuable and generic cases that require efficient algorithms present? Evaluate lessons, chapter/unit assessments, daily routines, and homework assignments. NOTE: Examples of problems in which opportunistic strategies are valuable might include the sum 698 + 240 or the system $x + y = 1$, $2x + 2y = 3$. Examples of generic cases that require efficient algorithms might include the sum 8767+2286 or the system $6y + x = x + 3$, $– x = 1 + 2y$.	**Evidence-** the "practice" and "lesson review" are dedicated to procedural practice. Number Worlds provides opportunities for students to practice standard algorithms in the student practice book: listed under "additional practice" in the Teacher's Edition. The curriculum also provides students with opportunities to develop their own strategies; typically these types of problems are in the Activity Cards. • Activity Card 3O: Decimal Stories • Activity Card 4I: Adding in the City	
Do the materials in grades K–6 provide repeated practice toward attainment of fluency Standards? Evaluate lessons, daily routines, and homework assignments for evidence of repeated practice toward attainment of the following K–6 Standards that set an explicit expectation of fluent (accurate and reasonably fast) computation: K.OA.A.5, 1.OA.C.6, 2.OA.B.2, 2.NBT.B.5, 3.OA.C.7, 3.NBT.A.2, 4.NBT.B.4, 5.NBT.B.5, 6.NS.B.2, 6.NS.B.3.	**Evidence-** Multiple opportunities for fluency are available for students in the daily lesson routine. "Warm-up" allows students to refresh their memory, "Engage" creates a framework for learning and provides practice of new skills, "Reflect" asks students to evaluate and justify their strategies, "Assess" (informal or formal) shows students and teacher what the class has learned. Fluency is built as students add to the framework throughout the Units.	

Metric AC1C: **The materials are designed so that teachers and students spend sufficient time working with engaging applications, without losing focus on the Major Work of each grade.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Major Work for the grade being evaluated that relate specifically application to use throughout the questions associated with this metric. NOTE: Some examples of clusters or Standards that call for application include: K.OA.A.2, 1.OA.A, 2.OA.A, 3.OA.A.3, 3.OA.D.8, 4.OA.A.3, 4.NF.B.3d, 4.NF.B.4c, 5.NF.B.6, 5.NF.B.7c, 6.RP.A.3, 6.NS.A.1, 6.EE.B.7, 6.EE.C.9, 7.RP.A, 7.NS.A.3, 7.EE.B.3, 8.EE.C.8c, 8.F.B For context, read Criterion #4c in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	Practice with major works comes in several different forms of practice: 4 lessons, 1 review lesson, and 1 "project" application lesson.	**Use the questions for Metric 1C to evaluate Metric 1C. Record evidence for each question and rate Metric 1C.** **(Reviewer only.)** **__2__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Are there are single- and multi-step contextual problems, including non-routine problems, that develop the mathematics of the grade, afford opportunities for practice, and engage students in problem solving? Do the problems attend thoroughly to those places in the content Standards where expectations for multi-step and real-world problems are explicit? Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** The daily routine has a variety of strategies for students to understand, explore, and apply their knowledge of the Standards. One-step problems are present in all lessons. Multi-step problems are are present but not in great number. Real world problems are present throughout lessons and end of week projects.	
Do application problems particularly stress applying the Major Work of the grade? Evaluate lessons, chapter/unit assessments, and homework assignments. NOTE: Examples of evaluating this Criterion might include looking at: how well, by the end of grade 2, students using the materials as designed can represent and solve a full range of one-step addition and subtraction word problems; or how well, by the end of grade 3, students using the materials as designed can represent and solve a full range of one-step multiplication and division word problems; or how well these basic situation types for each operation are carried coherently across the grades, (e.g., with fractions and algebraic expressions); or, in all grades, whether the problems connect concepts, Standards, and domains in ways that are natural and important. For a list of situation types for one-step addition, subtraction, multiplication, and division problems, see Situation Types for the Operations in Word Problems	**Evidence-** The curriculum is focused on building the Major Works of a grade level by having 65% or more of the lessons based on the Major Works of the grade. • Unit 1, Week 3: Place Value • Unit 2, Week 2-5: Multiplication and division of whole numbers. • Unit 3, Week 1-4: Operations with decimals. • Unit 4, Week 1-6: Operations with fractions. • Unit 5, Week 2: Volume of rectangles and prisms.	
Does modeling build slowly across K–8, with applications that are relatively simple in earlier grades and when students are encountering new content? In grades 6–8, do the problems begin to provide opportunities for students to make their own assumptions or simplifications in order to model a situation mathematically? Read Standard for Mathematical Practice 4, Model with Mathematics. Evaluate [illegible]ons, chapter/unit assessments, and homework assignm[illegible]	**Evidence-** There are developmentally appropriate models of the mathematics represented. Number Worlds Level G is based on 5th grade Standards and asks students to use arrays, model repeated addition, use factor pairs, frac[illegible] bars, and more. Not only are models used, but manipulatives such as counters,	

	unifix cubes, dot es and number cubes are utilized as well. reflections exercises allow some application for review.	
Alignment Criterion 1: Rigor and Balance **Materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.** **AC1** Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 out of 6 points, the Criterion has not been met. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)** **Before moving to Alignment Criterion 2, record the final Meets or Does Not Meet rating in the Evaluation Summary.**		**(Reviewer only.)** **_6___Meets** **____Does Not Meet** **Strengths/Weaknesses:**

Directions for Alignment Criterion 2

Standards for Mathematical Practice

Alignment Criterion 2: Standards for Mathematical Practice **Materials must demonstrate authentic connections between content Standards and practice Standards.** The Standards require that designers of instructional materials connect the mathematical practices to mathematical content in instruction. Thus, materials must demonstrate authentic connections between content Standards and practice Standards.	**Required Materials**: • Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf) • Focus by Grade Level for the grade being evaluated (www.achievethecore.org/focus) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion** Alignment Criterion 2 is rated as Meets or Does Not Meet. To rate Alignment Criterion 2, first rate metrics 2A, 2B, and 2C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). For each metric, guiding questions are provided to aid in gathering evidence. Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 2 if the materials earn 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as mathematical practices, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.

Metric AC2A: **Materials address the practice Standards in such a way as to enrich the Major Work of the grade; practices strengthen the focus on Major Work instead of detracting from it, in both teacher and student materials.** **How to Find the Evidence:** Familiarize yourself with the Major Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate teacher and student materials for evidence that the mathematical practices support and connect to the focus of the grade. NOTE: Examples of evaluating this Criterion might include looking at whether, in grades K–5, students using the materials are supported to look for and express regularity in repeated reasoning about the addition table, the multiplication table, the properties of operations, the relationship between addition and subtraction or multiplication and division, and the place value system; or whether, in grades 6–8, students using the materials are supported to look for and express regularity in repeated reasoning about proportional relationships and linear functions. For context, read Criterion #8 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013).	**Evidence-** The Major Work of the grade are represented: • Unit 1: Understand the place value system • Unit 2: perform operations with multi-digit whole numbers and with decimals to hundredths • Unit 3: perform operations with multi-digit whole numbers and with decimals to hundredths • More examples can be found in the curriculum.	**(Reviewer only.)** **_2___Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Metric AC2B: **Materials attend to the full meaning of each practice Standard.** **How to Find the Evidence:** For context, read Criterion #7 and Criterion #9 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).		**Use the questions for Metric 2B to evaluate Metric 2B. Record evidence for each question and rate Metric 2B.** **(Reviewer only.)** **____Meets (2)** **__1__Partially Meets (1)** **____Does Not Meet (0)**
Over the course of any given year of instruction, is each mathematical practice Standard meaningfully present in the form of assignments, activities, or problems that stimulate students to develop the habits of mind described in the practice Standard? Evaluate lessons, chapter/ unit assessments, and homework assignments for evidence of each mathematical practice being meaningfully present in instruction.	**Evidence-** The Mathematical Practices are inferred, but never explicitly referenced. Number Worlds provides teachers with overviews, charts, and a scope and sequence of the Major Works and Standards but fails to provide any similar resources for the Mathematical Practices. While most mathematical practices are present in student work, they are not explicitly indicated in the teacher's edition or the student workbook.	

Do the materials treat the practice Standards as developing across grades or grade bands? Are the practice Standards in early grades appropriately simple? Do they display an arc of growing sophistication across the grades?	**Evidence-** Teachers will have to infer the Mathematical Practices for different lessons which is completely doable; however, there should be a guide to ensure that all Practices are met.	
Are there teacher-directed materials that explain the role of the practice Standards in the classroom and in students' mathematical development? Are alignments to practice Standards accurate?	**Evidence-** There are no teacher-directed materials that explain the role of the practice Standards.	
Metric AC2C: **Materials support the Standards' emphasis on mathematical reasoning.** **How to Find the Evidence:** For context, read Criterion #10 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).		**Use the questions for Metric 2C to evaluate Metric 2C. Record evidence for each question and rate Metric 2C.** **(Reviewer only.)** **____Meets (2)** **__1__Partially Meets (1)** **____Does Not Meet (0)**
Do the materials support students in constructing viable arguments and critiquing the arguments of others concerning grade-level mathematics that is detailed in the content Standards? Read Standard for Mathematical Practice 3. Evaluate teacher and student materials to ensure that students are given opportunities to reason with grade-level mathematics.	**Evidence-** Students have opportunities to explain their work, but not create an argument or defend their strategy.	
Do the materials support students in producing not only answers and solutions, but also, in a grade-appropriate way, arguments, explanations, diagrams, mathematical models, etc., especially in the Major Work of the grade? Familiarize yourself with the Major Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate teacher and student materials, to understand the types of work students are expected to produce.	**Evidence-** Students are asked to provide models such as arrays, fraction bars, and explanations in a developmentally appropriate manner; however, they are not asked create arguments or defend their strategy.	
Do materials explicitly attend to the specialized language of mathematics? Is the language of argument, problem solving, and mathematical explanations taught rather than assumed? Evaluate teacher and student materials, paying attention to how mathematical language is taught. NOTE: Examples of evaluating this Criterion might include looking at whether students are supported in: basing arguments on definitions; using the method of providing a counterexample; or recognizing that examples alone do not establish a general statement.	**Evidence-** Grade appropriate vocabulary is clear and explicit in the Teacher's Edition. Instructions and word problems use mathematical terms correctly in the Teacher's Edition and the student Practice Book. Glossaries and vocabulary cards supplement vocabulary instruction.	
Alignment Criterion 2: **Standards for Mathematical Practice** **Materials must demonstrate authentic connections between content Standards and practice Standards.**		**(Reviewer only.)** **__x__Meets** **____Does Not Meet**

AC2 Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 out of 6 points, the Criterion has not been met. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)** **Before moving to Alignment Criterion 3, record the final Meets or Does Not Meet rating in the Evaluation Summary.**		**Strengths/Weaknesses:** Weaknesses: The Mathematical Practices are not explicit or well-linked to the content. Problems do not elicit argument or critique of others' arguments. Strengths: The Unit Overviews and Lesson Overviews provide great detail on the Standards that are taught. Charts and guides are provided for teachers to relate the Standards in each unit and lesson.
Alignment Criterion 3: **Access to the Standards for All Students** **Materials must provide supports for English Language Learners and other special populations.** Because Standards are for all students, alignment requires thoughtful support to ensure all students are able to meet the Standards. Thus, aligned materials must provide supports for English Language Learners and other special populations.	**Required Materials:** • Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion:** Alignment Criterion 3 is rated as Meets or Does Not Meet. To rate Alignment Criterion 3, first rate metrics 3A, 3B, and 3C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 3 if the materials earn 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as support for special population, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.

Metric AC3A: **Support for English Language Learners and other special populations is thoughtful and helps those students meet the same Standards as all other students. The language in which problems are posed is carefully considered.** **How to Find the Evidence:** Evaluate teacher and student materials, paying attention to supports offered for special populations.	**Evidence-** Support for English Language Learners is evident. A Support Guide is provided to aid teachers who are teaching English Language Learners. Vocabulary cards are available in 9 languages. Number Worlds is focused on students who require intervention.	**Reviewer only.)** **__2__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Metric AC3B: **Materials provide appropriate level and type of scaffolding, differentiation, intervention, and support for a broad range of learners with gradual removal of supports, when needed, to allow students to demonstrate their mathematical understanding independently.** **How to Find the Evidence:** Evaluate teacher and student materials, paying attention to whether materials provide differentiation that will lead all learners to engage with on-grade-level content.	**Evidence-** Appropriate scaffolding is present throughout lessons and units. Teachers are encouraged to use a variety of group sizes as well as individual assignments. Each lesson gives grouping suggestions. The nature of Number Worlds is for a differentiated group of lower learners. Vocabulary is available in the Teacher's Edition and additional vocabulary is present in the English Learner Support Guide.	**Reviewer only.)** **__2__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Metric AC3C: **Design of lessons recommends and facilitates a mix of instructional approaches for a variety of learners such as using multiple representations (e.g., including models, using a range of questions, checking for understanding, flexible grouping, pair-share).** **How to Find the Evidence:** Evaluate teacher materials, noting instructional approaches suggested for whole class and differentiated lessons and activities.	**Evidence-** Lessons include a variety of instructional approaches using multiple representations: pair:share, individual, whole group, small group, hands-on, procedural, diagrams, and informal/formal assessments throughout. There are several ways of practicing concepts within lessons.	**Reviewer only.)** **__2__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Alignment Criterion 3: **Access to the Standards for All Students** **Materials must provide supports for English Language Learners and other special populations.** **AC3** Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 points, the Criterion has not been met. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion.**(Reviewer only.)**		**(Reviewer only.)** **__6__Meets** **____Does Not Meet** **Strengths/Weaknesses:** Strengths: Number Worlds is well designed to address gaps in learning for students in a differentiation group. There are multiple opportunities for students to practice

Move to the Evaluation Summary and record the final Meets or Does Not Meet rating .	in a variety of ways thereby reaching a wide gamut of learners.

Once an evaluation for alignment to the Shifts and major features of the CCSS has been conducted using Sections 1-3, it's important to evaluate for overall quality and best practices. A starting list of Indicators of Quality are suggested below. States, districts and others evaluating instructional materials are encouraged to add to this list to ensure materials reflect local contexts. For background information on some of the Indicators of Quality in this section, refer to pp.18–21 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).

Indicators of Quality	**Evidence- Give specific examples.**	**Rating: (Reviewers only.)**
1. Lessons are thoughtfully structured and support the teacher in leading the class through the learning paths at hand, with active participation by all students in their own learning and in the learning of their classmates.	**Evidence-** There are clear instructions and guides for the teacher at the Unit Overview and in each lesson. The lessons hint at being too scripted.	**(Reviewer only.)** **__x____ Yes** **_____ No**
2. The underlying design of the materials includes both problems and exercises. (In solving problems, students learn new mathematics, whereas in working exercises, students apply what they have already learned to build mastery.) Each problem or exercise has a purpose. **NOTE: This Criterion does not require that the problems and exercises be labeled as such.**	**Evidence-** Problems and exercises allow for practice with surface and deeper conceptual learning. Students are introduced to new mathematics in the "Engage: Develop" portion of the lessons and practice their newly acquired skills in the "Engage: Practice" section as well as in the Additional Practice section.	**(Reviewer only.)** **___x___ Yes** **_____ No**
3. Design of assignments is not haphazard: exercises are given in intentional sequences in order to strengthen students' mathematical understanding.	**Evidence-** The lessons scaffold the students learning, allowing their understanding to grow and deepen in a logical way.	**(Reviewer only.)** **__x____ Yes** **_____ No**
4. There are separate teacher materials that support and **reward teacher study including, but not limited to: discussion of the mathematics of the units and the mathematical point of each lesson as it relates to the organizing concepts of the unit, discussion on**	**Evidence-** Background and charts are available in the beginning and end of the Teacher's Edition.	**(Reviewer only.)** **__x____ Yes** **_____ No**

student ways of thinking and anticipating a variety of students responses, guidance on lesson flow, guidance on questions that prompt students thinking, and discussion of desired mathematical behaviors being elicited among students.		
5. Manipulatives suggested in the materials are faithful representations of the mathematical objects they represent and are connected to written methods.	**Evidence-** The manipulatives are effective and well represented in the text.	**(Reviewer only.)** **__x____ Yes** **_____ No**
6. Materials include a variety of curriculum-embedded assessments. Examples include pre-, formative, summative, and self-assessment resources.	**Evidence-** The placement test is used to determine which Level of Number Worlds the students should begin. Each Unit has a Pretest and Posttest as well as Weekly Tests to give at the end of each week. Additionally, each lesson includes a Student Record for the teacher to record and monitor student learning.	**(Reviewer only.)** **___x___ Yes** **_____ No**
7. Assessments contain aligned rubrics, answer keys, and scoring guidelines that provide sufficient guidance for interpreting student performance.	**Evidence-** Answer keys are available in the Assessment handbook provided.	**(Reviewer only.)** **___x___ Yes** **_____ No**
8. Materials assess student proficiency using methods that are accessible and unbiased, including the use of course-level language in student prompts.	**Evidence-** The language used is unbiased, and the math terms are developmentally appropriate.	**(Reviewer only.)** **___x___ Yes** **_____ No**
9. Materials are carefully evaluated by qualified individuals, whose names are listed, in an effort to ensure freedom from mathematical errors and course-level appropriateness.	**Evidence-** Griffin, Clements, and Sorama	**(Reviewer only.)** **___x___ Yes** **_____ No**

10. The visual design supports students in engaging thoughtfully with the subject. Navigation through the text is clear.	**Evidence-** Visuals and models provided are developmentally appropriate and aid students in understanding the Standards. The pattern of lessons and units is easy to follow. Each week there are 4 lessons , 1 review lesson, and a project.	**(Reviewer only.)** **___x___ Yes** **_____ No**
11. The materials engage parents in appropriate ways. For example, homework assignments in elementary grades, consist of routine problems, practice with getting answers, and fluency-building exercises that parents can easily support.	**Evidence-** Number Worlds is an intervention program and does not provide assigned homework for students. However, if students need to take their work home it is simple and easy to understand.	**(Reviewer only.)** **___x___ Yes** **_____ No**

Reviewer IMET Evaluation Summary Title/Level: _Number Worlds Level F_____

Publisher: _McGraw-Hill_____ Copyright: ___2015____ ISBN:_TE# 978-0-02-129479-4_____

Reviewer ID # __LS_____ Date Review Completed:__02/16/16_____

Non-Negotiable Criteria- Each Non-Negotiable must be met in order for the Non-Negotiable Alignment Criteria to be met overall.

Non-Negotiable 1: Freedom from Obstacles to Focus	Non- Negotiable 2: Focus and Coherence
__x_____ Meets _____ Does Not Meet	__x___ Meets _____ Does Not Meet

Non-Negotiable Overall:

_x____ Meets _____ Does Not Meet

Alignment Criteria- Each Alignment Criterion must be met with a sufficient number of points in order for Alignment Criteria to be labeled as "Meets" overall. The more points the materials receive on the Alignment Criteria, the better they are aligned.

Alignment Criterion 1: Rigor and Balance	Alignment Criterion 2: Standards of Mathematical Practice	Alignment Criterion 3: Access to Standards for All Learners
Points: ___6__ of 6 possible. (Materials must receive at least 5 of 6 points to align.) ___x____ Meets _____ Does Not Meet	Points: __4___ of 6 possible. (Materials must receive at least 5 of 6 points to align.) ____x___ Meets _____ Does Not Meet	Points: ___6__ of 6 possible. (Materials must receive at least 5 of 6 points to align.) __x_____ Meets _____ Does Not Meet

Alignment Criteria Overall:

__x___ Meets _____ Does Not Meet

If the materials meet both Non-Negotiables and relevant Alignment Criterion, they are aligned to the Shifts and major features of the Core Standards. **Do the materials meet every Non-Negotiable and Alignment Criterion? _x____ Yes _____ No**

What are the specific areas of strength and weakness based on this evaluation? Publishers or others modifying or developing assessments can use this information to make improvements and/or to remedy gaps in the alignment of assessment materials

Strengths: Format is easy to follow for students. Vocabulary enriches understanding. Assessments are useful in placing students appropriately. Questions that call for explanations are helpful in developing conceptual understanding, problem-solving and daily lessons are useful for procedural understanding. The daily routine provides consistency yet offers a variety of instructional strategies such as grouping, hands-on activities, and student exploration. Number Worlds can be used along with a Core Mathematics Program and includes a "Suggestions for Implementation" guide for teachers that outlines which sections to use depending on the time the teacher has available for intervention: 30, 45, or 60+ minutes. There are effective planning resources for the teacher: Unit overview, charts that show alignment to standards, strong student engagement. Key Standards by Lesson Week charts in the back of the Teacher's Edition for all grades.

Weaknesses: The Mathematical Practices are not explicitly addressed. Students do not have opportunities to create arguments to defend their reasoning. There is a heavy emphasis on procedural fluency.

2015-16 Mathematics Interim Review Recommendation & Summary

Publisher Name:	McGraw-Hill LLC
Title:	Number Worlds Level H
ISBN #	
Grade Level(s) or Course:	Level H (6th Grade)
Reviewer ID:	JL AP

RECOMMENDED AS:

_____**Core Mathematics Program-** a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials. Substantial evidence clearly supports the designation of this program as Core.

_____**Other Mathematics Program-** a program that substantially, but partially, meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for supplemental materials. Substantial evidence clearly supports the designation of this program as Other.

_____**Component Mathematics Program-** a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs. Substantial evidence clearly supports the designation of this program as Component.

__✓__**Intervention Program-** a program designed and intended to target and support students' specific needs. Substantial evidence clearly supports the designation of this program as Intervention.

_____ **Does not meet criteria** for recommendation as a Curricular Material or Online Resource for Mathematics.

EVIDENCE SUMMARY:

FOCUS-

Standards addressed are from the appropriate grade level and aligned to CCSM
15/30 weeks address major works of the grade

COHERENCE-

A comprehensive approach to teaching computation / number sense. Scaffolding is evident as students work from concrete to abstract.

RIGOR-

Student lessons and activities require application of the standards and support the major works of the grade.

CONCEPTUAL UNDERSTANDING-

Conceptual Understanding is developed Through units/activities where students build understanding of math concepts.

MATHEMATICAL PRACTICES-

Connections between standards & practice standards were embedded in lessons in order to help students develop habits of critical thinking & math practice.

ACCESSIBILITY OF STANDARDS TO ALL STUDENTS-

As an intervention program, Number Worlds provides activities to targeted students of various backgrounds (ELL) and learning needs.

OTHER:

Design of lessons & activities were easy to follow.

2[illegible]-16 Interim Mathematics Review

Mathematics Evaluation Tool Grades K-8

Publisher: McGraw Hill LLC

Title of Material: Number Worlds - Level H

Author: Griffin

ISBN #: _____ **Copyright** 2015

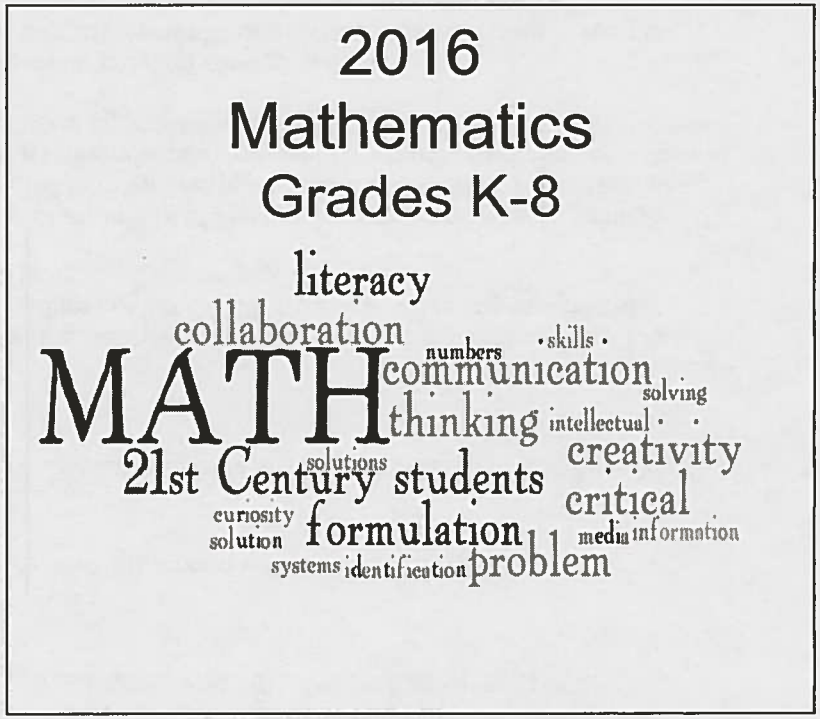
Reviewer ID: JL AP

Core Mathematics Program- a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Core.

Other Mathematics Program- a program that substantially, but partially, meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Other.

Component Mathematics Program- a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs.
Substantial evidence clearly supports the designation of this program as Component.

Intervention Program- a program designed and intended to target and support students' specific needs.
Substantial evidence clearly supports the designation of this program as Intervention.



- Evaluation Form adapted from Instructional Materials Evaluation Toolkit (IMET).

The IMET was developed by Student Achievement Partners. Educators may use or adapt. http://creativecommons.org/licenses/by/3.0/ Download this tool at http://achievethecore.org/IMET

Instructional Materials Evaluation Tool

Mathematics, Grades K-8

What Are the Purposes of the IMET?

This Math IMET is designed to help educators determine whether instructional materials are aligned to the Shifts and major features of the Common Core State Standards (CCSS). The substantial instructional Shifts (http://www.corestandards.org/other-resources/key-shifts-inmathematics/) at the heart of the Common Core State Standards are:

- **Focus** strongly where the Standards focus
- **Coherence**: Think across grades and link to major topics within the grade
- **Rigor**: In major topics, pursue conceptual understanding, procedural skill and fluency, and application with equal intensity.

The IMET draws directly from the following documents:

- Common Core State Standards for Mathematics (www.corestandards.org/Math)
- Publishers' Criteria for the Common Core State Standards in Mathematics grade K-8 (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)

When to use the IMET

1. Purchasing materials: Many factors go into local purchasing decisions. Alignment to the Standards is a critical factor to consider. This tool is designed to evaluate alignment of instructional materials to the Shifts and the major features of the CCSS. It also provides suggestions of additional indicators to consider in the materials evaluation and purchasing process.

2. Evaluating materials currently in use: The IMET can be used to analyze the degree of alignment of existing materials and help to highlight specific, concrete flaws in alignment. Even where materials and tools currently in use fail to meet one or more of these criteria, the pattern of failure is likely to be informative. States and districts can use the evaluation to create a thoughtful plan to modify or combine existing resources in such a way that students' actual learning experiences approach the focus, coherence, and rigor of the Standards.

3. Developing programs: Those developing new programs can use this tool as guidance for creating aligned curricula.
Please note this tool was designed for evaluating comprehensive curricula (including any supplemental or ancillary materials), but it was not designed for the evaluation of standalone supplemental materials.

Who Uses the IMET?

Evaluating instructional materials requires both subject-matter and pedagogical expertise. Evaluators should be well versed in the Standards (www.corestandards.org/Math) for all grades in which materials are being evaluated. This includes understanding the Major Work of the grade (www.achievethecore/focus), the Supporting and Additional work, how the content fits into the progressions in the Standards (www.achievethecore.org/progressions), and the expectations of the Standards with respect to conceptual understanding, procedural skill and fluency, and application. Evaluators also should be familiar with the substantial instructional Shifts (http:// www.corestandards.org/other-resources/key-shifts-in-mathematics/) of Focus, Coherence and Rigor that are listed above.

Getting Started

Prior to Evaluation

Assemble all of the materials necessary for the evaluation. It is essential for evaluators to have materials for all grades covered by the program, as some criteria cannot be rated without having access to each grade. In addition, each evaluator should have a reference copy of the Common Core State Standards for Mathematics (CCSSM) and the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013).

Before conducting the evaluation itself, it is important to develop a protocol for the evaluation process. The protocol should include having evaluators study the Publishers' Criteria and the IMET. It will also be helpful for evaluators to get a sense of each program overall before beginning the process. At a minimum, this would include reading the front matter of the text, looking at the table of contents and paging through multiple chapters.

Sections 1-3 below should be completed to produce a comprehensive picture of the strengths and weaknesses of the materials under evaluation. Information about areas in need of improvement or supplementation should be shared with internal and external stakeholders.

Navigating the Tool

Begin with Section 1: Non-Negotiable Alignment Criteria

- The Non-Negotiable Alignment Criteria must each be met in full for materials to be considered aligned to the Shifts and the major features of the Common Core State Standards. Each Non-Negotiable Alignment Criterion has one or more metrics associated with it; every one of these metrics must be met in order for the criterion as a whole to be met.

- Examine the relevant materials and use evidence to rate the materials against each criterion and its associated metric(s).

- Record and explain the evidence upon which the rating is based.

Continue to Section 2: Alignment Criteria

- The Alignment Criteria must each be met for materials to be considered aligned to the Shifts and the major features of the Common Core State Standards. Each Alignment Criterion has one or more metric associated with it; a specific number of these metrics must be met or partially met in order for the criterion as a whole to be met.

- Examine the materials in relation to these criteria, assigning each metric a point value. Rate the criterion as "Meets" or "Does Note Meet" based on the number of points assigned. The more points the materials receive on the alignment Criteria, the better they are aligned.

- Record and explain the evidence upon which the rating is based.

Proceed to Section 4: Indicators of Quality

- Indicators of Quality are important considerations that will help evaluators better understand the overall quality of instructional materials. These considerations are not criteria for alignment to the CCSS, but they provide valuable information about additional program characteristics. Evaluators may want to add their own indicators to the examples provided.

Directions for Non-Negotiable 1

Freedom from Obstacles to Focus

Criterion	Evidence- Give specific examples.	Rating: (Reviewer only.)
Non-Negotiable 1: **Freedom from Obstacles to Focus** **Materials must reflect the content architecture of the Standards by not assessing the topics named before the grade level where they first appear in the Standards.** The Standards foster students' progress to algebra by focusing strongly on arithmetic. Consistent with this focus, certain topics from outside of arithmetic appear only in later grades. Thus, to be aligned, materials must reflect the content architecture of the Standards by not assessing the topics named before the grade level where they first appear in the Standards. In this criterion, "topics named" means the topics that are explicitly named in Metric 1A. No other topics should be added to the list in Metric 1A. (Note that other topics in the standards are addressed in criterion NN2.)	**Required Materials** • Common Core State Standards for Mathematics (www.corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf) • From the materials being evaluated: teacher guides and all assessment components	**Rating this Criterion:** Non-Negotiable 1 is rated as Meets or Does Not Meet. To rate Non-Negotiable 1, begin by rating Metric 1A. Since Metric 1A is the only metric for Non-Negotiable 1, the rating for Non-Negotiable 1 is the same as the rating for Metric 1A. If Metric 1A is rated as Does Not Meet, include evidence of when the named topic(s) is/are assessed. If the metric is rated as Meets, list the grade(s) examined in the evaluation.

Metric NN1A:
Materials reflect the basic architecture of the Standards by not assessing the listed topics before the grade level indicated.

- Probability, including chance, likely outcomes, probability models. (Introduced in the CCSSM in grade 7)
- Statistical distributions, including center, variation, clumping, outliers, mean, median, mode, range, quartiles; and statistical association or trends, including two-way tables, bivariate measurement data, scatter plots, trend line, line of best fit, correlation. (Introduced in the CCSSM in grade 6)
- Similarity, congruence, or geometric transformations. (Introduced in the CCSSM in grade 8)
- Symmetry of shapes, including line/ reflection symmetry, rotational symmetry. (Introduced in the CCSSM in grade 4)

How to Find the Evidence:

Evaluate the table of contents, all chapter tests, all unit tests, and other such assessment components (including rubrics).

For context, read Criterion #2 from the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013). NOTE: Grade alignments of other topics are addressed in Non-Negotiable 2, Focus and Coherence.)

In this criterion, "topics named" means the topics that are explicitly named in Metric 1A. No other topics should be added to the list in Metric 1A. (Note that other topics in the standards are addressed in criterion NN2.)

Evidence-
This is an intervention program and does not cover all CCSMs. However the key standards are taught and aligned and assessed.

Probability not covered (7th grade)

-pg. b14 week by week standards

(Reviewer only.)

X **Meets**

____ **Does Not Meet**

Non-Negotiable 1: Materials must reflect the content architecture of the Standards by not assessing the topics named* before the grade level where they first appear in the Standards.

NN 1 If Metric 1A was rated as Meets, then rate Non-Negotiable 1 as Meets. If Metric 1A was rated as Does Not Meet, then rate Non- Negotiable 1 as Does Not Meet. Check the final rating.

Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion.**(Reviewer only.)**

Intervention Program, does not meet all CCSS

50% of standards are covered

Before moving to Non-Negotiable 2, record the final Meets or Does Not Meet rating in the Evaluation Summary.

(Reviewer only.)

X **Meets**

____ **Does Not Meet**

Strengths/Weaknesses:

Directions for Non-Negotiable 2

Focus and Coherence

Non-Negotiable 2:

Focus and Coherence

Materials must focus coherently on the Major Work of the grade in a way that is consistent with the progressions in the Standards.

Focus and coherence are the two major evidence-based design principles of the Common Core State Standards for Mathematics (CCSSM, p. 3). Focus is necessary in order to fulfill the ambitious promise the states have made to their students by adopting the Standards: greater achievement at the college and career ready level; greater depth of understanding of mathematics; and a rich classroom environment in which reasoning, sense-making, applications, and a range of mathematical practices flourish. In simpler terms, a mile-wide, inch-deep curriculum translates to less time per topic. Less time means less depth and moving on without many students. Thus, materials must focus coherently on the Major Work of the grade in a way that is consistent with the progressions in the Standards.

Required Materials

- Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf)
- Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)
- Focus by Grade Level for the grade being evaluated (www.achievethecore.org/focus)
- From the materials being evaluated: teacher guides, student texts and workbooks

Rating this Criterion:

Non-Negotiable 2 is rated as Meets or Does Not Meet.

To rate Non-Negotiable 2, first rate metrics 2A–2H. Each of these eight metrics must be rated as Meets in order for Non-Negotiable 2 to be rated as Meets. Rate each metric 2A-2H as Meets or Does Not Meet/Insufficient Evidence. If the evidence examined shows that the Criterion is met, then mark the Criterion Meets. If the evidence examined shows that the Criterion is not met—or if there is insufficient evidence to make a determination—then mark the Criterion as Does Not Meet/Insufficient Evidence. Support all ratings with evidence.

Metric NN2A:
In each grade K–8, students and teachers using the materials as designed devote the large majority of time to the Major Work of the grade.

How to Find the Evidence:

Familiarize yourself with the Major Work of the grade being evaluated (see the Focus by Grade Level documents.)

Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, lessons, homework assignments, and assessments. (Evaluate both student and teacher materials.)

Consider time spent on the Major Work of the grade and judge qualitatively whether students and teachers using the materials as designed will devote the large majority of time to the Major Work of the grade.

For context, read Criterion #1 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013)

Evidence-

Marjor works of the grade are covered:
Pg. T8A
Topics per grade:
-number sense
-operations sense
-algebra
-statistical analysis
-geometry/measurement

15/30 weeks on major works

(Reviewer only.)

__X__ **Meets**

____ **Does Not Meet/ Insufficient Evidence**

Metric NN2B: **Supporting Work, where present, enhances focus and coherence simultaneously by also engaging students in the Major Work of the grade.** **How to Find the Evidence:** Familiarize yourself with the Major Work and Supporting Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate chapters and lessons that focus on Supporting Work. NOTE: Example of evaluating this Criterion might include looking at whether materials for K–5 generally treat data displays as an occasion for solving grade-level word problems using the four operations (e.g., see 3.MD.B.3); or whether materials for grade 7 take advantage of opportunities to use probability to support ratios, proportions, and percentages. For context, read Criterion #3 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Solve real-world and mathematical problems involving area, surface area, and volume. - Pg. Unit 5 – lesson 3 & lesson 4 - Assessment pg. 48-49 of workbook - Focus supporting works & fractions - 5 weeks of instruction is centered on standards in the supporting work for 6th grade	**(Reviewer only.)** __x__**Meets** ____**Does Not Meet/** **Insufficient Evidence**
Metric NN2C: **Materials base content progressions on the grade-by-grade progressions in the Standards. Content from previous or future grades does not unduly interfere with or displace on-grade-level content.** **How to Find the Evidence:** Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, and lessons in both student and teacher materials. NOTE: In some cases it may be possible that aligned materials might address some aspects of a topic in a strategic way before or after the grade level in which the topic is central in the Standards' progressions; for example, a curriculum author might purposefully choose to explore adding fractions with unlike denominators in a way appropriate to grade four, recognizing that this work is not really required until the next grade. However, any such purposeful discrepancies in content progressions should enhance the required learning in each grade; not unduly interfere with or displace grade-level content; and be clearly aimed at helping students meet the Standards as written rather than effectively rewriting the progressions in the Standards. And in all cases, note that Non-Negotiable 1 must be met for materials to be aligned. For context, read Criterion #5a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** -Scope and sequence progression pg. B18-22 -Key standards by Lesson Week B8-B16 shows progression from K – 8 -Units divided by weeks in a progression of skills for 6th grade level	**(Reviewer only.)** __X__**Meets** ____**Does Not Meet/** **Insufficient Evidence**

Metric NN1: **Materials give all students extensive work with on-grade-level problems.** **How to Find the Evidence:** Evaluate both student and teacher materials. If the materials provide resources for differentiated learning, consider whether lower-performing students have opportunities to engage with grade-level problems. Also consider whether higher-performing students are given opportunities to learn current grade-level content in greater depth. For context, read Criterion #5b in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** - Each lesson has an "engage" activity that is on grade - Progress monitoring, reflection and assessment in each lesson - Additional practice - Supported & independent practice in each lesson	(Reviewer only.) __X__ **Meets** ____ **Does Not Meet/ Insufficient Evidence**
Metric NN2E: **Materials relate on-grade-level concepts explicitly to prior knowledge from earlier grades.** **How to Find the Evidence:** Evaluate both student and teacher materials. NOTE: Examples of evaluating this Criterion might include looking at the way the materials extend basic ideas of place value across the decimal point; or the role that properties of operations play when the materials extend arithmetic beyond whole numbers to fractions, variables, and expressions. More generally, cluster headings in the Standards sometimes signal key moments where reorganizing and extending previous knowledge is important in order to accommodate new knowledge (e.g., see cluster headings that use the phrase "Apply and extend previous understanding"). For context, read Criterion #5c in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** -each lesson has a warm up - creating context in each lesson -reviews -interactive differentiation	(Reviewer only.) __X__ **Meets** ____ **Does Not Meet/ Insufficient Evidence**
Metric NN2F: **Review of material from previous grades is clearly identified as such to the teacher, and teacher and students can see what their specific responsibility is for the current year.** **How to Find the Evidence:** Evaluate the table of contents, but do not stop there; also evaluate units, chapters, lessons, homework assignments and assessments. (Evaluate both student and teacher materials.) Identify any content from previous grades and check whether it is identified as such. For context, read Criterion #5a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Skill trace – pg 360 - Shows what students should know before Level, during level and after level Standards listed for each activity/lesson shows grade level Scaffolding of standards Lower-level -State	(Reviewer only.) __X__ **Meets** ____ **Does Not Meet/ Insufficient Evidence**

Metric NN2G: **Materials include learning objectives that are visibly shaped by CCSSM cluster headings.** **How to Find the Evidence:** Select several clusters from the Major Work in the grade being evaluated. Evaluate teacher and student materials in relation to these clusters. For context, read Criterion #6a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** **Key standard for the week shows:** **-domain** **-cluster** **-CCSM standard** **Pg. 363 (geometry)** **Pg. 161 (expressions & equations)**	**(Reviewer only.)** **X Meets** **____Does Not Meet/** **Insufficient Evidence**
Metric NN2H: **Materials include problems and activities that serve to connect two or more clusters in a domain, or two or more domains in a grade, in cases where these connections are natural and important.** **How to Find the Evidence:** In the grade being evaluated, choose two or more clusters or two or more domains for which connections are natural and important. Evaluate the units, chapters, and lessons that deal with the chosen topics, looking for problems and activities that serve to connect the chosen clusters or domains. NOTE: An example of evaluating this Criterion might include looking at whether problems in grade 4 sometimes or often involve students applying their developing computation skills (detailed in domain NBT) in the context of solving word problems (detailed in domain OA). For context, read Criterion #6b in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** **School Carnival project blends clusters** - **Project based learning** - **Pg. 272** ***this curriculum is more focused on addressing a standard at a time as it is an intervention**	**(Reviewer only.)** **X Meets** **____Does Not Meet/** **Insufficient Evidence**
Non-Negotiable 2: **Focus and Coherence** **Materials must focus coherently on the Major Work of the grade in a way that is consistent with the progressions in the Standards.** **NN 2** If all Metrics 2A – 2H were rated as Meets, then rate Non-Negotiable 2 as Meets. If one or more Metric was rated Does Not Meet/Insufficient Evidence, then rate Non-Negotiable 2 as Does Not Meet. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)** **Before moving to Alignment Criterion 1, record the final Meets or Does Not Meet rating in the Evaluation Summary.**		**(Reviewer only.)** **X Meets** **____Does Not Meet** **Strengths/Weaknesses:**

Now continue by evaluating the Alignment Criterion 1 for Rigor and Balance.

Directions for Alignment Criterion 1

Rigor and Balance

Alignment Criterion 1: Rigor and Balance **Materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.** The Standards set expectations for attention to all three aspects of rigor: conceptual understanding, procedural skill and fluency, and applications. Thus, materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.	**Required Materials** • Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf) • Focus by Grade Level for the grade being evaluated (achievethecore.org/focus) • Situation Types for the Operations in Word Problems (achievethecore.org/situation-types) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion:** Alignment Criterion 1 is rated as Meets or Does Not Meet. To rate Alignment Criterion 1, first rate metrics 1A, 1B, and 1C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). For each metric, guiding questions are provided to aid in gathering evidence. Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 1 if the materials rate 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as rigor and balance, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.
Metric AC1A: **The materials support the development of students' conceptual understanding of key mathematical concepts, especially where called for in specific content Standards or cluster headings.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Major Work for the grade being evaluated that relate specifically conceptual understanding to use throughout the questions associated with this metric. NOTE: Some examples of clusters or Standards that call for conceptual understanding include: K.OA.A.1, (1.NBT.B, 1.NBT.C), (2.NBT.A, 2.NBT.B), (3.OA.A.1, 3.OA.A.2), 4.NF.A, (4.NBT.A, 4.NBT.B), 5.NF.B, (5.NBT.A, 5.NBT.B), 6.RP.A, 6.EE.A.3, 7.NS.A, 7.EE.A, 8.EE.B, 8.F.A, 8.G.A Clusters or Standards grouped by parentheses are closely connected and could be analyzed together. For context, read Criterion #4a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	-Choose a cluster/Standard from the Major Work that is aligned to each aspect of rigor and use it to evaluate these metrics. It is most helpful if the same clusters/Standards are chosen for all of the programs being evaluated. (Guidance in choosing clusters/Standards is included in "How to Find the Evidence".)	**Use the questions for AC Metric 1A to evaluate Metric 1A. Record evidence for each question and rate Metric 1A.** __X__ **Meets (2)** ____ **Partially Meets (1)** ____ **Does Not Meet (0)**

Is conceptual understanding attended to thoroughly where the Standards set explicit expectations for understanding or interpreting? Evaluate lessons, chapter/unit assessments and homework assignments, paying attention to work aligned to Standards that explicitly call for understanding or interpreting. NOTE: Examples of evaluating this Criterion might include looking at how well the multi-digit addition and subtraction algorithms are developed and explained on the basis of place value and properties of operations; or how well the multi-digit multiplication and division algorithms are developed and explained on the basis of place value and properties of operations; or how well solving equations is presented and explained as a process of reasoning.	**Evidence-** Conceptual understanding shown in project based learning activities pg. 344 -engage has hands on games and interaction -activity cards -game boards Activities lead from models to algorithms	
Do the materials feature high-quality conceptual problems and conceptual discussion questions? Evaluate lessons, chapter/unit assessments, and homework assignments. NOTE: Example of conceptual problems might include such questions as "Find a number greater than 1/5 and less than 1/4," or "If the divisor does not change and the dividend increases, what happens to the quotient?"	**Evidence-** Activity cards engage students and develop math inquiry through games and activities Pg. t15A -creating context in each lesson -reflect/think critically activities Pg. 20, 21 Project based learning in between units	
Do the materials feature opportunities to identify correspondences across mathematical representations? Evaluate lessons, chapter/unit assessments and homework assignments. NOTE: Examples of evaluating this Criterion might include looking at whether students are supported in identifying correspondences among: the verbal description of a situation, the diagrams that distill its mathematical features, and the equations that model it; or equivalent forms of numbers (e.g., 3 and 6/2) and the number line; or rational number operations and representations of them via models such as the vector model; or the expression that defines a function and the graph that shows the relationship.	**Evidence-** -Data Displays 2 shows graphing in multiple ways	

Metric AC **The materials are designed so that students attain the fluencies and procedural skills required by the Standards.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Major Work for the grade being evaluated that relate specifically to fluency and procedural skill to use throughout the questions associated with this metric. NOTE: Some examples of Standards that call for procedural skill and fluency include: K.OA.A.5, 1.OA.C.6, 2.OA.B.2, 2.NBT.B.5, 3.OA.C.7, 3.NBT.A.2, 4.NBT.B.4, 5.NBT.B.5, 6.NS.B.2, and 6.NS.B.3, 6.EE.A, 7.NS.A, 7.EE.A.1,7.EE.B.4a, 8.EE.C.7, 8.EE.C.8b For context, read Criterion #4b in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	Procedural skills & ...encies Week 3 – Lessons 1-4 pg. 134-141	**Use the questions for Metric 1B ...valuate Metric 1 B. Record evidence for each qu...on and rate Metric 1B.** **(Reviewer only.)** X **Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Is progress toward fluency and procedural skill interwoven with students' developing conceptual understanding of the operations in question? Evaluate lessons, chapter/unit assessments, daily routines, and homework assignments for evidence that the development of fluency and procedural skill is supported by conceptual understanding.	**Evidence-** Each lesson follows this routine: -vocab, creating context -warm up Engage Reflect Assess Practice	
Are purely procedural problems and exercises present that include cases in which opportunistic strategies are valuable and generic cases that require efficient algorithms present? Evaluate lessons, chapter/unit assessments, daily routines, and homework assignments. NOTE: Examples of problems in which opportunistic strategies are valuable might include the sum 698 + 240 or the system x + y = 1, 2x + 2y = 3. Examples of generic cases that require efficient algorithms might include the sum 8767+2286 or the system 6y + x = x + 3, – x = 1 + 2y.	**Evidence-** Opportunistic & generic strategies Algorithms- wkbk. Pg. 46, 47 - Supported practice and real world application pg. 152m 153 TM	
Do the materials in grades K–6 provide repeated practice toward attainment of fluency Standards? Evaluate lessons, daily routines, and homework assignments for evidence of repeated practice toward attainment of the following K–6 Standards that set an explicit expectation of fluent (accurate and reasonably fast) computation: K.OA.A.5, 1.OA.C.6, 2.OA.B.2, 2.NBT.B.5, 3.OA.C.7, 3.NBT.A.2, 4.NBT.B.4, 5.NBT.B.5, 6.NS.B.2, 6.NS.B.3.	**Evidence-** **Whole number operations unit** **Lessons provide repeated practice towards fluency of whole number operations** **-addition and subtraction of whole numbers** **Pg. 104-105**	

Metric AC1C: **The materials are designed so that teachers and students spend sufficient time working with engaging applications, without losing focus on the Major Work of each grade.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Major Work for the grade being evaluated that relate specifically application to use throughout the questions associated with this metric. NOTE: Some examples of clusters or Standards that call for application include: K.OA.A.2, 1.OA.A, 2.OA.A, 3.OA.A.3, 3.OA.D.8, 4.OA.A.3, 4.NF.B.3d, 4.NF.B.4c, 5.NF.B.6, 5.NF.B.7c, 6.RP.A.3, 6.NS.A.1, 6.EE.B.7, 6.EE.C.9, 7.RP.A, 7.NS.A.3, 7.EE.B.3, 8.EE.C.8c, 8.F.B For context, read Criterion #4c in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Cluster chosen – 6RP Major works are the focus throughout RP covered for 5 weeks	**Use the questions for Metric 1C to [illegible]ate Metric 1C. Record evidence for each question and rate Metric 1C.** **(Reviewer only.)** **X Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Are there are single- and multi-step contextual problems, including non-routine problems, that develop the mathematics of the grade, afford opportunities for practice, and engage students in problem solving? Do the problems attend thoroughly to those places in the content Standards where expectations for multi-step and real-world problems are explicit? Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** Multiple representations of concept - Picture problems - -word problems - Standard algorithm (ratio representation 1:3) - Each lesson has multiple opportunities to practice and engage - Real world problems apparent in project based learning and - Just the facts pg. 50 - Real-world application pg. 51	
Do application problems particularly stress applying the Major Work of the grade? Evaluate lessons, chapter/unit assessments, and homework assignments. NOTE: Examples of evaluating this Criterion might include looking at: how well, by the end of grade 2, students using the materials as designed can represent and solve a full range of one-step addition and subtraction word problems; or how well, by the end of grade 3, students using the materials as designed can represent and solve a full range of one-step multiplication and division word problems; or how well these basic situation types for each operation are carried coherently across the grades, (e.g., with fractions and algebraic expressions); or, in all grades, whether the problems connect concepts, Standards, and domains in ways that are natural and important. For a list of situation types for one-step addition, subtraction, multiplication, and division problems, see Situation Types for the Operations in Word Problems	**Evidence-** Learning goals for each lesson include application Unit 4 – pg. 275 "daily lessons use communication, logic, reasoning, modeling, and patters to solve" -essential questions -major works of the grade are represented in application problems 50% of major work	

Does modeling build slowly across K–8, with applications that are relatively simple in earlier grades and when students are encountering new content? In grades 6–8, do the problems begin to provide opportunities for students to make their own assumptions or simplifications in order to model a situation mathematically? Read Standard for Mathematical Practice 4, Model with Mathematics. Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** Key standards grid pg. b7-b16 Scope & sequence pg. b17 –b22	

Alignment Criterion 1: Rigor and Balance

Materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.

AC1 Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 out of 6 points, the Criterion has not been met. Check the final rating.
Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)**

Before moving to Alignment Criterion 2, record the final Meets or Does Not Meet rating in the Evaluation Summary.

(Reviewer only.)

Meets

____Does Not Meet

Strengths/Weaknesses:

Directions for Alignment Criterion 2

Standards for Mathematical Practice

Alignment Criterion 2: Standards for Mathematical Practice

Materials must demonstrate authentic connections between content Standards and practice Standards.

The Standards require that designers of instructional materials connect the mathematical practices to mathematical content in instruction. Thus, materials must demonstrate authentic connections between content Standards and practice Standards.

Required Materials:

- Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf)
- Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)
- Focus by Grade Level for the grade being evaluated (www.achievethecore.org/focus)
- From the materials being evaluated: teacher guides, student texts and workbooks

Rating this Criterion

Alignment Criterion 2 is rated as Meets or Does Not Meet.

To rate Alignment Criterion 2, first rate metrics 2A, 2B, and 2C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). For each metric, guiding questions are provided to aid in gathering evidence.

Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 2 if the materials earn 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as mathematical practices, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.

Metric AC2A: **Materials address the practice Standards in such a way as to enrich the Major Work of the grade; practices strengthen the focus on Major Work instead of detracting from it, in both teacher and student materials.** **How to Find the Evidence:** Familiarize yourself with the Major Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate teacher and student materials for evidence that the mathematical practices support and connect to the focus of the grade. NOTE: Examples of evaluating this Criterion might include looking at whether, in grades K–5, students using the materials are supported to look for and express regularity in repeated reasoning about the addition table, the multiplication table, the properties of operations, the relationship between addition and subtraction or multiplication and division, and the place value system; or whether, in grades 6–8, students using the materials are supported to look for and express regularity in repeated reasoning about proportional relationships and linear functions. For context, read Criterion #8 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013).	**Evidence-** Major works of the grade are addressed in practice standards - Daily lessons - Daily practices - Assessments - Reflections - Additional worksheerts Weakness * mp should be listed for teacher ease	**(Reviewer only.)** X **Meets (2)** **Partially Meets (1)** **Does Not Meet (0)**
Metric AC2B: **Materials attend to the full meaning of each practice Standard.** **How to Find the Evidence:** For context, read Criterion #7 and Criterion #9 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).		**Use the questions for Metric 2B to evaluate Metric 2B. Record evidence for each question and rate Metric 2B.** **(Reviewer only.)** X **Meets (2)** **Partially Meets (1)** **Does Not Meet (0)**
Over the course of any given year of instruction, is each mathematical practice Standard meaningfully present in the form of assignments, activities, or problems that stimulate students to develop the habits of mind described in the practice Standard? Evaluate lessons, chapter/ unit assessments, and homework assignments for evidence of each mathematical practice being meaningfully present in instruction.	**Evidence-** **-each lesson has the following which are related to mathematical standards practice:** **-creating context** **Interactive differentiation** **Independent practice** **Supported practice** **Progress monitoring** **Alternative grouping** **Real world applications** **Additional practice**	

Do the materi eat the practice Standards as developing across grades or grade bands? Are the practice Standards in early grades appropriately simple? Do they display an arc of growing sophistication across the grades?	**Evidence-** **Students work from simple to more complex to using project based learning**	
Are there teacher-directed materials that explain the role of the practice Standards in the classroom and in students' mathematical development? Are alignments to practice Standards accurate?	**Evidence-** **Implementation guide pg. T15a-b** * Module 4 provides teacher support for practice standards	
Metric AC2C: **Materials support the Standards' emphasis on mathematical reasoning.** **How to Find the Evidence:** For context, read Criterion #10 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).		**Use the questions for Metric 2C to evaluate Metric 2C. Record evidence for each question and rate Metric 2C.** **(Reviewer only.)** **____Meets (2)** **_X_Partially Meets (1)** **____Does Not Meet (0)**
Do the materials support students in constructing viable arguments and critiquing the arguments of others concerning grade-level mathematics that is detailed in the content Standards? Read Standard for Mathematical Practice 3. Evaluate teacher and student materials to ensure that students are given opportunities to reason with grade-level mathematics.	**Evidence-** **All lessons have a reflect & think critically activity that encourage students to discuss and reinforce their concepts** **-multiplication pg. 125 TM** * no critique of others *	
Do the materials support students in producing not only answers and solutions, but also, in a grade-appropriate way, arguments, explanations, diagrams, mathematical models, etc., especially in the Major Work of the grade? Familiarize yourself with the Major Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate teacher and student materials, to understand the types of work students are expected to produce.	**Evidence-** **Unit 3 Algebra 6EE** **-students apply & extend** **Answers and solutions on workbook pages** **Arguments & explanations in the reflect and think critically** **Activity cards** **-school carnival project pg. 202-203**	
Do materials explicitly attend to the specialized language of mathematics? Is the language of argument, problem solving, and mathematical explanations taught rather than assumed? Evaluate teacher and student materials, paying attention to how mathematical language is taught. NOTE: Examples of evaluating this Criterion might include looking at whether students are supported in: basing arguments on definitions; using the method of providing a counterexample; or recognizing that examples alone do not establish a general statement.	**Evidence-** **Vocabulary identified at the beginning of each lesson -pg. 206** **-used throughout in engage and student workbooks as well as throughout the reflect and assessments** limited – but appropriate for interrention	

Alignment Criterion 2:
Standards for Mathematical Practice

Materials must demonstrate authentic connections between content Standards and practice Standards.

AC2 Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 out of 6 points, the Criterion has not been met. Check the final rating.
Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion.
(Reviewer only.)

Before moving to Alignment Criterion 3, record the final Meets or Does Not Meet rating in the Evaluation Summary.

(Reviewer only.)

X **Meets**

____ **Does Not Meet**

Strengths/Weaknesses:

MP standards should be identified in each lesson or an appendix/resource that shows lesson where mp standards are addressed.

Alignment Criterion 3:
Access to the Standards for All Students

Materials must provide supports for English Language Learners and other special populations.

Because Standards are for all students, alignment requires thoughtful support to ensure all students are able to meet the Standards. Thus, aligned materials must provide supports for English Language Learners and other special populations.

Required Materials:

- Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf)
- Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)
- From the materials being evaluated: teacher guides, student texts and workbooks

Rating this Criterion:
Alignment Criterion 3 is rated as Meets or Does Not Meet.

To rate Alignment Criterion 3, first rate metrics 3A, 3B, and 3C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points).

Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 3 if the materials earn 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as support for special population, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.

Metric AC3A:
Support for English Language Learners and other special populations is thoughtful and helps those students meet the same Standards as all other students. The language in which problems are posed is carefully considered.

How to Find the Evidence:
Evaluate teacher and student materials, paying attention to supports offered for special populations.

Evidence-
-ELL support guide
-vocabulary identified in each lesson
-English & Spanish version of online activities and letters
Hands on games and activities
-scaffolding present in lessons

Reviewer only.)

X **Meets (2)**

____ **Partially Meets (1)**

____ **Does Not Meet (0)**

Metric AC: **Materials provide appropriate level and type of scaffolding, differentiation, intervention, and support for a broad range of learners with gradual removal of supports, when needed, to allow students to demonstrate their mathematical understanding independently.** **How to Find the Evidence:** Evaluate teacher and student materials, paying attention to whether materials provide differentiation that will lead all learners to engage with on-grade-level content.	**Evidence** **-implementation guide pg. t10** **Differentiation guide pg. t11-a** **Project based learning pg. t12** **Interactive games pg. t13** **Flexible implementation pg. t15** • supports + differentiation for ELL + lower level learning	**Reviewer only.)** **_X_ Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Metric AC3C: **Design of lessons recommends and facilitates a mix of instructional approaches for a variety of learners such as using multiple representations (e.g., including models, using a range of questions, checking for understanding, flexible grouping, pair-share).** **How to Find the Evidence:** Evaluate teacher materials, noting instructional approaches suggested for whole class and differentiated lessons and activities.	**Evidence-** Each lesson has oral response, group activities, practices Critical thinking Pg. 20 (groupings)	**Reviewer only.)** **_X_ Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Alignment Criterion 3: **Access to the Standards for All Students** **Materials must provide supports for English Language Learners and other special populations.** **AC3** Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 points, the Criterion has not been met. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion.**(Reviewer only.)** **Move to the Evaluation Summary and record the final Meets or Does Not Meet rating .**		**(Reviewer only.)** **_X_ Meets** **____Does Not Meet** **Strengths/Weaknesses:**

Once an evaluation for alignment to the Shifts and major features of the CCSS has been conducted using Sections 1-3, it's important to evaluate for overall quality and best practices. A starting list of Indicators of Quality are suggested below. States, districts and others evaluating instructional materials are encouraged to add to this list to ensure materials reflect local contexts. For background information on some of the Indicators of Quality in this section, refer to pp.18–21 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).

Indicators of Quality	Evidence- Give specific examples.	Rating: (Reviewers only.)
1. Lessons are thoughtfully structured and support the teacher in leading the class through the learning paths at hand, with active participation by all students in their own learning and in the learning of their classmates.	Evidence- -warm up -engage -reflect -assess Progress monitoring (if/then) Guided discussion Informal assessment guides the teacher in thought process	(Reviewer only.) X Yes _____ No
2. The underlying design of the materials includes both problems and exercises. (In solving problems, students learn new mathematics, whereas in working exercises, students apply what they have already learned to build mastery.) Each problem or exercise has a purpose. NOTE: This Criterion does not require that the problems and exercises be labeled as such.	Evidence- Develop -activities teach students new concepts Practice –activities to show understanding In each lesson Engage in solving problems	(Reviewer only.) X Yes _____ No
3. Design of assignments is not haphazard: exercises are given in intentional sequences in order to strengthen students' mathematical understanding.	Evidence- Sequence is intentional - Skills strengthened throughout each lesson as you work through - Warm up, engage, reflect, assess - Next skill builds on previous lesson	(Reviewer only.) X Yes _____ No
4. There are separate teacher materials that support and reward teacher study including, but not limited to: discussion of the mathematics of the units and the mathematical point of each lesson as it relates to the organizing concepts of the unit, discussion on student ways of thinking and anticipating a variety of students responses, guidance on lesson flow, guidance on questions that prompt students thinking, and discussion of desired mathematical behaviors being elicited among students.	Evidence- Teacher's edition has a professional development link found online Discussion board	(Reviewer only.) X Yes _____ No
5. Manipulatives suggested in the materials are faithful representations of the mathematical objects they represent and are connected to written methods.	Evidence- -Each lesson uses manipulatives -digital manipulatives/games -varied models of pictorial representation -tub of manipulatives provided with materials	(Reviewer only.) X Yes _____ No

6. Materials include a variety of curriculum-embedded assessments. Examples include pre-, formative, summative, and self-assessment resources.	Evidence- -Placement test/number knowledge test -each lesson has informal assessment -formative assessment on workbook pages -building blocks software available -project evaluation criteria with project based learning	(Reviewer only.) X Yes ____ No
7. Assessments contain aligned rubrics, answer keys, and scoring guidelines that provide sufficient guidance for interpreting student performance.	Evidence- Answer keys available online an in tm Scoring rubric with exceeds, meets, and does not meet criteria (pg. 158) for project based learning -teacher reflections pg 159 Informal assessment for each lesson	(Reviewer only.) X Yes ____ No
8. Materials assess student proficiency using methods that are accessible and unbiased, including the use of course-level language in student prompts.	Evidence- Pre/post test for every unit Weekly tests worksheets	(Reviewer only.) X Yes ____ No
9. Materials are carefully evaluated by qualified individuals, whose names are listed, in an effort to ensure freedom from mathematical errors and course-level appropriateness.	Evidence- Sharon Griffin Douglas H Clements Julie Sarama	(Reviewer only.) X Yes ____ No
10. The visual design supports students in engaging thoughtfully with the subject. Navigation through the text is clear.	Evidence- Visual design is easy to read and understand Consistency throughout lessons/units	(Reviewer only.) X Yes ____ No
11. The materials engage parents in appropriate ways. For example, homework assignments in elementary grades, consist of routine problems, practice with getting answers, and fluency-building exercises that parents can easily support.	Evidence- "Math at Home" Newsletters Online activities can be done at home to engage students and parents	(Reviewer only.) X Yes ____ No

Reviewer IMET Evaluation Summary **Title/Level:** __Number Worlds Level H

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Reviewer ID # AP JL **Date Review Completed:** 3/1/16

Non-Negotiable Criteria- Each Non-Negotiable must be met in order for the Non-Negotiable Alignment Criteria to be met overall.

Non-Negotiable 1: Freedom from Obstacles to Focus	Non- Negotiable 2: Focus and Coherence
X Meets	X Meets
_____ Does Not Meet	_____ Does Not Meet

Non-Negotiable Overall:

X **Meets** _____ **Does Not Meet**

Alignment Criteria- Each Alignment Criterion must be met with a sufficient number of points in order for Alignment Criteria to be labeled as "Meets" overall. The more points the materials receive on the Alignment Criteria, the better they are aligned.

Alignment Criterion 1: Rigor and Balance	Alignment Criterion 2: Standards of Mathematical Practice	Alignment Criterion 3: Access to Standards for All Learners
Points: 6 of 6 possible. (Materials must receive at least 5 of 6 points to align.)	Points: 5 of 6 possible. (Materials must receive at least 5 of 6 points to align.)	Points: 6 of 6 possible. (Materials must receive at least 5 of 6 points to align.)
X Meets	X Meets	X Meets
_____ Does Not Meet	_____ Does Not Meet	_____ Does Not Meet

Alignment Criteria Overall:

X **Meets** _____ **Does Not Meet**

If the materials meet both Non-Negotiables and relevant Alignment Criterion, they are aligned to the Shifts and major features of the Core Standards. **Do the materials meet every Non-Negotiable and Alignment Criterion?** X **Yes** _____ **No**

What are the specific areas of strength and weakness based on this evaluation? Publishers or others modifying or developing assessments can use this information to make improvements and/or to remedy gaps in the alignment of assessment materials.

Strengths-

- Accessible for all students
- Easy to understand/use for teachers + students
- Different types of questioning strategies
  - concrete/basic → abstract/application

Weakness-

More support needed to identif Math Practice Standards within the lessons or as a resource (appendix)

2015-16 Mathematics Interim Review Recommendation & Summary

Publisher Name:	McGraw-Hill School Education, LLC
Title:	Number Worlds I
ISBN #	Various
Grade Level(s) or Course:	7th
Reviewer ID:	MMHC

RECOMMENDED AS:

_____**Core Mathematics Program-** a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials. Substantial evidence clearly supports the designation of this program as Core.

_____**Other Mathematics Program-** a program that substantially, but partially, meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for supplemental materials. Substantial evidence clearly supports the designation of this program as Other.

_____**Component Mathematics Program-** a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs. Substantial evidence clearly supports the designation of this program as Component.

__✓__**Intervention Program-** a program designed and intended to target and support students' specific needs. Substantial evidence clearly supports the designation of this program as Intervention.

_____ **Does not meet criteria** for recommendation as a Curricular Material or Online Resource for Mathematics.

EVIDENCE SUMMARY:

FOCUS- 60% of the major work is covered. Topics are not assessed or introduced above grade level. 18 of 30 weeks are major work.

COHERENCE- Not all standards for Grade 7 are covered in this curriculum. Intervention does not meet all CCSS. 60% of standards are covered.

RIGOR- Although not all standard are addressed, there is a high level of rigor and balance for the intervention lessons focused on.

CONCEPTUAL UNDERSTANDING- There is a high level of conceptual and procedural understanding enhanced through the use of activity cards and projects.

MATHEMATICAL PRACTICES- All 8 MPs are seen throughout and embedded within each lesson.

ACCESSIBILITY OF STANDARDS TO ALL STUDENTS- Materials provide supports for ELLs and other diverse learners. "Creating Context" is seen at the beginning of every lesson and provides supports.

OTHER: This is an intervention curriculum that focuses on the following standards.

7.NS.2d, 3
7.RP.1, 3
7.NS.1, 1d, 2, 2c, 3
7.EE.4, 4a, 4b
7.SP.4, 7, 8
7.G.4, 5, 6

Activity Cards are a necessity for this intervention program.

Online access is not needed.

Student workbooks are required for procedural practice.

2015-16 Interim Mathematics Review

Mathematics Evaluation Tool Grades K-8

Publisher: McGraw-Hill School Education, LLC

Title of Material: Number Worlds I

Author: Griffin

ISBN #: various **Copyright** 2015

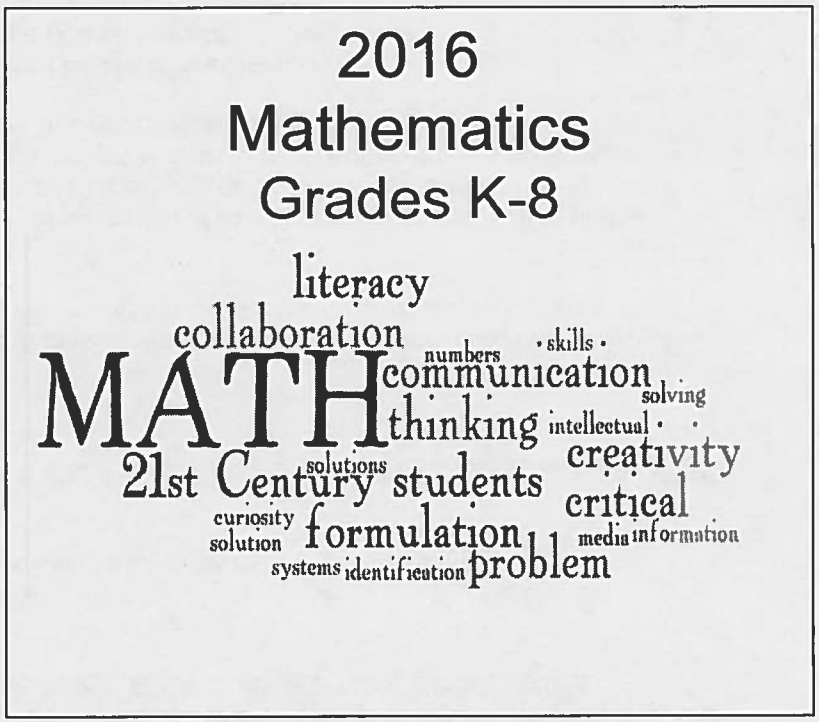
Reviewer ID: MMHC

Core Mathematics Program- a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Core.

Other Mathematics Program- a program that substantially, but partially, meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Other.

Component Mathematics Program- a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs.
Substantial evidence clearly supports the designation of this program as Component.

Intervention Program- a program designed and intended to target and support students' specific needs.
Substantial evidence clearly supports the designation of this program as Intervention.



- Evaluation Form adapted from Instructional Materials Evaluation Toolkit (IMET).

The IMET was developed by Student Achievement Partners. Educators may use or adapt. http://creativecommons.org/licenses/by/3.0/ Download this tool at http://achievethecore.org/IMET

Instructional Materials Evaluation Tool

Mathematics, Grades K-8

What Are the Purposes of the IMET?

This Math IMET is designed to help educators determine whether instructional materials are aligned to the Shifts and major features of the Common Core State Standards (CCSS). The substantial instructional Shifts (http://www.corestandards.org/other-resources/key-shifts-inmathematics/) at the heart of the Common Core State Standards are:

- **Focus** strongly where the Standards focus
- **Coherence**: Think across grades and link to major topics within the grade
- **Rigor**: In major topics, pursue conceptual understanding, procedural skill and fluency, and application with equal intensity.

The IMET draws directly from the following documents:

- Common Core State Standards for Mathematics (www.corestandards.org/Math)
- Publishers' Criteria for the Common Core State Standards in Mathematics grade K-8 (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)

When to use the IMET

1. Purchasing materials: Many factors go into local purchasing decisions. Alignment to the Standards is a critical factor to consider. This tool is designed to evaluate alignment of instructional materials to the Shifts and the major features of the CCSS. It also provides suggestions of additional indicators to consider in the materials evaluation and purchasing process.

2. Evaluating materials currently in use: The IMET can be used to analyze the degree of alignment of existing materials and help to highlight specific, concrete flaws in alignment. Even where materials and tools currently in use fail to meet one or more of these criteria, the pattern of failure is likely to be informative. States and districts can use the evaluation to create a thoughtful plan to modify or combine existing resources in such a way that students' actual learning experiences approach the focus, coherence, and rigor of the Standards.

3. Developing programs: Those developing new programs can use this tool as guidance for creating aligned curricula.
Please note this tool was designed for evaluating comprehensive curricula (including any supplemental or ancillary materials), but it was not designed for the evaluation of standalone supplemental materials.

Who Uses the IMET?

Evaluating instructional materials requires both subject-matter and pedagogical expertise. Evaluators should be well versed in the Standards (www.corestandards.org/Math) for all grades in which materials are being evaluated. This includes understanding the Major Work of the grade (www.achievethecore/focus), the Supporting and Additional work, how the content fits into the progressions in the Standards (www.achievethecore.org/progressions), and the expectations of the Standards with respect to conceptual understanding, procedural skill and fluency, and application. Evaluators also should be familiar with the substantial instructional Shifts (http:// www.corestandards.org/other-resources/key-shifts-in-mathematics/) of Focus, Coherence and Rigor that are listed above.

Getting Started

Prior to Evaluation

Assemble all of the materials necessary for the evaluation. It is essential for evaluators to have materials for all grades covered by the program, as some criteria cannot be rated without having access to each grade. In addition, each evaluator should have a reference copy of the Common Core State Standards for Mathematics (CCSSM) and the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013).

Before conducting the evaluation itself, it is important to develop a protocol for the evaluation process. The protocol should include having evaluators study the Publishers' Criteria and the IMET. It will also be helpful for evaluators to get a sense of each program overall before beginning the process. At a minimum, this would include reading the front matter of the text, looking at the table of contents and paging through multiple chapters.

Sections 1-3 below should be completed to produce a comprehensive picture of the strengths and weaknesses of the materials under evaluation. Information about areas in need of improvement or supplementation should be shared with internal and external stakeholders.

Navigating the Tool

Begin with Section 1: Non-Negotiable Alignment Criteria

- The Non-Negotiable Alignment Criteria must each be met in full for materials to be considered aligned to the Shifts and the major features of the Common Core State Standards. Each Non-Negotiable Alignment Criterion has one or more metrics associated with it; every one of these metrics must be met in order for the criterion as a whole to be met.

- Examine the relevant materials and use evidence to rate the materials against each criterion and its associated metric(s).

- Record and explain the evidence upon which the rating is based.

Continue to Section 2: Alignment Criteria

- The Alignment Criteria must each be met for materials to be considered aligned to the Shifts and the major features of the Common Core State Standards. Each Alignment Criterion has one or more metric associated with it; a specific number of these metrics must be met or partially met in order for the criterion as a whole to be met.

- Examine the materials in relation to these criteria, assigning each metric a point value. Rate the criterion as "Meets" or "Does Note Meet" based on the number of points assigned. The more points the materials receive on the alignment Criteria, the better they are aligned.

- Record and explain the evidence upon which the rating is based.

Proceed to Section 4: Indicators of Quality

- Indicators of Quality are important considerations that will help evaluators better understand the overall quality of instructional materials. These considerations are not criteria for alignment to the CCSS, but they provide valuable information about additional program characteristics. Evaluators may want to add their own indicators to the examples provided.

Directions for Non-Negotiable 1

Freedom from Obstacles to Focus

Criterion	Evidence- Give specific examples.	Rating: (Reviewer only.)
Non-Negotiable 1: **Freedom from Obstacles to Focus** **Materials must reflect the content architecture of the Standards by not assessing the topics named before the grade level where they first appear in the Standards.** The Standards foster students' progress to algebra by focusing strongly on arithmetic. Consistent with this focus, certain topics from outside of arithmetic appear only in later grades. Thus, to be aligned, materials must reflect the content architecture of the Standards by not assessing the topics named before the grade level where they first appear in the Standards. In this criterion, "topics named" means the topics that are explicitly named in Metric 1A. No other topics should be added to the list in Metric 1A. (Note that other topics in the standards are addressed in criterion NN2.)	**Required Materials** • Common Core State Standards for Mathematics (www.corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf) • From the materials being evaluated: teacher guides and all assessment components	**Rating this Criterion:** Non-Negotiable 1 is rated as Meets or Does Not Meet. To rate Non-Negotiable 1, begin by rating Metric 1A. Since Metric 1A is the only metric for Non-Negotiable 1, the rating for Non-Negotiable 1 is the same as the rating for Metric 1A. If Metric 1A is rated as Does Not Meet, include evidence of when the named topic(s) is/are assessed. If the metric is rated as Meets, list the grade(s) examined in the evaluation.

Metric NN1A **Materials reflect the basic architecture of the Standards by not assessing the listed topics before the grade level indicated.** • Probability, including chance, likely outcomes, probability models. (Introduced in the CCSSM in grade 7) • Statistical distributions, including center, variation, clumping, outliers, mean, median, mode, range, quartiles; and statistical association or trends, including two-way tables, bivariate measurement data, scatter plots, trend line, line of best fit, correlation. (Introduced in the CCSSM in grade 6) • Similarity, congruence, or geometric transformations. (Introduced in the CCSSM in grade 8) • Symmetry of shapes, including line/ reflection symmetry, rotational symmetry. (Introduced in the CCSSM in grade 4) **How to Find the Evidence:** Evaluate the table of contents, all chapter tests, all unit tests, and other such assessment components (including rubrics). For context, read Criterion #2 from the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013). NOTE: Grade alignments of other topics are addressed in Non-Negotiable 2, Focus and Coherence.) In this criterion, "topics named" means the topics that are explicitly named in Metric 1A. No other topics should be added to the list in Metric 1A. (Note that other topics in the standards are addressed in criterion NN2.)	**Evidence-** Number Worlds does not introduce or assess any Standards above grade level. In Unit 3, Lesson 3, Pg. 224 students are taught to solve two-step equations using division. Pg. 229 tests solving using distributive property, which has not been taught, but distributive property is not above grade level. 7.RP, 7EE.B4, 7.SP.C.8	(Reviewer only.) X Meets ___ Does Not Meet

Non-Negotiable 1: Materials must reflect the content architecture of the Standards by not assessing the topics named* before the grade level where they first appear in the Standards.

NN 1 If Metric 1A was rated as Meets, then rate Non-Negotiable 1 as Meets. If Metric 1A was rated as Does Not Meet, then rate Non- Negotiable 1 as Does Not Meet. Check the final rating.

Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion.**(Reviewer only.)**

Before moving to Non-Negotiable 2, record the final Meets or Does Not Meet rating in the Evaluation Summary.

(Reviewer only.)

X **Meets**

___ **Does Not Meet**

Strengths/Weaknesses:

Do materials explicitly attend to the specialized language of mathematics? Is the language of argument, problem solving, and mathematical explanations taught rather than assumed? Evaluate teacher and student materials, paying attention to how mathematical language is taught. NOTE: Examples of evaluating this Criterion might include looking at whether students are supported in: basing arguments on definitions; using the method of providing a counterexample; or recognizing that examples alone do not establish a general statement.	**Evidence-** Every lesson has vocabulary terms to focus on. There are vocabulary cards that can be purchased & used. The ELL support guide focuses on vocabulary.	

Alignment Criterion 2: Standards for Mathematical Practice

Materials must demonstrate authentic connections between content Standards and practice Standards.

AC2 Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 out of 6 points, the Criterion has not been met. Check the final rating.
Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion.
(Reviewer only.)

Before moving to Alignment Criterion 3, record the final Meets or Does Not Meet rating in the Evaluation Summary.

(Reviewer only.)

✓ **Meets**

____ **Does Not Meet**

Strengths/Weaknesses:

Alignment Criterion 3: Access to the Standards for All Students

Materials must provide supports for English Language Learners and other special populations.

Because Standards are for all students, alignment requires thoughtful support to ensure all students are able to meet the Standards. Thus, aligned materials must provide supports for English Language Learners and other special populations.

Required Materials:

- Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf)
- Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)
- From the materials being evaluated: teacher guides, student texts and workbooks

Rating this Criterion:

Alignment Criterion 3 is rated as Meets or Does Not Meet.

To rate Alignment Criterion 3, first rate metrics 3A, 3B, and 3C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points).

Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 3 if the materials earn 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as support for special population, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.

Metric AC3A: **Support for English Language Learners and other special populations is thoughtful and helps those students meet the same Standards as all other students. The language in which problems are posed is carefully considered.** **How to Find the Evidence:** Evaluate teacher and student materials, paying attention to supports offered for special populations.	**Evidence-** *The ELL support guide provides an Oral assessment, differentiated lesson, and practice WS for each Unit. *"Creating Context" discusses how to better help students (sometimes specifically ELL's) in every lesson. Pg. 18, 32, 46, 60, 74, 88, 104, 118, etc., 404, 418, 432	Reviewer only.) ✓ Meets (2) ___ Partially Meets (1) ___ Does Not Meet (0)
Metric AC3B: **Materials provide appropriate level and type of scaffolding, differentiation, intervention, and support for a broad range of learners with gradual removal of supports, when needed, to allow students to demonstrate their mathematical understanding independently.** **How to Find the Evidence:** Evaluate teacher and student materials, paying attention to whether materials provide differentiation that will lead all learners to engage with on-grade-level content.	**Evidence-** Differentiation and supported practice are provided in every lesson. Suggestions for Implementation T-10A. Each unit builds on itself until the project at the very end. Supports are not removed- they are consistent.	Reviewer only.) ✓ Meets (2) ___ Partially Meets (1) ___ Does Not Meet (0)
Metric AC3C: **Design of lessons recommends and facilitates a mix of instructional approaches for a variety of learners such as using multiple representations (e.g., including models, using a range of questions, checking for understanding, flexible grouping, pair-share).** **How to Find the Evidence:** Evaluate teacher materials, noting instructional approaches suggested for whole class and differentiated lessons and activities.	**Evidence-** Alternative grouping and reflect questions are provided in ea. lesson. Activity Cards have "Questions to Ask". There are lessons, hands-on learning, discovery, activities, and projects.	Reviewer only.) ✓ Meets (2) ___ Partially Meets (1) ___ Does Not Meet (0)

Alignment Criterion 3: **Access to the Standards for All Students** **Materials must provide supports for English Language Learners and other special populations.** **AC3** Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 points, the Criterion has not been met. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion.**(Reviewer only.)** **Move to the Evaluation Summary and record the final Meets or Does Not Meet rating .**	**(Reviewer only.)** ✓ **Meets** ____ **Does Not Meet** **Strengths/Weaknesses:**

Once an evaluation for alignment to the Shifts and major features of the CCSS has been conducted using Sections 1-3, it's important to evaluate for overall quality and best practices. A starting list of Indicators of Quality are suggested below. States, districts and others evaluating instructional materials are encouraged to add to this list to ensure materials reflect local contexts. For background information on some of the Indicators of Quality in this section, refer to pp.18–21 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).

Indicators of Quality	**Evidence- Give specific examples.**	**Rating: (Reviewers only.)**
1. Lessons are thoughtfully structured and support the teacher in leading the class through the learning paths at hand, with active participation by all students in their own learning and in the learning of their classmates.	**Evidence-** Every lesson has a warm-up, engage (activity), reflect, and assess section. Pacing is provided on T-10-A Ea. lesson has vocab & guided discussion prompts. Common misconceptions: Pg- 18, 46, 118, 190, 290, 318, 362, 392, 98.	**(Reviewer only.)** ✓ **Yes** ____ **No**
2. The underlying design of the materials includes both problems and exercises. (In solving problems, students learn new mathematics, whereas in working exercises, students apply what they have already learned to build mastery.) Each problem or exercise has a purpose. **NOTE: This Criterion does not require that the problems and exercises be labeled as such.**	**Evidence-** Each lesson has a warmup, guided review, and "reflect". There are activities and worksheets for every lesson and projects at the end of each week for practice and application.	**(Reviewer only.)** ✓ **Yes** ____ **No**

3. Design of assignments is not haphazard: exercises are given in intentional sequences in order to strengthen students' mathematical understanding.	**Evidence-** Scope & Sequence provided. B17-B22 Activity Cards has scaffolded questions in "Questions to Ask" Practice → application w/ activity & worksheet Concepts builds every week in Unit.	**(Reviewer only.)** ✓ Yes ____ No
4. There are separate teacher materials that support and reward teacher study including, but not limited to: discussion of the mathematics of the units and the mathematical point of each lesson as it relates to the organizing concepts of the unit, discussion on student ways of thinking and anticipating a variety of students responses, guidance on lesson flow, guidance on questions that prompt students thinking, and discussion of desired mathematical behaviors being elicited among students.	**Evidence-** Implementation Guide included. Online supports available. additional materials for ea. lesson.	**(Reviewer only.)** ✓ Yes ____ No
5. Manipulatives suggested in the materials are faithful representations of the mathematical objects they represent and are connected to written methods.	**Evidence-** Manipulatives are used throughout. pg. 107, 108 Activity 2a.26 Uses manipulatives when working with integers.	**(Reviewer only.)** ✓ Yes ____ No
6. Materials include a variety of curriculum-embedded assessments. Examples include pre-, formative, summative, and self-assessment resources.	**Evidence-** placement Tests Informal Assessment (every lesson) Activities Summative (End of Each week/unit)	**(Reviewer only.)** ✓ Yes ____ No
7. Assessments contain aligned rubrics, answer keys, and scoring guidelines that provide sufficient guidance for interpreting student performance.	**Evidence-** Placement Tests have scoring instructions. Answer keys provided. Projects have rubrics. Pg. 30, 44, 86, 100, 116, 130, 144, 158, 172, 186, 202, 216, 230, 244, 258, 272.	**(Reviewer only.)** ✓ Yes ____ No
8. Materials assess student proficiency using methods that are accessible and unbiased, including the use of course-level language in student prompts.	**Evidence-** Tests at end of each week. (Paper/Online) Placement tests Throughout	**(Reviewer only.)** ✓ Yes ____ No

9. Materials are carefully evaluated by qualified individuals, whose names are listed, in an effort to ensure freedom from mathematical errors and course-level appropriateness.	**Evidence-** Meet the authors Pg. 56.57 -Implementation Guide- Sharon Griffin, Julie Sarama, Dr. Douglas Clements.	**(Reviewer only.)** ✓ **Yes** ____ **No**
10. The visual design supports students in engaging thoughtfully with the subject. Navigation through the text is clear.	**Evidence-** Activity Cards Vocab Cards manipulatives Online Activities	**(Reviewer only.)** ✓ **Yes** ____ **No**
11. The materials engage parents in appropriate ways. For example, homework assignments in elementary grades, consist of routine problems, practice with getting answers, and fluency-building exercises that parents can easily support.	**Evidence-** Homework - every lesson Additional Practice - every lesson. academic vocab throughout. "Math at Home" parent letter ea. week Pg. 18, 32, 46, 60, 74, 88, 118, 104, 132, 146, 160, 174, 190, 204, 218, 232, 246, 260, 276, 290, 304, 318, 332, 346, 362, 376, 390, 404, 418, 432.	**(Reviewer only.)** ✓ **Yes** ____ **No**

Have to have:
Activity Cards

Reviewer IMET Evaluation Summary **Title/Level:** _____

Publisher: _____ **Copyright:** _____ **ISBN:** _____

Reviewer ID # _____ **Date Review Completed:** _____

Non-Negotiable Criteria- Each Non-Negotiable must be met in order for the Non-Negotiable Alignment Criteria to be met overall.

Non-Negotiable 1: Freedom from Obstacles to Focus	Non- Negotiable 2: Focus and Coherence
✓ Meets	____ Meets
____ Does Not Meet	✓ Does Not Meet

Non-Negotiable Overall:

____ **Meets** ✓ **Does Not Meet**

Alignment Criteria- Each Alignment Criterion must be met with a sufficient number of points in order for Alignment Criteria to be labeled as "Meets" overall. The more points the materials receive on the Alignment Criteria, the better they are aligned.

Alignment Criterion 1: Rigor and Balance	Alignment Criterion 2: Standards of Mathematical Practice	Alignment Criterion 3: Access to Standards for All Learners
Points: 4 of 6 possible. (Materials must receive at least 5 of 6 points to align.)	Points: 6 of 6 possible. (Materials must receive at least 5 of 6 points to align.)	Points: 6 of 6 possible. (Materials must receive at least 5 of 6 points to align.)
____ Meets	✓ Meets	✓ Meets
✓ Does Not Meet	____ Does Not Meet	____ Does Not Meet

Alignment Criteria Overall:

____ **Meets** ✓ **Does Not Meet**

If the materials meet both Non-Negotiables and relevant Alignment Criterion, they are aligned to the Shifts and major features of the Core Standards. **Do the materials meet every Non-Negotiable and Alignment Criterion?** _____ **Yes** ✓ **No**

What are the specific areas of strength and weakness based on this evaluation? Publishers or others modifying or developing assessments can use this information to make improvements and/or to remedy gaps in the alignment of assessment materials.

Strengths

Excellent intervention to use for the standards focused on.
Discovery based.
High level of engagement.
Hands on activities.
Vocabulary Cards.
Pacing guides.

Weaknesses

Student workbook must be purchased in sets of 5.
Manipulatives must be purchased.
A lot of materials.

Do not need online access.

4

2015-16 Mathematics Interim Review Recommendation & Summary

Publisher Name:	McGraw-Hill School Education, LLC
Title:	Number Worlds - J
ISBN #	
Grade Level(s) or Course:	8th Grade
Reviewer ID:	DN MM

RECOMMENDED AS:

_____**Core Mathematics Program-** a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials. Substantial evidence clearly supports the designation of this program as Core.

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__X__**Intervention Program-** a program designed and intended to target and support students' specific needs. Substantial evidence clearly supports the designation of this program as Intervention.

_____ **Does not meet criteria** for recommendation as a Curricular Material or Online Resource for Mathematics.

EVIDENCE SUMMARY:

FOCUS- As an intervention program the focus is 53% major work. Topics in later grades are not assessed.

COHERENCE- 53% of focus is major work. 16/30 weeks intervention program; does not need majority of time. (Functions, E.E, Geometry)

RIGOR- conceptual understanding present in "Engage" portions of lessons. Opportunities for discussion present on Activity cards. Single step problems throughout.

CONCEPTUAL UNDERSTANDING- Engage lessons provide prescribed ways to solve problems. Procedural practice is evident throughout.

MATHEMATICAL PRACTICES- Students regularly use MPs throughout program. The only exception is MP3. Students are asked to justify but not critique.

ACCESSIBILITY OF STANDARDS TO ALL STUDENTS- ELL support guide is present. Creating context prompts at the beginning of each lesson. Progress monitoring tools "If this, then this" statements. Games and activities allow for a variety of instructional strategies.

OTHER:

High level of engagement.
Variety of instructional strategies.
Good teacher resources (ELL)
Activity based

computer component is not a ~~ACES~~ necessity.

would like stronger focus on functions, radicals, congruence/similarity.

2015-16 Interim Mathematics Review

Mathematics Evaluation Tool Grades K-8

Publisher: McGraw-Hill School Education, LLC

Title of Material: Number Worlds J

Author: Griffin

ISBN #: Various **Copyright** 2015

Reviewer ID: MM DN

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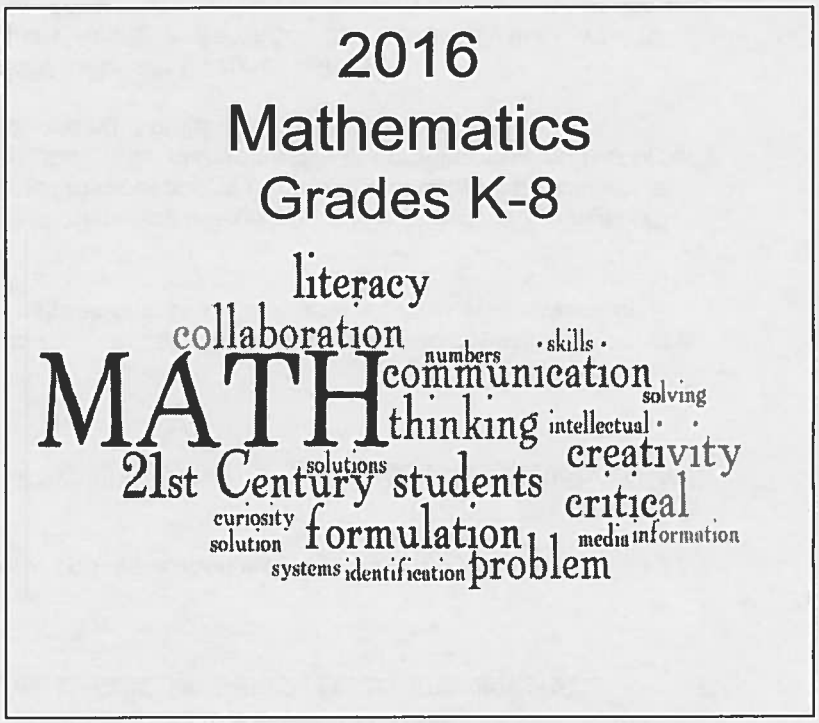

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The IMET was developed by Student Achievement Partners. Educators may use or adapt. http://creativecommons.org/licenses/by/3.0/ Download this tool at http://achievethecore.org/IMET

Instructional Materials Evaluation Tool

Mathematics, Grades K-8

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When to use the IMET

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2. Evaluating materials currently in use: The IMET can be used to analyze the degree of alignment of existing materials and help to highlight specific, concrete flaws in alignment. Even where materials and tools currently in use fail to meet one or more of these criteria, the pattern of failure is likely to be informative. States and districts can use the evaluation to create a thoughtful plan to modify or combine existing resources in such a way that students' actual learning experiences approach the focus, coherence, and rigor of the Standards.

3. Developing programs: Those developing new programs can use this tool as guidance for creating aligned curricula.
Please note this tool was designed for evaluating comprehensive curricula (including any supplemental or ancillary materials), but it was not designed for the evaluation of standalone supplemental materials.

Who Uses the IMET?

Evaluating instructional materials requires both subject-matter and pedagogical expertise. Evaluators should be well versed in the Standards (www.corestandards.org/Math) for all grades in which materials are being evaluated. This includes understanding the Major Work of the grade (www.achievethecore/focus), the Supporting and Additional work, how the content fits into the progressions in the Standards (www.achievethecore.org/progressions), and the expectations of the Standards with respect to conceptual understanding, procedural skill and fluency, and application. Evaluators also should be familiar with the substantial instructional Shifts (http:// www.corestandards.org/other-resources/key-shifts-in-mathematics/) of Focus, Coherence and Rigor that are listed above.

Getting Started

Prior to Evaluation

Assemble all of the materials necessary for the evaluation. It is essential for evaluators to have materials for all grades covered by the program, as some criteria cannot be rated without having access to each grade. In addition, each evaluator should have a reference copy of the Common Core State Standards for Mathematics (CCSSM) and the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013).

2015-16 Interim Mathematics Review

Mathematics Evaluation Tool Grades K-8

Publisher: McGraw Hill School Education ,LLC
Title of Material: Number Worlds J

Author: Griffin

ISBN #: Various Copyright 2015

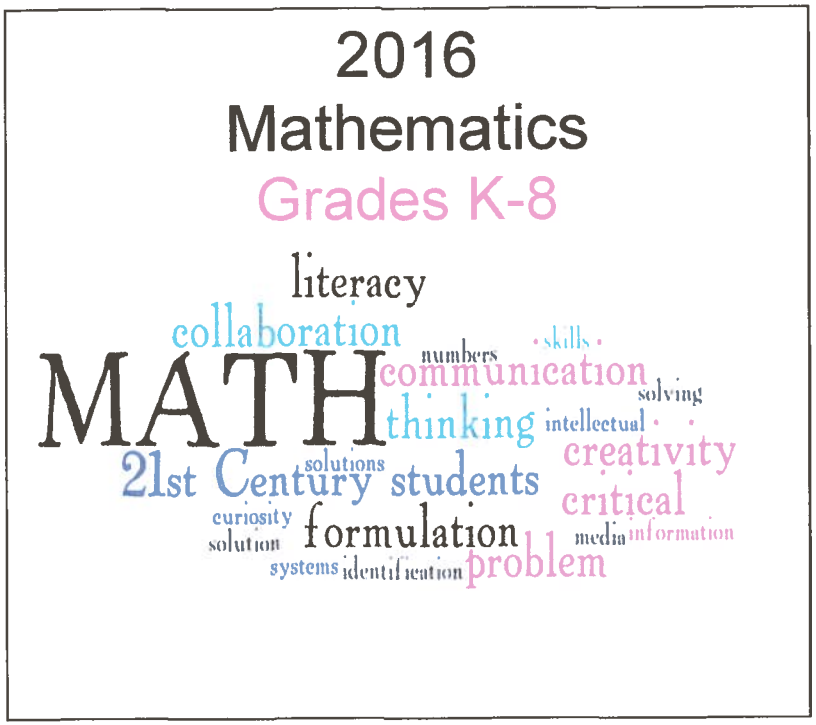
Reviewer ID: _____

Core Mathematics Program- a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Core.

Other Mathematics Program- a program that substantially, but partially, meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Other.

Component Mathematics Program- a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs.
Substantial evidence clearly supports the designation of this program as Component.

Intervention Program- a program designed and intended to target and support students' specific needs.
Substantial evidence clearly supports the designation of this program as Intervention.



- Evaluation Form adapted from Instructional Materials Evaluation Toolkit (IMET).

The IMET was developed by Student Achievement Partners. Educators may use or adapt. http://creativecommons.org/licenses/by/3.0/ Download this tool at http://achievethecore.org/IMET

Instructional Materials Evaluation Tool

What Are the Purposes of the IMET?

This Math IMET is designed to help educators determine whether instructional materials are aligned to the Shifts and major features of the Common Core State Standards (CCSS). The substantial instructional Shifts (http://www.corestandards.org/other-resources/key-shifts-inmathematics/) at the heart of the Common Core State Standards are:

- **Focus** strongly where the Standards focus
- **Coherence**: Think across grades and link to major topics within the grade
- **Rigor**: In major topics, pursue conceptual understanding, procedural skill and fluency, and application with equal intensity.

The IMET draws directly from the following documents:

- Common Core State Standards for Mathematics (www.corestandards.org/Math)
- Publishers' Criteria for the Common Core State Standards in Mathematics grade K-8 (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)

When to use the IMET

1. Purchasing materials: Many factors go into local purchasing decisions. Alignment to the Standards is a critical factor to consider. This tool is designed to evaluate alignment of instructional materials to the Shifts and the major features of the CCSS. It also provides suggestions of additional indicators to consider in the materials evaluation and purchasing process.

2. Evaluating materials currently in use: The IMET can be used to analyze the degree of alignment of existing materials and help to highlight specific, concrete flaws in alignment. Even where materials and tools currently in use fail to meet one or more of these criteria, the pattern of failure is likely to be informative. States and districts can use the evaluation to create a thoughtful plan to modify or combine existing resources in such a way that students' actual learning experiences approach the focus, coherence, and rigor of the Standards.

3. Developing programs: Those developing new programs can use this tool as guidance for creating aligned curricula.
Please note this tool was designed for evaluating comprehensive curricula (including any supplemental or ancillary materials), but it was not designed for the evaluation of standalone supplemental materials.

Who Uses the IMET?

Evaluating instructional materials requires both subject-matter and pedagogical expertise. Evaluators should be well versed in the Standards (www.corestandards.org/Math) for all grades in which materials are being evaluated. This includes understanding the Major Work of the grade (www.achievethecore/focus), the Supporting and Additional work, how the content fits into the progressions in the Standards (www.achievethecore.org/progressions), and the expectations of the Standards with respect to conceptual understanding, procedural skill and fluency, and application. Evaluators also should be familiar with the substantial instructional Shifts (http:// www.corestandards.org/other-resources/key-shifts-in-mathematics/) of Focus, Coherence and Rigor that are listed above.

Getting Started
Prior to Evaluation

Assemble all of the materials necessary for the evaluation. It is essential for evaluators to have materials for all grades covered by the program, as some criteria cannot be rated without having access to each grade. In addition, each evaluator should have a reference copy of the Common Core State Standards for Mathematics (CCSSM) and the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013).

Before conducting the evaluation itself, it is important to develop a protocol for the evaluation process. The protocol should include having evaluators study the Publishers' Criteria and the IMET. It will also be helpful for evaluators to get a sense of each program overall before beginning the process. At a minimum, this would include reading the front matter of the text, looking at the table of contents and paging through multiple chapters.

Sections 1-3 below should be completed to produce a comprehensive picture of the strengths and weaknesses of the materials under evaluation. Information about areas in need of improvement or supplementation should be shared with internal and external stakeholders.

Navigating the Tool

Begin with Section 1: Non-Negotiable Alignment Criteria

- The Non-Negotiable Alignment Criteria must each be met in full for materials to be considered aligned to the Shifts and the major features of the Common Core State Standards. Each Non-Negotiable Alignment Criterion has one or more metrics associated with it; every one of these metrics must be met in order for the criterion as a whole to be met.

- Examine the relevant materials and use evidence to rate the materials against each criterion and its associated metric(s).

- Record and explain the evidence upon which the rating is based.

Continue to Section 2: Alignment Criteria

- The Alignment Criteria must each be met for materials to be considered aligned to the Shifts and the major features of the Common Core State Standards. Each Alignment Criterion has one or more metric associated with it; a specific number of these metrics must be met or partially met in order for the criterion as a whole to be met.

- Examine the materials in relation to these criteria, assigning each metric a point value. Rate the criterion as "Meets" or "Does Note Meet" based on the number of points assigned. The more points the materials receive on the alignment Criteria, the better they are aligned.

Record and explain the evidence upon which the rating is based.

Proceed to Section 4: Indicators of Quality

- Indicators of Quality are important considerations that will help evaluators better understand the overall quality of instructional materials. These considerations are not criteria for alignment to the CCSS, but they provide valuable information about additional program characteristics. Evaluators may want to add their own indicators to the examples provided.

Directions for Non-Negotiable 1

Freedom from Obstacles to Focus

Criterion	Evidence- Give specific examples.	Rating: (Reviewer only.)
Non-Negotiable 1: **Freedom from Obstacles to Focus** **Materials must reflect the content architecture of the Standards by not assessing the topics named before the grade level where they first appear in the Standards.** The Standards foster students' progress to algebra by focusing strongly on arithmetic. Consistent with this focus, certain topics from outside of arithmetic appear only in later grades. Thus, to be aligned, materials must reflect the content architecture of the Standards by not assessing the topics named before the grade level where they first appear in the Standards. In this criterion, "topics named" means the topics that are explicitly named in Metric 1A. No other topics should be added to the list in Metric 1A. (Note that other topics in the standards are addressed in criterion NN2.)	**Required Materials** • Common Core State Standards for Mathematics (www.corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf) • From the materials being evaluated: teacher guides and all assessment components	**Rating this Criterion:** Non-Negotiable 1 is rated as Meets or Does Not Meet. To rate Non-Negotiable 1, begin by rating Metric 1A. Since Metric 1A is the only metric for Non-Negotiable 1, the rating for Non-Negotiable 1 is the same as the rating for Metric 1A. If Metric 1A is rated as Does Not Meet, include evidence of when the named topic(s) is/are assessed. If the metric is rated as Meets, list the grade(s) examined in the evaluation.

Metric NN1A: **Materials re[illegible] the basic architecture of the Standards by not assessing the listed topics before the grade level indicated.** • Probability, including chance, likely outcomes, probability models. (Introduced in the CCSSM in grade 7) • Statistical distributions, including center, variation, clumping, outliers, mean, median, mode, range, quartiles; and statistical association or trends, including two-way tables, bivariate measurement data, scatter plots, trend line, line of best fit, correlation. (Introduced in the CCSSM in grade 6) • Similarity, congruence, or geometric transformations. (Introduced in the CCSSM in grade 8) • Symmetry of shapes, including line/ reflection symmetry, rotational symmetry. (Introduced in the CCSSM in grade 4) **How to Find the Evidence:** Evaluate the table of contents, all chapter tests, all unit tests, and other such assessment components (including rubrics). For context, read Criterion #2 from the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013). NOTE: Grade alignments of other topics are addressed in Non-Negotiable 2, Focus and Coherence.) In this criterion, "topics named" means the topics that are explicitly named in Metric 1A. No other topics should be added to the list in Metric 1A. (Note that other topics in the standards are addressed in criterion NN2.)	**Evidence-** **Looking through the assessment booklet, there are no Algebra 1 or beyond topics addressed.**	**(Reviewer only.)** **___X_Meets** **____Does Not Meet**
Non-Negotiable 1: Materials must reflect the content architecture of the Standards by not assessing the topics named* before the grade level where they first appear in the Standards. **NN 1** If Metric 1A was rated as Meets, then rate Non-Negotiable 1 as Meets. If Metric 1A was rated as Does Not Meet, then rate Non- Negotiable 1 as Does Not Meet. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion.**(Reviewer only.)** **Before moving to Non-Negotiable 2, record the final Meets or Does Not Meet rating in the Evaluation Summary.**		**(Reviewer only.)** **_X___Meets** **____Does Not Meet** **Strengths/Weaknesses:**

Directions for Non-Negotiable 2

Focus and Coherence

Non-Negotiable 2: **Focus and Coherence** **Materials must focus coherently on the Major Work of the grade in a way that is consistent with the progressions in the Standards.** Focus and coherence are the two major evidence-based design principles of the Common Core State Standards for Mathematics (CCSSM, p. 3). Focus is necessary in order to fulfill the ambitious promise the states have made to their students by adopting the Standards: greater achievement at the college and career ready level; greater depth of understanding of mathematics; and a rich classroom environment in which reasoning, sense-making, applications, and a range of mathematical practices flourish. In simpler terms, a mile-wide, inch-deep curriculum translates to less time per topic. Less time means less depth and moving on without many students. Thus, materials must focus coherently on the Major Work of the grade in a way that is consistent with the progressions in the Standards.	**Required Materials** • Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf) • Focus by Grade Level for the grade being evaluated (www.achievethecore.org/focus) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion:** Non-Negotiable 2 is rated as Meets or Does Not Meet. To rate Non-Negotiable 2, first rate metrics 2A–2H. Each of these eight metrics must be rated as Meets in order for Non-Negotiable 2 to be rated as Meets. Rate each metric 2A-2H as Meets or Does Not Meet/Insufficient Evidence. If the evidence examined shows that the Criterion is met, then mark the Criterion Meets. If the evidence examined shows that the Criterion is not met—or if there is insufficient evidence to make a determination—then mark the Criterion as Does Not Meet/Insufficient Evidence. Support all ratings with evidence.
Metric NN2A: **In each grade K–8, students and teachers using the materials as designed devote the large majority of time to the Major Work of the grade.** **How to Find the Evidence:** Familiarize yourself with the Major Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, lessons, homework assignments, and assessments. (Evaluate both student and teacher materials.) Consider time spent on the Major Work of the grade and judge qualitatively whether students and teachers using the materials as designed will devote the large majority of time to the Major Work of the grade. For context, read Criterion #1 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013)	**Evidence-** **Number Worlds is an intervention program not designed to cover all CCSS.** **16/30 weeks are spent on major work.** **53% of time.** **Not majority of the time.**	**(Reviewer only.)** **____Meets** **__x__Does Not Meet/** **Insufficient Evidence**

Metric NN2B: **Supporting Work, where present, enhances focus and coherence simultaneously by also engaging students in the Major Work of the grade.** **How to Find the Evidence:** Familiarize yourself with the Major Work and Supporting Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate chapters and lessons that focus on Supporting Work. NOTE: Example of evaluating this Criterion might include looking at whether materials for K–5 generally treat data displays as an occasion for solving grade-level word problems using the four operations (e.g., see 3.MD.B.3); or whether materials for grade 7 take advantage of opportunities to use probability to support ratios, proportions, and percentages. For context, read Criterion #3 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** **No mention of Irrational Numbers (8.NS.A.1).** **Only 1 unit covers bivariate data, not enough to support major works.**	**(Reviewer only.)** **____Meets** **_x___Does Not Meet/** **Insufficient Evidence**
Metric NN2C: **Materials base content progressions on the grade-by-grade progressions in the Standards. Content from previous or future grades does not unduly interfere with or displace on-grade-level content.** **How to Find the Evidence:** Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, and lessons in both student and teacher materials. NOTE: In some cases it may be possible that aligned materials might address some aspects of a topic in a strategic way before or after the grade level in which the topic is central in the Standards' progressions; for example, a curriculum author might purposefully choose to explore adding fractions with unlike denominators in a way appropriate to grade four, recognizing that this work is not really required until the next grade. However, any such purposeful discrepancies in content progressions should enhance the required learning in each grade; not unduly interfere with or displace grade-level content; and be clearly aimed at helping students meet the Standards as written rather than effectively rewriting the progressions in the Standards. And in all cases, note that Non-Negotiable 1 must be met for materials to be aligned. For context, read Criterion #5a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Content is grade level appropriate. Previous standards serve to enrich grade level standards and do not inhibit. NO future grade level material is present.	**(Reviewer only.)** **_x___Meets** **____Does Not Meet/** **Insufficient Evidence**

Metric NN2D: **Materials gi[illegible]l students extensive work with on-grade-level problems.** **How to Find the Evidence:** Evaluate both student and teacher materials. If the materials provide resources for differentiated learning, consider whether lower-performing students have opportunities to engage with grade-level problems. Also consider whether higher-performing students are given opportunities to learn current grade-level content in greater depth. For context, read Criterion #5b in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Content is on gra[illegible]evel. Intervention program does not cover all major work. Progress Monitoring in lesson allows for differentiation. "Engage" parts of lesson.	**(Reviewer only.)** **___X_Meets** **____Does Not Meet/ Insufficient Evidence**
Metric NN2E: **Materials relate on-grade-level concepts explicitly to prior knowledge from earlier grades.** **How to Find the Evidence:** Evaluate both student and teacher materials. NOTE: Examples of evaluating this Criterion might include looking at the way the materials extend basic ideas of place value across the decimal point; or the role that properties of operations play when the materials extend arithmetic beyond whole numbers to fractions, variables, and expressions. More generally, cluster headings in the Standards sometimes signal key moments where reorganizing and extending previous knowledge is important in order to accommodate new knowledge (e.g., see cluster headings that use the phrase "Apply and extend previous understanding"). For context, read Criterion #5c in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Placement tests determine which level students will start at. This allows comprehension of previous work and material. Progress Monitoring. Page 21 directs to additional practice.	**(Reviewer only.)** **__X__Meets** **____Does Not Meet/ Insufficient Evidence**
Metric NN2F: **Review of material from previous grades is clearly identified as such to the teacher, and teacher and students can see what their specific responsibility is for the current year.** **How to Find the Evidence:** Evaluate the table of contents, but do not stop there; also evaluate units, chapters, lessons, homework assignments and assessments. (Evaluate both student and teacher materials.) Identify any content from previous grades and check whether it is identified as such. For context, read Criterion #5a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Skills Trace at beginning of unit allows teacher to see previous works, next grade level concepts. Pg. 6,7 Vocab Table of contents/headings tell direction for the year.	**(Reviewer only.)** **__X__Meets** **____Does Not Meet/ Insufficient Evidence**

Metric NN2G: **Materials include learning objectives that are visibly shaped by CCSSM cluster headings.** **How to Find the Evidence:** Select several clusters from the Major Work in the grade being evaluated. Evaluate teacher and student materials in relation to these clusters. For context, read Criterion #6a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** **Learning objectives present at daily lessons.** **Presented as "key ideas" in student notebook.**	**(Reviewer only.)** **__X__Meets** **____Does Not Meet/** **Insufficient Evidence**
Metric NN2H: **Materials include problems and activities that serve to connect two or more clusters in a domain, or two or more domains in a grade, in cases where these connections are natural and important.** **How to Find the Evidence:** In the grade being evaluated, choose two or more clusters or two or more domains for which connections are natural and important. Evaluate the units, chapters, and lessons that deal with the chosen topics, looking for problems and activities that serve to connect the chosen clusters or domains. NOTE: An example of evaluating this Criterion might include looking at whether problems in grade 4 sometimes or often involve students applying their developing computation skills (detailed in domain NBT) in the context of solving word problems (detailed in domain OA). For context, read Criterion #6b in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** **Weekly Project Based Learning combines ideas into a larger piece of linking standards/clusters.** **"Numbers in the Real Worlds" page 30.** **"Numbers All Around."**	**(Reviewer only.)** **_X___Meets** **____Does Not Meet/** **Insufficient Evidence**
Non-Negotiable 2: **Focus and Coherence** **Materials must focus coherently on the Major Work of the grade in a way that is consistent with the progressions in the Standards.** NN 2 If all Metrics 2A – 2H were rated as Meets, then rate Non-Negotiable 2 as Meets. If one or more Metric was rated Does Not Meet/Insufficient Evidence, then rate Non-Negotiable 2 as Does Not Meet. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)** **Intervention Program. Not designed to cover all CCSS. Focuses on Major Work 53% of the time.** **Before moving to Alignment Criterion 1, record the final Meets or Does Not Meet rating in the Evaluation Summary.**		**(Reviewer only.)** **____Meets** **__X__Does Not Meet** **Strengths/Weaknesses:**

Now continue by evaluating the Alignment Criterion 1 for Rigor and Balance.

Directions for Alignment Criterion 1

Rigor and Balance

Alignment Criterion 1: Rigor and Balance **Materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.** The Standards set expectations for attention to all three aspects of rigor: conceptual understanding, procedural skill and fluency, and applications. Thus, materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.	**Required Materials** • Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf) • Focus by Grade Level for the grade being evaluated (achievethecore.org/focus) • Situation Types for the Operations in Word Problems (achievethecore.org/situation-types) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion:** Alignment Criterion 1 is rated as Meets or Does Not Meet. To rate Alignment Criterion 1, first rate metrics 1A, 1B, and 1C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). For each metric, guiding questions are provided to aid in gathering evidence. Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 1 if the materials rate 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as rigor and balance, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.
Metric AC1A: **The materials support the development of students' conceptual understanding of key mathematical concepts, especially where called for in specific content Standards or cluster headings.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Major Work for the grade being evaluated that relate specifically conceptual understanding to use throughout the questions associated with this metric. NOTE: Some examples of clusters or Standards that call for conceptual understanding include: K.OA.A.1, (1.NBT.B, 1.NBT.C), (2.NBT.A, 2.NBT.B), (3.OA.A.1, 3.OA.A.2), 4.NF.A, (4.NBT.A, 4.NBT.B), 5.NF.B, (5.NBT.A, 5.NBT.B), 6.RP.A, 6.EE.A.3, 7.NS.A, 7.EE.A, 8.EE.B, 8.F.A, 8.G.A Clusters or Standards grouped by parentheses are closely connected and could be analyzed together. For context, read Criterion #4a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	-Choose a cluster/Standard from the Major Work that is aligned to each aspect of rigor and use it to evaluate these metrics. It is most helpful if the same clusters/Standards are chosen for all of the programs being evaluated. (Guidance in choosing clusters/Standards is included in "How to Find the Evidence".)	**Use the questions for AC Metric 1A to evaluate Metric 1A. Record evidence for each question and rate Metric 1A.** **_X___Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**

Is conceptual understanding attended to thoroughly where the Standards set e expectations for understanding or interpreting? Evaluate lessons, chapter/unit assessments and homework assignments, paying attention to work aligned to Standards that explicitly call for understanding or interpreting. NOTE: Examples of evaluating this Criterion might include looking at how well the multi-digit addition and subtraction algorithms are developed and explained on the basis of place value and properties of operations; or how well the multi-digit multiplication and division algorithms are developed and explained on the basis of place value and properties of operations; or how well solving equations is presented and explained as a process of reasoning.	**Evidence-** Unit 3, Week 3, Le n 1,2,3 More Expressions and Equations than Functions. 8.F.1 8.EE.C.7	
Do the materials feature high-quality conceptual problems and conceptual discussion questions? Evaluate lessons, chapter/unit assessments, and homework assignments. NOTE: Example of conceptual problems might include such questions as "Find a number greater than 1/5 and less than 1/4," or "If the divisor does not change and the dividend increases, what happens to the quotient?"	**Evidence-** Questions to ask on Activity Cards are great discussion topics. Example 3G "What generalizations can you make about the slope and steepness of the lines?"	
Do the materials feature opportunities to identify correspondences across mathematical representations? Evaluate lessons, chapter/unit assessments and homework assignments. NOTE: Examples of evaluating this Criterion might include looking at whether students are supported in identifying correspondences among: the verbal description of a situation, the diagrams that distill its mathematical features, and the equations that model it; or equivalent forms of numbers (e.g., 3 and 6/2) and the number line; or rational number operations and representations of them via models such as the vector model; or the expression that defines a function and the graph that shows the relationship.	**Evidence-** Construction of graphs. Unit 3 Week 3 Lesson 2	
Metric AC1B: **The materials are designed so that students attain the fluencies and procedural skills required by the Standards.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Major Work for the grade being evaluated that relate specifically to fluency and procedural skill to use throughout the questions associated with this metric. NOTE: Some examples of Standards that call for procedural skill and fluency include: K.OA.A.5, 1.OA.C.6, 2.OA.B.2, 2.NBT.B.5, 3.OA.C.7, 3.NBT.A.2, 4.NBT.B.4, 5.NBT.B.5, 6.NS.B.2, and 6.NS.B.3, 6.EE.A, 7.NS.A, 7.EE.A.1,7.EE.B.4a, 8.EE.C.7, 8.EE.C.8b For context, read Criterion #4b in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).		**Use the questions for Metric 1B to evaluate Metric 1 B. Record evidence for each question and rate Metric 1B.** **(Reviewer only.)** **____Meets (2)** **_X___Partially Meets (1)** **____Does Not Meet (0)**

Is progress toward fluency and procedural skill interwoven with students' develo conceptual understanding of the operations in question? Evaluate lessons, chapter/unit assessments, daily routines, and homework assignments for evidence that the development of fluency and procedural skill is supported by conceptual understanding.	**Evidence-** Missing solving wit actional coefficients 8.EE.7 Procedural practice is evident throughout. Unit 3 Week 1 is conceptual, reflection questions.	
Are purely procedural problems and exercises present that include cases in which opportunistic strategies are valuable and generic cases that require efficient algorithms present? Evaluate lessons, chapter/unit assessments, daily routines, and homework assignments. NOTE: Examples of problems in which opportunistic strategies are valuable might include the sum 698 + 240 or the system x + y = 1, 2x + 2y = 3. Examples of generic cases that require efficient algorithms might include the sum 8767+2286 or the system 6y + x = x + 3, – x = 1 + 2y.	**Evidence-** Generic cases are often present. Opportunistic strategies are lacking in student work except during Engage portion of lesson. Engage lessons provide prescribed way to solve problem. Examples: Activity Cards 2B, 2O.	
Do the materials in grades K–6 provide repeated practice toward attainment of fluency Standards? Evaluate lessons, daily routines, and homework assignments for evidence of repeated practice toward attainment of the following K–6 Standards that set an explicit expectation of fluent (accurate and reasonably fast) computation: K.OA.A.5, 1.OA.C.6, 2.OA.B.2, 2.NBT.B.5, 3.OA.C.7, 3.NBT.A.2, 4.NBT.B.4, 5.NBT.B.5, 6.NS.B.2, 6.NS.B.3.	**Evidence-** **N/A**	
Metric AC1C: **The materials are designed so that teachers and students spend sufficient time working with engaging applications, without losing focus on the Major Work of each grade.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Major Work for the grade being evaluated that relate specifically application to use throughout the questions associated with this metric. NOTE: Some examples of clusters or Standards that call for application include: K.OA.A.2, 1.OA.A, 2.OA.A, 3.OA.A.3, 3.OA.D.8, 4.OA.A.3, 4.NF.B.3d, 4.NF.B.4c, 5.NF.B.6, 5.NF.B.7c, 6.RP.A.3, 6.NS.A.1, 6.EE.B.7, 6.EE.C.9, 7.RP.A, 7.NS.A.3, 7.EE.B.3, 8.EE.C.8c, 8.F.B For context, read Criterion #4c in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-**	**Use the questions for Metric 1C to evaluate Metric 1C. Record evidence for each question and rate Metric 1C.** **(Reviewer only.)** **__X__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Are there are single- and multi-step contextual problems, including non-routine problems, that develop the mathematics of the grade, afford opportunities for practice, and engage students in problem solving? Do the problems attend thoroughly to those places in the content Standards where expectations for multi-step and real-world problems are explicit? Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** Rarely (Snack Bar Prices). Most are single step problems. Singe Step: Project Based Learning. "Exponents" Week 6 "Word Problems with Equations"	

Do application problems particularly stress applying the Major Work of the grade? Eva[illegible]essons, chapter/unit assessments, and homework assignments. NOTE: Examples of evaluating this Criterion might include looking at: how well, by the end of grade 2, students using the materials as designed can represent and solve a full range of one-step addition and subtraction word problems; or how well, by the end of grade 3, students using the materials as designed can represent and solve a full range of one-step multiplication and division word problems; or how well these basic situation types for each operation are carried coherently across the grades, (e.g., with fractions and algebraic expressions); or, in all grades, whether the problems connect concepts, Standards, and domains in ways that are natural and important. For a list of situation types for one-step addition, subtraction, multiplication, and division problems, see Situation Types for the Operations in Word Problems	**Evidence-** Application problem[illegible]n the engage sections work towards applying major work. Application problems are primarily in Engage section. Students are rarely asked to work independently through an application problem. Activity Card 3J, 3O	
Does modeling build slowly across K–8, with applications that are relatively simple in earlier grades and when students are encountering new content? In grades 6–8, do the problems begin to provide opportunities for students to make their own assumptions or simplifications in order to model a situation mathematically? Read Standard for Mathematical Practice 4, Model with Mathematics. Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** "Investigating Slope" is a good example of modeling with slope – simple block diagram shows rise/run.	

Alignment Criterion 1: Rigor and Balance

Materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.

AC1 Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 out of 6 points, the Criterion has not been met. Check the final rating.
Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)**

Before moving to Alignment Criterion 2, record the final Meets or Does Not Meet rating in the Evaluation Summary.

(Reviewer only.)

____Meets

__X__Does Not Meet

Strengths/Weaknesses:

Directions for Alignment Criterion 2

Standards for Mathematical Practice

Alignment Criterion 2: Standards for Mathematical Practice **Materials must demonstrate authentic connections between content Standards and practice Standards.** The Standards require that designers of instructional materials connect the mathematical practices to mathematical content in instruction. Thus, materials must demonstrate authentic connections between content Standards and practice Standards.	**Required Materials:** • Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf) • Focus by Grade Level for the grade being evaluated (www.achievethecore.org/focus) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion** Alignment Criterion 2 is rated as Meets or Does Not Meet. To rate Alignment Criterion 2, first rate metrics 2A, 2B, and 2C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). For each metric, guiding questions are provided to aid in gathering evidence. Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 2 if the materials earn 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as mathematical practices, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.
Metric AC2A: **Materials address the practice Standards in such a way as to enrich the Major Work of the grade; practices strengthen the focus on Major Work instead of detracting from it, in both teacher and student materials.** **How to Find the Evidence:** Familiarize yourself with the Major Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate teacher and student materials for evidence that the mathematical practices support and connect to the focus of the grade. NOTE: Examples of evaluating this Criterion might include looking at whether, in grades K–5, students using the materials are supported to look for and express regularity in repeated reasoning about the addition table, the multiplication table, the properties of operations, the relationship between addition and subtraction or multiplication and division, and the place value system; or whether, in grades 6–8, students using the materials are supported to look for and express regularity in repeated reasoning about proportional relationships and linear functions. For context, read Criterion #8 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013).	**Evidence-** Students regularly use mathematical practices throughout program. The only exception we could find is a critique of arguments from MP3. Students are asked to justify but not to critique. MP1 – pg 258, 273 MP4 – pg 207 MP5 – 52, 53	**(Reviewer only.)** **____Meets (2)** **__X__Partially Meets (1)** **____Does Not Meet (0)**

Metric AC2B: **Materials attend to the full meaning of each practice Standard.** **How to Find the Evidence:** For context, read Criterion #7 and Criterion #9 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).		**Use the questions for Metric 2B to evaluate Metric 2B. Record evidence for each question and rate Metric 2B.** **(Reviewer only.)** **__X__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Over the course of any given year of instruction, is each mathematical practice Standard meaningfully present in the form of assignments, activities, or problems that stimulate students to develop the habits of mind described in the practice Standard? Evaluate lessons, chapter/ unit assessments, and homework assignments for evidence of each mathematical practice being meaningfully present in instruction.	**Evidence-** **Each practice is evident throughout each lesson.**	
Do the materials treat the practice Standards as developing across grades or grade bands? Are the practice Standards in early grades appropriately simple? Do they display an arc of growing sophistication across the grades?	**Evidence-** **They are age appropriate.**	
Are there teacher-directed materials that explain the role of the practice Standards in the classroom and in students' mathematical development? Are alignments to practice Standards accurate?	**Evidence-** **Implementation guide helps define where and how the MPs are used.**	
Metric AC2C: **Materials support the Standards' emphasis on mathematical reasoning.** **How to Find the Evidence:** For context, read Criterion #10 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).		**Use the questions for Metric 2C to evaluate Metric 2C. Record evidence for each question and rate Metric 2C.** **(Reviewer only.)** **____Meets (2)** **__X__Partially Meets (1)** **____Does Not Meet (0)**
Do the materials support students in constructing viable arguments and critiquing the arguments of others concerning grade-level mathematics that is detailed in the content Standards? Read Standard for Mathematical Practice 3. Evaluate teacher and student materials to ensure that students are given opportunities to reason with grade-level mathematics.	**Evidence-** **The "reflect" at the end of each lesson allows students to construct argument but not critique one another.** **Project Based Learning – Pg. 31**	
Do the materials support students in producing not only answers and solutions, but also, in a grade-appropriate way, arguments, explanations, diagrams, mathematical models, etc., especially in the Major Work of the grade? Familiarize yourself with the Major Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate teacher and student materials, to understand the types of work students are expected to produce.	**Evidence-** **As an intervention when major works are present students do have opportunities to make arguments and use diagrams.**	

Do materials explicitly attend to the specialized language of mathematics? Is the language of argument, problem solving, and mathematical explanations taught rather than assumed? Evaluate teacher and student materials, paying attention to how mathematical language is taught. NOTE: Examples of evaluating this Criterion might include looking at whether students are supported in: basing arguments on definitions; using the method of providing a counterexample; or recognizing that examples alone do not establish a general statement.	**Evidence-** **Vocabulary cards are used and vocabulary is bolded/identified at the beginning of each lesson.**	
Alignment Criterion 2: **Standards for Mathematical Practice** **Materials must demonstrate authentic connections between content Standards and practice Standards.** **AC2** Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 out of 6 points, the Criterion has not been met. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)** **Intervention program - only covers 53% of major works.** **MP are present but opportunity to critique other arguments is not present.** **Before moving to Alignment Criterion 3, record the final Meets or Does Not Meet rating in the Evaluation Summary.**		**(Reviewer only.)** **____Meets** **__X__Does Not Meet** **Strengths/Weaknesses:**
Alignment Criterion 3: **Access to the Standards for All Students** **Materials must provide supports for English Language Learners and other special populations.** Because Standards are for all students, alignment requires thoughtful support to ensure all students are able to meet the Standards. Thus, aligned materials must provide supports for English Language Learners and other special populations.	**Required Materials:** • Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion:** Alignment Criterion 3 is rated as Meets or Does Not Meet. To rate Alignment Criterion 3, first rate metrics 3A, 3B, and 3C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 3 if the materials earn 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as support for special population, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.

Metric AC3A: **Support for English Language Learners and other special populations is thoughtful and helps those students meet the same Standards as all other students. The language in which problems are posed is carefully considered.** **How to Find the Evidence:** Evaluate teacher and student materials, paying attention to supports offered for special populations.	**Evidence-** ELL support guide present. Spanish resources online. Creating context prompts at the beginning of each lesson.	**Reviewer only.)** **__X__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Metric AC3B: **Materials provide appropriate level and type of scaffolding, differentiation, intervention, and support for a broad range of learners with gradual removal of supports, when needed, to allow students to demonstrate their mathematical understanding independently.** **How to Find the Evidence:** Evaluate teacher and student materials, paying attention to whether materials provide differentiation that will lead all learners to engage with on-grade-level content.	**Evidence-** Progress monitoring and use of Intervention Strategy. "If this... then this" statements- EX: Pg 24	**Reviewer only.)** **__X__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Metric AC3C: **Design of lessons recommends and facilitates a mix of instructional approaches for a variety of learners such as using multiple representations (e.g., including models, using a range of questions, checking for understanding, flexible grouping, pair-share).** **How to Find the Evidence:** Evaluate teacher materials, noting instructional approaches suggested for whole class and differentiated lessons and activities.	**Evidence-** Different games and activities allow for a variety of instructional techniques.	**Reviewer only.)** **__X__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**

Alignment Criterion 3: Access to the Standards for All Students **Materials must provide supports for English Language Learners and other special populations.** **AC3** Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 points, the Criterion has not been met. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion.**(Reviewer only.)** **Move to the Evaluation Summary and record the final Meets or Does Not Meet rating .**	**(Reviewer only.)** **__X__Meets** **____Does Not Meet** **Strengths/Weaknesses:**

Once an evaluation for alignment to the Shifts and major features of the CCSS has been conducted using Sections 1-3, it's important to evaluate for overall quality and best practices. A starting list of Indicators of Quality are suggested below. States, districts and others evaluating instructional materials are encouraged to add to this list to ensure materials reflect local contexts. For background information on some of the Indicators of Quality in this section, refer to pp.18–21 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).

Indicators of Quality	Evidence- Give specific examples.	Rating: (Reviewers only.)
1. Lessons are thoughtfully structured and support the teacher in leading the class through the learning paths at hand, with active participation by all students in their own learning and in the learning of their classmates.	**Evidence-** **Starts with warm-up, then progresses to engage activity, then reflect, then assess. Logical progression.**	**(Reviewer only.)** **____X__ Yes** **_____ No**
2. The underlying design of the materials includes both problems and exercises. (In solving problems, students learn new mathematics, whereas in working exercises, students apply what they have already learned to build mastery.) Each problem or exercise has a purpose. **NOTE: This Criterion does not require that the problems and exercises be labeled as such.**	**Evidence-** **More focus on exercises. Workbook of procedural activities.**	**(Reviewer only.)** **___X___ Yes** **_____ No**

3. Design of assignments is not haphazard: exercises are given in intentional sequences in order to strengthen students' mathematical understanding.	Evidence- Sequence is appropriate and accessible.	(Reviewer only.) ___X___ Yes _____ No
4. There are separate teacher materials that support and reward teacher study including, but not limited to: discussion of the mathematics of the units and the mathematical point of each lesson as it relates to the organizing concepts of the unit, discussion on student ways of thinking and anticipating a variety of students responses, guidance on lesson flow, guidance on questions that prompt students thinking, and discussion of desired mathematical behaviors being elicited among students.	Evidence- Lots of additional materials but the specific reward for teacher study is lacking.	(Reviewer only.) _____ Yes ___X___ No
5. Manipulatives suggested in the materials are faithful representations of the mathematical objects they represent and are connected to written methods.	Evidence- Lots of resources.	(Reviewer only.) ___X___ Yes _____ No
6. Materials include a variety of curriculum-embedded assessments. Examples include pre-, formative, summative, and self-assessment resources.	Evidence- Assessments are traditional at the conclusion of each unit. Pretests and rubrics for student observation.	(Reviewer only.) ___X___ Yes _____ No
7. Assessments contain aligned rubrics, answer keys, and scoring guidelines that provide sufficient guidance for interpreting student performance.	Evidence- Rubric for problem evaluation criteria (Pg 30) and answer keys for assessments are present.	(Reviewer only.) ____X__ Yes _____ No
8. Materials assess student proficiency using methods that are accessible and unbiased, including the use of course-level language in student prompts.	Evidence- Unbiased and accessible.	(Reviewer only.) ___X___ Yes _____ No

9. Materials are carefully evaluated by qualified individuals, whose names are listed, in an effort to ensure freedom from mathematical errors and course-level appropriateness.	**Evidence-** **Yes, McGraw Hill and list is present.**	**(Reviewer only.)** **___X___ Yes** **_____ No**
10. The visual design supports students in engaging thoughtfully with the subject. Navigation through the text is clear.	**Evidence-** **Colorful and hands on interactive activities help students engage.**	**(Reviewer only.)** **___X___ Yes** **_____ No**
11. The materials engage parents in appropriate ways. For example, homework assignments in elementary grades, consist of routine problems, practice with getting answers, and fluency-building exercises that parents can easily support.	**Evidence-** **Letters home to parents.**	**(Reviewer only.)** **___X___ Yes** **_____ No**

Reviewer IMET Evaluation Summary **Title/Level: _Number Worlds J_____**

Publisher: _McGraw-Hill_____ Copyright: _2015_____
ISBN:__Various_____

Reviewer ID # _____ Date Review Completed:____3/8/16__

Non-Negotiable Criteria- Each Non-Negotiable must be met in order for the Non-Negotiable Alignment Criteria to be met overall.

Non-Negotiable 1: Freedom from Obstacles to Focus	Non- Negotiable 2: Focus and Coherence
___X____ Meets _____ Does Not Meet	_____ Meets ___X__ Does Not Meet

Non-Negotiable Overall:

_____ Meets ___X__ Does Not Meet

Alignment Criteria- Each Alignment Criterion must be met with a sufficient number of points in order for Alignment Criteria to be labeled as "Meets" overall. The more points the materials receive on the Alignment Criteria, the better they are aligned.

Alignment Criterion 1: Rigor and Balance	Alignment Criterion 2: Standards of Mathematical Practice	Alignment Criterion 3: Access to Standards for All Learners
Points: ___5__ of 6 possible. (Materials must receive at least 5 of 6 points to align.) ___X____ Meets _____ Does Not Meet	Points: ___4__ of 6 possible. (Materials must receive at least 5 of 6 points to align.) _____ Meets ___X____ Does Not Meet	Points: __6___ of 6 possible. (Materials must receive at least 5 of 6 points to align.) ___X____ Meets _____ Does Not Meet

Alignment Criteria Overall:

_____ Meets __X___ Does Not Meet

If the materials meet both Non-Negotiables and relevant Alignment Criterion, they are aligned to the Shifts and major features of the Core Standards. **the materials meet every Non-Negotiable and Alignment Criterion? _____ Yes ___X__ No**

What are the specific areas of strength and weakness based on this evaluation? Publishers or others modifying or developing assessments can use this information to make improvements and/or to remedy gaps in the alignment of assessment materials.

Strengths: Activity based use of manipulatives. Good teacher resources (Example – ELL.) Very high level of engagement. Variety of instructional techniques.

Weaknesses: We would like to see a stronger focus on; Functions, Radicals, and Congruence and Similarity.

*Computer component is not necessarily needed.

2015-16 Mathematics Interim Review Recommendation & Summary

Publisher Name:	McGraw Hill
Title:	Glenco Math
ISBN #	978-02-1381081
Grade Level(s) or Course:	6th Grade Course 1
Reviewer ID:	JL PW

RECOMMENDED AS:

__✓__ **Core Mathematics Program-** a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials. Substantial evidence clearly supports the designation of this program as Core.

_____ **Other Mathematics Program-** a program that substantially, but partially, meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for supplemental materials. Substantial evidence clearly supports the designation of this program as Other.

_____ **Component Mathematics Program-** a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs. Substantial evidence clearly supports the designation of this program as Component.

_____ **Intervention Program-** a program designed and intended to target and support students' specific needs. Substantial evidence clearly supports the designation of this program as Intervention.

_____ **Does not meet criteria** for recommendation as a Curricular Material or Online Resource for Mathematics.

EVIDENCE SUMMARY:

FOCUS-
Materials reflect content standards for 6th grade with focus on major works and supporting works of the grade. Progression through standards is consistent and well covered. 76% focused on major works.

COHERENCE-
Lessons include coherence through previous, grade level and next activities and lessons across grade levels. Stated in lessons & by chapters.

RIGOR-
Scaffolding and multiple opportunities to develop procedural skills and fluency.

CONCEPTUAL UNDERSTANDING-
Conceptual understanding and fluency supported through guided, independent work and higher order thinking problems & applications.

MATHEMATICAL PRACTICES-
Mathmatical practices are denoted in student math practices handbook, in student text and teachers manual. Numerous opportunities to practice MP standards.

ACCESSIBILITY OF STANDARDS TO ALL STUDENTS-
Levels of complexity for activities and lessons throughout chapters. Leveled instruction and vocab to meet ind. needs. Spanish versions/ELL available.

OTHER: Teachers manual provides alternative strategies.

This is a comprehensive program with many ancillary products. Consumable text needs more work space for student problem-solving.

2015-16 Interim Mathematics Review

Mathematics Evaluation Tool Grades K-8

Publisher: McGraw Hill

Title of Material: GlenCo Math Grade 6

Author: Carter et al

ISBN #: 978-02-1381081 **Copyright** 2015

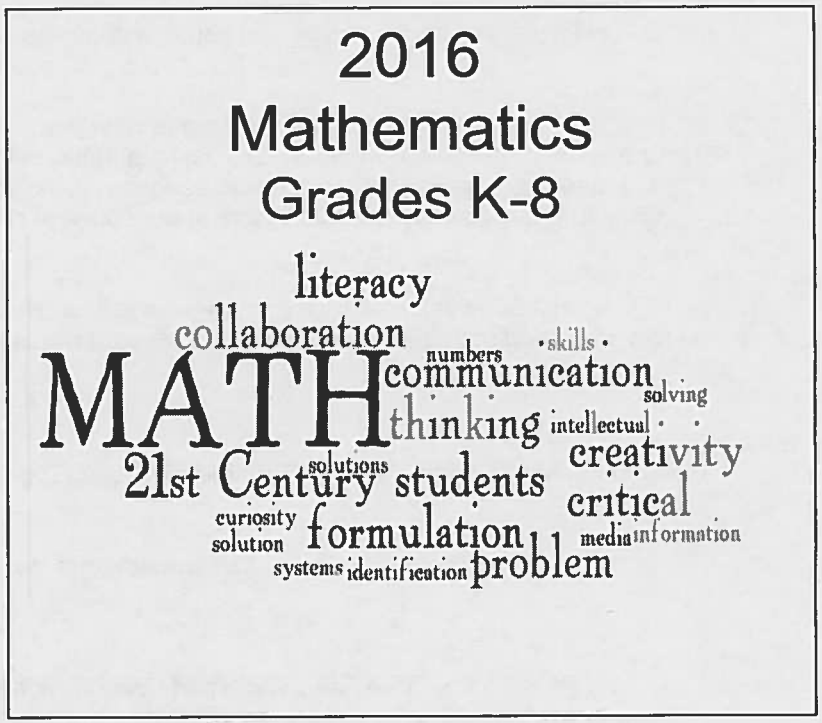
Reviewer ID: JL PW

Core Mathematics Program- a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Core.

Other Mathematics Program- a program that substantially, but partially, meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Other.

Component Mathematics Program- a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs.
Substantial evidence clearly supports the designation of this program as Component.

Intervention Program- a program designed and intended to target and support students' specific needs.
Substantial evidence clearly supports the designation of this program as Intervention.



- Evaluation Form adapted from Instructional Materials Evaluation Toolkit (IMET).

The IMET was developed by Student Achievement Partners. Educators may use or adapt. http://creativecommons.org/licenses/by/3.0/ Download this tool at http://achievethecore.org/IMET

Instructional Materials Evaluation Tool

Mathematics, Grades K-8

What Are the Purposes of the IMET?

This Math IMET is designed to help educators determine whether instructional materials are aligned to the Shifts and major features of the Common Core State Standards (CCSS). The substantial instructional Shifts (http://www.corestandards.org/other-resources/key-shifts-inmathematics/) at the heart of the Common Core State Standards are:

- **Focus** strongly where the Standards focus
- **Coherence**: Think across grades and link to major topics within the grade
- **Rigor**: In major topics, pursue conceptual understanding, procedural skill and fluency, and application with equal intensity.

The IMET draws directly from the following documents:

- Common Core State Standards for Mathematics (www.corestandards.org/Math)
- Publishers' Criteria for the Common Core State Standards in Mathematics grade K-8 (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)

When to use the IMET

1. Purchasing materials: Many factors go into local purchasing decisions. Alignment to the Standards is a critical factor to consider. This tool is designed to evaluate alignment of instructional materials to the Shifts and the major features of the CCSS. It also provides suggestions of additional indicators to consider in the materials evaluation and purchasing process.

2. Evaluating materials currently in use: The IMET can be used to analyze the degree of alignment of existing materials and help to highlight specific, concrete flaws in alignment. Even where materials and tools currently in use fail to meet one or more of these criteria, the pattern of failure is likely to be informative. States and districts can use the evaluation to create a thoughtful plan to modify or combine existing resources in such a way that students' actual learning experiences approach the focus, coherence, and rigor of the Standards.

3. Developing programs: Those developing new programs can use this tool as guidance for creating aligned curricula.
Please note this tool was designed for evaluating comprehensive curricula (including any supplemental or ancillary materials), but it was not designed for the evaluation of standalone supplemental materials.

Who Uses the IMET?

Evaluating instructional materials requires both subject-matter and pedagogical expertise. Evaluators should be well versed in the Standards (www.corestandards.org/Math) for all grades in which materials are being evaluated. This includes understanding the Major Work of the grade (www.achievethecore/focus), the Supporting and Additional work, how the content fits into the progressions in the Standards (www.achievethecore.org/progressions), and the expectations of the Standards with respect to conceptual understanding, procedural skill and fluency, and application. Evaluators also should be familiar with the substantial instructional Shifts (http:// www.corestandards.org/other-resources/key-shifts-in-mathematics/) of Focus, Coherence and Rigor that are listed above.

Getting Started

Prior to Evaluation

Assemble all of the materials necessary for the evaluation. It is essential for evaluators to have materials for all grades covered by the program, as some criteria cannot be rated without having access to each grade. In addition, each evaluator should have a reference copy of the Common Core State Standards for Mathematics (CCSSM) and the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013).

Before conducting the evaluation itself, it is important to develop a protocol for the evaluation process. The protocol should include having evaluators study the Publishers' Criteria and the IMET. It will also be helpful for evaluators to get a sense of each program overall before beginning the process. At a minimum, this would include reading the front matter of the text, looking at the table of contents and paging through multiple chapters.

Sections 1-3 below should be completed to produce a comprehensive picture of the strengths and weaknesses of the materials under evaluation. Information about areas in need of improvement or supplementation should be shared with internal and external stakeholders.

Navigating the Tool

Begin with Section 1: Non-Negotiable Alignment Criteria

- The Non-Negotiable Alignment Criteria must each be met in full for materials to be considered aligned to the Shifts and the major features of the Common Core State Standards. Each Non-Negotiable Alignment Criterion has one or more metrics associated with it; every one of these metrics must be met in order for the criterion as a whole to be met.

- Examine the relevant materials and use evidence to rate the materials against each criterion and its associated metric(s).

- Record and explain the evidence upon which the rating is based.

Continue to Section 2: Alignment Criteria

- The Alignment Criteria must each be met for materials to be considered aligned to the Shifts and the major features of the Common Core State Standards. Each Alignment Criterion has one or more metric associated with it; a specific number of these metrics must be met or partially met in order for the criterion as a whole to be met.

- Examine the materials in relation to these criteria, assigning each metric a point value. Rate the criterion as "Meets" or "Does Note Meet" based on the number of points assigned. The more points the materials receive on the alignment Criteria, the better they are aligned.

- Record and explain the evidence upon which the rating is based.

Proceed to Section 4: Indicators of Quality

- Indicators of Quality are important considerations that will help evaluators better understand the overall quality of instructional materials. These considerations are not criteria for alignment to the CCSS, but they provide valuable information about additional program characteristics. Evaluators may want to add their own indicators to the examples provided.

Directions for Non-Negotiable 1

Freedom from Obstacles to Focus

Criterion	Evidence- Give specific examples.	Rating: (Reviewer only.)
Non-Negotiable 1: **Freedom from Obstacles to Focus** **Materials must reflect the content architecture of the Standards by not assessing the topics named before the grade level where they first appear in the Standards.** The Standards foster students' progress to algebra by focusing strongly on arithmetic. Consistent with this focus, certain topics from outside of arithmetic appear only in later grades. Thus, to be aligned, materials must reflect the content architecture of the Standards by not assessing the topics named before the grade level where they first appear in the Standards. In this criterion, "topics named" means the topics that are explicitly named in Metric 1A. No other topics should be added to the list in Metric 1A. (Note that other topics in the standards are addressed in criterion NN2.)	**Required Materials** • Common Core State Standards for Mathematics (www.corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf) • From the materials being evaluated: teacher guides and all assessment components	**Rating this Criterion:** Non-Negotiable 1 is rated as Meets or Does Not Meet. To rate Non-Negotiable 1, begin by rating Metric 1A. Since Metric 1A is the only metric for Non-Negotiable 1, the rating for Non-Negotiable 1 is the same as the rating for Metric 1A. If Metric 1A is rated as Does Not Meet, include evidence of when the named topic(s) is/are assessed. If the metric is rated as Meets, list the grade(s) examined in the evaluation.

Metric NN1A: **Materials re[illegible] the basic architecture of the Standards by not assessing the listed topics before the grade level indicated.** • Probability, including chance, likely outcomes, probability models. (Introduced in the CCSSM in grade 7) • Statistical distributions, including center, variation, clumping, outliers, mean, median, mode, range, quartiles; and statistical association or trends, including two-way tables, bivariate measurement data, scatter plots, trend line, line of best fit, correlation. (Introduced in the CCSSM in grade 6) • Similarity, congruence, or geometric transformations. (Introduced in the CCSSM in grade 8) • Symmetry of shapes, including line/ reflection symmetry, rotational symmetry. (Introduced in the CCSSM in grade 4) **How to Find the Evidence:** Evaluate the table of contents, all chapter tests, all unit tests, and other such assessment components (including rubrics). For context, read Criterion #2 from the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013). NOTE: Grade alignments of other topics are addressed in Non-Negotiable 2, Focus and Coherence.) In this criterion, "topics named" means the topics that are explicitly named in Metric 1A. No other topics should be added to the list in Metric 1A. (Note that other topics in the standards are addressed in criterion NN2.)	**Evidence-** **Units organized by [illegible]S Domain and target 6th grade standards.** - **Unit 12 (pg. 799-926) Include statistics, introducing statistical distributions but NOT Probability** - **Adheres to CCSSM for grade 6** - **Geometry Topics (Chapters 9 & 10) include on topics for 6th grade standards** - **No other topics are addressed in tests, quizzes, and chapters that are outside of topics for 6th grade CCSSM** - **Standards that are assessed are shown in the teacher's edition on pages vi-xvii** Geometry chapters focus on area of figures	**(Reviewer only.)** **_x___Meets** **____Does Not Meet**

Non-Negotiable 1: Materials must reflect the content architecture of the Standards by not assessing the topics named* before the grade level where they first appear in the Standards. **NN 1** If Metric 1A was rated as Meets, then rate Non-Negotiable 1 as Meets. If Metric 1A was rated as Does Not Meet, then rate Non- Negotiable 1 as Does Not Meet. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion.**(Reviewer only.)** **Before moving to Non-Negotiable 2, record the final Meets or Does Not Meet rating in the Evaluation Summary.**	**(Reviewer only.)** **_x___Meets** **____Does Not Meet** **Strengths/Weaknesses:** **Each chapter includes stated standards that adhere to 6th Grade CCSSM. Each standard and topics are identified at the beginning of the unit. Standards assessed in each chapter are shown in the teacher's edition**

Directions for Non-Negotiable 2

Focus and Coherence

Non-Negotiable 2: **Focus and Coherence** **Materials must focus coherently on the Major Work of the grade in a way that is consistent with the progressions in the Standards.** Focus and coherence are the two major evidence-based design principles of the Common Core State Standards for Mathematics (CCSSM, p. 3). Focus is necessary in order to fulfill the ambitious promise the states have made to their students by adopting the Standards: greater achievement at the college and career ready level; greater depth of understanding of mathematics; and a rich classroom environment in which reasoning, sense-making, applications, and a range of mathematical practices flourish. In simpler terms, a mile-wide, inch-deep curriculum translates to less time per topic. Less time means less depth and moving on without many students. Thus, materials must focus coherently on the Major Work of the grade in a way that is consistent with the progressions in the Standards.	**Required Materials** • Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf) • Focus by Grade Level for the grade being evaluated (www.achievethecore.org/focus) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion:** Non-Negotiable 2 is rated as Meets or Does Not Meet. To rate Non-Negotiable 2, first rate metrics 2A–2H. Each of these eight metrics must be rated as Meets in order for Non-Negotiable 2 to be rated as Meets. Rate each metric 2A-2H as Meets or Does Not Meet/Insufficient Evidence. If the evidence examined shows that the Criterion is met, then mark the Criterion Meets. If the evidence examined shows that the Criterion is not met—or if there is insufficient evidence to make a determination—then mark the Criterion as Does Not Meet/Insufficient Evidence. Support all ratings with evidence.
Metric NN2A: **In each grade K–8, students and teachers using the materials as designed devote the large majority of time to the Major Work of the grade.** **How to Find the Evidence:** Familiarize yourself with the Major Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, lessons, homework assignments, and assessments. (Evaluate both student and teacher materials.) Consider time spent on the Major Work of the grade and judge qualitatively whether students and teachers using the materials as designed will devote the large majority of time to the Major Work of the grade. For context, read Criterion #1 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013)	**Evidence-** **The Major Works of 6th grade are apparent in Glenco Math (Grade 6). Each chapter in the book is focused on the 6th grade major works.** - **Pg. T26-T31 show all of the 6th grade standards and what lessons and pages those standards are met.** - **TOC on pg. iii have the units divided up by 6th grade standard and actually state the standard on the unit page** - **Introduction to each unit outlines adherence to 6th grade standard by standard number and topic** lessons + standards in TM 2 chapters for each major work	**(Reviewer only.)** **_x___Meets** **____Does Not Meet/ Insufficient Evidence**

Metric NN2B: **Supporting Work, where present, enhances focus and coherence simultaneously by also engaging students in the Major Work of the grade.** **How to Find the Evidence:** Familiarize yourself with the Major Work and Supporting Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate chapters and lessons that focus on Supporting Work. NOTE: Example of evaluating this Criterion might include looking at whether materials for K–5 generally treat data displays as an occasion for solving grade-level word problems using the four operations (e.g., see 3.MD.B.3); or whether materials for grade 7 take advantage of opportunities to use probability to support ratios, proportions, and percentages. For context, read Criterion #3 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** **Supporting work is focused on extending the knowledge of the major works of the grade level.** - **Supporting work is found at the end of chapters and in problem solving activities.** -utilizing variable equations to geometric supporting	(Reviewer only.) **_x___Meets** **____Does Not Meet/** **Insufficient Evidence**
Metric NN2C: **Materials base content progressions on the grade-by-grade progressions in the Standards. Content from previous or future grades does not unduly interfere with or displace on-grade-level content.** **How to Find the Evidence:** Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, and lessons in both student and teacher materials. NOTE: In some cases it may be possible that aligned materials might address some aspects of a topic in a strategic way before or after the grade level in which the topic is central in the Standards' progressions; for example, a curriculum author might purposefully choose to explore adding fractions with unlike denominators in a way appropriate to grade four, recognizing that this work is not really required until the next grade. However, any such purposeful discrepancies in content progressions should enhance the required learning in each grade; not unduly interfere with or displace grade-level content; and be clearly aimed at helping students meet the Standards as written rather than effectively rewriting the progressions in the Standards. And in all cases, note that Non-Negotiable 1 must be met for materials to be aligned. For context, read Criterion #5a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** The text is focused on 6th Grade CCSM. - Each chapter is tied to a grade level standard - Pg. xix – shows ccss that are met in each chapter and allow tracking of ccss progress for grade 6 only - Review of previous grade level skills does not interfere with grade level content - Lessons are launched with 6th grade standards (example pg. 19) - - lessons are launched directly with comparing ratios, a 6th grade standard (not reflecting on other grade level learning) - No scope + sequence reference for all grade level	(Reviewer only.) **_x___Meets** **____Does Not Meet/** **Insufficient Evidence**

Metric NN2D **Materials g... all students extensive work with on-grade-level problems.** **How to Find the Evidence:** Evaluate both student and teacher materials. If the materials provide resources for differentiated learning, consider whether lower-performing students have opportunities to engage with grade-level problems. Also consider whether higher-performing students are given opportunities to learn current grade-level content in greater depth. For context, read Criterion #5b in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Students are given opportunities for on grade-level work in the following ways: -inquiry hands on activities -investigations -analyze and reflect -create -guided practice -independent practice -Higher Order Thinking Problems -Extra practices -Common Core Test Practice -Common Core Spiral Review (These are just a list of on grade level practices for on lesson in Expressions & Equations pg. 429 – 440) 8-guided prac. 12 algorithm 4 word 5 HOT prob.	(Reviewer only.) __x__Meets ____Does Not Meet/ Insufficient Evidence
Metric NN2E: **Materials relate on-grade-level concepts explicitly to prior knowledge from earlier grades.** **How to Find the Evidence:** Evaluate both student and teacher materials. NOTE: Examples of evaluating this Criterion might include looking at the way the materials extend basic ideas of place value across the decimal point; or the role that properties of operations play when the materials extend arithmetic beyond whole numbers to fractions, variables, and expressions. More generally, cluster headings in the Standards sometimes signal key moments where reorganizing and extending previous knowledge is important in order to accommodate new knowledge (e.g., see cluster headings that use the phrase "Apply and extend previous understanding"). For context, read Criterion #5c in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Prior knowledge is related at the beginning of each lesson. - Pg. 428 – quick review of ccss 4 nbt.5 and 5nf.1 to review prior knowledge of factors, LCDs and powers, adding and subtracting of fractions - Quick checks are also presented to check student knowledge of earlier grades CCSSM Previous – Now – Next "Are You Ready?"	(Reviewer only.) __x__Meets ____Does Not Meet/ Insufficient Evidence

Metric NN2F: **Review of material from previous grades is clearly identified as such to the teacher, and teacher and students can see what their specific responsibility is for the current year.** **How to Find the Evidence:** Evaluate the table of contents, but do not stop there; also evaluate units, chapters, lessons, homework assignments and assessments. (Evaluate both student and teacher materials.) Identify any content from previous grades and check whether it is identified as such. For context, read Criterion #5a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Teacher's manual shows review material that is clearly labeled by CCSS Review - Example – pg. 176 of TM - Quick check states standards being reviewed - Students also see review standards that are clearly labeled and practiced in quick check - - list of CCSS responsibilities for grade level are shown in lessons and in Tables of Contents, as well as on student checklists (pg. xix – xxii)	(Reviewer only.) __X__Meets ____Does Not Meet/ Insufficient Evidence
Metric NN2G: **Materials include learning objectives that are visibly shaped by CCSSM cluster headings.** **How to Find the Evidence:** Select several clusters from the Major Work in the grade being evaluated. Evaluate teacher and student materials in relation to these clusters. For context, read Criterion #6a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** **Learning objectives are clearly stated for each lesson . Next to each lesson objective is the CCSS in number form.** - **Objectives are shaped by CCSS cluster titles** - **Cluster titles w/ objectives are in the TM table of contents** - **Chapters are named by CCSS cluster titles**	(Reviewer only.) __x__Meets ____Does Not Meet/ Insufficient Evidence
Metric NN2H: **Materials include problems and activities that serve to connect two or more clusters in a domain, or two or more domains in a grade, in cases where these connections are natural and important.** **How to Find the Evidence:** In the grade being evaluated, choose two or more clusters or two or more domains for which connections are natural and important. Evaluate the units, chapters, and lessons that deal with the chosen topics, looking for problems and activities that serve to connect the chosen clusters or domains. NOTE: An example of evaluating this Criterion might include looking at whether problems in grade 4 sometimes or often involve students applying their developing computation skills (detailed in domain NBT) in the context of solving word problems (detailed in domain OA). For context, read Criterion #6b in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** **-Clusters are connected through real world links** **- Clusters are connected through inquiry labs at the beginning of units** - Relates problem-solving from equations to ratios & quantitative relationships	(Reviewer only.) _x___Meets ____Does Not Meet/ Insufficient Evidence

Non-Negotiable 2:

Focus and Coherence

Materials must focus coherently on the Major Work of the grade in a way that is consistent with the progressions in the Standards.

NN 2 If all Metrics 2A – 2H were rated as Meets, then rate Non-Negotiable 2 as Meets. If one or more Metric was rated Does Not Meet/Insufficient Evidence, then rate Non-Negotiable 2 as Does Not Meet. Check the final rating.
Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)**

Before moving to Alignment Criterion 1, record the final Meets or Does Not Meet rating in the Evaluation Summary.

(Reviewer only.)

__x__Meets

____Does Not Meet

Strengths/Weaknesses:

Standards are clearly present in lessons. for students & teachers

Now continue by evaluating the Alignment Criterion 1 for Rigor and Balance.

Directions for Alignment Criterion 1

Rigor and Balance

Alignment Criterion 1: Rigor and Balance

Materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.

The Standards set expectations for attention to all three aspects of rigor: conceptual understanding, procedural skill and fluency, and applications. Thus, materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.

Required Materials

- Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf)
- Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)
- Focus by Grade Level for the grade being evaluated (achievethecore.org/focus)
- Situation Types for the Operations in Word Problems (achievethecore.org/situation-types)
- From the materials being evaluated: teacher guides, student texts and workbooks

Rating this Criterion:

Alignment Criterion 1 is rated as Meets or Does Not Meet.

To rate Alignment Criterion 1, first rate metrics 1A, 1B, and 1C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). For each metric, guiding questions are provided to aid in gathering evidence.
Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 1 if the materials rate 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as rigor and balance, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.

Metric AC1A: **The materials support the development of students' conceptual understanding of key mathematical concepts, especially where called for in specific content Standards or cluster headings.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Major Work for the grade being evaluated that relate specifically conceptual understanding to use throughout the questions associated with this metric. NOTE: Some examples of clusters or Standards that call for conceptual understanding include: K.OA.A.1, (1.NBT.B, 1.NBT.C), (2.NBT.A, 2.NBT.B), (3.OA.A.1, 3.OA.A.2), 4.NF.A, (4.NBT.A, 4.NBT.B), 5.NF.B, (5.NBT.A, 5.NBT.B), 6.RP.A, 6.EE.A.3, 7.NS.A, 7.EE.A, 8.EE.B, 8.F.A, 8.G.A Clusters or Standards grouped by parentheses are closely connected and could be analyzed together. For context, read Criterion #4a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	-Choose a cluster/Standard from the Major Work that is aligned to each aspect of rigor and use to evaluate these metrics. It is most helpful if the same clusters/Standards are chosen for all of the programs being evaluated. (Guidance in choosing clusters/Standards is included in "How to Find the Evidence".)	-
Is conceptual understanding attended to thoroughly where the Standards set explicit expectations for understanding or interpreting? Evaluate lessons, chapter/unit assessments and homework assignments, paying attention to work aligned to Standards that explicitly call for understanding or interpreting. NOTE: Examples of evaluating this Criterion might include looking at how well the multi-digit addition and subtraction algorithms are developed and explained on the basis of place value and properties of operations; or how well the multi-digit multiplication and division algorithms are developed and explained on the basis of place value and properties of operations; or how well solving equations is presented and explained as a process of reasoning.	**Evidence-** Conceptual understanding is evident in the Ratios/Proportions unit in the following ways: -making models to show understanding -picture problems - application using charts/graphs -inquiry labs -investigations -analysis & reflection Each lesson begins w/ inquiry	
Do the materials feature high-quality conceptual problems and conceptual discussion questions? Evaluate lessons, chapter/unit assessments, and homework assignments. NOTE: Example of conceptual problems might include such questions as "Find a number greater than 1/5 and less than 1/4," or "If the divisor does not change and the dividend increases, what happens to the quotient?"	**Evidence-** Highly conceptual problems/discussion is modeled in units and tests - TM pg. 84 questioning strategies (Answering essential questions) - Career projects - Performance tasks Find error Justify Conclusion	

Do the materials feature opportunities to identify correspondences across mathematical representations? Evaluate lessons, chapter/unit assessments and homework assignments. NOTE: Examples of evaluating this Criterion might include looking at whether students are supported in identifying correspondences among: the verbal description of a situation, the diagrams that distill its mathematical features, and the equations that model it; or equivalent forms of numbers (e.g., 3 and 6/2) and the number line; or rational number operations and representations of them via models such as the vector model; or the expression that defines a function and the graph that shows the relationship.	**Evidence-** Multiple Mathematical representations - Key concept check pg. 82 - Inquiry Lab pg. 735 (models of volume) - Guided practice pg. 190 shows example of multiplying decimals, using equations and using estimation Bar models to visualize written expressions w/ variable ⇒ equations	
Metric AC1B: **The materials are designed so that students attain the fluencies and procedural skills required by the Standards.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Major Work for the grade being evaluated that relate specifically to fluency and procedural skill to use throughout the questions associated with this metric. NOTE: Some examples of Standards that call for procedural skill and fluency include: K.OA.A.5, 1.OA.C.6, 2.OA.B.2, 2.NBT.B.5, 3.OA.C.7, 3.NBT.A.2, 4.NBT.B.4, 5.NBT.B.5, 6.NS.B.2, and 6.NS.B.3, 6.EE.A, 7.NS.A, 7.EE.A.1,7.EE.B.4a, 8.EE.C.7, 8.EE.C.8b For context, read Criterion #4b in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).		**Use the questions for Metric 1B to evaluate Metric 1 B. Record evidence for each question and rate Metric 1B.** **(Reviewer only.)** **__x__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Is progress toward fluency and procedural skill interwoven with students' developing conceptual understanding of the operations in question? Evaluate lessons, chapter/unit assessments, daily routines, and homework assignments for evidence that the development of fluency and procedural skill is supported by conceptual understanding.	**Evidence-** Development of fluency is supported by conceptual understanding - Use of guided, independent and extra practice in each lesson - Use of word problems to show conceptual understanding - Patterning → algorithm	
Are purely procedural problems and exercises present that include cases in which opportunistic strategies are valuable and generic cases that require efficient algorithms present? Evaluate lessons, chapter/unit assessments, daily routines, and homework assignments. NOTE: Examples of problems in which opportunistic strategies are valuable might include the sum 698 + 240 or the system x + y = 1, 2x + 2y = 3. Examples of generic cases that require efficient algorithms might include the sum 8767+2286 or the system 6y + x = x + 3, – x = 1 + 2y.	**Evidence-** Procedural problems w/ algorithms shown on pgs: -326-327 and throughout lessons - unit tests include algorithms to solve Practice w/ ratio tables to solve real world problems	

Do the materials in grades K–6 provide repeated practice toward attainment of fluency standards? Evaluate lessons, daily routines, and homework assignments for evidence of repeated practice toward attainment of the following K–6 Standards that set an explicit expectation of fluent (accurate and reasonably fast) computation: K.OA.A.5, 1.OA.C.6, 2.OA.B.2, 2.NBT.B.5, 3.OA.C.7, 3.NBT.A.2, 4.NBT.B.4, 5.NBT.B.5, 6.NS.B.2, 6.NS.B.3.	**Evidence-** **Fluency attainment is apparent** - **Daily independent practice** - ***Extra practice (pg. 331)** - **ALEKs homework/extra practice targets lack of fluency and provides additional practice** Guided practice	
Metric AC1C: **The materials are designed so that teachers and students spend sufficient time working with engaging applications, without losing focus on the Major Work of each grade.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Major Work for the grade being evaluated that relate specifically application to use throughout the questions associated with this metric. NOTE: Some examples of clusters or Standards that call for application include: K.OA.A.2, 1.OA.A, 2.OA.A, 3.OA.A.3, 3.OA.D.8, 4.OA.A.3, 4.NF.B.3d, 4.NF.B.4c, 5.NF.B.6, 5.NF.B.7c, 6.RP.A.3, 6.NS.A.1, 6.EE.B.7, 6.EE.C.9, 7.RP.A, 7.NS.A.3, 7.EE.B.3, 8.EE.C.8c, 8.F.B For context, read Criterion #4c in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Each unit is designed and centered around major clusters with engaging application in the Major work - Each unit includes multiple lessons on the major work - Units include hands-on activities, investigations, alternate strategies, analyzing, reflecting, creating, and modeling Pg. 18 Variety of practice/opportunities	**Use the questions for Metric 1C to evaluate Metric 1C. Record evidence for each question and rate Metric 1C.** **(Reviewer only.)** **__x__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Are there are single- and multi-step contextual problems, including non-routine problems, that develop the mathematics of the grade, afford opportunities for practice, and engage students in problem solving? Do the problems attend thoroughly to those places in the content Standards where expectations for multi-step and real-world problems are explicit? Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** Authentic problem solving practiced in unit projects (pg. career projects, pg. 163, 79, 247 performance task pg. 251, 337 Create your own problem to show understanding	
Do application problems particularly stress applying the Major Work of the grade? Evaluate lessons, chapter/unit assessments, and homework assignments. NOTE: Examples of evaluating this Criterion might include looking at: how well, by the end of grade 2, students using the materials as designed can represent and solve a full range of one-step addition and subtraction word problems; or how well, by the end of grade 3, students using the materials as designed can represent and solve a full range of one-step multiplication and division word problems; or how well these basic situation types for each operation are carried coherently across the grades, (e.g., with fractions and algebraic expressions); or, in all grades, whether the problems connect concepts, Standards, and domains in ways that are natural and important. For a list of situation types for one-step addition, subtraction, multiplication, and division problems, see Situation Types for the Operations in Word Problems	**Evidence-** Problem solving investigations – pg. 125-126 - Application of Major work is apparent throughout - Major works spiraled throughout	

Does modeling build slowly across K–8, with applications that are relatively simple in earlier grades and when students are encountering new content? In grades 6–8, do the problems begin to provide opportunities for students to make their own assumptions or simplifications in order to model a situation mathematically? Read Standard for Mathematical Practice 4, Model with Mathematics. Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** Guided and independent practice allow students to model problem solving - Investigations (pg. 431 of ST) - HOT problems in lessons have "Model With Mathematics" questions (pg. 438) - Hands on activities and inquiry Labs (pg. 457) Begin w/ partners Analysis/Create Response	

Alignment Criterion 1: Rigor and Balance

Materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.

AC1 Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 out of 6 points, the Criterion has not been met. Check the final rating.
Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)**

Before moving to Alignment Criterion 2, record the final Meets or Does Not Meet rating in the Evaluation Summary.

(Reviewer only.)

X **Meets**

____ **Does Not Meet**

Strengths/Weaknesses:

Directions for Alignment Criterion 2

Standards for Mathematical Practice

Alignment Criterion 2: Standards for Mathematical Practice

Materials must demonstrate authentic connections between content Standards and practice Standards.

The Standards require that designers of instructional materials connect the mathematical practices to mathematical content in instruction. Thus, materials must demonstrate authentic connections between content Standards and practice Standards.

Required Materials:

- Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf)
- Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)
- Focus by Grade Level for the grade being evaluated (www.achievethecore.org/focus)
- From the materials being evaluated: teacher guides, student texts and workbooks

Rating this Criterion

Alignment Criterion 2 is rated as Meets or Does Not Meet.

To rate Alignment Criterion 2, first rate metrics 2A, 2B, and 2C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). For each metric, guiding questions are provided to aid in gathering evidence.

Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 2 if the materials earn 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as mathematical practices, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.

Metric AC2A: **Materials address the practice Standards in such a way as to enrich the Major Work of the grade; practices strengthen the focus on Major Work instead of detracting from it, in both teacher and student materials.** **How to Find the Evidence:** Familiarize yourself with the Major Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate teacher and student materials for evidence that the mathematical practices support and connect to the focus of the grade. NOTE: Examples of evaluating this Criterion might include looking at whether, in grades K–5, students using the materials are supported to look for and express regularity in repeated reasoning about the addition table, the multiplication table, the properties of operations, the relationship between addition and subtraction or multiplication and division, and the place value system; or whether, in grades 6–8, students using the materials are supported to look for and express regularity in repeated reasoning about proportional relationships and linear functions. For context, read Criterion #8 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013).	**Evidence-** Practices strengthen focus of Major Works -power up CCSS practice tests - Common Core spiral review (pg. 54) MP (Math Practice denoted throughout teacher manual) pg. 55 – cabin fever - Math practice handbook - CCSS tracking progress (pg. xix) - TG lists specific problems, That meet/target mathematical practice standards	(Reviewer only.) __x__Meets (2) ____Partially Meets (1) ____Does Not Meet (0)
Metric AC2B: **Materials attend to the full meaning of each practice Standard.** **How to Find the Evidence:** For context, read Criterion #7 and Criterion #9 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).		**Use the questions for Metric 2B to evaluate Metric 2B. Record evidence for each question and rate Metric 2B.** (Reviewer only.) __X__Meets (2) ____Partially Meets (1) ____Does Not Meet (0)
Over the course of any given year of instruction, is each mathematical practice Standard meaningfully present in the form of assignments, activities, or problems that stimulate students to develop the habits of mind described in the practice Standard? Evaluate lessons, chapter/ unit assessments, and homework assignments for evidence of each mathematical practice being meaningfully present in instruction.	**Evidence-** **Math practices handbook is part of Student text and teacher manual (pg. MP1-MP 20)** **"MP" listed in TM where practices are reviewed/taught** **Pg. 70 (analyze and reflect), 231 (launch the lesson)** **Correlations chart pg. T23 – T25)** Real world/Persevere w/ problems	
Do the materials treat the practice Standards as developing across grades or grade bands? Are the practice Standards in early grades appropriately simple? Do they display an arc of growing sophistication across the grades?	**Evidence-** **Levels of complexity are in each lesson with denotations of Levels 1 -3 (example pg. 17 Collaborate)**	

Are these teacher-directed materials that explain the role of the practice Standards in the classroom and in students' mathematical development? Are alignments to practice Standards accurate?	**Evidence-** **-inquiry labs** **-performance tasks** **- Higher order thinking questions** MP Correlations throughout	
Metric AC2C: **Materials support the Standards' emphasis on mathematical reasoning.** **How to Find the Evidence:** For context, read Criterion #10 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).		**Use the questions for Metric 2C to evaluate Metric 2C. Record evidence for each question and rate Metric 2C.** **(Reviewer only.)** **__x__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Do the materials support students in constructing viable arguments and critiquing the arguments of others concerning grade-level mathematics that is detailed in the content Standards? Read Standard for Mathematical Practice 3. Evaluate teacher and student materials to ensure that students are given opportunities to reason with grade-level mathematics.	**Evidence-** **Reasoning skills are seen throughout** **- Questioning strategies (pg. 706)** **- Investigations** **- Pairs discussions (pg. 714)** **- Heads together (pg. 758)**	
Do the materials support students in producing not only answers and solutions, but also, in a grade-appropriate way, arguments, explanations, diagrams, mathematical models, etc., especially in the Major Work of the grade? Familiarize yourself with the Major Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate teacher and student materials, to understand the types of work students are expected to produce.	**Evidence-** **Performance tasks** **Career investigations** **Hands on activities** **Inquiry labs** **Formative assessments** Find Error Reason Inductively Draw multiple representations	
Do materials explicitly attend to the specialized language of mathematics? Is the language of argument, problem solving, and mathematical explanations taught rather than assumed? Evaluate teacher and student materials, paying attention to how mathematical language is taught. NOTE: Examples of evaluating this Criterion might include looking at whether students are supported in: basing arguments on definitions; using the method of providing a counterexample; or recognizing that examples alone do not establish a general statement.	**Evidence-** **Each chapter/unit has a vocabulary activity, review, and what you know that is built on mathematical language (pg. 802-803) This language is used throughout** **- Vocabulary is highlighted thoughout** **- Questioning uses mathematical language (pg. 805)** **- TM questioning strategies/script uses mathematical language**	

Alignment Criterion 2:
Standards for Mathematical Practice

Materials must demonstrate authentic connections between content Standards and practice Standards.

AC2 Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 out of 6 points, the Criterion has not been met. Check the final rating.
Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion.
(Reviewer only.)

Before moving to Alignment Criterion 3, record the final Meets or Does Not Meet rating in the Evaluation Summary.

(Reviewer only.)

X Meets

____Does Not Meet

Strengths/Weaknesses:

Alignment Criterion 3:
Access to the Standards for All Students

Materials must provide supports for English Language Learners and other special populations.

Because Standards are for all students, alignment requires thoughtful support to ensure all students are able to meet the Standards. Thus, aligned materials must provide supports for English Language Learners and other special populations.

Required Materials:

- Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf)
- Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)
- From the materials being evaluated: teacher guides, student texts and workbooks

Rating this Criterion:
Alignment Criterion 3 is rated as Meets or Does Not Meet.

To rate Alignment Criterion 3, first rate metrics 3A, 3B, and 3C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points).

Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 3 if the materials earn 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as support for special population, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.

Metric AC3A:
Support for English Language Learners and other special populations is thoughtful and helps those students meet the same Standards as all other students. The language in which problems are posed is carefully considered.

How to Find the Evidence:
Evaluate teacher and student materials, paying attention to supports offered for special populations.

Evidence-

Student edition available in Spanish
Leveled instruction
Vocabulary review
Interactive guide for ELL available
Glossary has vocabulary in English and Spanish
EL in teacher's manual shows alternate strategies for teaching ELL concepts (pg. 783)
Word problems not lengthy

Reviewer only.)

__x__Meets (2)

____Partially Meets (1)

____Does Not Meet (0)

Metric AC3B: **Materials provide appropriate level and type of scaffolding, differentiation, intervention, and support for a broad range of learners with gradual removal of supports, when needed, to allow students to demonstrate their mathematical understanding independently.** **How to Find the Evidence:** Evaluate teacher and student materials, paying attention to whether materials provide differentiation that will lead all learners to engage with on-grade-level content.	**Evidence-** This is a strength of this program - Scaffolding – "previous, now, next" in each lesson(ie. Pg. 535) - Levels of complexity (pg. 539) in each lesson - Guided practice & independent practice - Differentiation for hw options Alternative Strategies in each lesson	**Reviewer only.)** **__x__Meets (2)** **_ ___Partially Meets (1)** **___Does Not Meet (0)**
Metric AC3C: **Design of lessons recommends and facilitates a mix of instructional approaches for a variety of learners such as using multiple representations (e.g., including models, using a range of questions, checking for understanding, flexible grouping, pair-share).** **How to Find the Evidence:** Evaluate teacher materials, noting instructional approaches suggested for whole class and differentiated lessons and activities.	**Evidence-** Multiple approaches are used in "HOT Problems", and in guided and extra practice (ie. Pg. 540) Common errors noted on problems in teacher's manual (check for understanding) - Alternate strategies - Think pair share (pg. 546) - Exit tickets for lessons	**Reviewer only.)** **__x__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Alignment Criterion 3: **Access to the Standards for All Students** **Materials must provide supports for English Language Learners and other special populations.** **AC3** Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 points, the Criterion has not been met. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion.**(Reviewer only.)** **Move to the Evaluation Summary and record the final Meets or Does Not Meet rating .**		**(Reviewer only.)** **___x_Meets** **____Does Not Meet** **Strengths/Weaknesses:**

Once an evaluation for alignment to the Shifts and major features of the CCSS has been conducted using Sections 1-3, it's important to evaluate for overall quality and best practices. A starting list of Indicators of Quality are suggested below. States, districts and others evaluating instructional materials are encouraged to add to this list to ensure materials reflect local contexts. For background information on some of the Indicators of Quality in this section, refer to pp.18–21 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).

Indicators of quality	Evidence- Give specific examples.	Rating: (Reviewers only.)
1. Lessons are thoughtfully structured and support the teacher in leading the class through the learning paths at hand, with active participation by all students in their own learning and in the learning of their classmates.	Evidence- Learning path is evident through the following steps in EACH lesson: formative assessments Launch the lesson Teach the concept (with examples in varying forms) Guided practice Practice and apply Extra practice Additional activities (inquiry lab, hands on activities,collaboration and investigations) Lesson 551-561) teacher support	(Reviewer only.) ____x__ Yes _____ No
2. The underlying design of the materials includes both problems and exercises. (In solving problems, students learn new mathematics, whereas in working exercises, students apply what they have already learned to build mastery.) Each problem or exercise has a purpose. NOTE: This Criterion does not require that the problems and exercises be labeled as such.	Evidence- Design is consistently using practice problems and exercises. Problems are apparent in practice examples (guided and independent practice) and in student assignments. Exercises shown pg. 557 Problem examples pg. 556 #16	(Reviewer only.) ____x__ Yes _____ No
3. Design of assignments is not haphazard: exercises are given in intentional sequences in order to strengthen students' mathematical understanding.	Evidence- Problems go from guided practice to independent practice to extra practice & enrichment Examples → rules → practice → extension	(Reviewer only.) ____x__ Yes _____ No
4. There are separate teacher materials that support and reward teacher study including, but not limited to: discussion of the mathematics of the units and the mathematical point of each lesson as it relates to the organizing concepts of the unit, discussion on student ways of thinking and anticipating a variety of students responses, guidance on lesson flow, guidance on questions that prompt students thinking, and discussion of desired mathematical behaviors being elicited among students.	Evidence- Online feature at connected provides teacher with supplemental study material. Textbook also includes instructions for teachers to track progress, (pg. 574) Strategies for students – pg. 809 Analyze and reflect – pg. 808 + Launch + Differentiate etc.	(Reviewer only.) ____x__ Yes _____ No

5. Manipulatives suggested in the materials are faithful representations of the mathematical objects they represent and are connected to written methods.	Evidence- Foldables at the end of the book (FL1 –FL16) Problem solving investigations- each lesson 21st Century Careers – each unit Hands on activities each lesson Real world representations	(Reviewer only.) ____x__ Yes _____ No
6. Materials include a variety of curriculum-embedded assessments. Examples include pre-, formative, summative, and self-assessment resources.	Evidence- Every unit has a - common core practice test -common core spiral review -unit assessments - exit tickets	(Reviewer only.) ___x___ Yes _____ No
7. Assessments contain aligned rubrics, answer keys, and scoring guidelines that provide sufficient guidance for interpreting student performance.	Evidence- Common core test practice has scoring rubric Example pg. 898 -answers to all problems are on each page in the teacher's manual and at the end of the TM "Got it?" questions	(Reviewer only.) __x____ Yes _____ No
8. Materials assess student proficiency using methods that are accessible and unbiased, including the use of course-level language in student prompts.	Evidence- Each chapter has pretests, vocab reviews, and lessons have levels of complexity complete with the number of problem on each level Language is consistent throughout Benchmark tests > Rubrics Performance tasks	(Reviewer only.) ____x__ Yes _____ No
9. Materials are carefully evaluated by qualified individuals, whose names are listed, in an effort to ensure freedom from mathematical errors and course-level appropriateness.	Evidence- T-18 – T21 Authors/Writers are in the field of education and highly qualified to in the area of math	(Reviewer only.) ___x___ Yes _____ No
10. The visual design supports students in engaging thoughtfully with the subject. Navigation through the text is clear.	Evidence- Easy navigation from topic to topic - Each topic builds on each other Age appropriate graphics -need more room to work out problems in Student Consumable	(Reviewer only.) __x____ Yes _____ No

11. The materials engage parents in appropriate ways. For exa[illegible], homework assignments in elementary gra[illegible]s, consist of routine problems, practice with getting answers, and fluency-building exercises that parents can easily support.	**Evidence-** **Multiple models are p[illegible]ided with samples that help parents help their kids** **-step by step activities** **-completed examples** **-answers to some problems in the back of student book (SA pages)**	**(Reviewer only.)** **___x___ Yes** **_____ No**

Reviewer IMET Evaluation Summary Title/Level: Glenco Math –Built to the Common Core C1

Publisher: McGraw Hill Education Copyright: ___2015__ ISBN:__978-0-01-138108-1

Reviewer ID # JL PW **Date Review Completed:____2/6/16_____**

Non-Negotiable Criteria- Each Non-Negotiable must be met in order for the Non-Negotiable Alignment Criteria to be met overall.	
Non-Negotiable 1: Freedom from Obstacles to Focus **___x___ Meets** **_____ Does Not Meet**	**Non- Negotiable 2: Focus and Coherence** **___x__ Meets** **_____ Does Not Meet**
Non-Negotiable Overall: **__x___ Meets _____ Does Not Meet**	
Alignment Criteria- Each Alignment Criterion must be met with a sufficient number of points in order for Alignment Criteria to be labeled as "Meets" overall. The more points the materials receive on the Alignment Criteria, the better they are aligned.	

Alignment Criterion 1: Rigor and Balance	Alignment Criterion 2: Standards of Mathematical Practice	Alignment Criterion 3: Access to Standards for All Learners
Points: _6____ of 6 possible. (Materials must receive at least 5 of 6 points to align.) ___x____ Meets _____ Does Not Meet	Points: __6___ of 6 possible. (Materials must receive at least 5 of 6 points to align.) ___x____ Meets _____ Does Not Meet	Points: __6___ of 6 possible. (Materials must receive at least 5 of 6 points to align.) ___x____ Meets _____ Does Not Meet

Alignment Criteria Overall:

_x____ Meets **_____ Does Not Meet**

If the materials meet both Non-Negotiables and relevant Alignment Criterion, they are aligned to the Shifts and major features of the Core Standards. **Do the materials meet every Non-Negotiable and Alignment Criterion? __x___ Yes _____ No**

What are the specific areas of strength and weakness based on this evaluation? Publishers or others modifying or developing assessments can use this information to make improvements and/or to remedy gaps in the alignment of assessment materials.

2015-16 Mathematics Interim Review Recommendation & Summary

Publisher Name:	McGraw-Hill School Education LLC
Title:	Glencoe Math Course 2 (7th Grade)
ISBN #	9780021447893
Grade Level(s) or Course:	7th Grade
Reviewer ID:	TH + AC

RECOMMENDED AS:

✓ **Core Mathematics Program-** a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials. Substantial evidence clearly supports the designation of this program as Core.

_____ **Other Mathematics Program-** a program that substantially, but partially, meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for supplemental materials. Substantial evidence clearly supports the designation of this program as Other.

_____ **Component Mathematics Program-** a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs. Substantial evidence clearly supports the designation of this program as Component.

_____ **Intervention Program-** a program designed and intended to target and support students' specific needs. Substantial evidence clearly supports the designation of this program as Intervention.

_____ **Does not meet criteria** for recommendation as a Curricular Material or Online Resource for Mathematics.

EVIDENCE SUMMARY:

FOCUS- Materials reflect the content architecture of the standards by not assessing above grade level. The focus is 7th grade state standards.

COHERENCE-

Materials focus coherently on all Major Work Grade 7 standards.

RIGOR-

Materials reflect the balances in the Standards with rigorous expectations.

CONCEPTUAL UNDERSTANDING-

Conceptual and procedural understanding are attended to throughout the curriculum with launch problems, real-world problems and performance tasks.

MATHEMATICAL PRACTICES-

MPs are practiced throughout this curriculum and make authentic connections between standards. MPs meet the needs of ELLs and diverse learners.

ACCESSIBILITY OF STANDARDS TO ALL STUDENTS-

MPs and content throughout this curriculum meet the needs of ELLs and diverse learners through launch problems, small + large group activities, vocabulary startups, graphic organizers, and higher-order-thinking problems.

OTHER:

2015-16 Interim Mathematics Review

Mathematics Evaluation Tool Grades K-8

Publisher: McGraw-Hill School Education LLC

Title of Material: Glencoe Math Course 2 (7th Grade)

Author: Price, et al

ISBN #: 9780021447893 **Copyright** 2015

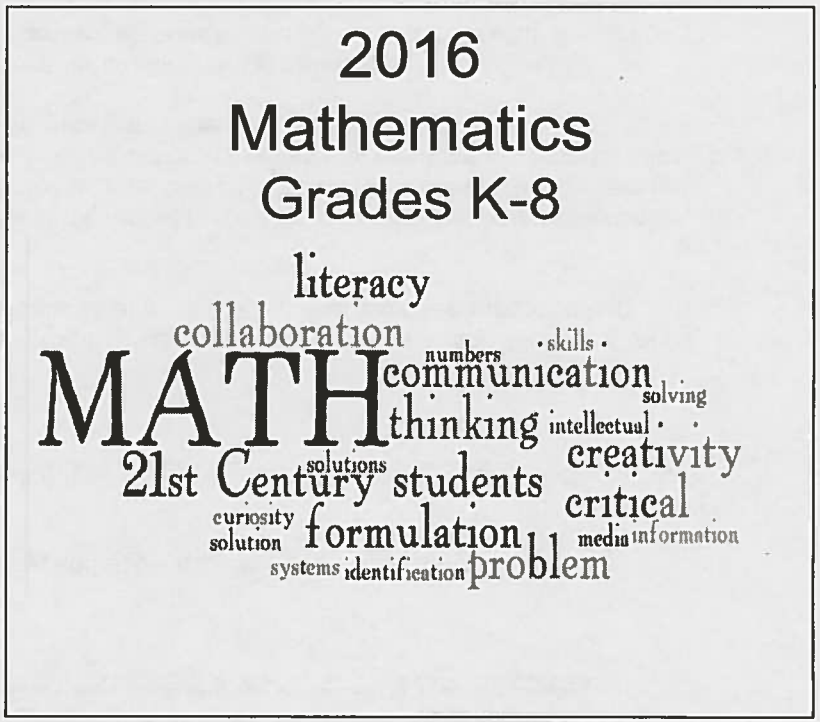
Reviewer ID: TH + AC

Core Mathematics Program- a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Core.

Other Mathematics Program- a program that substantially, but partially, meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Other.

Component Mathematics Program- a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs.
Substantial evidence clearly supports the designation of this program as Component.

Intervention Program- a program designed and intended to target and support students' specific needs.
Substantial evidence clearly supports the designation of this program as Intervention.



- Evaluation Form adapted from Instructional Materials Evaluation Toolkit (IMET).

The IMET was developed by Student Achievement Partners. Educators may use or adapt. http://creativecommons.org/licenses/by/3.0/ Download this tool at http://achievethecore.org/IMET

Instructional Materials Evaluation Tool

Mathematics, Grades K-8

What Are the Purposes of the IMET?

This Math IMET is designed to help educators determine whether instructional materials are aligned to the Shifts and major features of the Common Core State Standards (CCSS). The substantial instructional Shifts (http://www.corestandards.org/other-resources/key-shifts-inmathematics/) at the heart of the Common Core State Standards are:

- **Focus** strongly where the Standards focus
- **Coherence**: Think across grades and link to major topics within the grade
- **Rigor**: In major topics, pursue conceptual understanding, procedural skill and fluency, and application with equal intensity.

The IMET draws directly from the following documents:

- Common Core State Standards for Mathematics (www.corestandards.org/Math)
- Publishers' Criteria for the Common Core State Standards in Mathematics grade K-8 (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)

When to use the IMET

1. Purchasing materials: Many factors go into local purchasing decisions. Alignment to the Standards is a critical factor to consider. This tool is designed to evaluate alignment of instructional materials to the Shifts and the major features of the CCSS. It also provides suggestions of additional indicators to consider in the materials evaluation and purchasing process.

2. Evaluating materials currently in use: The IMET can be used to analyze the degree of alignment of existing materials and help to highlight specific, concrete flaws in alignment. Even where materials and tools currently in use fail to meet one or more of these criteria, the pattern of failure is likely to be informative. States and districts can use the evaluation to create a thoughtful plan to modify or combine existing resources in such a way that students' actual learning experiences approach the focus, coherence, and rigor of the Standards.

3. Developing programs: Those developing new programs can use this tool as guidance for creating aligned curricula.
Please note this tool was designed for evaluating comprehensive curricula (including any supplemental or ancillary materials), but it was not designed for the evaluation of standalone supplemental materials.

Who Uses the IMET?

Evaluating instructional materials requires both subject-matter and pedagogical expertise. Evaluators should be well versed in the Standards (www.corestandards.org/Math) for all grades in which materials are being evaluated. This includes understanding the Major Work of the grade (www.achievethecore/focus), the Supporting and Additional work, how the content fits into the progressions in the Standards (www.achievethecore.org/progressions), and the expectations of the Standards with respect to conceptual understanding, procedural skill and fluency, and application. Evaluators also should be familiar with the substantial instructional Shifts (http:// www.corestandards.org/other-resources/key-shifts-in-mathematics/) of Focus, Coherence and Rigor that are listed above.

Getting Started

Prior to Evaluation

Assemble all of the materials necessary for the evaluation. It is essential for evaluators to have materials for all grades covered by the program, as some criteria cannot be rated without having access to each grade. In addition, each evaluator should have a reference copy of the Common Core State Standards for Mathematics (CCSSM) and the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013).

Before conducting the evaluation itself, it is important to develop a protocol for the evaluation process. The protocol should include having evaluators study the Publishers' Criteria and the IMET. It will also be helpful for evaluators to get a sense of each program overall before beginning the process. At a minimum, this would include reading the front matter of the text, looking at the table of contents and paging through multiple chapters.

Sections 1-3 below should be completed to produce a comprehensive picture of the strengths and weaknesses of the materials under evaluation. Information about areas in need of improvement or supplementation should be shared with internal and external stakeholders.

Navigating the Tool

Begin with Section 1: Non-Negotiable Alignment Criteria

- The Non-Negotiable Alignment Criteria must each be met in full for materials to be considered aligned to the Shifts and the major features of the Common Core State Standards. Each Non-Negotiable Alignment Criterion has one or more metrics associated with it; every one of these metrics must be met in order for the criterion as a whole to be met.

- Examine the relevant materials and use evidence to rate the materials against each criterion and its associated metric(s).

- Record and explain the evidence upon which the rating is based.

Continue to Section 2: Alignment Criteria

- The Alignment Criteria must each be met for materials to be considered aligned to the Shifts and the major features of the Common Core State Standards. Each Alignment Criterion has one or more metric associated with it; a specific number of these metrics must be met or partially met in order for the criterion as a whole to be met.

- Examine the materials in relation to these criteria, assigning each metric a point value. Rate the criterion as "Meets" or "Does Note Meet" based on the number of points assigned. The more points the materials receive on the alignment Criteria, the better they are aligned.

- Record and explain the evidence upon which the rating is based.

Proceed to Section 4: Indicators of Quality

- Indicators of Quality are important considerations that will help evaluators better understand the overall quality of instructional materials. These considerations are not criteria for alignment to the CCSS, but they provide valuable information about additional program characteristics. Evaluators may want to add their own indicators to the examples provided.

Directions for Non-Negotiable 1

Freedom from Obstacles to Focus

Criterion	Evidence- Give specific examples.	Rating: (Reviewer only.)
Non-Negotiable 1: **Freedom from Obstacles to Focus** **Materials must reflect the content architecture of the Standards by not assessing the topics named before the grade level where they first appear in the Standards.** The Standards foster students' progress to algebra by focusing strongly on arithmetic. Consistent with this focus, certain topics from outside of arithmetic appear only in later grades. Thus, to be aligned, materials must reflect the content architecture of the Standards by not assessing the topics named before the grade level where they first appear in the Standards. In this criterion, "topics named" means the topics that are explicitly named in Metric 1A. No other topics should be added to the list in Metric 1A. (Note that other topics in the standards are addressed in criterion NN2.)	**Required Materials** • Common Core State Standards for Mathematics (www.corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf) • From the materials being evaluated: teacher guides and all assessment components	**Rating this Criterion:** Non-Negotiable 1 is rated as Meets or Does Not Meet. To rate Non-Negotiable 1, begin by rating Metric 1A. Since Metric 1A is the only metric for Non-Negotiable 1, the rating for Non-Negotiable 1 is the same as the rating for Metric 1A. If Metric 1A is rated as Does Not Meet, include evidence of when the named topic(s) is/are assessed. If the metric is rated as Meets, list the grade(s) examined in the evaluation.

Metric NN1A: **Materials r[illegible]t the basic architecture of the Standards by not assessing the listed topics before the grade level indicated.** • Probability, including chance, likely outcomes, probability models. (Introduced in the CCSSM in grade 7) • Statistical distributions, including center, variation, clumping, outliers, mean, median, mode, range, quartiles; and statistical association or trends, including two-way tables, bivariate measurement data, scatter plots, trend line, line of best fit, correlation. (Introduced in the CCSSM in grade 6) • Similarity, congruence, or geometric transformations. (Introduced in the CCSSM in grade 8) • Symmetry of shapes, including line/ reflection symmetry, rotational symmetry. (Introduced in the CCSSM in grade 4) **How to Find the Evidence:** Evaluate the table of contents, all chapter tests, all unit tests, and other such assessment components (including rubrics). For context, read Criterion #2 from the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013). NOTE: Grade alignments of other topics are addressed in Non-Negotiable 2, Focus and Coherence.) In this criterion, "topics named" means the topics that are explicitly named in Metric 1A. No other topics should be added to the list in Metric 1A. (Note that other topics in the standards are addressed in criterion NN2.)	**Evidence-** Materials in text are on grade level and standards are not assessed before The grade level indicated.	**(Reviewer only.)** X **Meets** ____ **Does Not Meet**
Non-Negotiable 1: Materials must reflect the content architecture of the Standards by not assessing the topics named* before the grade level where they first appear in the Standards. **NN 1** If Metric 1A was rated as Meets, then rate Non-Negotiable 1 as Meets. If Metric 1A was rated as Does Not Meet, then rate Non- Negotiable 1 as Does Not Meet. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion.**(Reviewer only.)** **Before moving to Non-Negotiable 2, record the final Meets or Does Not Meet rating in the Evaluation Summary.**		**(Reviewer only.)** X **Meets** ____ **Does Not Meet** **Strengths/Weaknesses:**

Directions for Non-Negotiable 2

Focus and Coherence

Non-Negotiable 2:

Focus and Coherence

Materials must focus coherently on the Major Work of the grade in a way that is consistent with the progressions in the Standards.

Focus and coherence are the two major evidence-based design principles of the Common Core State Standards for Mathematics (CCSSM, p. 3). Focus is necessary in order to fulfill the ambitious promise the states have made to their students by adopting the Standards: greater achievement at the college and career ready level; greater depth of understanding of mathematics; and a rich classroom environment in which reasoning, sense-making, applications, and a range of mathematical practices flourish. In simpler terms, a mile-wide, inch-deep curriculum translates to less time per topic. Less time means less depth and moving on without many students. Thus, materials must focus coherently on the Major Work of the grade in a way that is consistent with the progressions in the Standards.

Required Materials

- Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf)
- Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)
- Focus by Grade Level for the grade being evaluated (www.achievethecore.org/focus)
- From the materials being evaluated: teacher guides, student texts and workbooks

Rating this Criterion:

Non-Negotiable 2 is rated as Meets or Does Not Meet.

To rate Non-Negotiable 2, first rate metrics 2A–2H. Each of these eight metrics must be rated as Meets in order for Non-Negotiable 2 to be rated as Meets. Rate each metric 2A-2H as Meets or Does Not Meet/Insufficient Evidence. If the evidence examined shows that the Criterion is met, then mark the Criterion Meets. If the evidence examined shows that the Criterion is not met—or if there is insufficient evidence to make a determination—then mark the Criterion as Does Not Meet/Insufficient Evidence. Support all ratings with evidence.

Metric NN2A:

In each grade K–8, students and teachers using the materials as designed devote the large majority of time to the Major Work of the grade.

How to Find the Evidence:

Familiarize yourself with the Major Work of the grade being evaluated (see the Focus by Grade Level documents.)

Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, lessons, homework assignments, and assessments. (Evaluate both student and teacher materials.)

Consider time spent on the Major Work of the grade and judge qualitatively whether students and teachers using the materials as designed will devote the large majority of time to the Major Work of the grade.

For context, read Criterion #1 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013)

Evidence-

Materials devote approximately 70% of their time to Major Works of 7th grade.

(Reviewer only.)

✓ **Meets**

____ **Does Not Meet/ Insufficient Evidence**

Metric NN2B: **Supporting work, where present, enhances focus and coherence simultaneously by also engaging students in the Major Work of the grade.** **How to Find the Evidence:** Familiarize yourself with the Major Work and Supporting Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate chapters and lessons that focus on Supporting Work. NOTE: Example of evaluating this Criterion might include looking at whether materials for K–5 generally treat data displays as an occasion for solving grade-level word problems using the four operations (e.g., see 3.MD.B.3); or whether materials for grade 7 take advantage of opportunities to use probability to support ratios, proportions, and percentages. For context, read Criterion #3 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Supporting clusters refer to major works in previous lessons. Example: page 533, when introducing geometric figures the lesson refers students back to what they already know about scale drawings from previous lesson on proportional relationships	(Reviewer only.) X Meets ____Does Not Meet/ Insufficient Evidence
Metric NN2C: **Materials base content progressions on the grade-by-grade progressions in the Standards. Content from previous or future grades does not unduly interfere with or displace on-grade-level content.** **How to Find the Evidence:** Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, and lessons in both student and teacher materials. NOTE: In some cases it may be possible that aligned materials might address some aspects of a topic in a strategic way before or after the grade level in which the topic is central in the Standards' progressions; for example, a curriculum author might purposefully choose to explore adding fractions with unlike denominators in a way appropriate to grade four, recognizing that this work is not really required until the next grade. However, any such purposeful discrepancies in content progressions should enhance the required learning in each grade; not unduly interfere with or displace grade-level content; and be clearly aimed at helping students meet the Standards as written rather than effectively rewriting the progressions in the Standards. And in all cases, note that Non-Negotiable 1 must be met for materials to be aligned. For context, read Criterion #5a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** The content of the curriculum is clearly defined. Material from previous grades is referenced at the beginning of the chapter and marked as "prior knowledge" needed. In the teachers' manual, the standards that are to be met in the lesson are clearly stated. The curriculum is in line with CCSS Domain Progression.	(Reviewer only.) ✓ Meets ____Does Not Meet/ Insufficient Evidence

Metric NN2D: **Materials give all students extensive work with on-grade-level problems.** **How to Find the Evidence:** Evaluate both student and teacher materials. If the materials provide resources for differentiated learning, consider whether lower-performing students have opportunities to engage with grade-level problems. Also consider whether higher-performing students are given opportunities to learn current grade-level content in greater depth. For context, read Criterion #5b in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** There are multiple grade-level problems marked BL (beyond grade level) and AL (almost at grade level). There are also H.O.T (higher order thinking) problems at the end of each lesson to give higher performing students a challenge.	(Reviewer only.) ✓ Meets ____Does Not Meet/ Insufficient Evidence
Metric NN2E: **Materials relate on-grade-level concepts explicitly to prior knowledge from earlier grades.** **How to Find the Evidence:** Evaluate both student and teacher materials. NOTE: Examples of evaluating this Criterion might include looking at the way the materials extend basic ideas of place value across the decimal point; or the role that properties of operations play when the materials extend arithmetic beyond whole numbers to fractions, variables, and expressions. More generally, cluster headings in the Standards sometimes signal key moments where reorganizing and extending previous knowledge is important in order to accommodate new knowledge (e.g., see cluster headings that use the phrase "Apply and extend previous understanding"). For context, read Criterion #5c in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Concepts are related to prior knowledge through "Coherence" at the beginning of each chapter which shows connections and progression. Ex. pg. 9 + pg. 711 "Real-World Links"- pg. 243 "Vocabulary Start-up" pg. 211, 279	(Reviewer only.) ✓ Meets ____Does Not Meet/ Insufficient Evidence
Metric NN2F: **Review of material from previous grades is clearly identified as such to the teacher, and teacher and students can see what their specific responsibility is for the current year.** **How to Find the Evidence:** Evaluate the table of contents, but do not stop there; also evaluate units, chapters, lessons, homework assignments and assessments. (Evaluate both student and teacher materials.) Identify any content from previous grades and check whether it is identified as such. For context, read Criterion #5a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** At the beginning of each chapter there is a list of prior knowledge that students need to be successful in the upcoming lesson. Often times the previous standards are not clearly identified, however the students can see what their specific responsibility is for the current year.	(Reviewer only.) X Meets ____Does Not Meet/ Insufficient Evidence

Metric NN2G: **Materials include learning objectives that are visibly shaped by CCSSM cluster headings.** **How to Find the Evidence:** Select several clusters from the Major Work in the grade being evaluated. Evaluate teacher and student materials in relation to these clusters. For context, read Criterion #6a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Objectives for each chapter are clearly stated with cluster heading at beginning of each chapter. Ex. pg. 191-447. The progression chart has prior standards, current standards + the standards the students will work on next.	(Reviewer only.) ✓ Meets ____ Does Not Meet/ Insufficient Evidence
Metric NN2H: **Materials include problems and activities that serve to connect two or more clusters in a domain, or two or more domains in a grade, in cases where these connections are natural and important.** **How to Find the Evidence:** In the grade being evaluated, choose two or more clusters or two or more domains for which connections are natural and important. Evaluate the units, chapters, and lessons that deal with the chosen topics, looking for problems and activities that serve to connect the chosen clusters or domains. NOTE: An example of evaluating this Criterion might include looking at whether problems in grade 4 sometimes or often involve students applying their developing computation skills (detailed in domain NBT) in the context of solving word problems (detailed in domain OA). For context, read Criterion #6b in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** The performance Tasks and Inquiry Labs connect several domains. Ex page 287 #7 and #8 standards 7.NS.1c & 7EE4 & 7NS.1d.	(Reviewer only.) X Meets ____ Does Not Meet/ Insufficient Evidence
Non-Negotiable 2: **Focus and Coherence** **Materials must focus coherently on the Major Work of the grade in a way that is consistent with the progressions in the Standards.** **NN 2** If all Metrics 2A – 2H were rated as Meets, then rate Non-Negotiable 2 as Meets. If one or more Metric was rated Does Not Meet/Insufficient Evidence, then rate Non-Negotiable 2 as Does Not Meet. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)** **Before moving to Alignment Criterion 1, record the final Meets or Does Not Meet rating in the Evaluation Summary.**		(Reviewer only.) X Meets ____ Does Not Meet **Strengths/Weaknesses:**

Now continue by evaluating the Alignment Criterion 1 for Rigor and Balance.

Directions for Alignment Criterion 1

Rigor and Balance

Alignment Criterion 1: Rigor and Balance

Materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.

The Standards set expectations for attention to all three aspects of rigor: conceptual understanding, procedural skill and fluency, and applications. Thus, materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.

Required Materials

- Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf)
- Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)
- Focus by Grade Level for the grade being evaluated (achievethecore.org/focus)
- Situation Types for the Operations in Word Problems (achievethecore.org/situation-types)
- From the materials being evaluated: teacher guides, student texts and workbooks

Rating this Criterion:

Alignment Criterion 1 is rated as Meets or Does Not Meet.

To rate Alignment Criterion 1, first rate metrics 1A, 1B, and 1C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). For each metric, guiding questions are provided to aid in gathering evidence.
Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 1 if the materials rate 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as rigor and balance, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.

Metric AC1A:
The materials support the development of students' conceptual understanding of key mathematical concepts, especially where called for in specific content Standards or cluster headings.

How to Find the Evidence:

Select one or more cluster(s) or Standard(s) from the Major Work for the grade being evaluated that relate specifically conceptual understanding to use throughout the questions associated with this metric. NOTE: Some examples of clusters or Standards that call for conceptual understanding include: K.OA.A.1, (1.NBT.B, 1.NBT.C), (2.NBT.A, 2.NBT.B), (3.OA.A.1, 3.OA.A.2), 4.NF.A, (4.NBT.A, 4.NBT.B), 5.NF.B, (5.NBT.A, 5.NBT.B), 6.RP.A, 6.EE.A.3, 7.NS.A, 7.EE.A, 8.EE.B, 8.F.A, 8.G.A

Clusters or Standards grouped by parentheses are closely connected and could be analyzed together.

For context, read Criterion #4a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).

-Choose a cluster/Standard from the Major Work that is aligned to each aspect of rigor and use it to evaluate these metrics. It is most helpful if the same clusters/Standards are chosen for all of the programs being evaluated. (Guidance in choosing clusters/Standards is included in "How to Find the Evidence".)

Use the questions for AC Metric 1A to evaluate Metric 1A. Record evidence for each question and rate Metric 1A.

X **Meets (2)**

____ **Partially Meets (1)**

____ **Does Not Meet (0)**

Is conceptual understanding attended to thoroughly where the Standards set [illegible]t expectations for understanding or interpreting? Evaluate lessons, chapter/unit assessments and homework assignments, paying attention to work aligned to Standards that explicitly call for understanding or interpreting. NOTE: Examples of evaluating this Criterion might include looking at how well the multi-digit addition and subtraction algorithms are developed and explained on the basis of place value and properties of operations; or how well the multi-digit multiplication and division algorithms are developed and explained on the basis of place value and properties of operations; or how well solving equations is presented and explained as a process of reasoning.	**Evidence-** Conceptual understanding is attended throughout the curriculum. Essential questions are listed for each unit; Ex. pg. 187 in Chapt. 3: "What happens when you add, subtract, multiply & divide integers?"	
Do the materials feature high-quality conceptual problems and conceptual discussion questions? Evaluate lessons, chapter/unit assessments, and homework assignments. NOTE: Example of conceptual problems might include such questions as "Find a number greater than 1/5 and less than 1/4," or "If the divisor does not change and the dividend increases, what happens to the quotient?"	**Evidence-** At the beginning of each lesson there are ideas for launching the lesson that would encourage a whole group or small group discussion. There are also ideas for high quality Labs or projects for students to enhance their understanding.	
Do the materials feature opportunities to identify correspondences across mathematical representations? Evaluate lessons, chapter/unit assessments and homework assignments. NOTE: Examples of evaluating this Criterion might include looking at whether students are supported in identifying correspondences among: the verbal description of a situation, the diagrams that distill its mathematical features, and the equations that model it; or equivalent forms of numbers (e.g., 3 and 6/2) and the number line; or rational number operations and representations of them via models such as the vector model; or the expression that defines a function and the graph that shows the relationship.	**Evidence-** The materials feature opportunities to enhance learning for visual learners through models, diagrams, number lines, which doesn't belong in estimation, etc.	
Metric AC1B: **The materials are designed so that students attain the fluencies and procedural skills required by the Standards.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Major Work for the grade being evaluated that relate specifically to fluency and procedural skill to use throughout the questions associated with this metric. NOTE: Some examples of Standards that call for procedural skill and fluency include: K.OA.A.5, 1.OA.C.6, 2.OA.B.2, 2.NBT.B.5, 3.OA.C.7, 3.NBT.A.2, 4.NBT.B.4, 5.NBT.B.5, 6.NS.B.2, and 6.NS.B.3, 6.EE.A, 7.NS.A, 7.EE.A.1,7.EE.B.4a, 8.EE.C.7, 8.EE.C.8b For context, read Criterion #4b in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).		**Use the questions for Metric 1B to evaluate Metric 1 B. Record evidence for each question and rate Metric 1B.** **(Reviewer only.)** ✓ **Meets (2)** ____ **Partially Meets (1)** ____ **Does Not Meet (0)**

Is progress toward fluency and procedural skill interwoven with students' developing conceptual understanding of the operations in question? Evaluate lessons, chapter/unit assessments, daily routines, and homework assignments for evidence that the development of fluency and procedural skill is supported by conceptual understanding.	**Evidence-** Each chapter has many skills practice types as well as applications problems that require both conceptual and procedual understanding Ex. pg. 246 #7 requires conceptual understandings of integers procedual and conceptual understanding to explain its meaning are also reflected in performance tasks + Assessments. for chapt. 3	
Are purely procedural problems and exercises present that include cases in which opportunistic strategies are valuable and generic cases that require efficient algorithms present? Evaluate lessons, chapter/unit assessments, daily routines, and homework assignments. NOTE: Examples of problems in which opportunistic strategies are valuable might include the sum 698 + 240 or the system x + y = 1, 2x + 2y = 3. Examples of generic cases that require efficient algorithms might include the sum 8767+2286 or the system 6y + x = x + 3, – x = 1 + 2y.	**Evidence-** Procedural problems and exercises are present throughout the curriculum. For example, pg. 247 #1-12 include cases that require the algorithm to divide integers.	
Do the materials in grades K–6 provide repeated practice toward attainment of fluency Standards? Evaluate lessons, daily routines, and homework assignments for evidence of repeated practice toward attainment of the following K–6 Standards that set an explicit expectation of fluent (accurate and reasonably fast) computation: K.OA.A.5, 1.OA.C.6, 2.OA.B.2, 2.NBT.B.5, 3.OA.C.7, 3.NBT.A.2, 4.NBT.B.4, 5.NBT.B.5, 6.NS.B.2, 6.NS.B.3.	**Evidence-** N/A	
Metric AC1C: **The materials are designed so that teachers and students spend sufficient time working with engaging applications, without losing focus on the Major Work of each grade.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Major Work for the grade being evaluated that relate specifically application to use throughout the questions associated with this metric. NOTE: Some examples of clusters or Standards that call for application include: K.OA.A.2, 1.OA.A, 2.OA.A, 3.OA.A.3, 3.OA.D.8, 4.OA.A.3, 4.NF.B.3d, 4.NF.B.4c, 5.NF.B.6, 5.NF.B.7c, 6.RP.A.3, 6.NS.A.1, 6.EE.B.7, 6.EE.C.9, 7.RP.A, 7.NS.A.3, 7.EE.B.3, 8.EE.C.8c, 8.F.B For context, read Criterion #4c in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Each lesson begins with a real-world link which students are either to solve in a whole group, or small group setting. Each real-world link connects to the standards and several mathematical practices, students are also asked to work backwards in their problem solving strategies on page 489 which makes them look for structure in the math being done	**Use the questions for Metric 1C to evaluate Metric 1C. Record evidence for each question and rate Metric 1C.** **(Reviewer only.)** ☒ **Meets (2)** ____ **Partially Meets (1)** ____ **Does Not Meet (0)**
Are there are single- and multi-step contextual problems, including non-routine problems, that develop the mathematics of the grade, afford opportunities for practice, and engage students in problem solving? Do the problems attend thoroughly to those places in the content Standards where expectations for multi-step and real-world problems are explicit? Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** The curriculum includes many types of single + multi-step contextual problems such as real-world application problems that can be solved in small or whole group settings. Independent practice includes single + multi step : pg. 85, Lesson 9 #1, 2-6. #13-15 and HOT problems that are non-routine.	

Do application problems particularly stress applying the Major Work of the grade? Evaluate lessons, chapter/unit assessments, and homework assignments. NOTE: Examples of evaluating this Criterion might include looking at: how well, by the end of grade 2, students using the materials as designed can represent and solve a full range of one-step addition and subtraction word problems; or how well, by the end of grade 3, students using the materials as designed can represent and solve a full range of one-step multiplication and division word problems; or how well these basic situation types for each operation are carried coherently across the grades, (e.g., with fractions and algebraic expressions); or, in all grades, whether the problems connect concepts, Standards, and domains in ways that are natural and important. For a list of situation types for one-step addition, subtraction, multiplication, and division problems, see Situation Types for the Operations in Word Problems	**Evidence-** There are 4 major works of grade 7 and the problems in each lesson focus on the majority of the major works. In addition, to the practice/homework assignments focusing on the topic in the lesson, there are also Spiral Review questions at the end of each assignment which focuses on review questions from prior lessons. There are however, almost just as many lessons focused on supporting or additional clusters.	
Does modeling build slowly across K–8, with applications that are relatively simple in earlier grades and when students are encountering new content? In grades 6–8, do the problems begin to provide opportunities for students to make their own assumptions or simplifications in order to model a situation mathematically? Read Standard for Mathematical Practice 4, Model with Mathematics. Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** Real world problems are part of every lesson as well as assessments, performance tasks and unit projects. They increase in difficulty with chapter progression. Ex. pg 8 #3 has students create a problem that can be represented with a bar graph. Then pg. 197 #20-21 has students model integers on a number line.	

Alignment Criterion 1: Rigor and Balance

Materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.

AC1 Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 out of 6 points, the Criterion has not been met. Check the final rating.
Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)**

Before moving to Alignment Criterion 2, record the final Meets or Does Not Meet rating in the Evaluation Summary.

(Reviewer only.)

✓ **Meets**

____ **Does Not Meet**

Strengths/Weaknesses:

Directions for Alignment Criterion 2

Standards for Mathematical Practice

Alignment Criterion 2: Standards for Mathematical Practice

Materials must demonstrate authentic connections between content Standards and practice Standards.

The Standards require that designers of instructional materials connect the mathematical practices to mathematical content in instruction. Thus, materials must demonstrate authentic connections between content Standards and practice Standards.

Required Materials:

- Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf)
- Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)
- Focus by Grade Level for the grade being evaluated (www.achievethecore.org/focus)
- From the materials being evaluated: teacher guides, student texts and workbooks

Rating this Criterion

Alignment Criterion 2 is rated as Meets or Does Not Meet.

To rate Alignment Criterion 2, first rate metrics 2A, 2B, and 2C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). For each metric, guiding questions are provided to aid in gathering evidence.

Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 2 if the materials earn 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as mathematical practices, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.

Metric AC2A:
Materials address the practice Standards in such a way as to enrich the Major Work of the grade; practices strengthen the focus on Major Work instead of detracting from it, in both teacher and student materials.

How to Find the Evidence:

Familiarize yourself with the Major Work of the grade being evaluated (see the Focus by Grade Level documents.)

Evaluate teacher and student materials for evidence that the mathematical practices support and connect to the focus of the grade.

NOTE: Examples of evaluating this Criterion might include looking at whether, in grades K–5, students using the materials are supported to look for and express regularity in repeated reasoning about the addition table, the multiplication table, the properties of operations, the relationship between addition and subtraction or multiplication and division, and the place value system; or whether, in grades 6–8, students using the materials are supported to look for and express regularity in repeated reasoning about proportional relationships and linear functions.

For context, read Criterion #8 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013).

Evidence-

Mathematical Practices are clearly identified in each lesson throughout.

Chapt. 1 7.RP

Lesson 1: Justify conclusions

Pg. 13 #6 pg 15 #20 & 21

- understand unit rates
- compare + justify reasoning

MP 1 & 3

(Reviewer only.)

X **Meets (2)**

____ **Partially Meets (1)**

____ **Does Not Meet (0)**

Metric AC2B: **Materials attend to the full meaning of each practice Standard.** **How to Find the Evidence:** For context, read Criterion #7 and Criterion #9 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).		**Use the questions for Metric 2B to evaluate Metric 2B. Record evidence for each question and rate Metric 2B.** **(Reviewer only.)** X **Meets (2)** ____ **Partially Meets (1)** ____ **Does Not Meet (0)**
Over the course of any given year of instruction, is each mathematical practice Standard meaningfully present in the form of assignments, activities, or problems that stimulate students to develop the habits of mind described in the practice Standard? Evaluate lessons, chapter/ unit assessments, and homework assignments for evidence of each mathematical practice being meaningfully present in instruction.	**Evidence-** CC Mathematical Practices are present throughout the curriculum as shown in the teacher edition. One example, MP# 1 pg. 14, 331, 738 and MP# 2 pg. 40, 400, 645. Also, Students are asked to evaluate themselves on which practices they used.	
Do the materials treat the practice Standards as developing across grades or grade bands? Are the practice Standards in early grades appropriately simple? Do they display an arc of growing sophistication across the grades?	**Evidence-** yes pg. 224 - use number lines to represent distance, pg 447 - algebra tiles to represent coefficients	
Are there teacher-directed materials that explain the role of the practice Standards in the classroom and in students' mathematical development? Are alignments to practice Standards accurate?	**Evidence-** Mathematical Practices are clearly identified + explained - ex. pg. 447 MP# 1,2,3,4,7 Vocab. Start-up pg. 447 MP# 1,5,6 Pairs Discussion - explained how to implement activities	
Metric AC2C: **Materials support the Standards' emphasis on mathematical reasoning.** **How to Find the Evidence:** For context, read Criterion #10 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).		**Use the questions for Metric 2C to evaluate Metric 2C. Record evidence for each question and rate Metric 2C.** **(Reviewer only.)** X **Meets (2)** ____ **Partially Meets (1)** ____ **Does Not Meet (0)**
Do the materials support students in constructing viable arguments and critiquing the arguments of others concerning grade-level mathematics that is detailed in the content Standards? Read Standard for Mathematical Practice 3. Evaluate teacher and student materials to ensure that students are given opportunities to reason with grade-level mathematics.	**Evidence-** Yes. Example; pg 523, students must write two facts and one fib relating to the vocabulary terms listed. Then students work in groups to discuss each fact and fib, identify fibs, and correct them so they become facts.	
Do the materials support students in producing not only answers and solutions, but also, in a grade-appropriate way, arguments, explanations, diagrams, mathematical models, etc., especially in the Major Work of the grade? Familiarize yourself with the Major Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate teacher and student materials, to understand the types of work students are expected to produce.	**Evidence-** In each lesson, group discussions are encouraged in the teacher edition of "Launching the Lesson". On pg. 14 # 11, 12 + 13, students are asked to "explain their reasoning", + "give a counter-example."	

Do materials explicitly attend to the specialized language of mathematics? Is the language of argument, problem solving, and mathematical explanations taught rather than assumed? Evaluate teacher and student materials, paying attention to how mathematical language is taught. NOTE: Examples of evaluating this Criterion might include looking at whether students are supported in: basing arguments on definitions; using the method of providing a counterexample; or recognizing that examples alone do not establish a general statement.	**Evidence-** Yes. At the beginning of each lesson there are vocabulary words and appropriate definitions to be used throughout the lesson. Ex: 485 question 8, students are asked to explain real-world story problems in multiple representations.	

Alignment Criterion 2: Standards for Mathematical Practice

Materials must demonstrate authentic connections between content Standards and practice Standards.

AC2 Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 out of 6 points, the Criterion has not been met. Check the final rating.
Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion.
(Reviewer only.)

Before moving to Alignment Criterion 3, record the final Meets or Does Not Meet rating in the Evaluation Summary.

(Reviewer only.)

X **Meets**

____ **Does Not Meet**

Strengths/Weaknesses:

Alignment Criterion 3: Access to the Standards for All Students

Materials must provide supports for English Language Learners and other special populations.

Because Standards are for all students, alignment requires thoughtful support to ensure all students are able to meet the Standards. Thus, aligned materials must provide supports for English Language Learners and other special populations.

Required Materials:

- Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf)
- Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)
- From the materials being evaluated: teacher guides, student texts and workbooks

Rating this Criterion:

Alignment Criterion 3 is rated as Meets or Does Not Meet.

To rate Alignment Criterion 3, first rate metrics 3A, 3B, and 3C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points).

Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 3 if the materials earn 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as support for special population, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.

Metric AC3A: **Support for English Language Learners and other special populations is thoughtful and helps those students meet the same Standards as all other students. The language in which problems are posed is carefully considered.** **How to Find the Evidence:** Evaluate teacher and student materials, paying attention to supports offered for special populations.	**Evidence-** There are many supports included: • Vocabulary Start-ups • Graphic Organizers • Pictures • glossary - English to Spanish • Spanish textbooks / tests • HOT (Higher Order Thinking) • Differentiated Homework Options • Levels of the Complexity Identified • online editable assignments/assessments	Reviewer only.) ✓ Meets (2) ____Partially Meets (1) ____Does Not Meet (0)
Metric AC3B: **Materials provide appropriate level and type of scaffolding, differentiation, intervention, and support for a broad range of learners with gradual removal of supports, when needed, to allow students to demonstrate their mathematical understanding independently.** **How to Find the Evidence:** Evaluate teacher and student materials, paying attention to whether materials provide differentiation that will lead all learners to engage with on-grade-level content.	**Evidence-** yes In the teachers manual there is a list of alternate strategies, scaffolding ideas, and leveled homework options for approaching level, on level, or beyond level.	Reviewer only.) ✓ Meets (2) ____Partially Meets (1) ____Does Not Meet (0)
Metric AC3C: **Design of lessons recommends and facilitates a mix of instructional approaches for a variety of learners such as using multiple representations (e.g., including models, using a range of questions, checking for understanding, flexible grouping, pair-share).** **How to Find the Evidence:** Evaluate teacher materials, noting instructional approaches suggested for whole class and differentiated lessons and activities.	**Evidence-** Curriculum includes a mixture of instructional approaches including: think-pair-share, online whiteboard, graphic organizers, round robin, trade-a-problem + three-step-interviews.	Reviewer only.) ✓ Meets (2) ____Partially Meets (1) ____Does Not Meet (0)

Alignment Criterion 3: **Access to the Standards for All Students** **Materials must provide supports for English Language Learners and other special populations.** **AC3** Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 points, the Criterion has not been met. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion.**(Reviewer only.)** **Move to the Evaluation Summary and record the final Meets or Does Not Meet rating .**	**(Reviewer only.)** ✓ **Meets** ____ **Does Not Meet** **Strengths/Weaknesses:**

Once an evaluation for alignment to the Shifts and major features of the CCSS has been conducted using Sections 1-3, it's important to evaluate for overall quality and best practices. A starting list of Indicators of Quality are suggested below. States, districts and others evaluating instructional materials are encouraged to add to this list to ensure materials reflect local contexts. For background information on some of the Indicators of Quality in this section, refer to pp.18–21 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).

Indicators of Quality	**Evidence- Give specific examples.**	**Rating: (Reviewers only.)**
1. Lessons are thoughtfully structured and support the teacher in leading the class through the learning paths at hand, with active participation by all students in their own learning and in the learning of their classmates.	**Evidence-** Each chapter starts with multiple ways to launch the lesson. The focus and standards are very clear and there are many ways that a teacher can pick from to guide the class through a meaningful lesson.	**(Reviewer only.)** X **Yes** ____ **No**
2. The underlying design of the materials includes both problems and exercises. (In solving problems, students learn new mathematics, whereas in working exercises, students apply what they have already learned to build mastery.) Each problem or exercise has a purpose. **NOTE: This Criterion does not require that the problems and exercises be labeled as such.**	**Evidence-** In each lesson the practice problems are separated into several sections. 1) Quick review problems to prepare 2) Examples 3) Guided problems to solve w/ assistance 4) Independent practice in solving problems 5) Extra practice problems to build mastery in all standards.	**(Reviewer only.)** ✓ **Yes** ____ **No**

3. Design of assignments is not haphazard: exercises are given in intentional sequences in order to strengthen students' mathematical understanding.	**Evidence-** Yes They are sequenced in a mathematical and logical order.	(Reviewer only.) ✓ Yes ____ No
4. There are separate teacher materials that support and reward teacher study including, but not limited to: discussion of the mathematics of the units and the mathematical point of each lesson as it relates to the organizing concepts of the unit, discussion on student ways of thinking and anticipating a variety of students responses, guidance on lesson flow, guidance on questions that prompt students thinking, and discussion of desired mathematical behaviors being elicited among students.	**Evidence-** Teacher materials include ways to discuss or "launch the lesson", the main focus of the lesson, essential questions to ask, standards addressed, math practices used, scaffolding ideas & common misunderstandings.	(Reviewer only.) ✓ Yes ____ No
5. Manipulatives suggested in the materials are faithful representations of the mathematical objects they represent and are connected to written methods.	**Evidence-** Yes Example: page 518, it is recommended for students to use a number line to solve for the inequality and on pg. 14 students are encouraged to use a graph to find the average number of heartbeats in a minute	(Reviewer only.) ✓ Yes ____ No
6. Materials include a variety of curriculum-embedded assessments. Examples include pre-, formative, summative, and self-assessment resources.	**Evidence-** Materials included many assessments: · Diagnostic · Formative · Summative · Pace-Yourself · Performance Tasks · Unit Projects	(Reviewer only.) ✓ Yes ____ No
7. Assessments contain aligned rubrics, answer keys, and scoring guidelines that provide sufficient guidance for interpreting student performance.	**Evidence-** All assessments include answer keys and Performance Tasks included rubrics.	(Reviewer only.) ✓ Yes ____ No
8. Materials assess student proficiency using methods that are accessible and unbiased, including the use of course-level language in student prompts.	**Evidence-** Language for lessons, examples & assessments use grade level language & situations. For example, story problems talk often about cell phones, skateboards, movie theaters, middle school fundraisers, etc.	(Reviewer only.) ✓ Yes ____ No

9. Materials are carefully evaluated by qualified individuals, whose names are listed, in an effort to ensure freedom from mathematical errors and course-level appropriateness.	**Evidence-** Yes page T 18-21 4 lead authors 4 program authors 1 contributing authors	**(Reviewer only.)** ✓ **Yes** ____ **No**
10. The visual design supports students in engaging thoughtfully with the subject. Navigation through the text is clear.	**Evidence-** Pictures + visuals are not distracting for 7th graders. For example, when asking a question about the relationship between the cost and number of pizzas as a ratio, there is a small picture of a pizza cut into pieces and on pg. 33.	**(Reviewer only.)** ✓ **Yes** ____ **No**
11. The materials engage parents in appropriate ways. For example, homework assignments in elementary grades, consist of routine problems, practice with getting answers, and fluency-building exercises that parents can easily support.	**Evidence-** The material in the textbook is easy to follow and parents could easily understand. On-line resources for parents available	**(Reviewer only.)** ✓ **Yes** ____ **No**

Reviewer IMET Evaluation Summary **Title/Level:** Glencoe Math Course 2 (7th grade)

Publisher: Glencoe McGraw Hill **Copyright:** 2015 **ISBN:** 9780021441893

Reviewer ID # TH & AC **Date Review Completed:** 3-8-2016

Non-Negotiable Criteria- Each Non-Negotiable must be met in order for the Non-Negotiable Alignment Criteria to be met overall.

Non-Negotiable 1: Freedom from Obstacles to Focus	Non- Negotiable 2: Focus and Coherence
X Meets	X Meets
_____ Does Not Meet	_____ Does Not Meet

Non-Negotiable Overall:

X **Meets** _____ **Does Not Meet**

Alignment Criteria- Each Alignment Criterion must be met with a sufficient number of points in order for Alignment Criteria to be labeled as "Meets" overall. The more points the materials receive on the Alignment Criteria, the better they are aligned.

Alignment Criterion 1: Rigor and Balance	Alignment Criterion 2: Standards of Mathematical Practice	Alignment Criterion 3: Access to Standards for All Learners
Points: 6 of 6 possible. (Materials must receive at least 5 of 6 points to align.)	Points: 6 of 6 possible. (Materials must receive at least 5 of 6 points to align.)	Points: 6 of 6 possible. (Materials must receive at least 5 of 6 points to align.)
X Meets	X Meets	X Meets
_____ Does Not Meet	_____ Does Not Meet	_____ Does Not Meet

Alignment Criteria Overall:

X **Meets** _____ **Does Not Meet**

If the materials meet both Non-Negotiables and relevant Alignment Criterion, they are aligned to the Shifts and major features of the Core Standards. **Do the materials meet every Non-Negotiable and Alignment Criterion?** _X_ **Yes** _____ **No**

What are the specific areas of strength and weakness based on this evaluation? Publishers or others modifying or developing assessments can use this information to make improvements and/or to remedy gaps in the alignment of assessment materials.

Strengths: CCSS + MP clearly identified
Many teaching strategies
Many problem types
Many assessment resources
Differentiation

Weaknesses: Teacher edition - pages very flimsy + tear out easily
Student edition - workbook format so pages are perforated + tear out easily
Excessive amount of lessons in supporting clusters.

2015-16 Mathematics Interim Review Recommendation & Summary

Publisher Name:	McGraw Hill Education
Title:	Glencoe Math Course 3
ISBN #	9780076678525 & 9780021454259
Grade Level(s) or Course:	8th Grade
Reviewer ID:	*TH & TC*

RECOMMENDED AS:

__X____Core Mathematics Program- a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials. Substantial evidence clearly supports the designation of this program as Core.

_____Other Mathematics Program- a program that substantially, but partially, meets the *focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for* supplemental materials. Substantial evidence clearly supports the designation of this program as Other.

_____Component Mathematics Program- a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs. Substantial evidence clearly supports the designation of this program as Component.

_____Intervention Program- a program designed and intended to target and support students' specific needs. Substantial evidence clearly supports the designation of this program as Intervention.

_____ Does not meet criteria for recommendation as a Curricular Material or Online Resource for Mathematics.

EVIDENCE SUMMARY:

FOCUS-
None assessment items cover anything beyond grade 8 on similarity, congruence, or geometric transformations. Items on similarity, congruence, or geometric transformations can be found in the assessment items referred to as Interim

COHERENCE-
There are 50 out of the 63 lessons in the series devoted to the major work of the grade. This represents 79% which is within the acceptable range.

RIGOR-
Throughout chapter 9 they use input/output tables, scatter plots, lines of best fit, two-way tables and also asked to analyze data. Multiple models and diagrams to explain the material.

CONCEPTUAL UNDERSTANDING-
Use of the inquiry labs to solve two-step equations uses diagram in order to build strategies that students can apply to multiple step equations. Also in the lesson 3 there are alternative strategies presented to help students link two step equations with the equation 400 + 15( ) = _____

MATHEMATICAL PRACTICES-
Approximately 90% of the materials in the text are repeated reasoning in proportional relationships, whether it is in equations, graphs, tables, or shapes. There is only 1 chapter that doesn't focus on the major work or 8th grade which is chapter 8. In the independent practice problems they are labeled MP and are also labeled in the heading

ACCESSIBILITY OF STANDARDS TO ALL STUDENTS-
There is a full Spanish version of the text available. In the teachers manual it gives "Alternate strategy" that is AL (approaching level), OL (on level), and BL (beyond level)

OTHER:
Strengths:
Very good vocabulary and does a great job of using and teaching the mathematical practices.
Is common core aligned and the countdown to SBAC is a very nice resource.
The performance tasks are a very good resource to help the students represent the material in different ways.
The teachers manual helps facilitate a mix of instructional approaches.

Weaknesses:
Many times 7th grade standards over shadow the 8th grade standards. This happens in Chapter 5 with lessons 4-6 focusing on standard deviation (which should not even be introduced yet).
Also Chapter 8 is half volume and half surface area. Surface area is a 7th Grade CCSS.
No pacing guide included.
The consumable workbook format may be costly.
The materials state that Professional Development is a requirement (at a cost). But after reviewing the material we don't think it would be necessary.

2015-16 Interim Mathematics Review

Mathematics Evaluation Tool Grades K-8

Publisher: McGraw Hill Education

Title of Material: Glencoe Math Course 3

Author: Carter, Cuevas, Day & Malloy

ISBN #: 9780076607852 5 Vol 1 - 9780021454259 - Vol 2 **Copyright** 2015

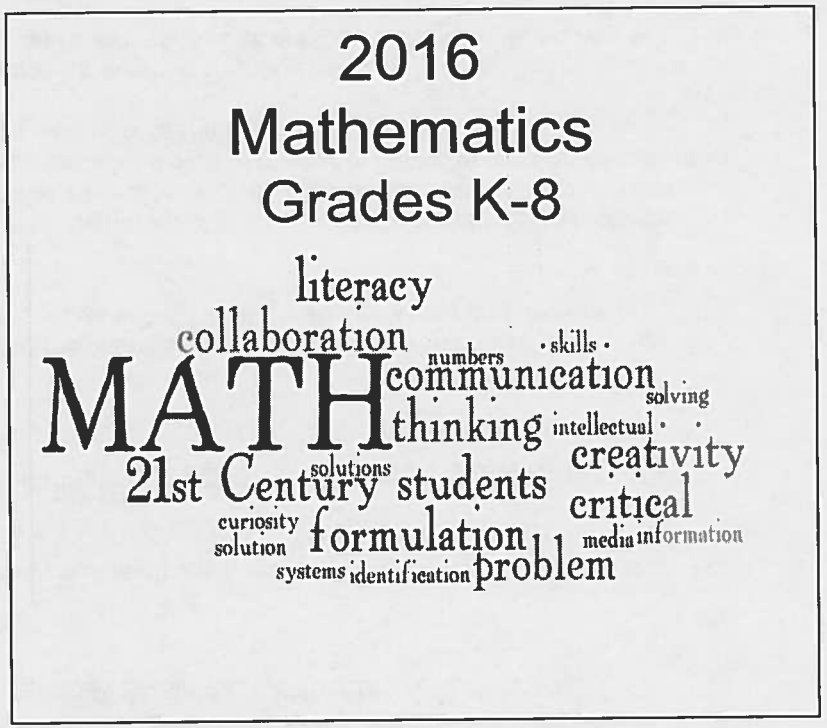
Reviewer ID: TC & TH

Core Mathematics Program- a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Core.

Other Mathematics Program- a program that substantially, but partially, meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Other.

Component Mathematics Program- a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs.
Substantial evidence clearly supports the designation of this program as Component.

Intervention Program- a program designed and intended to target and support students' specific needs.
Substantial evidence clearly supports the designation of this program as Intervention.



- Evaluation Form adapted from Instructional Materials Evaluation Toolkit (IMET).

The IMET was developed by Student Achievement Partners. Educators may use or adapt. http://creativecommons.org/licenses/by/3.0/ Download this tool at http://achievethecore.org/IMET

Instructional Materials Evaluation Tool
Mathematics, Grades K-8

What Are the Purposes of the IMET?
This Math IMET is designed to help educators determine whether instructional materials are aligned to the Shifts and major features of the Common Core State Standards (CCSS). The substantial instructional Shifts (http://www.corestandards.org/other-resources/key-shifts-inmathematics/) at the heart of the Common Core State Standards are:
- **Focus** strongly where the Standards focus
- **Coherence**: Think across grades and link to major topics within the grade
- **Rigor**: In major topics, pursue conceptual understanding, procedural skill and fluency, and application with equal intensity.

The IMET draws directly from the following documents:
- Common Core State Standards for Mathematics (www.corestandards.org/Math)
- Publishers' Criteria for the Common Core State Standards in Mathematics grade K-8 (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)

When to use the IMET
1. Purchasing materials: Many factors go into local purchasing decisions. Alignment to the Standards is a critical factor to consider. This tool is designed to evaluate alignment of instructional materials to the Shifts and the major features of the CCSS. It also provides suggestions of additional indicators to consider in the materials evaluation and purchasing process.

2. Evaluating materials currently in use: The IMET can be used to analyze the degree of alignment of existing materials and help to highlight specific, concrete flaws in alignment. Even where materials and tools currently in use fail to meet one or more of these criteria, the pattern of failure is likely to be informative. States and districts can use the evaluation to create a thoughtful plan to modify or combine existing resources in such a way that students' actual learning experiences approach the focus, coherence, and rigor of the Standards.

3. Developing programs: Those developing new programs can use this tool as guidance for creating aligned curricula.
Please note this tool was designed for evaluating comprehensive curricula (including any supplemental or ancillary materials), but it was not designed for the evaluation of standalone supplemental materials.

Who Uses the IMET?
Evaluating instructional materials requires both subject-matter and pedagogical expertise. Evaluators should be well versed in the Standards (www.corestandards.org/Math) for all grades in which materials are being evaluated. This includes understanding the Major Work of the grade (www.achievethecore/focus), the Supporting and Additional work, how the content fits into the progressions in the Standards (www.achievethecore.org/progressions), and the expectations of the Standards with respect to conceptual understanding, procedural skill and fluency, and application. Evaluators also should be familiar with the substantial instructional Shifts (http:// www.corestandards.org/other-resources/key-shifts-in-mathematics/) of Focus, Coherence and Rigor that are listed above.

Getting Started
Prior to Evaluation

Assemble all of the materials necessary for the evaluation. It is essential for evaluators to have materials for all grades covered by the program, as some criteria cannot be rated without having access to each grade. In addition, each evaluator should have a reference copy of the Common Core State Standards for Mathematics (CCSSM) and the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013).

Before conducting the evaluation itself, it is important to develop a protocol for the evaluation process. The protocol should include having evaluators study the Publishers' Criteria and the IMET. It will also be helpful for evaluators to get a sense of each program overall before beginning the process. At a minimum, this would include reading the front matter of the text, looking at the table of contents and paging through multiple chapters.

Sections 1-3 below should be completed to produce a comprehensive picture of the strengths and weaknesses of the materials under evaluation. Information about areas in need of improvement or supplementation should be shared with internal and external stakeholders.

Navigating the Tool

Begin with Section 1: Non-Negotiable Alignment Criteria

- The Non-Negotiable Alignment Criteria must each be met in full for materials to be considered aligned to the Shifts and the major features of the Common Core State Standards. Each Non-Negotiable Alignment Criterion has one or more metrics associated with it; every one of these metrics must be met in order for the criterion as a whole to be met.

- Examine the relevant materials and use evidence to rate the materials against each criterion and its associated metric(s).

- Record and explain the evidence upon which the rating is based.

Continue to Section 2: Alignment Criteria

- The Alignment Criteria must each be met for materials to be considered aligned to the Shifts and the major features of the Common Core State Standards. Each Alignment Criterion has one or more metric associated with it; a specific number of these metrics must be met or partially met in order for the criterion as a whole to be met.

- Examine the materials in relation to these criteria, assigning each metric a point value. Rate the criterion as "Meets" or "Does Note Meet" based on the number of points assigned. The more points the materials receive on the alignment Criteria, the better they are aligned.

Record and explain the evidence upon which the rating is based.

Proceed to Section 4: Indicators of Quality

- Indicators of Quality are important considerations that will help evaluators better understand the overall quality of instructional materials. These considerations are not criteria for alignment to the CCSS, but they provide valuable information about additional program characteristics. Evaluators may want to add their own indicators to the examples provided.

Directions for Non-Negotiable 1

Freedom from Obstacles to Focus

Criterion	Evidence- Give specific examples.	Rating: (Reviewer only.)
Non-Negotiable 1: **Freedom from Obstacles to Focus** **Materials must reflect the content architecture of the Standards by not assessing the topics named before the grade level where they first appear in the Standards.** The Standards foster students' progress to algebra by focusing strongly on arithmetic. Consistent with this focus, certain topics from outside of arithmetic appear only in later grades. Thus, to be aligned, materials must reflect the content architecture of the Standards by not assessing the topics named before the grade level where they first appear in the Standards. In this criterion, "topics named" means the topics that are explicitly named in Metric 1A. No other topics should be added to the list in Metric 1A. (Note that other topics in the standards are addressed in criterion NN2.)	**Required Materials** • Common Core State Standards for Mathematics (www.corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf) • From the materials being evaluated: teacher guides and all assessment components	**Rating this Criterion**: Non-Negotiable 1 is rated as Meets or Does Not Meet. To rate Non-Negotiable 1, begin by rating Metric 1A. Since Metric 1A is the only metric for Non-Negotiable 1, the rating for Non-Negotiable 1 is the same as the rating for Metric 1A. If Metric 1A is rated as Does Not Meet, include evidence of when the named topic(s) is/are assessed. If the metric is rated as Meets, list the grade(s) examined in the evaluation.

Metric NN1A: **Materials ref the basic architecture of the Standards by not assessing the listed topics before the grade level indicated.** • Probability, including chance, likely outcomes, probability models. (Introduced in the CCSSM in grade 7) • Statistical distributions, including center, variation, clumping, outliers, mean, median, mode, range, quartiles; and statistical association or trends, including two-way tables, bivariate measurement data, scatter plots, trend line, line of best fit, correlation. (Introduced in the CCSSM in grade 6) • Similarity, congruence, or geometric transformations. (Introduced in the CCSSM in grade 8) • Symmetry of shapes, including line/ reflection symmetry, rotational symmetry. (Introduced in the CCSSM in grade 4) **How to Find the Evidence:** Evaluate the table of contents, all chapter tests, all unit tests, and other such assessment components (including rubrics). For context, read Criterion #2 from the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013). NOTE: Grade alignments of other topics are addressed in Non-Negotiable 2, Focus and Coherence.) In this criterion, "topics named" means the topics that are explicitly named in Metric 1A. No other topics should be added to the list in Metric 1A. (Note that other topics in the standards are addressed in criterion NN2.)	**Evidence-** No assessment it cover anything beyond grade 8 on similarity, congruence, or geometric transformations. Items on similarity, congruence, or geometric transformations can be found in the assessment items referred to as Interim	**(Reviewer only.)** **X Meets** **____Does Not Meet**
Non-Negotiable 1: Materials must reflect the content architecture of the Standards by not assessing the topics named* before the grade level where they first appear in the Standards. **NN 1** If Metric 1A was rated as Meets, then rate Non-Negotiable 1 as Meets. If Metric 1A was rated as Does Not Meet, then rate Non- Negotiable 1 as Does Not Meet. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion.**(Reviewer only.)** **Before moving to Non-Negotiable 2, record the final Meets or Does Not Meet rating in the Evaluation Summary.**		**(Reviewer only.)** **X Meets** **____Does Not Meet** **Strengths/Weaknesses:**

Directions for Non-Negotiable 2

Focus and Coherence

Non-Negotiable 2: **Focus and Coherence** **Materials must focus coherently on the Major Work of the grade in a way that is consistent with the progressions in the Standards.** Focus and coherence are the two major evidence-based design principles of the Common Core State Standards for Mathematics (CCSSM, p. 3). Focus is necessary in order to fulfill the ambitious promise the states have made to their students by adopting the Standards: greater achievement at the college and career ready level; greater depth of understanding of mathematics; and a rich classroom environment in which reasoning, sense-making, applications, and a range of mathematical practices flourish. In simpler terms, a mile-wide, inch-deep curriculum translates to less time per topic. Less time means less depth and moving on without many students. Thus, materials must focus coherently on the Major Work of the grade in a way that is consistent with the progressions in the Standards.	**Required Materials** • Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf) • Focus by Grade Level for the grade being evaluated (www.achievethecore.org/focus) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion:** Non-Negotiable 2 is rated as Meets or Does Not Meet. To rate Non-Negotiable 2, first rate metrics 2A–2H. Each of these eight metrics must be rated as Meets in order for Non-Negotiable 2 to be rated as Meets. Rate each metric 2A-2H as Meets or Does Not Meet/Insufficient Evidence. If the evidence examined shows that the Criterion is met, then mark the Criterion Meets. If the evidence examined shows that the Criterion is not met—or if there is insufficient evidence to make a determination—then mark the Criterion as Does Not Meet/Insufficient Evidence. Support all ratings with evidence.
Metric NN2A: **In each grade K–8, students and teachers using the materials as designed devote the large majority of time to the Major Work of the grade.** **How to Find the Evidence:** Familiarize yourself with the Major Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, lessons, homework assignments, and assessments. (Evaluate both student and teacher materials.) Consider time spent on the Major Work of the grade and judge qualitatively whether students and teachers using the materials as designed will devote the large majority of time to the Major Work of the grade. For context, read Criterion #1 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013)	**Evidence-** There are 50 out of the 63 lessons in the series devoted to the major work of the grade. This represents 79% which is within the acceptable range.	**(Reviewer only.)** **X Meets** **____Does Not Meet/** **Insufficient Evidence**

Metric NN2B: **Supporting Work, where present, enhances focus and coherence simultaneously by also engaging students in the Major Work of the grade.** **How to Find the Evidence:** Familiarize yourself with the Major Work and Supporting Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate chapters and lessons that focus on Supporting Work. NOTE: Example of evaluating this Criterion might include looking at whether materials for K–5 generally treat data displays as an occasion for solving grade-level word problems using the four operations (e.g., see 3.MD.B.3); or whether materials for grade 7 take advantage of opportunities to use probability to support ratios, proportions, and percentages. For context, read Criterion #3 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** **Concepts were introduced and revisited throughout the scope and sequence.** **Supporting clusters refer to major works in previous lessons. On page 665, when introducing scatter plots the vocabulary terms positive and negative slope are referred to.**	**(Reviewer only.)** **X Meets** **____Does Not Meet/** **Insufficient Evidence**
Metric NN2C: **Materials base content progressions on the grade-by-grade progressions in the Standards. Content from previous or future grades does not unduly interfere with or displace on-grade-level content.** **How to Find the Evidence:** Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, and lessons in both student and teacher materials. NOTE: In some cases it may be possible that aligned materials might address some aspects of a topic in a strategic way before or after the grade level in which the topic is central in the Standards' progressions; for example, a curriculum author might purposefully choose to explore adding fractions with unlike denominators in a way appropriate to grade four, recognizing that this work is not really required until the next grade. However, any such purposeful discrepancies in content progressions should enhance the required learning in each grade; not unduly interfere with or displace grade-level content; and be clearly aimed at helping students meet the Standards as written rather than effectively rewriting the progressions in the Standards. And in all cases, note that Non-Negotiable 1 must be met for materials to be aligned. For context, read Criterion #5a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Content from previous or future grades does not unduly interfere with or displace on grade level content. Some standards that shouldn't be covered are and this is noted in the weaknesses of Non Negotiable 2	**(Reviewer only.)** **X Meets** **____Does Not Meet/** **Insufficient Evidence**

Metric NN2D: **Materials gi[illegible] students extensive work with on-grade-level problems.** **How to Find the Evidence:** Evaluate both student and teacher materials. If the materials provide resources for differentiated learning, consider whether lower-performing students have opportunities to engage with grade-level problems. Also consider whether higher-performing students are given opportunities to learn current grade-level content in greater depth. For context, read Criterion #5b in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** There are multiple [illegible]ade-level problems as well as problems marked BL (beyond grade level) and AL (almost oat grade-level). There are also HOT (higher order thinking) problems at the end of each lesson to give higher preforming students a challenge. The Countdown to SBAC is also a really good resource.	**(Reviewer only.)** **X Meets** **____Does Not Meet/** **Insufficient Evidence**
Metric NN2E: **Materials relate on-grade-level concepts explicitly to prior knowledge from earlier grades.** **How to Find the Evidence:** Evaluate both student and teacher materials. NOTE: Examples of evaluating this Criterion might include looking at the way the materials extend basic ideas of place value across the decimal point; or the role that properties of operations play when the materials extend arithmetic beyond whole numbers to fractions, variables, and expressions. More generally, cluster headings in the Standards sometimes signal key moments where reorganizing and extending previous knowledge is important in order to accommodate new knowledge (e.g., see cluster headings that use the phrase "Apply and extend previous understanding"). For context, read Criterion #5c in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Each chapter has Quick Review and Quick Check. Each lesson also has a "Stop and Reflect" Also a common core test practice and spiral review.	**(Reviewer only.)** **X Meets** **____Does Not Meet/** **Insufficient Evidence**
Metric NN2F: **Review of material from previous grades is clearly identified as such to the teacher, and teacher and students can see what their specific responsibility is for the current year.** **How to Find the Evidence:** Evaluate the table of contents, but do not stop there; also evaluate units, chapters, lessons, homework assignments and assessments. (Evaluate both student and teacher materials.) Identify any content from previous grades and check whether it is identified as such. For context, read Criterion #5a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** The Teachers Edition has a section called "Coherence connecting within and across grades" with Previous/Now/Next. At the beginning of each chapter there is a list of prior knowledge that students need to be successful in the upcoming lesson.	**(Reviewer only.)** **X Meets** **____Does Not Meet/** **Insufficient Evidence**

Metric NN2G: **Materials include learning objectives that are visibly shaped by CCSSM cluster headings.** **How to Find the Evidence:** Select several clusters from the Major Work in the grade being evaluated. Evaluate teacher and student materials in relation to these clusters. For context, read Criterion #6a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** The CCSS are clearly stated at the beginning of every chapter and lesson. The "Track your Progress" at the beginning of the book is also a nice resource.	**(Reviewer only.)** **X Meets** **____Does Not Meet/ Insufficient Evidence**
Metric NN2H: **Materials include problems and activities that serve to connect two or more clusters in a domain, or two or more domains in a grade, in cases where these connections are natural and important.** **How to Find the Evidence:** In the grade being evaluated, choose two or more clusters or two or more domains for which connections are natural and important. Evaluate the units, chapters, and lessons that deal with the chosen topics, looking for problems and activities that serve to connect the chosen clusters or domains. NOTE: An example of evaluating this Criterion might include looking at whether problems in grade 4 sometimes or often involve students applying their developing computation skills (detailed in domain NBT) in the context of solving word problems (detailed in domain OA). For context, read Criterion #6b in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Materials include problems and activities that serve to connect two or more clusters in a domain, or two or more domains in a grade, in cases where these connections are natural and important. Inquiry labs throughout the text do a very good job of using and reteaching concepts learned.	**(Reviewer only.)** **X Meets** **____Does Not Meet/ Insufficient Evidence**
Non-Negotiable 2: **Focus and Coherence** **Materials must focus coherently on the Major Work of the grade in a way that is consistent with the progressions in the Standards.** NN 2 If all Metrics 2A – 2H were rated as Meets, then rate Non-Negotiable 2 as Meets. If one or more Metric was rated Does Not Meet/Insufficient Evidence, then rate Non-Negotiable 2 as Does Not Meet. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)** **Weakness: Many times 7th grade standards over shadow the 8th grade standards. This happens in Chapter 5 with lessons 4-6 focusing on standard deviation (which should not even be introduced yet). Also Chapter 8 is half volume and half surface area. Surface area is a 7th Grade CCSS** **Before moving to Alignment Criterion 1, record the final Meets or Does Not Meet rating in the Evaluation Summary.**		**(Reviewer only.)** **X Meets** **____Does Not Meet** **Strengths/Weaknesses:**

Now continue by evaluating the Alignment Criterion 1 for Rigor and Balance.

Directions for Alignment Criterion 1

Rigor and Balance

Alignment Criterion 1: Rigor and Balance

Materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.

The Standards set expectations for attention to all three aspects of rigor: conceptual understanding, procedural skill and fluency, and applications. Thus, materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.

Required Materials

- Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf)
- Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)
- Focus by Grade Level for the grade being evaluated (achievethecore.org/focus)
- Situation Types for the Operations in Word Problems (achievethecore.org/situation-types)
- From the materials being evaluated: teacher guides, student texts and workbooks

Rating this Criterion:

Alignment Criterion 1 is rated as Meets or Does Not Meet.

To rate Alignment Criterion 1, first rate metrics 1A, 1B, and 1C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). For each metric, guiding questions are provided to aid in gathering evidence.
Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 1 if the materials rate 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as rigor and balance, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.

Metric AC1A:
The materials support the development of students' conceptual understanding of key mathematical concepts, especially where called for in specific content Standards or cluster headings.

How to Find the Evidence:

Select one or more cluster(s) or Standard(s) from the Major Work for the grade being evaluated that relate specifically conceptual understanding to use throughout the questions associated with this metric. NOTE: Some examples of clusters or Standards that call for conceptual understanding include: K.OA.A.1, (1.NBT.B, 1.NBT.C), (2.NBT.A, 2.NBT.B), (3.OA.A.1, 3.OA.A.2), 4.NF.A, (4.NBT.A, 4.NBT.B), 5.NF.B, (5.NBT.A, 5.NBT.B), 6.RP.A, 6.EE.A.3, 7.NS.A, 7.EE.A, 8.EE.B, 8.F.A, 8.G.A

Clusters or Standards grouped by parentheses are closely connected and could be analyzed together.

For context, read Criterion #4a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).

-Choose a cluster/Standard from the Major Work that is aligned to each aspect of rigor and use it to evaluate these metrics. It is most helpful if the same clusters/Standards are chosen for all of the programs being evaluated. (Guidance in choosing clusters/Standards is included in "How to Find the Evidence".)

Use the questions for AC Metric 1A to evaluate Metric 1A. Record evidence for each question and rate Metric 1A.

X Meets (2)

____Partially Meets (1)

____Does Not Meet (0)

Is conceptual understanding attended to thoroughly where the Standards set ex expectations for understanding or interpreting? Evaluate lessons, chapter/unit assessments and homework assignments, paying attention to work aligned to Standards that explicitly call for understanding or interpreting. NOTE: Examples of evaluating this Criterion might include looking at how well the multi-digit addition and subtraction algorithms are developed and explained on the basis of place value and properties of operations; or how well the multi-digit multiplication and division algorithms are developed and explained on the basis of place value and properties of operations; or how well solving equations is presented and explained as a process of reasoning.	**Evidence-** The curriculum cov all 4 CCSS under statistics and probability. They are found in chapter 9 of the Text	
Do the materials feature high-quality conceptual problems and conceptual discussion questions? Evaluate lessons, chapter/unit assessments, and homework assignments. NOTE: Example of conceptual problems might include such questions as "Find a number greater than 1/5 and less than 1/4," or "If the divisor does not change and the dividend increases, what happens to the quotient?"	**Evidence-** They are not only asked to crunch numbers, but also asked to explain and interpret. The inquiry labs are a very good tool which help them enhance their understanding.	
Do the materials feature opportunities to identify correspondences across mathematical representations? Evaluate lessons, chapter/unit assessments and homework assignments. NOTE: Examples of evaluating this Criterion might include looking at whether students are supported in identifying correspondences among: the verbal description of a situation, the diagrams that distill its mathematical features, and the equations that model it; or equivalent forms of numbers (e.g., 3 and 6/2) and the number line; or rational number operations and representations of them via models such as the vector model; or the expression that defines a function and the graph that shows the relationship.	**Evidence-** Throughout chapter 9 they use input/output tables, scatter plots, lines of best fit, two-way tables and also asked to analyze data. Multiple models and diagrams to explain the material.	
Metric AC1B: **The materials are designed so that students attain the fluencies and procedural skills required by the Standards.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Major Work for the grade being evaluated that relate specifically to fluency and procedural skill to use throughout the questions associated with this metric. NOTE: Some examples of Standards that call for procedural skill and fluency include: K.OA.A.5, 1.OA.C.6, 2.OA.B.2, 2.NBT.B.5, 3.OA.C.7, 3.NBT.A.2, 4.NBT.B.4, 5.NBT.B.5, 6.NS.B.2, and 6.NS.B.3, 6.EE.A, 7.NS.A, 7.EE.A.1,7.EE.B.4a, 8.EE.C.7, 8.EE.C.8b For context, read Criterion #4b in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).		**Use the questions for Metric 1B to evaluate Metric 1 B. Record evidence for each question and rate Metric 1B.** **(Reviewer only.)** **X Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**

Is progress toward fluency and procedural skill interwoven with students' develo[illegible]onceptual understanding of the operations in question? Evaluate lessons, chapter/unit assessments, daily routines, and homework assignments for evidence that the development of fluency and procedural skill is supported by conceptual understanding.	**Evidence-** The lessons give g[illegible]examples that help the students learn procedures to solve the problems. The standard 8.EE.7b is practiced in 5 chapters and standard 8.EE.8b is practiced in 2 chapters and in two inquiry labs. The standards are interwoven throughout the text.	
Are purely procedural problems and exercises present that include cases in which opportunistic strategies are valuable and generic cases that require efficient algorithms present? Evaluate lessons, chapter/unit assessments, daily routines, and homework assignments. NOTE: Examples of problems in which opportunistic strategies are valuable might include the sum 698 + 240 or the system x + y = 1, 2x + 2y = 3. Examples of generic cases that require efficient algorithms might include the sum 8767+2286 or the system 6y + x = x + 3, – x = 1 + 2y.	**Evidence-** Use of the inquiry labs to solve two-step equations uses diagram in order to build strategies that students can apply to multiple step equations. Also in the lesson 3 there ar alternative strategies presented to help students link two step equations with the equation 400 + 15( ) = _____	
Do the materials in grades K–6 provide repeated practice toward attainment of fluency Standards? Evaluate lessons, daily routines, and homework assignments for evidence of repeated practice toward attainment of the following K–6 Standards that set an explicit expectation of fluent (accurate and reasonably fast) computation: K.OA.A.5, 1.OA.C.6, 2.OA.B.2, 2.NBT.B.5, 3.OA.C.7, 3.NBT.A.2, 4.NBT.B.4, 5.NBT.B.5, 6.NS.B.2, 6.NS.B.3.	**Evidence-**	
Metric AC1C: **The materials are designed so that teachers and students spend sufficient time working with engaging applications, without losing focus on the Major Work of each grade.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Major Work for the grade being evaluated that relate specifically application to use throughout the questions associated with this metric. NOTE: Some examples of clusters or Standards that call for application include: K.OA.A.2, 1.OA.A, 2.OA.A, 3.OA.A.3, 3.OA.D.8, 4.OA.A.3, 4.NF.B.3d, 4.NF.B.4c, 5.NF.B.6, 5.NF.B.7c, 6.RP.A.3, 6.NS.A.1, 6.EE.B.7, 6.EE.C.9, 7.RP.A, 7.NS.A.3, 7.EE.B.3, 8.EE.C.8c, 8.F.B For context, read Criterion #4c in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-**	**Use the questions for Metric 1C to evaluate Metric 1C. Record evidence for each question and rate Metric 1C.** **(Reviewer only.)** **_X__ Meets (2)** **____ Partially Meets (1)** **____Does Not Meet (0)**

Are there are single- and multi-step contextual problems, including non-routine problems that develop the mathematics of the grade, afford opportunities for practice, and engage students in problem solving? Do the problems attend thoroughly to those places in the content Standards where expectations for multi-step and real-world problems are explicit? Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** Each lesson engages students in a variety of applications and contextual situations as well as some procedural practice. The "Real world link" at the beginning of every lesson is a good resource which students are either to solve in a whole group or small group setting. The "When will you use this" at the beginning of each chapter is also a very nice tool.	
Do application problems particularly stress applying the Major Work of the grade? Evaluate lessons, chapter/unit assessments, and homework assignments. NOTE: Examples of evaluating this Criterion might include looking at: how well, by the end of grade 2, students using the materials as designed can represent and solve a full range of one-step addition and subtraction word problems; or how well, by the end of grade 3, students using the materials as designed can represent and solve a full range of one-step multiplication and division word problems; or how well these basic situation types for each operation are carried coherently across the grades, (e.g., with fractions and algebraic expressions); or, in all grades, whether the problems connect concepts, Standards, and domains in ways that are natural and important. For a list of situation types for one-step addition, subtraction, multiplication, and division problems, see Situation Types for the Operations in Word Problems	**Evidence-** The majority of the problems focus on the 7 major works of the 8th grade. The "Real world link" is a good tool and the "ideas for use" in the teachers edition are also a good help.	
Does modeling build slowly across K–8, with applications that are relatively simple in earlier grades and when students are encountering new content? In grades 6–8, do the problems begin to provide opportunities for students to make their own assumptions or simplifications in order to model a situation mathematically? Read Standard for Mathematical Practice 4, Model with Mathematics. Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** Opportunities for modeling mathematics and for students to come up with their own assumptions are evident in the inquiry labs and Problem Solving Investigations. The text also has the students evaluate which mathematical practices they use at the beginning of each lesson.	

Alignment Criterion 1: Rigor and Balance

Materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.

AC1 Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 out of 6 points, the Criterion has not been met. Check the final rating.
Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)**

Before moving to Alignment Criterion 2, record the final Meets or Does Not Meet rating in the Evaluation Summary.

(Reviewer only.)

X Meets

____Does Not Meet

Strengths/Weaknesses:

Directions for Alignment Criterion 2

Standards for Mathematical Practice

Alignment Criterion 2: Standards for Mathematical Practice

Materials must demonstrate authentic connections between content Standards and practice Standards.

The Standards require that designers of instructional materials connect the mathematical practices to mathematical content in instruction. Thus, materials must demonstrate authentic connections between content Standards and practice Standards.

Required Materials:

- Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf)
- Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)
- Focus by Grade Level for the grade being evaluated (www.achievethecore.org/focus)
- From the materials being evaluated: teacher guides, student texts and workbooks

Rating this Criterion

Alignment Criterion 2 is rated as Meets or Does Not Meet.

To rate Alignment Criterion 2, first rate metrics 2A, 2B, and 2C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). For each metric, guiding questions are provided to aid in gathering evidence.

Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 2 if the materials earn 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as mathematical practices, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.

Metric AC2A: **Materials address the practice Standards in such a way as to enrich the Major Work of the grade; practices strengthen the focus on Major Work instead of detracting from it, in both teacher and student materials.** **How to Find the Evidence:** Familiarize yourself with the Major Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate teacher and student materials for evidence that the mathematical practices support and connect to the focus of the grade. NOTE: Examples of evaluating this Criterion might include looking at whether, in grades K–5, students using the materials are supported to look for and express regularity in repeated reasoning about the addition table, the multiplication table, the properties of operations, the relationship between addition and subtraction or multiplication and division, and the place value system; or whether, in grades 6–8, students using the materials are supported to look for and express regularity in repeated reasoning about proportional relationships and linear functions. For context, read Criterion #8 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013).	**Evidence-** Approximately 90% of the material in the text are repeated reasoning in proportional relationships, whether it be in equations, graphs, tables, or shapes. There is only 1 chapter that doesn't focus on the major work or 8th grade which is chapter 8. In the independent practice problems they are labeled MP and are also labeled in the heading.	**(Reviewer only.)** **X Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Metric AC2B: **Materials attend to the full meaning of each practice Standard.** **How to Find the Evidence:** For context, read Criterion #7 and Criterion #9 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).		**Use the questions for Metric 2B to evaluate Metric 2B. Record evidence for each question and rate Metric 2B.** **(Reviewer only.)** **X Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Over the course of any given year of instruction, is each mathematical practice Standard meaningfully present in the form of assignments, activities, or problems that stimulate students to develop the habits of mind described in the practice Standard? Evaluate lessons, chapter/ unit assessments, and homework assignments for evidence of each mathematical practice being meaningfully present in instruction.	**Evidence-** **Not only do I see the mathematical practices, but the students are asked to evaluate themselves occasionally on which practices they used in the lesson. Practices are will thought out and obvious in the teachers edition.**	
Do the materials treat the practice Standards as developing across grades or grade bands? Are the practice Standards in early grades appropriately simple? Do they display an arc of growing sophistication across the grades?	**Evidence-** **N/A**	

Are there teacher-directed materials that explain the role of the practice Standards in the classroom and in students' mathematical development? Are alignments to practice Standards accurate?	**Evidence-** **Materials attend to the full meaning of each practice standard. The MP is marked in red on the outside section of the Teachers Edition.**	
Metric AC2C: **Materials support the Standards' emphasis on mathematical reasoning.** **How to Find the Evidence:** For context, read Criterion #10 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).		**Use the questions for Metric 2C to evaluate Metric 2C. Record evidence for each question and rate Metric 2C.** **(Reviewer only.)** **X Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Do the materials support students in constructing viable arguments and critiquing the arguments of others concerning grade-level mathematics that is detailed in the content Standards? Read Standard for Mathematical Practice 3. Evaluate teacher and student materials to ensure that students are given opportunities to reason with grade-level mathematics.	**Evidence-** Materials support the standards emphasis on mathematical reasoning throughout the text. For example: page 126, question 16, students must use counterarguments to explain integer coefficients.	
Do the materials support students in producing not only answers and solutions, but also, in a grade-appropriate way, arguments, explanations, diagrams, mathematical models, etc., especially in the Major Work of the grade? Familiarize yourself with the Major Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate teacher and student materials, to understand the types of work students are expected to produce.	**Evidence-** The "Inquiry Lab" and "Power Up! Performance task" require the student to reason, explain and justify their findings.	
Do materials explicitly attend to the specialized language of mathematics? Is the language of argument, problem solving, and mathematical explanations taught rather than assumed? Evaluate teacher and student materials, paying attention to how mathematical language is taught. NOTE: Examples of evaluating this Criterion might include looking at whether students are supported in: basing arguments on definitions; using the method of providing a counterexample; or recognizing that examples alone do not establish a general statement.	**Evidence-** There are vocabulary words and appropriate definitions to be used throughout the lesson. Students are often asked in their practice to not only find an answer but justify it by listing properties.	

Alignment Criterion 2:
Standards for Mathematical Practice

Materials must demonstrate authentic connections between content Standards and practice Standards.

AC2 Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 out of 6 points, the Criterion has not been met. Check the final rating.
Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion.
(Reviewer only.)

The Standards for Mathematical Practice are evident throughout the materials including many opportunities for writing and critiquing work. There are opportunities for students to create viable arguments in discussions and in open ended responses.

Before moving to Alignment Criterion 3, record the final Meets or Does Not Meet rating in the Evaluation Summary.

(Reviewer only.)

X Meets

____Does Not Meet

Strengths/Weaknesses:

Alignment Criterion 3:
Access to the Standards for All Students

Materials must provide supports for English Language Learners and other special populations.

Because Standards are for all students, alignment requires thoughtful support to ensure all students are able to meet the Standards. Thus, aligned materials must provide supports for English Language Learners and other special populations.

Required Materials:

- Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf)
- Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)
- From the materials being evaluated: teacher guides, student texts and workbooks

Rating this Criterion:
Alignment Criterion 3 is rated as Meets or Does Not Meet.

To rate Alignment Criterion 3, first rate metrics 3A, 3B, and 3C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points).

Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 3 if the materials earn 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as support for special population, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.

Metric AC3A: **Support for [redacted]ish Language Learners and other special populations is thoughtful and helps those students meet the same Standards as all other students. The language in which problems are posed is carefully considered.** **How to Find the Evidence:** Evaluate teacher and student materials, paying attention to supports offered for special populations.	**Evidence-** There is a full Spar[redacted]version of the text available. In the teachers manual it gives "Alternate strategy" that is AL (approaching level), OL (on level), and BL (beyond level)	**Reviewer only.)** **__X__Meets (2)** **____ Partially Meets (1)** **____Does Not Meet (0)**
Metric AC3B: **Materials provide appropriate level and type of scaffolding, differentiation, intervention, and support for a broad range of learners with gradual removal of supports, when needed, to allow students to demonstrate their mathematical understanding independently.** **How to Find the Evidence:** Evaluate teacher and student materials, paying attention to whether materials provide differentiation that will lead all learners to engage with on-grade-level content.	**Evidence-** There is a list of alternate strategies, scaffolding ideas, and leveled homework options for approaching level, on level, or beyond level.	**Reviewer only.)** **X Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Metric AC3C: **Design of lessons recommends and facilitates a mix of instructional approaches for a variety of learners such as using multiple representations (e.g., including models, using a range of questions, checking for understanding, flexible grouping, pair-share).** **How to Find the Evidence:** Evaluate teacher materials, noting instructional approaches suggested for whole class and differentiated lessons and activities.	**Evidence-** The teachers edition gives differentiated homework options in the AL, OL, BL as stated above. The teachers edition gives many ideas for use in grouping, pair-share, and modeling with math tools strategies to use.	**Reviewer only.)** **X Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**

Alignment Criterion 3: Access to the Standards for All Students **Materials must provide supports for English Language Learners and other special populations.** **AC3** Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 points, the Criterion has not been met. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion.**(Reviewer only.)** **Move to the Evaluation Summary and record the final Meets or Does Not Meet rating .**	**(Reviewer only.)** **X Meets** **____Does Not Meet** **Strengths/Weaknesses:**

Once an evaluation for alignment to the Shifts and major features of the CCSS has been conducted using Sections 1-3, it's important to evaluate for overall quality and best practices. A starting list of Indicators of Quality are suggested below. States, districts and others evaluating instructional materials are encouraged to add to this list to ensure materials reflect local contexts. For background information on some of the Indicators of Quality in this section, refer to pp.18–21 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).

Indicators of Quality	Evidence- Give specific examples.	Rating: (Reviewers only.)
1. Lessons are thoughtfully structured and support the teacher in leading the class through the learning paths at hand, with active participation by all students in their own learning and in the learning of their classmates.	**Evidence-** **Each chapter starts with multiple ways to launch the lesson. The focus and standards are very clear, there are many ways introduced that a teacher can pick from to guide the class through a meaningful lesson.**	**(Reviewer only.)** **X Yes** **_____ No**

2. The underlying design of the materials includes both problems and exercises. (In solving problems, students learn new mathematics, whereas in working exercises, students apply what they have already learned to build mastery.) Each problem or exercise has a purpose. NOTE: This Criterion does not require that the problems and exercises be labeled as such.	Evidence- In each lesson the practice problems are separated into several sections. 1) Quick review problems to prepare, 2) examples, 3) Guided Problems to solve with assistance. 4) Independent practice in solving problems. 5) extra practice to build mastery in all standards.	(Reviewer only.) X Yes _____ No
3. Design of assignments is not haphazard: exercises are given in intentional sequences in order to strengthen students' mathematical understanding.	Evidence- The lesson scaffold and build on each other.	(Reviewer only.) X Yes _____ No
4. There are separate teacher materials that support and reward teacher study including, but not limited to: discussion of the mathematics of the units and the mathematical point of each lesson as it relates to the organizing concepts of the unit, discussion on student ways of thinking and anticipating a variety of students responses, guidance on lesson flow, guidance on questions that prompt students thinking, and discussion of desired mathematical behaviors being elicited among students.	Evidence- The teachers' edition is helpful in giving activities, alternate strategies, common errors, scaffolding ideas, ideas for manipulatives or tools and an essential questions to ask.	(Reviewer only.) X Yes _____ No
5. Manipulatives suggested in the materials are faithful representations of the mathematical objects they represent and are connected to written methods.	Evidence- Manipulatives that are suggested in the teacher materials match the content in the standards. The use of "Foldables" is a very good tool.	(Reviewer only.) X Yes _____ No
6. Materials include a variety of curriculum-embedded assessments. Examples include pre-, formative, summative, and self-assessment resources.	Evidence- There is a separate assessment book that includeds pre-tests, chapter tests, summative test, smarter balanced assessment types in SBAC format, and an end of course test.	(Reviewer only.) X Yes _____ No

7. Assessments contain aligned rubrics, answer keys, and scoring guidelines that provide sufficient guidance for interpreting student performance.	Evidence- Same as stated before. Answer keys and scoring guidelines are provided. The only place the rubrics were found were on the student assessments where they assess themselves.	(Reviewer only.) X Yes _____ No
8. Materials assess student proficiency using methods that are accessible and unbiased, including the use of course-level language in student prompts.	Evidence- Language for lessons, examples and assessments use grade level language and situations. For example, story problems talk about cell phones, skateboards, movie theatres etc.	(Reviewer only.) X Yes _____ No
9. Materials are carefully evaluated by qualified individuals, whose names are listed, in an effort to ensure freedom from mathematical errors and course-level appropriateness.	Evidence- List authors, consultant's and reviewers on page T20 and T21	(Reviewer only.) X Yes _____ No
10. The visual design supports students in engaging thoughtfully with the subject. Navigation through the text is clear.	Evidence- Pictures and visuals are not distracting and only add to the helping the student visualize the content. For example, when asking a question about the amount of rainfall, there is a small picture of a rain gauge on page 13.	(Reviewer only.) X Yes _____ No
11. The materials engage parents in appropriate ways. For example, homework assignments in elementary grades, consist of routine problems, practice with getting answers, and fluency-building exercises that parents can easily support.	Evidence- The material in the text would be easy for a parent to follow and help support their child.	(Reviewer only.) X Yes _____ No

Reviewer IMET Evaluation Summary **Title/Level: Glencoe Math Course 3 / 8th Grade**

Publisher: McGraw Hill Education **Copyright: 2015** **ISBN: 9780076678525 & 9780021454259**

Reviewer ID # TH & TC **Date Review Completed: March 8, 2016**

Non-Negotiable Criteria- Each Non-Negotiable must be met in order for the Non-Negotiable Alignment Criteria to be met overall.	
Non-Negotiable 1: Freedom from Obstacles to Focus **X** Meets _____ Does Not Meet	**Non- Negotiable 2: Focus and Coherence** **X** Meets _____ Does Not Meet
Non-Negotiable Overall: **X** Meets _____ Does Not Meet	
Alignment Criteria- Each Alignment Criterion must be met with a sufficient number of points in order for Alignment Criteria to be labeled as "Meets" overall. The more points the materials receive on the Alignment Criteria, the better they are aligned.	

Alignment Criterion 1: Rigor and Balance	Alignment Criterion 2: Standards of Mathematical Practice	Alignment Criterion 3: Access to Standards for All Learners
Points: 6 of 6 possible. (Materials must receive at least 5 of 6 points to align.) X Meets _____ Does Not Meet	Points: 6 of 6 possible. (Materials must receive at least 5 of 6 points to align.) X Meets _____ Does Not Meet	Points: 6 of 6 possible. (Materials must receive at least 5 of 6 points to align.) X Meets _____ Does Not Meet

Alignment Criteria Overall:

X Meets _____ Does Not Meet

If the materials meet both Non-Negotiables and relevant Alignment Criterion, they are aligned to the Shifts and major features of the Core Standards. **the materials meet every Non-Negotiable and Alignment Criterion? X Yes _____ No**

What are the specific areas of strength and weakness based on this evaluation? Publishers or others modifying or developing assessments can use this information to make improvements and/or to remedy gaps in the alignment of assessment materials.

Strengths:

Very good vocabulary and does a great job of using and teaching the mathematical practices.
Is common core aligned and the countdown to SBAC is a very nice resource.
The performance tasks are a very good resource to help the students represent the material in different ways.
The teachers manual helps facilitate a mix of instructional approaches.

Weaknesses:

Many times 7th grade standards over shadow the 8th grade standards. This happens in Chapter 5 with lessons 4-6 focusing on standard deviation (which should not even be introduced yet). Also Chapter 8 is half volume and half surface area. Surface area is a 7th Grade CCSS.
No pacing guide included.
The consumable workbook format may be costly.
The materials state that Professional Development is a requirement (at a cost). But after reviewing the material we don't think it would be necessary.

2015-16 Mathematics Interim Review Recommendation & Summary

Publisher Name:	McGraw-Hill School Education LLC
Title:	Glencoe Math Accelerated (7th Grade)
ISBN #	Various
Grade Level(s) or Course:	Grade 7
Reviewer ID:	AC + TS

RECOMMENDED AS:

__✓____**Core Mathematics Program-** a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials. Substantial evidence clearly supports the designation of this program as Core.

_____**Other Mathematics Program-** a program that substantially, but partially, meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for supplemental materials. Substantial evidence clearly supports the designation of this program as Other.

_____**Component Mathematics Program-** a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs. Substantial evidence clearly supports the designation of this program as Component.

_____**Intervention Program-** a program designed and intended to target and support students' specific needs. Substantial evidence clearly supports the designation of this program as Intervention.

_____ **Does not meet criteria** for recommendation as a Curricular Material or Online Resource for Mathematics.

EVIDENCE SUMMARY:

FOCUS-

Materials reflect the content architecture of the Standards by not assessing above grade level.
The focus is 7th grade accelerated Standards listed in Appendix A.

COHERENCE-

Materials focus ~~not~~ coherently on all Major Grade 7 & 8 Standards listed in Appendix A.

RIGOR-

Materials reflect the balances in the Standards with Rigorous expectations.

CONCEPTUAL UNDERSTANDING-

Conceptual and procedural understanding are attended to throughout the curriculum with real-world application, HOT problems, virtual manipulatives, and essential questions.

MATHEMATICAL PRACTICES-

MPs are seen throughout this curriculum and make authentic connections between standards. MPs meet the needs of ELLs and diverse learners.

ACCESSIBILITY OF STANDARDS TO ALL STUDENTS-

MPs and content throughout this curriculum meet the needs of ELLs and diverse learners ~~by~~ through real-world problems, vocabulary, graphic organizers, pictures, interactive study guide, higher-order-thinking problems and differentiated homework options.

OTHER:

2015-16 Interim Mathematics Review

Mathematics Evaluation Tool Grades K-8

Publisher: McGraw-Hill School Education LLC

Title of Material: Glencoe Math Accelerated (7th Grade)

Author: Price et al

ISBN #: Various **Copyright** 2014

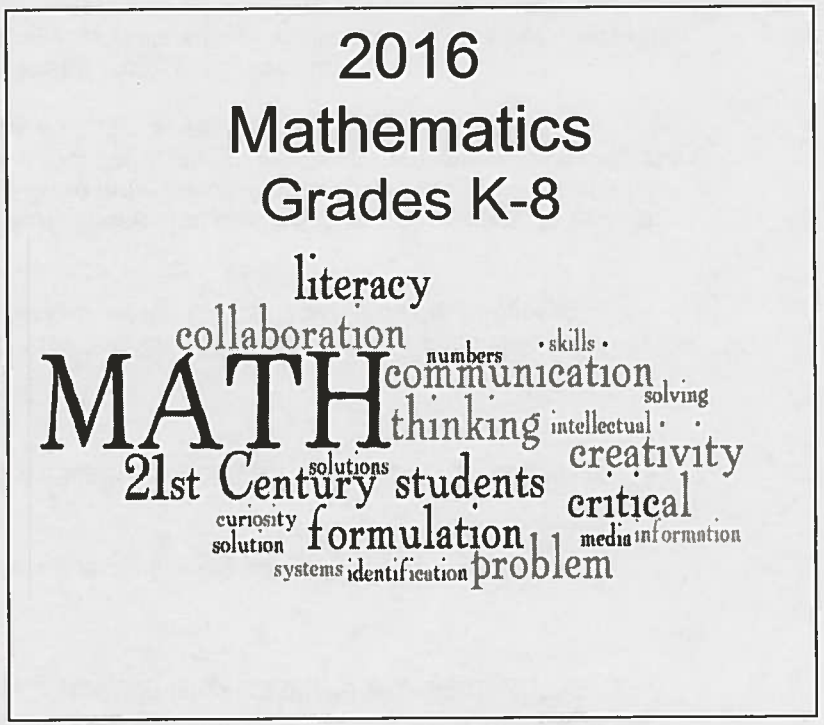
Reviewer ID: AC + TS

Core Mathematics Program- a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Core.

Other Mathematics Program- a program that substantially, but partially, meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Other.

Component Mathematics Program- a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs.
Substantial evidence clearly supports the designation of this program as Component.

Intervention Program- a program designed and intended to target and support students' specific needs.
Substantial evidence clearly supports the designation of this program as Intervention.



- Evaluation Form adapted from Instructional Materials Evaluation Toolkit (IMET).

The IMET was developed by Student Achievement Partners. Educators may use or adapt. http://creativecommons.org/licenses/by/3.0/ Download this tool at http://achievethecore.org/IMET

Instructional Materials Evaluation Tool

Mathematics, Grades K-8

What Are the Purposes of the IMET?

This Math IMET is designed to help educators determine whether instructional materials are aligned to the Shifts and major features of the Common Core State Standards (CCSS). The substantial instructional Shifts (http://www.corestandards.org/other-resources/key-shifts-inmathematics/) at the heart of the Common Core State Standards are:

- **Focus** strongly where the Standards focus
- **Coherence**: Think across grades and link to major topics within the grade
- **Rigor**: In major topics, pursue conceptual understanding, procedural skill and fluency, and application with equal intensity.

The IMET draws directly from the following documents:

- Common Core State Standards for Mathematics (www.corestandards.org/Math)
- Publishers' Criteria for the Common Core State Standards in Mathematics grade K-8 (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)

When to use the IMET

1. Purchasing materials: Many factors go into local purchasing decisions. Alignment to the Standards is a critical factor to consider. This tool is designed to evaluate alignment of instructional materials to the Shifts and the major features of the CCSS. It also provides suggestions of additional indicators to consider in the materials evaluation and purchasing process.

2. Evaluating materials currently in use: The IMET can be used to analyze the degree of alignment of existing materials and help to highlight specific, concrete flaws in alignment. Even where materials and tools currently in use fail to meet one or more of these criteria, the pattern of failure is likely to be informative. States and districts can use the evaluation to create a thoughtful plan to modify or combine existing resources in such a way that students' actual learning experiences approach the focus, coherence, and rigor of the Standards.

3. Developing programs: Those developing new programs can use this tool as guidance for creating aligned curricula.
Please note this tool was designed for evaluating comprehensive curricula (including any supplemental or ancillary materials), but it was not designed for the evaluation of standalone supplemental materials.

Who Uses the IMET?

Evaluating instructional materials requires both subject-matter and pedagogical expertise. Evaluators should be well versed in the Standards (www.corestandards.org/Math) for all grades in which materials are being evaluated. This includes understanding the Major Work of the grade (www.achievethecore/focus), the Supporting and Additional work, how the content fits into the progressions in the Standards (www.achievethecore.org/progressions), and the expectations of the Standards with respect to conceptual understanding, procedural skill and fluency, and application. Evaluators also should be familiar with the substantial instructional Shifts (http:// www.corestandards.org/other-resources/key-shifts-in-mathematics/) of Focus, Coherence and Rigor that are listed above.

Getting Started

Prior to Evaluation

Assemble all of the materials necessary for the evaluation. It is essential for evaluators to have materials for all grades covered by the program, as some criteria cannot be rated without having access to each grade. In addition, each evaluator should have a reference copy of the Common Core State Standards for Mathematics (CCSSM) and the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013).

Before conducting the evaluation itself, it is important to develop a protocol for the evaluation process. The protocol should include having evaluators study the Publishers' Criteria and the IMET. It will also be helpful for evaluators to get a sense of each program overall before beginning the process. At a minimum, this would include reading the front matter of the text, looking at the table of contents and paging through multiple chapters.

Sections 1-3 below should be completed to produce a comprehensive picture of the strengths and weaknesses of the materials under evaluation. Information about areas in need of improvement or supplementation should be shared with internal and external stakeholders.

Navigating the Tool

Begin with Section 1: Non-Negotiable Alignment Criteria

- The Non-Negotiable Alignment Criteria must each be met in full for materials to be considered aligned to the Shifts and the major features of the Common Core State Standards. Each Non-Negotiable Alignment Criterion has one or more metrics associated with it; every one of these metrics must be met in order for the criterion as a whole to be met.

- Examine the relevant materials and use evidence to rate the materials against each criterion and its associated metric(s).

- Record and explain the evidence upon which the rating is based.

Continue to Section 2: Alignment Criteria

- The Alignment Criteria must each be met for materials to be considered aligned to the Shifts and the major features of the Common Core State Standards. Each Alignment Criterion has one or more metric associated with it; a specific number of these metrics must be met or partially met in order for the criterion as a whole to be met.

- Examine the materials in relation to these criteria, assigning each metric a point value. Rate the criterion as "Meets" or "Does Note Meet" based on the number of points assigned. The more points the materials receive on the alignment Criteria, the better they are aligned.

- Record and explain the evidence upon which the rating is based.

Proceed to Section 4: Indicators of Quality

- Indicators of Quality are important considerations that will help evaluators better understand the overall quality of instructional materials. These considerations are not criteria for alignment to the CCSS, but they provide valuable information about additional program characteristics. Evaluators may want to add their own indicators to the examples provided.

Directions for Non-Negotiable 1 **Freedom from Obstacles to Focus**		
Criterion	**Evidence- Give specific examples.**	**Rating: (Reviewer only.)**
Non-Negotiable 1: **Freedom from Obstacles to Focus** **Materials must reflect the content architecture of the Standards by not assessing the topics named before the grade level where they first appear in the Standards.** The Standards foster students' progress to algebra by focusing strongly on arithmetic. Consistent with this focus, certain topics from outside of arithmetic appear only in later grades. Thus, to be aligned, materials must reflect the content architecture of the Standards by not assessing the topics named before the grade level where they first appear in the Standards. In this criterion, "topics named" means the topics that are explicitly named in Metric 1A. No other topics should be added to the list in Metric 1A. (Note that other topics in the standards are addressed in criterion NN2.)	**Required Materials** • Common Core State Standards for Mathematics (www.corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf) • From the materials being evaluated: teacher guides and all assessment components	**Rating this Criterion:** Non-Negotiable 1 is rated as Meets or Does Not Meet. To rate Non-Negotiable 1, begin by rating Metric 1A. Since Metric 1A is the only metric for Non-Negotiable 1, the rating for Non-Negotiable 1 is the same as the rating for Metric 1A. If Metric 1A is rated as Does Not Meet, include evidence of when the named topic(s) is/are assessed. If the metric is rated as Meets, list the grade(s) examined in the evaluation.

Metric NN1A:
Materials re[illegible] the basic architecture of the Standards by not assessing the listed topics before the grade level indicated.

- Probability, including chance, likely outcomes, probability models. (Introduced in the CCSSM in grade 7)
- Statistical distributions, including center, variation, clumping, outliers, mean, median, mode, range, quartiles; and statistical association or trends, including two-way tables, bivariate measurement data, scatter plots, trend line, line of best fit, correlation. (Introduced in the CCSSM in grade 6)
- Similarity, congruence, or geometric transformations. (Introduced in the CCSSM in grade 8)
- Symmetry of shapes, including line/ reflection symmetry, rotational symmetry. (Introduced in the CCSSM in grade 4)

How to Find the Evidence:

Evaluate the table of contents, all chapter tests, all unit tests, and other such assessment components (including rubrics).

For context, read Criterion #2 from the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013). NOTE: Grade alignments of other topics are addressed in Non-Negotiable 2, Focus and Coherence.)

In this criterion, "topics named" means the topics that are explicitly named in Metric 1A. No other topics should be added to the list in Metric 1A. (Note that other topics in the standards are addressed in criterion NN2.)

Evidence-

Unit 1: 7.NS ✓, [illegible].NS ✓, 8.EE ✓
Unit 2: 7.RP ✓, 7.EE, 8.EE ✓
Unit 3: 7.SP
Unit 4: 7.G ✓, 8.G ✓

Table of Contents pg. T22
Curriculum meets all CCSS for Accel. 7th.
Assessments align w/ units.
- Assessment Master
- Create your own - eAssessments

(Reviewer only.)

✓ Meets

____ Does Not Meet

Non-Negotiable 1: Materials must reflect the content architecture of the Standards by not assessing the topics named* before the grade level where they first appear in the Standards.

NN 1 If Metric 1A was rated as Meets, then rate Non-Negotiable 1 as Meets. If Metric 1A was rated as Does Not Meet, then rate Non- Negotiable 1 as Does Not Meet. Check the final rating.

Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion.**(Reviewer only.)**

Before moving to Non-Negotiable 2, record the final Meets or Does Not Meet rating in the Evaluation Summary.

(Reviewer only.)

✓ Meets

____ Does Not Meet

Strengths/Weaknesses:

Directions for Non-Negotiable 2

Focus and Coherence

Non-Negotiable 2:

Focus and Coherence

Materials must focus coherently on the Major Work of the grade in a way that is consistent with the progressions in the Standards.

Focus and coherence are the two major evidence-based design principles of the Common Core State Standards for Mathematics (CCSSM, p. 3). Focus is necessary in order to fulfill the ambitious promise the states have made to their students by adopting the Standards: greater achievement at the college and career ready level; greater depth of understanding of mathematics; and a rich classroom environment in which reasoning, sense-making, applications, and a range of mathematical practices flourish. In simpler terms, a mile-wide, inch-deep curriculum translates to less time per topic. Less time means less depth and moving on without many students. Thus, materials must focus coherently on the Major Work of the grade in a way that is consistent with the progressions in the Standards.

Required Materials

- Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf)
- Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)
- Focus by Grade Level for the grade being evaluated (www.achievethecore.org/focus)
- From the materials being evaluated: teacher guides, student texts and workbooks

Rating this Criterion:

Non-Negotiable 2 is rated as Meets or Does Not Meet.

To rate Non-Negotiable 2, first rate metrics 2A–2H. Each of these eight metrics must be rated as Meets in order for Non-Negotiable 2 to be rated as Meets. Rate each metric 2A-2H as Meets or Does Not Meet/Insufficient Evidence. If the evidence examined shows that the Criterion is met, then mark the Criterion Meets. If the evidence examined shows that the Criterion is not met—or if there is insufficient evidence to make a determination—then mark the Criterion as Does Not Meet/Insufficient Evidence. Support all ratings with evidence.

Metric NN2A:
In each grade K–8, students and teachers using the materials as designed devote the large majority of time to the Major Work of the grade.

How to Find the Evidence:

Familiarize yourself with the Major Work of the grade being evaluated (see the Focus by Grade Level documents.)

Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, lessons, homework assignments, and assessments. (Evaluate both student and teacher materials.)

Consider time spent on the Major Work of the grade and judge qualitatively whether students and teachers using the materials as designed will devote the large majority of time to the Major Work of the grade.

For context, read Criterion #1 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013)

Evidence-

Total = 88 Chapters

Major	Supporting	Addtl
67	4	17
76%	5%	19%

Materials devoted majority to Major Works.

(Reviewer only.)

✓ **Meets**

Does Not Meet/ Insufficient Evidence

Metric NN2B: **Supporting [illegible]k, where present, enhances focus and coherence simultaneously by also engaging students in the Major Work of the grade.** **How to Find the Evidence:** Familiarize yourself with the Major Work and Supporting Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate chapters and lessons that focus on Supporting Work. NOTE: Example of evaluating this Criterion might include looking at whether materials for K–5 generally treat data displays as an occasion for solving grade-level word problems using the four operations (e.g., see 3.MD.B.3); or whether materials for grade 7 take advantage of opportunities to use probability to support ratios, proportions, and percentages. For context, read Criterion #3 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Supporting Work enhances Major Work. pg 433 Chapt. 10 : [illegible]tistics + Probability builds on Ratios + Proportional Reasoning · Uses Expressions + Equations pg 558 Chapt. 12 : Volume + Surface Area · Uses Number System + Expressions + Equations to compute Volume + Surface Area · Use Proportional Reasoning to find missing sides of proportional figures	(Reviewer only.) ✓ Meets ____Does Not Meet/ Insufficient Evidence
Metric NN2C: **Materials base content progressions on the grade-by-grade progressions in the Standards. Content from previous or future grades does not unduly interfere with or displace on-grade-level content.** **How to Find the Evidence:** Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, and lessons in both student and teacher materials. NOTE: In some cases it may be possible that aligned materials might address some aspects of a topic in a strategic way before or after the grade level in which the topic is central in the Standards' progressions; for example, a curriculum author might purposefully choose to explore adding fractions with unlike denominators in a way appropriate to grade four, recognizing that this work is not really required until the next grade. However, any such purposeful discrepancies in content progressions should enhance the required learning in each grade; not unduly interfere with or displace grade-level content; and be clearly aimed at helping students meet the Standards as written rather than effectively rewriting the progressions in the Standards. And in all cases, note that Non-Negotiable 1 must be met for materials to be aligned. For context, read Criterion #5a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** In line w/ CCSS Domain Progression. pg. 31 Chapt. 1 Lesson 6 : States it is in preparation for 7.RP.2a,b,d + 8.EE.5 pg. 83 Chapt. 2 Lesson 6 : States it is in preparation for 7.RP.2a,b,d 8.EE.5 pg. 513 Chapt. 11 Lesson 3 : States it is an extension to 8.G.5 All other chapters reference the 7th + 8th grade standards they align with. Table of Contents pg. T25 Shows Standards progression The curriculum routinely includes content standards from both previous grades as well as subsequent grades to enhance the understanding of grade level content.	(Reviewer only.) ✓ Meets ____Does Not Meet/ Insufficient Evidence

Metric NN2D: **Materials give all students extensive work with on-grade-level problems.** **How to Find the Evidence:** Evaluate both student and teacher materials. If the materials provide resources for differentiated learning, consider whether lower-performing students have opportunities to engage with grade-level problems. Also consider whether higher-performing students are given opportunities to learn current grade-level content in greater depth. For context, read Criterion #5b in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Throughout: Ex. pg. 437 · Each Chapter has "Differentiated Homework Options" identifying problems AL - Approaching Level OL - On Level BL - Beyond Level · Online Differentiation Instruction · Aleks online option · interactive study guide	(Reviewer only.) ✓ Meets ___ Does Not Meet/ Insufficient Evidence
Metric NN2E: **Materials relate on-grade-level concepts explicitly to prior knowledge from earlier grades.** **How to Find the Evidence:** Evaluate both student and teacher materials. NOTE: Examples of evaluating this Criterion might include looking at the way the materials extend basic ideas of place value across the decimal point; or the role that properties of operations play when the materials extend arithmetic beyond whole numbers to fractions, variables, and expressions. More generally, cluster headings in the Standards sometimes signal key moments where reorganizing and extending previous knowledge is important in order to accommodate new knowledge (e.g., see cluster headings that use the phrase "Apply and extend previous understanding"). For context, read Criterion #5c in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Throughout: · Each Chapt. has "Quick Review" to link new concepts to prior skills/knowledge. Ex. pg. 91b · Chapters have "Real-World Links" Ex. pg. 120a - links fractions (add + subtract) to a survey of e-Readers + why they prefer e-Readers over books. Throughout the curriculum prerequisite skills are extended and applied to the new standards being taught. An example is in Chpt. 3 extends operations & use of models.	(Reviewer only.) ✓ Meets ___ Does Not Meet/ Insufficient Evidence
Metric NN2F: **Review of material from previous grades is clearly identified as such to the teacher, and teacher and students can see what their specific responsibility is for the current year.** **How to Find the Evidence:** Evaluate the table of contents, but do not stop there; also evaluate units, chapters, lessons, homework assignments and assessments. (Evaluate both student and teacher materials.) Identify any content from previous grades and check whether it is identified as such. For context, read Criterion #5a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** pg. 31 Chapt. 1 Lesson 6: states it is in preparation for 7.RP.2.a,b,d + 8.EE.5 pg. 83 Chapt. 2 Lesson 6: states it is in preparation for 7.RP.2a,b,d + 8.EE.5 There is a common core review in every lesson that is identified in the teacher manual by content Standard and grade level. The review supports material being learned in the current year.	(Reviewer only.) ✓ Meets ___ Does Not Meet/ Insufficient Evidence

The curriculum is divided into ... by CCSS clusters. The learning objectives are clearly

Metric NN2G: **Materials include learning objectives that are visibly shaped by CCSSM cluster headings.** **How to Find the Evidence:** Select several clusters from the Major Work in the grade being evaluated. Evaluate teacher and student materials in relation to these clusters. For context, read Criterion #6a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** shaped by these clusters. Objectives identified as "What You'll Learn" at beginning of each chapter. Ex. pg. 120 CCSS are identified : Ex. pg. 120 Each Chapter Lesson	(Reviewer only.) ✓ Meets ____ Does Not Meet/ Insufficient Evidence
Metric NN2H: **Materials include problems and activities that serve to connect two or more clusters in a domain, or two or more domains in a grade, in cases where these connections are natural and important.** **How to Find the Evidence:** In the grade being evaluated, choose two or more clusters or two or more domains for which connections are natural and important. Evaluate the units, chapters, and lessons that deal with the chosen topics, looking for problems and activities that serve to connect the chosen clusters or domains. NOTE: An example of evaluating this Criterion might include looking at whether problems in grade 4 sometimes or often involve students applying their developing computation skills (detailed in domain NBT) in the context of solving word problems (detailed in domain OA). For context, read Criterion #6b in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Real world links in the Interactive Study Guide + Inquiry Labs integrate clusters in natural Throughout + important ways. Examples, guided practice, independent practice connect 2 or more clusters. Ex. Chapt. 6 Lesson 1 pg. 250-255 standards : 7.RP2, 7.RP2c, 7.RP.3 7.EE.3 Problems link proportional reasoning to expressions + equations	(Reviewer only.) ✓ Meets ____ Does Not Meet/ Insufficient Evidence Ex : Chapt. 8 making tables + writing equations.

Non-Negotiable 2:

Focus and Coherence

Materials must focus coherently on the Major Work of the grade in a way that is consistent with the progressions in the Standards.

NN 2 If all Metrics 2A – 2H were rated as Meets, then rate Non-Negotiable 2 as Meets. If one or more Metric was rated Does Not Meet/Insufficient Evidence, then rate Non-Negotiable 2 as Does Not Meet. Check the final rating.
Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)**

Before moving to Alignment Criterion 1, record the final Meets or Does Not Meet rating in the Evaluation Summary.

(Reviewer only.)

✓ Meets

____ Does Not Meet

Strengths/Weaknesses:

Major Works @ 76%

Now continue by evaluating the Alignment Criterion 1 for Rigor and Balance.

Directions for Alignment Criterion 1

Rigor and Balance

Alignment Criterion 1: Rigor and Balance

Materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.

The Standards set expectations for attention to all three aspects of rigor: conceptual understanding, procedural skill and fluency, and applications. Thus, materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.

Required Materials

- Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf)
- Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)
- Focus by Grade Level for the grade being evaluated (achievethecore.org/focus)
- Situation Types for the Operations in Word Problems (achievethecore.org/situation-types)
- From the materials being evaluated: teacher guides, student texts and workbooks

Rating this Criterion:

Alignment Criterion 1 is rated as Meets or Does Not Meet.

To rate Alignment Criterion 1, first rate metrics 1A, 1B, and 1C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). For each metric, guiding questions are provided to aid in gathering evidence.
Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 1 if the materials rate 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as rigor and balance, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.

Metric AC1A:
The materials support the development of students' conceptual understanding of key mathematical concepts, especially where called for in specific content Standards or cluster headings.

How to Find the Evidence:

Select one or more cluster(s) or Standard(s) from the Major Work for the grade being evaluated that relate specifically conceptual understanding to use throughout the questions associated with this metric. NOTE: Some examples of clusters or Standards that call for conceptual understanding include: K.OA.A.1, (1.NBT.B, 1.NBT.C), (2.NBT.A, 2.NBT.B), (3.OA.A.1, 3.OA.A.2), 4.NF.A, (4.NBT.A, 4.NBT.B), 5.NF.B, (5.NBT.A, 5.NBT.B), 6.RP.A, 6.EE.A.3, 7.NS.A, 7.EE.A, 8.EE.B, 8.F.A, 8.G.A

Clusters or Standards grouped by parentheses are closely connected and could be analyzed together.

For context, read Criterion #4a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).

-Choose a cluster/Standard from the Major Work that is aligned to each aspect of rigor and use it to evaluate these metrics. It is most helpful if the same clusters/Standards are chosen for all of the programs being evaluated. (Guidance in choosing clusters/Standards is included in "How to Find the Evidence".)

Use the questions for AC Metric 1A to evaluate Metric 1A. Record evidence for each question and rate Metric 1A.

✓ **Meets (2)**

____ **Partially Meets (1)**

____ **Does Not Meet (0)**

Is conceptual understanding attended to thoroughly where the Standards set expectations for understanding or interpreting? Evaluate lessons, chapter/unit assessments and homework assignments, paying attention to work aligned to Standards that explicitly call for understanding or interpreting. NOTE: Examples of evaluating this Criterion might include looking at how well the multi-digit addition and subtraction algorithms are developed and explained on the basis of place value and properties of operations; or how well the multi-digit multiplication and division algorithms are developed and explained on the basis of place value and properties of operations; or how well solving equations is presented and explained as a process of reasoning.	**Evidence-** 7.EE.3 Throughout: • Essential Questions are stated + reviewed for each unit. Ex. pg. 250 How can you use proportional relationships to solve real-world percent problems? Real World Link: pg. 250 Fruit Salad → proportional fruit "Building on the essential question" pg. 254 #48 pg. 290 "Reflect" Answering Essential Questions (graphic organizer)	• HOT problems • Virtual manipulatives • Summaries • essential questions guide discussions + learning • reflection pages - pg. 92 ISG
Do the materials feature high-quality conceptual problems and conceptual discussion questions? Evaluate lessons, chapter/unit assessments, and homework assignments. NOTE: Example of conceptual problems might include such questions as "Find a number greater than 1/5 and less than 1/4," or "If the divisor does not change and the dividend increases, what happens to the quotient?"	**Evidence-** 7.EE.3 Throughout: Ex. pg. 255 #5 In a drawing of a honeybee, the bee is 4.8 cm long. The actual size of the honeybee is 1.2 cm. What is the scale of the drawing?	
Do the materials feature opportunities to identify correspondences across mathematical representations? Evaluate lessons, chapter/unit assessments and homework assignments. NOTE: Examples of evaluating this Criterion might include looking at whether students are supported in identifying correspondences among: the verbal description of a situation, the diagrams that distill its mathematical features, and the equations that model it; or equivalent forms of numbers (e.g., 3 and 6/2) and the number line; or rational number operations and representations of them via models such as the vector model; or the expression that defines a function and the graph that shows the relationship.	**Evidence-** 7.NS. + 7.RP Throughout: bar diagram pg. 248 answers as part, whole, % pg. 252 pg. 261 Example 1 "How would you rewrite "Find 62% of 75" as a question? pg. 264 #31 "explain" #32 find his mistake + correct it	There are Key concept boxes (ex - p. 20) graphic organizers for concepts, use of models, number lines, manipulatives (student centered online)
Metric AC1B: **The materials are designed so that students attain the fluencies and procedural skills required by the Standards.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Major Work for the grade being evaluated that relate specifically to fluency and procedural skill to use throughout the questions associated with this metric. NOTE: Some examples of Standards that call for procedural skill and fluency include: K.OA.A.5, 1.OA.C.6, 2.OA.B.2, 2.NBT.B.5, 3.OA.C.7, 3.NBT.A.2, 4.NBT.B.4, 5.NBT.B.5, 6.NS.B.2, and 6.NS.B.3, 6.EE.A, 7.NS.A, 7.EE.A.1,7.EE.B.4a, 8.EE.C.7, 8.EE.C.8b For context, read Criterion #4b in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).		**Use the questions for Metric 1B to evaluate Metric 1 B. Record evidence for each question and rate Metric 1B.** **(Reviewer only.)** ✓ **Meets (2)** ____ **Partially Meets (1)** ____ **Does Not Meet (0)**

Is progress toward fluency and procedural skill interwoven with students' developing conceptual understanding of the operations in question? Evaluate lessons, chapter/unit assessments, daily routines, and homework assignments for evidence that the development of fluency and procedural skill is supported by conceptual understanding.	**Evidence-** Throughout: Each chapter has many skills practice type problems as well as application problems that require both conceptual & procedural understanding. Ex. pg. 118 #50 need procedural understanding to evaluate $40 \cdot \frac{1}{4} + 40 \div \frac{1}{4}$ and conceptual understanding to explain which is greater. Prac	Fluency is built by starting with models and manipulatives to represent algebraic equatio and then moving to algorythms w/ ample
Are purely procedural problems and exercises present that include cases in which opportunistic strategies are valuable and generic cases that require efficient algorithms present? Evaluate lessons, chapter/unit assessments, daily routines, and homework assignments. NOTE: Examples of problems in which opportunistic strategies are valuable might include the sum 698 + 240 or the system x + y = 1, 2x + 2y = 3. Examples of generic cases that require efficient algorithms might include the sum 8767+2286 or the system 6y + x = x + 3, – x = 1 + 2y.	**Evidence-** Throughout! Generic cases that require algorithms: pg. 116 (Chapt. 3 Operations w/ Rational Numbers)	
Do the materials in grades K–6 provide repeated practice toward attainment of fluency Standards? Evaluate lessons, daily routines, and homework assignments for evidence of repeated practice toward attainment of the following K–6 Standards that set an explicit expectation of fluent (accurate and reasonably fast) computation: K.OA.A.5, 1.OA.C.6, 2.OA.B.2, 2.NBT.B.5, 3.OA.C.7, 3.NBT.A.2, 4.NBT.B.4, 5.NBT.B.5, 6.NS.B.2, 6.NS.B.3.	**Evidence-** 7th-8th grade curriculum	
Metric AC1C: **The materials are designed so that teachers and students spend sufficient time working with engaging applications, without losing focus on the Major Work of each grade.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Major Work for the grade being evaluated that relate specifically application to use throughout the questions associated with this metric. NOTE: Some examples of clusters or Standards that call for application include: K.OA.A.2, 1.OA.A, 2.OA.A, 3.OA.A.3, 3.OA.D.8, 4.OA.A.3, 4.NF.B.3d, 4.NF.B.4c, 5.NF.B.6, 5.NF.B.7c, 6.RP.A.3, 6.NS.A.1, 6.EE.B.7, 6.EE.C.9, 7.RP.A, 7.NS.A.3, 7.EE.B.3, 8.EE.C.8c, 8.F.B For context, read Criterion #4c in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Throughout; The curriculum provides engaging application within the Major work. • Real World Problems / Applications • Inquiry Labs • Example: Chapt. 2 Lesson 1 7.NSA pg. 46a - Real World Link Geocaching - 46 representing elevation as integers. pg. 47 # Example 3 Order video game scores from least to greatest "Do these problems to find out." pg. 50 Movies + ticket sales	**Use the questions for Metric 1C to evaluate Metric 1C. Record evidence for each question and rate Metric 1C.** **(Reviewer only.)** ✓ **Meets (2)** **Partially Meets (1)** **Does Not Meet (0)**
Are there are single- and multi-step contextual problems, including non-routine problems, that develop the mathematics of the grade, afford opportunities for practice, and engage students in problem solving? Do the problems attend thoroughly to those places in the content Standards where expectations for multi-step and real-world problems are explicit? Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** Throughout Example: Chapt. 2 Lesson 1 pg. 50 Evaluate each expression (single-step) #36-44 Evaluate if $x=-3, y=4+z=2$ # 45-50 (multi-step) #51 multi-step • find absolute value • compare	• Performance Tasks • Unit Projects • Interactive Study Guide

Do application problems particularly stress applying the Major Work of the grade? Evaluate lessons, chapter/unit assessments, and homework assignments. NOTE: Examples of evaluating this Criterion might include looking at: how well, by the end of grade 2, students using the materials as designed can represent and solve a full range of one-step addition and subtraction word problems; or how well, by the end of grade 3, students using the materials as designed can represent and solve a full range of one-step multiplication and division word problems; or how well these basic situation types for each operation are carried coherently across the grades, (e.g., with fractions and algebraic expressions); or, in all grades, whether the problems connect concepts, Standards, and domains in ways that are natural and important. For a list of situation types for one-step addition, subtraction, multiplication, and division problems, see Situation Types for the Operations in Word Problems	**Evidence-** Inquiry Lab: Chapt. 2 pg. 52 (7.NS.1) Entertainment adding integers w/ algebra tiles - discovering additive inverses Chapt. 10 Statistics pg. 434 - Measures of Center - ordering integers + integers operations	• Application • Ticket out the door pg 203 SE pg. 197-199, 201-205 • HOT problems pg. 204 Real World Links pg. 105, 109, 111, 115, 117 Chpt Rvw pg. 243-244
Does modeling build slowly across K–8, with applications that are relatively simple in earlier grades and when students are encountering new content? In grades 6–8, do the problems begin to provide opportunities for students to make their own assumptions or simplifications in order to model a situation mathematically? Read Standard for Mathematical Practice 4, Model with Mathematics. Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** Throughout: Real world problems are part of every lesson as well as assessments. They increase in difficulty w/ chapter progression. Ex. pg. 55 Example 1 Use a number line pg. 56 Algorithm / Notation Adding Integers Ex. 2 pg. 57 Ex 5 Real-World App. Problem	Inquiry Labs use algebra tiles, move to rules, making symbolic notation.

Alignment Criterion 1: Rigor and Balance

Materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.

AC1 Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 out of 6 points, the Criterion has not been met. Check the final rating.
Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)**

Before moving to Alignment Criterion 2, record the final Meets or Does Not Meet rating in the Evaluation Summary.

(Reviewer only.)

✓ **Meets**

____ **Does Not Meet**

Strengths/Weaknesses:

Directions for Alignment Criterion 2

Standards for Mathematical Practice

Alignment Criterion 2: Standards for Mathematical Practice

Materials must demonstrate authentic connections between content Standards and practice Standards.

The Standards require that designers of instructional materials connect the mathematical practices to mathematical content in instruction. Thus, materials must demonstrate authentic connections between content Standards and practice Standards.

Required Materials:

- Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf)
- Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)
- Focus by Grade Level for the grade being evaluated (www.achievethecore.org/focus)
- From the materials being evaluated: teacher guides, student texts and workbooks

Rating this Criterion

Alignment Criterion 2 is rated as Meets or Does Not Meet.

To rate Alignment Criterion 2, first rate metrics 2A, 2B, and 2C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). For each metric, guiding questions are provided to aid in gathering evidence.

Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 2 if the materials earn 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as mathematical practices, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.

Metric AC2A:
Materials address the practice Standards in such a way as to enrich the Major Work of the grade; practices strengthen the focus on Major Work instead of detracting from it, in both teacher and student materials.

How to Find the Evidence:

Familiarize yourself with the Major Work of the grade being evaluated (see the Focus by Grade Level documents.)

Evaluate teacher and student materials for evidence that the mathematical practices support and connect to the focus of the grade.

NOTE: Examples of evaluating this Criterion might include looking at whether, in grades K–5, students using the materials are supported to look for and express regularity in repeated reasoning about the addition table, the multiplication table, the properties of operations, the relationship between addition and subtraction or multiplication and division, and the place value system; or whether, in grades 6–8, students using the materials are supported to look for and express regularity in repeated reasoning about proportional relationships and linear functions.

For context, read Criterion #8 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013).

Evidence-

Throughout the curriculum CCSS + MP are integrated + labeled.

Chapt. 2 pg. 55 use number line
Ex 1 (model)
pg. 59 #39
- Write a real-world problem that can be solved w/ a number line
- understand adding integers

MP 1, 4, 6

Chapt. 4 pg. 136-137
Concept Summary - use of structure

Exercises #50 MP 1
#46, 48, 49, 51 MP 3
#47 MP 4
#43 MP 6

* Mathematical Practices are clearly identified in each lesson throughout.

* Publisher identifies where all MP are used throughout curriculum. pg. T23

(Reviewer only.)

✓ **Meets (2)**

____ **Partially Meets (1)**

____ **Does Not Meet (0)**

Metric AC2B: **Materials at[illegible] to the full meaning of each practice Standard.** **How to Find the Evidence:** For context, read Criterion #7 and Criterion #9 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).		**Use the questions for Metric 2B to evaluate Metric 2B. Record evidence for each questi[illegible]nd rate Metric 2B.** **(Reviewer only.)** ✓ **Meets (2)** **Partially Meets (1)** **Does Not Meet (0)**
Over the course of any given year of instruction, is each mathematical practice Standard meaningfully present in the form of assignments, activities, or problems that stimulate students to develop the habits of mind described in the practice Standard? Evaluate lessons, chapter/ unit assessments, and homework assignments for evidence of each mathematical practice being meaningfully present in instruction.	**Evidence-** pg. T23 shows All Mathematical Practices distributed throughout curriculum ex) #1 pg. 50, 337, 619	
Do the materials treat the practice Standards as developing across grades or grade bands? Are the practice Standards in early grades appropriately simple? Do they display an arc of growing sophistication across the grades?	**Evidence-** throughout #3 pg. 22, 259, 489, 606 pg. 55 use number line to represent integers pg. 52 algebra tiles - adding integers	
Are there teacher-directed materials that explain the role of the practice Standards in the classroom and in students' mathematical development? Are alignments to practice Standards accurate?	**Evidence-** Activities / Math. Practices are clearly explained ex. pg. 55 + 52 · Develop the Concept guides ex. pg. 63a · Collaborate ideas - ex. pg. 62	
Metric AC2C: **Materials support the Standards' emphasis on mathematical reasoning.** **How to Find the Evidence:** For context, read Criterion #10 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).		**Use the questions for Metric 2C to evaluate Metric 2C. Record evidence for each question and rate Metric 2C.** **(Reviewer only.)** ✓ **Meets (2)** **Partially Meets (1)** **Does Not Meet (0)**
Do the materials support students in constructing viable arguments and critiquing the arguments of others concerning grade-level mathematics that is detailed in the content Standards? Read Standard for Mathematical Practice 3. Evaluate teacher and student materials to ensure that students are given opportunities to reason with grade-level mathematics.	**Evidence-** Throughout: pg. 55a Have students work in pairs. "Without using a number line, how can you know the sum is positive?" pg. 62 Collaborate, Analyze, Reflect pg. 66 Find the error · essential questions HOT problems correct it.	
Do the materials support students in producing not only answers and solutions, but also, in a grade-appropriate way, arguments, explanations, diagrams, mathematical models, etc., especially in the Major Work of the grade? Familiarize yourself with the Major Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate teacher and student materials, to understand the types of work students are expected to produce.	**Evidence-** Throughout: pg. 59 · use a counter example pg. 66 #42 Explain why the result is the same.	

Do materials explicitly attend to the specialized language of mathematics? Is the language of argument, problem solving, and mathematical explanations taught rather than assumed? Evaluate teacher and student materials, paying attention to how mathematical language is taught.
NOTE: Examples of evaluating this Criterion might include looking at whether students are supported in: basing arguments on definitions; using the method of providing a counterexample; or recognizing that examples alone do not establish a general statement.

Evidence- Throughout

Ex. pg. 66 #39 Write a subtraction expression w/ a positive integer & a negative integer whose difference is positive. Then find the difference.
#40 Find the mistake and correct it.
#42 Write an expression involving the subtraction of a negative integer. Write an equivalent expression. Explain why the result is the same.
- guides them step by step to an argument justifying results.

- Vocab - new terms highlighted
- graphic organizers
- key concept boxes
- glossary

Alignment Criterion 2: Standards for Mathematical Practice

Materials must demonstrate authentic connections between content Standards and practice Standards.

AC2 Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 out of 6 points, the Criterion has not been met. Check the final rating.
Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion.
(Reviewer only.)

(Reviewer only.)

✓ **Meets**

____ **Does Not Meet**

Strengths/Weaknesses:

Before moving to Alignment Criterion 3, record the final Meets or Does Not Meet rating in the Evaluation Summary.

Alignment Criterion 3: Access to the Standards for All Students

Materials must provide supports for English Language Learners and other special populations.

Because Standards are for all students, alignment requires thoughtful support to ensure all students are able to meet the Standards. Thus, aligned materials must provide supports for English Language Learners and other special populations.

Required Materials:

- Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf)
- Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)
- From the materials being evaluated: teacher guides, student texts and workbooks

Rating this Criterion:
Alignment Criterion 3 is rated as Meets or Does Not Meet.

To rate Alignment Criterion 3, first rate metrics 3A, 3B, and 3C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points).

Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 3 if the materials earn 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as support for special population, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.

Metric AC3A: **Support for English Language Learners and other special populations is thoughtful and helps those students meet the same Standards as all other students. The language in which problems are posed is carefully considered.** **How to Find the Evidence:** Evaluate teacher and student materials, paying attention to supports offered for special populations.	**Evidence-** throughout Vocabulary Graphic organizers Pictures english-spanish glossary H.O.T Problems - higher order thinking Differentiated Homework options • online editable assignments + assessments • ISG	Reviewer only.) ✓ Meets (2) ____Partially Meets (1) ____Does Not Meet (0)
Metric AC3B: **Materials provide appropriate level and type of scaffolding, differentiation, intervention, and support for a broad range of learners with gradual removal of supports, when needed, to allow students to demonstrate their mathematical understanding independently.** **How to Find the Evidence:** Evaluate teacher and student materials, paying attention to whether materials provide differentiation that will lead all learners to engage with on-grade-level content.	**Evidence-** • graphic organizers • number lines pg. 55 • algebra tiles pg. 52 • bar diagrams pg. 248 • foldable notes • interactive study guide pg. 555c • Are you ready? • watch-out!	Reviewer only.) ✓ Meets (2) ____Partially Meets (1) ____Does Not Meet (0)
Metric AC3C: **Design of lessons recommends and facilitates a mix of instructional approaches for a variety of learners such as using multiple representations (e.g., including models, using a range of questions, checking for understanding, flexible grouping, pair-share).** **How to Find the Evidence:** Evaluate teacher materials, noting instructional approaches suggested for whole class and differentiated lessons and activities.	**Evidence-** online interactive whiteboard graphic organizers pg. 174 ~~Problem-posters~~ Interactive Study Guide - pg. 224 Inquiry Labs - pg. 230-31 Collaborate ticket-out-the door Got it? Are you ready?	Reviewer only.) ✓ Meets (2) ____Partially Meets (1) ____Does Not Meet (0)

Alignment Criterion 3: **Access to the Standards for All Students** **Materials must provide supports for English Language Learners and other special populations.** **AC3** Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 points, the Criterion has not been met. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion.**(Reviewer only.)** **Move to the Evaluation Summary and record the final Meets or Does Not Meet rating .**	**(Reviewer only.)** ✓ **Meets** ____ **Does Not Meet** **Strengths/Weaknesses:**

Once an evaluation for alignment to the Shifts and major features of the CCSS has been conducted using Sections 1-3, it's important to evaluate for overall quality and best practices. A starting list of Indicators of Quality are suggested below. States, districts and others evaluating instructional materials are encouraged to add to this list to ensure materials reflect local contexts. For background information on some of the Indicators of Quality in this section, refer to pp.18–21 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).

Indicators of Quality	**Evidence- Give specific examples.**	**Rating: (Reviewers only.)**
1. Lessons are thoughtfully structured and support the teacher in leading the class through the learning paths at hand, with active participation by all students in their own learning and in the learning of their classmates.	Teacher manuals include lesson tips, clear procedures that are tied to essential questions throughout - Ex. Chapt. 5 Lesson 8 pg. 324a • Teacher notes • Interactive study Guide • Vocab • Real world Link • Examples • Guided Practice • Independent Practice • Common errors • Extra Practice • HOT Problems	**(Reviewer only.)** ✓ **Yes** ____ **No**
2. The underlying design of the materials includes both problems and exercises. (In solving problems, students learn new mathematics, whereas in working exercises, students apply what they have already learned to build mastery.) Each problem or exercise has a purpose. **NOTE: This Criterion does not require that the problems and exercises be labeled as such.**	pg. 228-229 • extra examples • skills practices • real-world app • spiral review Includes problems and exercises and interactive journal to refer to concepts. Problems and exercises increase in complexity to build mastery.	**(Reviewer only.)** ✓ **Yes** ____ **No**

3. Design of assignments is not haphazard: exercises are given in intentional sequences in order to strengthen students' mathematical understanding.	**Evidence-** Progression in complexity Practice other applications. Differentiated homework options & Customizable assignments	**(Reviewer only.)** ✓ **Yes** ____ **No**
4. There are separate teacher materials that support and reward teacher study including, but not limited to: discussion of the mathematics of the units and the mathematical point of each lesson as it relates to the organizing concepts of the unit, discussion on student ways of thinking and anticipating a variety of students responses, guidance on lesson flow, guidance on questions that prompt students thinking, and discussion of desired mathematical behaviors being elicited among students.	**Evidence-** Teacher edition - teacher notes in outside columns online resources - worksheets - assessments - presentations - interactive whiteboard • Watch out! • CCSS listed • Need another example.	**(Reviewer only.)** ✓ **Yes** ____ **No**
5. Manipulatives suggested in the materials are faithful representations of the mathematical objects they represent and are connected to written methods.	**Evidence-** • number line - integers & distance pg. 55 • Algebra tiles to represent adding integers pg. 52	**(Reviewer only.)** ✓ **Yes** ____ **No**
6. Materials include a variety of curriculum-embedded assessments. Examples include pre-, formative, summative, and self-assessment resources.	**Evidence-** * Assessment Masters * 21st Century Career * Rate yourself ex. pg. 232b • Inquiry Lab reflections • Are you ready? • Quick Checks • Ticket at the Door • Building on essential question • Mid-Chapt. Check	**(Reviewer only.)** ✓ **Yes** ____ **No**
7. Assessments contain aligned rubrics, answer keys, and scoring guidelines that provide sufficient guidance for interpreting student performance.	**Evidence-** Teacher edition - answer keys online resources - online answer keys	**(Reviewer only.)** ✓ **Yes** ____ **No**
8. Materials assess student proficiency using methods that are accessible and unbiased, including the use of course-level language in student prompts.	**Evidence-** • language matches units • Clear sentence structure & explanation	**(Reviewer only.)** ✓ **Yes** ____ **No**

9. Materials are carefully evaluated by qualified individuals, whose names are listed, in an effort to ensure freedom from mathematical errors and course-level appropriateness.	**Evidence-** pg. TI4 lists 4 lead authors 3 program authors 1 contributing author	**(Reviewer only.)** ✓ **Yes** ____ **No**
10. The visual design supports students in engaging thoughtfully with the subject. Navigation through the text is clear.	**Evidence-** · font size is appropriate · appealing for 7th grade · colorful · pictures match problems · visual design supports student engagement	**(Reviewer only.)** ✓ **Yes** ____ **No**
11. The materials engage parents in appropriate ways. For example, homework assignments in elementary grades, consist of routine problems, practice with getting answers, and fluency-building exercises that parents can easily support.	**Evidence-** · online resources for parents available · can be understood by parent (chapter explanations)	**(Reviewer only.)** ✓ **Yes** ____ **No**

Reviewer IMET Evaluation Summary **Title/Level:** Glencoe Math Accelerated (7th Grade)

Publisher: McGraw-Hill School Education LLC **Copyright:** 2014 **ISBN:** Various

Reviewer ID # AC + TS **Date Review Completed:** 3-8-16

Non-Negotiable Criteria- Each Non-Negotiable must be met in order for the Non-Negotiable Alignment Criteria to be met overall.

Non-Negotiable 1: Freedom from Obstacles to Focus	Non- Negotiable 2: Focus and Coherence
✓ Meets	✓ Meets
_____ Does Not Meet	_____ Does Not Meet

Non-Negotiable Overall:

✓ **Meets** _____ **Does Not Meet**

Alignment Criteria- Each Alignment Criterion must be met with a sufficient number of points in order for Alignment Criteria to be labeled as "Meets" overall. The more points the materials receive on the Alignment Criteria, the better they are aligned.

Alignment Criterion 1: Rigor and Balance	Alignment Criterion 2: Standards of Mathematical Practice	Alignment Criterion 3: Access to Standards for All Learners
Points: 6 of 6 possible. (Materials must receive at least 5 of 6 points to align.)	Points: 6 of 6 possible. (Materials must receive at least 5 of 6 points to align.)	Points: 6 of 6 possible. (Materials must receive at least 5 of 6 points to align.)
✓ Meets	✓ Meets	✓ Meets
_____ Does Not Meet	_____ Does Not Meet	_____ Does Not Meet

Alignment Criteria Overall:

✓ **Meets** _____ **Does Not Meet**

If the materials meet both Non-Negotiables and relevant Alignment Criterion, they are aligned to the Shifts and major features of the Core Standards. **Do the materials meet every Non-Negotiable and Alignment Criterion?** _X_ **Yes** ____ **No**

What are the specific areas of strength and weakness based on this evaluation? Publishers or others modifying or developing assessments can use this information to make improvements and/or to remedy gaps in the alignment of assessment materials.

Strengths of the program are teacher resources and differentiated instruction. Visually appealing. The Interactive Student Guide is an excellent resource as well for scaffolding student learning.

Weaknesses are the paper quality of teacher edition (pages tear easily).

Perforation of student guide is not best because the students keep the journal (guide) throughout as a resource.

Districts need to be aware that the Interactive Student Guides are consumable and need to be replaced yearly, however they are necessary.

2015-16 Mathematics Interim Review Recommendation & Summary

Publisher Name:	McGraw-Hill
Title:	Core-Plus 1
ISBN #	SE 978-0-07-665794-0
Grade Level(s) or Course:	High School - 9th
Reviewer ID:	MK & TG

RECOMMENDED AS:

✓ **Core Mathematics Program-** a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials. Substantial evidence clearly supports the designation of this program as Core.

_____ **Other Mathematics Program-** a program that substantially, but partially, meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for supplemental materials. Substantial evidence clearly supports the designation of this program as Other.

_____ **Component Mathematics Program-** a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs. Substantial evidence clearly supports the designation of this program as Component.

_____ **Intervention Program-** a program designed and intended to target and support students' specific needs. Substantial evidence clearly supports the designation of this program as Intervention.

_____ **Does not meet criteria** for recommendation as a Curricular Material or Online Resource for Mathematics.

EVIDENCE SUMMARY:

FOCUS-
86% of time on WAPs
Design aligned w/ standards

COHERENCE-
Integration of topics is a dominant design element.
Clusters & domains interwoven in cohesive manner.

RIGOR- Real-world investigations and Summarize the Math components require attention to accurate & high-level math throughout.

CONCEPTUAL UNDERSTANDING- Investigations & classroom discussions require explanation and reflection as opposed to rote procedures.

MATHEMATICAL PRACTICES-
8 SMPs are embedded throughout the design of the curriculum. Teacher tips support implementation.

ACCESSIBILITY OF STANDARDS TO ALL STUDENTS-
Adaptations for ELL & other needs may be minimal.

OTHER:
Strengths: Active learning design (4-phase lesson cycle)
Reflection through Summarize the Math components
Strong alignment w/ Standards

Weakness: Explicit support for individual adaptations

2015-1 nterim Mathematics Review

Mathematics Evaluation Tool – High School

Publisher: McGraw-Hill

Title of Material: Core-Plus 1

Author: Hirsch, Fey, Hart, Watkins, et al.

ISBN #: SE 978-0-07-645794-0 **Copyright** 2015

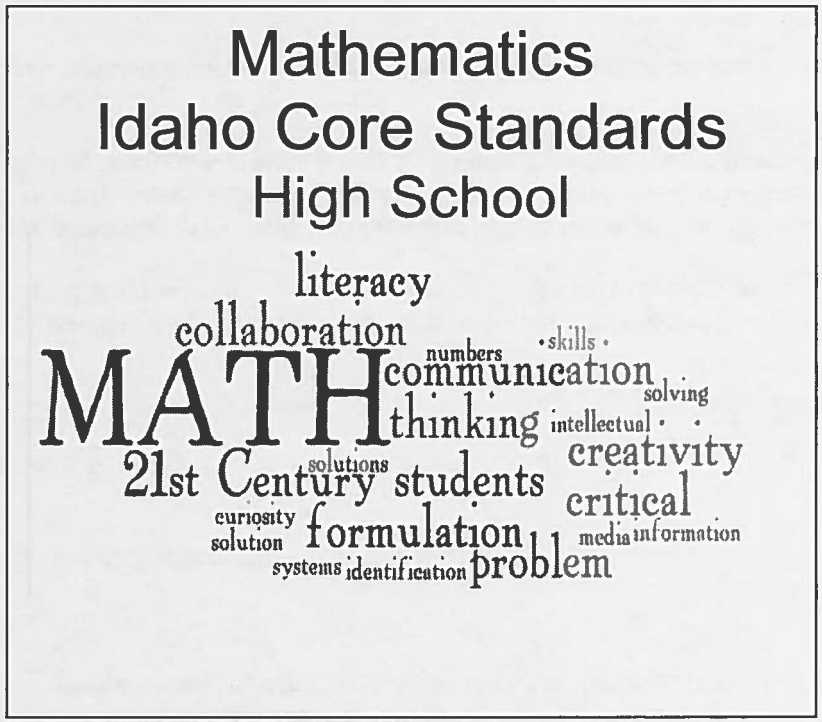
Reviewer ID: MK & TG

Core Mathematics Program- a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Core.

Other Mathematics Program- a program that substantially, but partially, meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Other.

Component Mathematics Program- a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs.
Substantial evidence clearly supports the designation of this program as Component.

Intervention Program- a program designed and intended to target and support students' specific needs.
Substantial evidence clearly supports the designation of this program as Intervention.



- Evaluation Form adapted from Instructional Materials Evaluation Toolkit (IMET).

The IMET was developed by Student Achievement Partners. Educators may use or adapt. http://creativecommons.org/licenses/by/3.0/ Download this tool at http://achievethecore.org/IMET

Instructional Materials Evaluation Tool

Mathematics, High School

What Are the Purposes of the IMET?

This Math IMET is designed to help educators determine whether instructional materials are aligned to the Shifts and major features of the Common Core State Standards (CCSS). The substantial instructional Shifts (http://www.corestandards.org/other-resources/key-shifts-in-mathematics/) at the heart of the Common Core State Standards are:

- **Focus** strongly where the Standards focus
- **Coherence**: Think across grades and link to major topics within the grade
- **Rigor**: In major topics, pursue conceptual understanding, procedural skill and fluency, and application with equal intensity.

The IMET draws directly from the following documents:

- Common Core State Standards for Mathematics (www.corestandards.org/Math)
- Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013) (http://www. corestandards.org/wp-content/uploads/Math_Publishers_Criteria_ HS_Spring_2013_FINAL1.pdf)

When to use the IMET

1. Purchasing materials: Many factors go into local purchasing decisions. Alignment to the Standards is a critical factor to consider. This tool is designed to evaluate alignment of instructional materials to the Shifts and the major features of the CCSS. It also provides suggestions of additional indicators to consider in the materials evaluation and purchasing process
2. Evaluating materials currently in use: The IMET can be used to analyze the degree of alignment of existing materials and help to highlight specific, concrete flaws in alignment. Even where materials and tools currently in use fail to meet one or more of these criteria, the pattern of failure is likely to be informative. States and districts can use the evaluation to create a thoughtful plan to modify or combine existing resources in such a way that students' actual learning experiences approach the focus, coherence, and rigor of the Standards.
3. Developing programs: Those developing new programs can use this tool as guidance for creating aligned curricula.

Please note this tool was designed for evaluating comprehensive curricula (including any supplemental or ancillary materials), but it was not designed for the evaluation of standalone supplemental materials.

Who Uses the IMET?

Evaluating instructional materials requires both subject-matter and pedagogical expertise. Evaluators should be well versed in the Standards (www.corestandards.org/Math) for all grades in which materials are being evaluated. This includes understanding the Widely Applicable Prerequisites (www.achievethecore.org/prerequisites), how the content fits into the progressions in the Standards (www. achievethecore.org/progressions), and the expectations of the Standards with respect to conceptual understanding, procedural skill and fluency, and application. Evaluators also should be familiar with the substantial instructional Shifts (http://www.corestandards.org/other-resources/key-shifts-in-mathematics/) of Focus, Coherence and Rigor that are listed above.

Getting Started

Prior to Evaluation

Assemble all of the materials necessary for the evaluation. It is essential for evaluators to have materials for all grades covered by the program, as some criteria cannot be rated without having access to each grade. In addition, each evaluator should have a reference copy of the Common Core State Standards for Mathematics (CCSSM) and the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).

Before conducting the evaluation itself, it is important to develop a protocol for the evaluation process. The protocol should include having evaluators study the Publishers' Criteria and the IMET. It will also be helpful for evaluators to get a sense of each program overall before beginning the process. At a minimum, this would include reading the front matter of the text, looking at the table of contents and paging through multiple chapters.

Sections 1-3 below should be completed to produce a comprehensive picture of the strengths and weaknesses of the materials under evaluation. Information about areas in need of improvement or supplementation should be shared with internal and external stakeholders.

Navigating the Tool

Begin with Section 1: Non-Negotiable Alignment Criteria

- The Non-Negotiable Alignment Criteria must each be met in full for materials to be considered aligned to the Shifts and the major features of the Common Core State Standards. Each Non-Negotiable Alignment Criterion has one or more metrics associated with it; every one of these metrics must be met in order for the criterion as a whole to be met.

- Examine the relevant materials and use evidence to rate the materials against each criterion and its associated metric(s).

- Record and explain the evidence upon which the rating is based.

Continue to Section 2: Alignment Criteria

- The Alignment Criteria must each be met for materials to be considered aligned to the Shifts and the major features of the Common Core State Standards. Each Alignment Criterion has one or more metric associated with it; a specific number of these metrics must be met or partially met in order for the criterion as a whole to be met.

- Examine the materials in relation to these criteria, assigning each metric a point value. Rate the criterion as "Meets" or "Does Note Meet" based on the number of points assigned. The more points the materials receive on the alignment Criteria, the better they are aligned.

- Record and explain the evidence upon which the rating is based.

Proceed to Section 4: Indicators of Quality

- Indicators of Quality are important considerations that will help evaluators better understand the overall quality of instructional materials. These considerations are not criteria for alignment to the CCSS, but they provide valuable information about additional program characteristics. Evaluators may want to add their own indicators to the examples provided.

Directions for Non-Negotiable 1

Focus and Coherence

Criterion	Evidence- Give specific examples.	Rating: (Reviewer only.)
Non-Negotiable 1: Focus and Coherence- Materials must focus coherently on the Widely Applicable Prerequisites in a way that is consistent with the progressions in the Standards. Focus and coherence are the two major evidence-based design principles of the Common Core State Standards for Mathematics (CCSSM, p. 3). Focus is necessary in order to fulfill the ambitious promise the states have made to their students by adopting the Standards: greater achievement at the college and career-ready level; greater depth of understanding of mathematics; and a rich classroom environment in which reasoning, sense-making, applications, and a range of mathematical practices flourish. In high school courses, narrowing and deepening the curriculum creates a structure that ties topics together. Thus, materials must focus coherently on the Widely Applicable Prerequisites in a way that is consistent with the progressions in the Standards.	Focus and coherence are the two major evidence-based design principles of the Common Core State Standards for Mathematics (CCSSM, p. 3). Focus is necessary in order to fulfill the ambitious promise the states have made to their students by adopting the Standards: greater achievement at the college and career-ready level; greater depth of understanding of mathematics; and a rich classroom environment in which reasoning, sense-making, applications, and a range of mathematical practices flourish. In high school courses, narrowing and deepening the curriculum creates a structure that ties topics together. Thus, materials must focus coherently on the Widely Applicable Prerequisites in a way that is consistent with the progressions in the Standards. **Required Materials:** • Common Core State Standards for Mathematics (www.corestandards.org/wpcontent/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_HS_Spring_2013_FINAL1.pdf) • Widely Applicable Prerequisites for College and Careers (http://achievethecore.org/prerequisites) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion:** Non-Negotiable 1 is rated as Meets or Does Not Meet. To rate Non-Negotiable 1, first rate Metrics 1A–1H. Each of these eight metrics must be rated as Meets in order for Non-Negotiable 1 to be rated as Meets. Rate each metric 1A–1H as Meets or Does Not Meet/Insufficient Evidence. If the evidence examined shows that the Criterion is met, then mark the Criterion as Meets. If the evidence examined shows that the Criterion is not met—or if there is insufficient evidence to make a determination—then mark the Criterion as Does Not Meet/Insufficient Evidence. Support all ratings with evidence.

Metric NN1A: **In any s[illegible]e course, students spend at least 50% of their time on Widely Applicable Prerequisites.** **How to Find the Evidence:** Familiarize yourself with the Widely Applicable Prerequisites. Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, lessons, homework assignments, and assessments. (Evaluate both student and teacher materials.) Consider time spent on the Widely Applicable Prerequisites and judge qualitatively whether students and teachers using the materials as designed will devote the majority of time to the Widely Applicable Prerequisites For context, read Criterion #1 in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** 86% of [illegible] time on WAPs Example: Unit 1 Lesson 1 of the 13 standards, 11 are WAPs.	✓ **Meets** **____Does Not Meet Insufficient Evidence**
Metric NN1B: **Student work in Geometry involves significant work with applications/modeling and problems that use algebra skills.** **How to Find the Evidence:** Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, lessons, homework assignments, and assessments. (Evaluate both student and teacher materials. NOTE: Since Geometry contains relatively fewer Widely Applicable Prerequisites, this Criterion is important to help foster students' college and career readiness. Problems that use algebra skills might include, for example, algebraic geometry problems in a coordinate setting, or problems of measurement involving unknown quantities.	**Evidence-** Geometry uses application & modeling & real contexts - and capitalizes on algebra skills. Investigations are used to support students in learning and applying the mathematics. Example: Unit 6 Lesson 1 uses spaghetti to discover, model, & prove triangle congruence theorems.	✓ **Meets** **____Does Not Meet Insufficient Evidence**

Metric NN1C: **There are problems at a level of sophistication appropriate to high school (beyond mere review of middle school topics) that involve the application of knowledge and skills from grades 6-8.** **How to Find the Evidence:** Evaluate lessons, chapter/unit assessments, and homework assignments. NOTE: Problems should include application of the following topics from grades 6-8: • Ratios and proportional relationships. • Percentage and unit conversions, e.g., in the context of complex measurement problems involving quantities with derived or compound units (such as mg/mL, kg/ m3, acre-feet, etc.). • Basic function concepts, e.g., by interpreting the features of a graph in the context of an applied problem. • Concepts and skills of geometric measurement e.g., when analyzing a diagram or schematic. • Concepts and skills of basic statistics and probability (see grades 6–8.SP) • Performing rational number arithmetic fluently. For context, read Table 1 on Page 8 of the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** Alignment chart helpful and accurate Use of investigations engage students in authentic mathematical activity - exploring, modeling, justifying, etc. Examples: Unit 1 Lesson 1 appropriate high-school level investigation Unit 1 Lesson 3 appropriate level of challenge & includes use of technology	✓ **Meets** ___ **Does Not Meet Insufficient Evidence**
Metric NN1D: **Materials base courses on the content specified in the Standards.** **How to Find the Evidence:** Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, and lessons in both student and teacher materials. For context, read Criterion #3a in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** Modeling and functions are prominent themes. Core-Plus was designed to address Standards (as opposed to overlaying Standards on existing materials). Sequence designed to promote student learning. Mathematical Practices addressed throughout.	✓ **Meets** ___ **Does Not Meet Insufficient Evidence** Standards Guide very easy to use.
Metric NN1E: **Materials give all students extensive work with course-level problems.** **How to Find the Evidence:** Evaluate both student and teacher materials. If the materials provide resources for differentiated learning, consider whether lower-performing students have opportunities to engage with course-level problems. Also consider whether higher-performing students are given opportunities to learn current course-level content in greater depth. For context, read Criterion #3b in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** Cycle within each section has students in recall, investigations, practice, & reflection. There are also Check Your Understanding items in each unit. Margin notes in teacher edition support adaptations.	✓ **Meets** ___ **Does Not Meet Insufficient Evidence**

Metric NN1F: **Materials relate course-level concepts explicitly to prior knowledge from earlier grades or courses. The materials are designed so that prior knowledge becomes reorganized and extended to accommodate the new knowledge.** **How to Find the Evidence:** Evaluate student and teacher materials, looking for problems that involve extending the knowledge learned in earlier grades and courses. NOTE: An example of evaluating this Criterion might be to look at whether materials connect the equation of a circle with the distance formula and the Pythagorean theorem. For context, read Criterion #3c in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** Each lesson starts with Think About the Situation, includes a Just-in-Time review and also has Looking Back lessons so that prior knowledge is connected to current concepts.	✓ **Meets** **____Does Not Meet Insufficient Evidence**
Metric NN1G: **Materials include learning objectives that are visibly shaped by CCSSM cluster and domain headings.** **How to Find the Evidence:** Select several clusters from the course being evaluated. Evaluate teacher and student materials in relation to these clusters. For context, read Criterion #4a in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** Clear alignment - visible in unit titles Attention to finding & using patterns contributes to overall focus & coherence.	✓ **Meets** **____Does Not Meet Insufficient Evidence**
Metric NN1H: **Materials include problems and activities that serve to connect two or more clusters in a domain, or two or more domains in a category, or two or more categories, in cases where these connections are natural and important.** **How to Find the Evidence:** In the course being evaluated, choose two or more clusters, two or more domains, or two or more categories for which connections are natural and important. Evaluate the units, chapters, and lessons that deal with the chosen topics, looking for problems and activities that serve to connect the chosen clusters or domains. NOTE: An example of evaluating this Criterion might be to look at whether materials include problems in which students analyze a situation by building a function, graphing it, and using it to create and solve an equation. For context, read Criterion #4b in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** Integration is a dominant design element. Clusters & domains are interwoven in cohesive manner. Unit 3 Lesson 4 includes A-SSE, A-CED, A-REI, F-IF, F-BF, F-LE & S-ID	✓ **Meets** **____Does Not Meet Insufficient Evidence**

Non-Negotiable 1: Focus and Coherence- Materials must focus coherently on the Widely Applicable Prerequisites in a way that is consistent with the progressions in the Standards.

Metric NN 1: If all metrics 1A–1H were rated as Meets, then rate Non-Negotiable 1 as Meets. If one or more metrics were rated as Does Not Meet/Insufficient Evidence, then rate Non-Negotiable 1 as Does Not Meet. Check the final rating.
Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)**

Before moving to Alignment Criterion 1, record the final Meets or Does Not Meet rating in the Evaluation Summary.

✓ **Meets**

____ **Does Not Meet**

Strengths/Weaknesses

Integrated approach has been established by years of implementation. All lessons follow inquiry-based approach. High expectation for discus and formative assessment.

Now continue by evaluating Alignment Criterion 1 for Rigor and Balance.

Directions for Alignment Criterion 1

Rigor and Balance

Alignment Criterion 1:
Rigor and Balance- Materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.

The Standards set expectations for attention to all three aspects of rigor: conceptual understanding, procedural skill and fluency, and applications. Thus, materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.

The Standards set expectations for attention to all three aspects of rigor: conceptual understanding, procedural skill and fluency, and applications. Thus, materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.

- Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf)
- Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_HS_Spring_2013_FINAL1.pdf)
- Widely Applicable Prerequisites for College and Careers (http://achievethecore.org/prerequisites)
- From the materials being evaluated: teacher guides, student texts and workbooks

Rating this Criterion:

Alignment Criterion 1 is rated as Meets or Does Not Meet.

To rate Alignment Criterion 1, first rate metrics 1A, 1B, and 1C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). For each metric, guiding questions are provided to aid in gathering evidence.
Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 1 if the materials rate 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as rigor and balance, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.

AC Metric 1A: **The materials support the development of students' conceptual understanding of key mathematical concepts, especially where called for in specific content Standards or cluster headings.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Widely Applicable Prerequisites that relate specifically to conceptual understanding to use throughout the questions associated with this metric. NOTE: Some examples of clusters or Standards that call for conceptual understanding include: N-RN.A.1, A-APR.B, A-REI.A.1, A-REI.D.10, A.REI.D.11, F.IF.A.1, F-LE.A.1, G.SRT.A.2, G-SRT.C.6, S-ID.C.7 For context, read Criterion #2a in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	• Choose a cluster/Standard from the Widely Applicable Prerequisites that is aligned to each aspect of rigor and use it to evaluate these metrics. It is most helpful if the same clusters and Standards are chosen for all of the programs being evaluated. (Guidance in choosing clusters/Standards is included in "How to Find the Evidence" below.)	**Use the questions for AC Metric 1A to evaluate Metric 1A. Record evidence for each question and rate Metric 1A** ✓ **Meets (2)** ____ **Partially Meets (1)** ____ **Does Not Meet (0)**
Is conceptual understanding attended to thoroughly where the Standards set explicit expectations for understanding or interpreting? Evaluate lessons, chapter/unit assessments and homework assignments, paying attention to work aligned to Standards that explicitly call for understanding or interpreting.	**Evidence-** Through active learning & cooperative learning in each lesson. "Summarize the Math" encourages reflection. Example: Unit 1 Lesson 2	
Do the materials feature high-quality conceptual problems and conceptual discussion questions? Evaluate lessons, chapter/unit assessments, and homework assignments. NOTE: Examples of conceptual problems might include such questions as "What is the maximum value of the function f(t) = 5 – t2 ?" or "Is √2 a polynomial? How about ½(x + √2)+ ½ (-x + √2)?"	**Evidence-** Collaborative nature fosters discussions around high-quality conceptual problems. Summarize the Math again.	
Do the materials feature opportunities to identify correspondences across mathematical representations? Evaluate lessons, chapter/unit assessments and homework assignments. NOTE: An example of evaluating this metric might include looking at whether materials support students in identifying correspondences among the expression that defines a function, the graph that shows the relationship, and the behavior of the phenomenon being modeled (if any).	**Evidence-** Learn to represent information in different forms, and to look for and make use of patterns. Unit 1 focuses on patterns of change represented in tables, graph, and equations.	

AC Metric 1B: **The materials are designed so that students attain the fluencies and procedural skills required by the Standards.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Widely Applicable Prerequisites that relate specifically to fluency and procedural skill to use throughout the questions associated with this metric. NOTE: Some examples of Standards that call for procedural skill and fluency include: A-SSE.A.1b, A-SSE.2, A-APR.A.1, A-APR.C.6, F-BF.B.3, G-GPE.B.4, G-GPE.B.5, G-GPE.B.7, G-CO.A.1, G-SRT.B.5 For context, read Criterion #2b in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).		**Use the questions for AC Metric 1B to evaluate Metric 1B. Record evidence for each question and rate Metric 1B.** ✓ **Meets (2)** **Partially Meets (1)** **Does Not Meet (0)**
Is progress toward fluency and procedural skill interwoven with the student's developing conceptual understanding of the skills in question? Evaluate lessons, chapter/unit assessments, daily routines, and homework assignments for evidence that the development of fluency and procedural skill is supported by conceptual understanding.	**Evidence-** Check Your Understanding items check for both procedural & conceptual understanding.	
Are purely procedural problems and exercises present that include cases in which opportunistic strategies are valuable and generic cases that require efficient and general procedures present? Evaluate lessons, chapter/unit assessments, daily routines, and homework assignments. NOTE: Problems in which opportunistic strategies are valuable might include such examples as solving x2 + 5 = 49 + 5 or (3x − 2)2 = 6x − 4. Generic cases that require efficient and general procedures might include such problems as solving c + 8 – c2 = 3(c – 1)2 − 5).	**Evidence-** Unit 3 Lesson 3 is an example of making most of opportunistic strategies.	
AC Metric 1C: **The materials are designed so that teachers and students spend sufficient time working with engaging applications, without losing focus on the Widely Applicable Prerequisites.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Widely Applicable Prerequisites that relate specifically to application to use throughout the questions associated with this metric. NOTE: Some examples of clusters or Standards that call for application include: N-Q.A, A-SSE.B.3, A-REI.D.11, F-IF.B, F-IF.C.7, F-BF.A.1, G-SRT.C.8, S-ID.A.2, S-IC.A.1 For context, read Criterion #2c in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).		**Use the questions for AC Metric 1C to evaluate Metric 1C. Record evidence for each question and rate Metric 1C.** ✓ **Meets (2)** **Partially Meets (1)** **Does Not Meet (0)**
Are there single- and multi-step contextual problems, including non-routine problems, that develop the mathematics of the course, afford opportunities for practice, and engage students in problem solving? Do the problems attend thoroughly to those places in the content Standards where expectations for multi-step and real-world problems are explicit? Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** Investigations & real-world problems are multi-step. Contexts are engaging at an appropriate level.	

Do application problems particularly stress applying the Widely Applicable Prerequisites? Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** 86% of content focused on WAPs. Application and Connection sections of On Your Own exercises	
Are there ample opportunities for students to engage with modeling problems? Do materials require students to use both individual parts of the modeling cycle as well as the full modeling cycle? Read the pages on High School—Modeling in the Standards for Mathematics (pp. 72 and 73). Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** Modeling is a key focus through real-world contexts. Unit 5 Lesson 2	

Alignment Criterion 1: Materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.

AC 1: Materials must earn at least 5 of 6 points to meet this Alignment Criterion. If materials earn less than 5 points, the Criterion has not been met. Check the final rating.
Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)**

Before moving to Alignment Criterion 2, record the final Meets or Does Not Meet rating in the Evaluation Summary.

✓ **Meets** 6/6

Does Not Meet

Strengths/Weaknesses:

Focus on discussion, inquiry and looking for patterns creates a rigorous course. Balance with appropriate level of skills practice.

Alignment Criterion 2: **Standards for Mathematical Practice- Materials must demonstrate authentic connections between content Standards and practice Standards.** The Standards require that designers of instructional materials connect the mathematical practices to mathematical content in instruction. Thus, materials must demonstrate authentic connections between content Standards and practice Standards.	The Standards require that designers of instructional materials connect the mathematical practices to mathematical content in instruction. Thus, materials must demonstrate authentic connections between content Standards and practice Standards. **Required Materials**: • Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_HS_Spring_2013_FINAL1.pdf) • Widely Applicable Prerequisites for College and Careers (http://achievethecore.org/prerequisites) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion:** Alignment Criterion 2 is rated as Meets or Does Not Meet. To rate Alignment Criterion 2, first rate metrics 2A, 2B, and 2C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). For each metric, guiding questions are provided to aid in gathering evidence. Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 2 if the materials rate 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as mathematical practices, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.

AC Metric 2A: **Materials address the practice Standards in such a way as to enrich the Widely Applicable Prerequisites; practices strengthen the focus of the course instead of detracting from it, in both teacher and student materials.** **How to Find the Evidence:** Familiarize yourself with the Widely Applicable Prerequisites. Evaluate teacher and student materials for evidence that the mathematical practices support and connect to the focus of the course. NOTE: An example of evaluating this Criterion might include looking at whether materials use regularity in repeated reasoning to illuminate formal algebra as well as functions, particularly recursive definitions of functions. For context, read Criterion #6 in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** Launch, Explore, Share, & Summarize cycle address practice standards across all units. Bungee Jump exploration Unit 1 Lesson 1	✓ Meets (2) ___Partially Meets (1) ___Does Not Meet (0)
AC Metric 2B: **Materials attend to the full meaning of each practice Standard.** **How to Find the Evidence:** For context, read Criterion #7 in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).		**Use the questions for AC Metric 2B to evaluate Metric 2B. Record evidence for each question and rate Metric 2B.** ✓ Meets (2) ___Partially Meets (1) ___Does Not Meet (0)
Over the course of any given year of instruction, is each mathematical practice Standard meaningfully present in the form of assignments, activities, or problems that stimulate students to develop the habits of mind described in the practice Standard? Evaluate lessons, chapter/ unit assessments, and homework assignments for evidence of each mathematical practice being meaningfully present in instruction.	**Evidence-** Continuously engaged in SMPs through investigations; interwoven throughout the course. See publisher CCSSM alignment chart.	
Are teacher-directed materials that explain the role of the practice Standards in the classroom and in students' mathematical development included? Are alignments to practice Standards accurate? Evaluate teacher materials, paying attention to explanations of the role of the practice Standards in the classroom and in students' mathematical development. Evaluate documents aligning lessons to practice Standards for accuracy. NOTE: Examples to look for when evaluating this metric might include the following: a highly scaffolded problem should not be aligned to MP.1; or a problem that directs a student to use a calculator should not be aligned to MP.5; or a problem about merely extending a pattern should not be aligned to MP.8.	**Evidence-** TE offers sample discussions to help prompt mathematical communication. Example: Unit 1 Lesson 1	

AC Metric 2C: **Materials support the Standards' emphasis on mathematical reasoning.** **How to Find the Evidence:** For context, read Criterion #8 in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).		**Use the questions for AC Metric 2C to evaluate Metric 2C. Record evidence for each question and rate Metric.** ✓ **Meets (2)** **Partially Meets (1)** **Does Not Meet (0)**
Do the materials support students in constructing viable arguments and critiquing the arguments of others concerning course-level mathematics that is detailed in the content Standards? Read Standard for Mathematical Practice 3. Evaluate teacher and student materials to ensure that students are given opportunities to reason with grade-level mathematics.	**Evidence-** Discussions included in all lessons; these discussions involve constructing and critiquing arguments. Teacher has responsibility for promoting & monitoring this activity.	
Do the materials support students in producing not only answers and solutions, but also, in a course-appropriate way, arguments, explanations, diagrams, mathematical models, etc., especially in the Widely Applicable Prerequisites? Familiarize yourself with the Widely Applicable Prerequisites. Evaluate teacher and student materials to understand the types of work students are expected to produce.	**Evidence-** Lots of high-level thinking items Example: Unit 1 Lesson 3 On Your Own & Summarize the Math Sections	
Do materials explicitly attend to the specialized language of mathematics? Is the language of argument, problem solving, and mathematical explanations taught rather than assumed? Evaluate teacher and student materials, paying attention to how mathematical language is taught. NOTE: An example of evaluating this Criterion might include looking at whether students are supported in: basing arguments on definitions; using the method of providing a counter example; or recognizing that examples alone do not establish a general statement.	**Evidence-** Mathematical language and its proper use is addressed in all investigations.	
Alignment Criterion 2: Materials must demonstrate authentic connections between content Standards and practice Standards. **AC 2:** Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 points, the Criterion has not been met. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewers only.)** **Before moving to Alignment Criterion 3, record the final Meets or Does Not Meet rating in the Evaluation Summary.**		✓ **Meets** 6/4 **Does Not Meet** **Strengths/Weaknesses:** 8 Practices incorporated throughout the curriculum Focus on authentic mathematical activity

Alignment Criterion 3: **Access to the Standards for All Students- Materials must provide supports for English Language Learners and other special populations.** Because Standards are for all students, alignment requires thoughtful support to ensure all students are able to meet the Standards. Thus, aligned materials must provide supports for English Language Learners and other special populations.	Because Standards are for all students, alignment requires thoughtful support to ensure all students are able to meet the Standards. Thus, aligned materials must provide supports for English Language Learners and other special populations. **Required Materials:** • Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math Publishers_Criteria_HS_Spring_2013_FINAL1.pdf) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion:** Alignment Criterion 3 is rated as Meets or Does Not Meet. To rate Alignment Criterion 3, first rate metrics 3A, 3B, and 3C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 3 if the materials rate 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as support for special population, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.
AC Metric 3A: **Support for English Language Learners and other special populations is thoughtful and helps those students meet the same Standards as all other students. The language in which problems are posed is carefully considered.** **How to Find the Evidence:** Evaluate teacher and student materials, paying attention to supports offered for special populations.	**Evidence-** Differentiation notes & ELL tips in margins. Design focus is intended to promote best practices for all. Tips and notes are minimal	____**Meets (2)** __✓__**Partially Meets (1)** ____**Does Not Meet (0)**
AC Metric 3B: **Materials provide appropriate level and type of scaffolding, differentiation, intervention, and support for a broad range of learners with gradual removal of supports, when needed, to allow students to demonstrate their mathematical understanding independently.** **How to Find the Evidence:** Evaluate teacher and student materials, paying attention to whether materials provide differentiation that will lead all learners to engage with on-grade-level content.	**Evidence-** The learning cycle allows for multiple instructional strategies that can be adapted to meet individual needs. Collaborative approach promotes access to the math for all students. "Equity through high expectations" supported by research.	__✓__**Meets (2)** ____**Partially Meets (1)** ____**Does Not Meet (0)**
AC Metric 3C: **Design of lessons recommends and facilitates a mix of instructional approaches for a variety of learners such as using multiple representations (e.g., including models, using a range of questions, checking for understanding, flexible grouping, pair-share).** **How to Find the Evidence:** Evaluate teacher materials, noting instructional approaches suggested for whole class and differentiated lessons and activities.	**Evidence-** 4-phase lesson cycle allows for different learning styles	__✓__**Meets (2)** ____**Partially Meets (1)** ____**Does Not Meet (0)**

Alignment Criterion 3: Materials must provide supports for English Language Learners and other special populations.	✓ Meets 5/6 ____ Does Not Meet **Strengths/Weaknesses:** Expectation of high engagement for all students – allows for adaptation but more support could be provided.
AC 3 Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 points, the Criterion has not been met. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewers only.)** **Move to the Evaluation Summary and record the final Meets or Does Not Meet rating .**	

Once an evaluation for alignment to the Shifts and major features of the CCSS has been conducted using Sections 1-3, it's important to evaluate for overall quality and best practices. A starting list of Indicators of Quality are suggested below. States, districts and others evaluating instructional materials are encouraged to add to this list to ensure materials reflect local contexts. For background information on some of the Indicators of Quality in this section, refer to pp.16–18 in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).

Indicators of Quality	Evidence- Give specific examples.	Rating: (Reviewer only.)
1. Lessons are thoughtfully structured and support the teacher in leading the class through the learning paths at hand, with active participation by all students in their own learning and in the learning of their classmates.	**Evidence-** Lesson cycle leads to objectives with all students as active learners.	**(Reviewer only.)** ✓ **Yes** ____ **No**
2. The underlying design of the materials includes both problems and exercises. (In solving problems, students learn new mathematics, whereas in working exercises, students apply what they have already learned to build mastery.) Each problem or exercise has a purpose. **NOTE: This Criterion does not require that the problems and exercises be labeled as such.**	**Evidence-** Problem-based design requires students to learn new mathematics and then apply concepts in On Your Own exercises.	**(Reviewer only.)** ✓ **Yes** ____ **No**

3. Design of assignments is not haphazard: exercises are given in intentional sequences in order to strengthen students' mathematical understanding.	**Evidence-** 4-phase lesson cycle reflected in assignments; practice, application and reflection balanced.	**(Reviewer only.)** ✓ Yes ____ No
4. There are separate teacher materials that support and reward teacher study including, but not limited to: discussion of the mathematics of the units and the mathematical point of each lesson as it relates to the organizing concepts of the unit, discussion on student ways of thinking and anticipating a variety of students responses, guidance on lesson flow, guidance on questions that prompt students thinking, and discussion of desired mathematical behaviors being elicited among students.	**Evidence-** ConnectED online portal for teacher support in promoting ~~Mareag~~ active learning	**(Reviewer only.)** ✓ Yes ____ No
5. Manipulatives suggested in the materials are faithful representations of the mathematical objects they represent and are connected to written methods.	**Evidence-** Some (few) manipulatives suggested Missed opportunity: no algebra tiles Unit 7 Lesson 2	**(Reviewer only.)** ✓ Yes ____ No
6. Materials include a variety of curriculum-embedded assessments. Examples include pre-, formative, summative, and self-assessment resources.	**Evidence-** Plenty of assessments, good quality & variety May not allow for teacher modifications	**(Reviewer only.)** ✓ Yes ____ No
7. Assessments contain aligned rubrics, answer keys, and scoring guidelines that provide sufficient guidance for interpreting student performance.	**Evidence-** Answer keys available Could have more support for formative assessment during investigations	**(Reviewer only.)** ✓ Yes ____ No
8. Materials assess student proficiency using methods that are accessible and unbiased, including the use of course-level language in student prompts.	**Evidence-** Unbiased & balanced	**(Reviewer only.)** ✓ Yes ____ No

9. Materials are carefully evaluated by qualified individuals whose names are listed, in an effort to ensure freedom from mathematical errors and course-level appropriateness.	**Evidence-** Reviewers listed Research studies shared TE iii	**(Reviewer only.)** ✓ **Yes** ____ **No**
10. The visual design supports students in engaging thoughtfully with the subject. Navigation through the text is clear.	**Evidence-** Appealing w/o being overly busy Illustrations are true to the mathematics	**(Reviewer only.)** ✓ **Yes** ____ **No**

Reviewer IMET Evaluation Summary **Title/Level:** Core-Plus 1

Publisher: McGraw Hill **Copyright:** 2015 **ISBN:** SE 978-0-07-665794-0

Reviewer ID # MK & TG **Date Review Completed:** 3/8/16

Non-Negotiable Criteria-The Non-Negotiable must be met in order for the Non-Negotiable Alignment Criteria to be met overall.

Non- Negotiable 1: Focus and Coherence

✓ **Meets**

____ **Does Not Meet**

Non-Negotiable Overall:

✓ **Meets** _____ **Does Not Meet**

Alignment Criteria- Each Alignment Criterion must be met with a sufficient number of points in order for Alignment Criteria to be labeled as "Meets" overall. The more points the materials receive on the Alignment Criteria, the better they are aligned.

Alignment Criterion 1: Rigor and Balance	Alignment Criterion 2: Standards of Mathematical Practice	Alignment Criterion 3: Access to Standards for All Learners
Points: 6 **of 6 possible.** (Materials must receive at least 5 of 6 points to align.)	**Points:** 6 **of 6 possible.** (Materials must receive at least 5 of 6 points to align.)	**Points:** 5 **of 6 possible.** (Materials must receive at least 5 of 6 points to align.)
✓ **Meets**	✓ **Meets**	✓ **Meets**
_____ **Does Not Meet**	_____ **Does Not Meet**	_____ **Does Not Meet**

Alignment Criteria Overall:

✓ **Meets** _____ **Does Not Meet**

If the materials meet the Non-Negotiable Criterion and each Alignment Criterion, they are aligned to the Shifts and major features of the Co[illegible]tandards. **Do the materials meet every Non-Negoti[illegible]e and Alignment Criterion?** ___✓___ **Yes** _____ **No**

What are the specific areas of strength and weakness based on this evaluation? Publishers or others modifying or developing assessments can use this information to make improvements and/or to remedy gaps in the alignment of assessment materials.

Strength: Design focus on active learning through investigations
4-phase lesson cycle
Summarize the Math reflection component
Strong alignment with content standards and intentional development of practice standards.

Weakness: Explicit support for ELL & other adaptations could be increased (this is an explicit design choice, however)

2015-16 Mathematics Interim Review Recommendation & Summary

Publisher Name:	McGraw-Hill School Education LLC
Title:	Core-Plus Mathematics 2
ISBN #	978-0-07-665799-5
Grade Level(s) or Course:	9-12
Reviewer ID:	KD, RW

RECOMMENDED AS:

___X_____**Core Mathematics Program-** a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials. Substantial evidence clearly supports the designation of this program as Core.

_____**Other Mathematics Program-** a program that substantially, but partially, meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for supplemental materials. Substantial evidence clearly supports the designation of this program as Other.

_____**Component Mathematics Program-** a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs. Substantial evidence clearly supports the designation of this program as Component.

_____**Intervention Program-** a program designed and intended to target and support students' specific needs. Substantial evidence clearly supports the designation of this program as Intervention.

_____ **Does not meet criteria** for recommendation as a Curricular Material or Online Resource for Mathematics.

2015-1 Interim Mathematics Review

Mathematics Evaluation Tool – High School

Publisher: McGraw-Hill School Education LLC

Title of Material: Core-Plus Mathematics 2

Author: Christian R. Hirsch, et al.

ISBN #: 978-0-07-665799-5 **Copyright** 2015

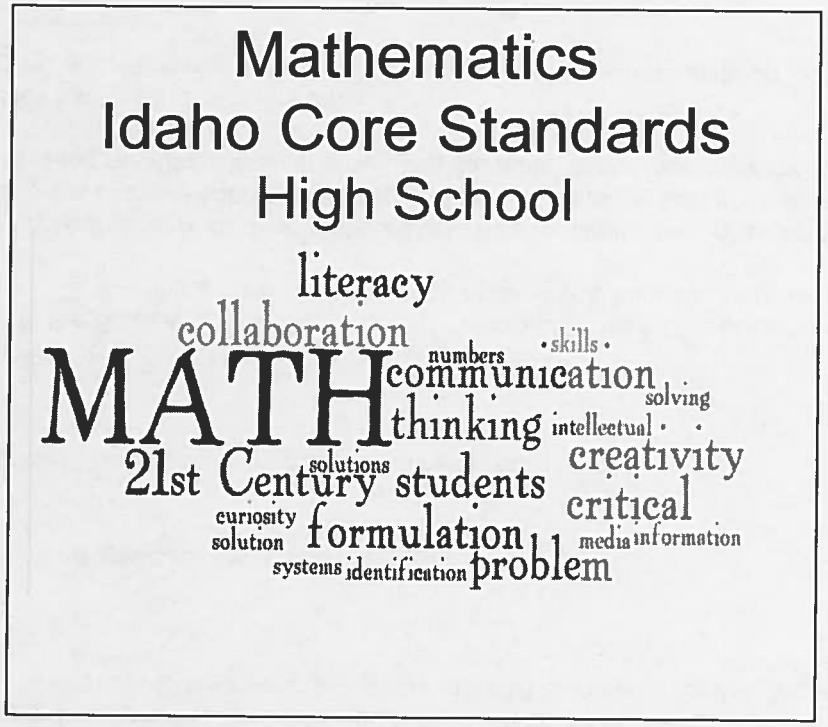
Reviewer ID: KS RW

Core Mathematics Program- a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Core.

Other Mathematics Program- a program that substantially, but partially, meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Other.

Component Mathematics Program- a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs.
Substantial evidence clearly supports the designation of this program as Component.

Intervention Program- a program designed and intended to target and support students' specific needs.
Substantial evidence clearly supports the designation of this program as Intervention.



- Evaluation Form adapted from Instructional Materials Evaluation Toolkit (IMET).

The IMET was developed by Student Achievement Partners. Educators may use or adapt. http://creativecommons.org/licenses/by/3.0/ Download this tool at http://achievethecore.org/IMET

Instructional Materials Evaluation Tool
Mathematics, High School

What Are the Purposes of the IMET?
This Math IMET is designed to help educators determine whether instructional materials are aligned to the Shifts and major features of the Common Core State Standards (CCSS). The substantial instructional Shifts (http://www.corestandards.org/other-resources/key-shifts-in-mathematics/) at the heart of the Common Core State Standards are:
- **Focus** strongly where the Standards focus
- **Coherence**: Think across grades and link to major topics within the grade
- **Rigor**: In major topics, pursue conceptual understanding, procedural skill and fluency, and application with equal intensity.

The IMET draws directly from the following documents:
- Common Core State Standards for Mathematics (www.corestandards.org/Math)
- Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013) (http://www. corestandards.org/wp-content/uploads/Math_Publishers_Criteria_ HS_Spring_2013_FINAL1.pdf)

When to use the IMET
1. Purchasing materials: Many factors go into local purchasing decisions. Alignment to the Standards is a critical factor to consider. This tool is designed to evaluate alignment of instructional materials to the Shifts and the major features of the CCSS. It also provides suggestions of additional indicators to consider in the materials evaluation and purchasing process
2. Evaluating materials currently in use: The IMET can be used to analyze the degree of alignment of existing materials and help to highlight specific, concrete flaws in alignment. Even where materials and tools currently in use fail to meet one or more of these criteria, the pattern of failure is likely to be informative. States and districts can use the evaluation to create a thoughtful plan to modify or combine existing resources in such a way that students' actual learning experiences approach the focus, coherence, and rigor of the Standards.
3. Developing programs: Those developing new programs can use this tool as guidance for creating aligned curricula.

Please note this tool was designed for evaluating comprehensive curricula (including any supplemental or ancillary materials), but it was not designed for the evaluation of standalone supplemental materials.

Who Uses the IMET?
Evaluating instructional materials requires both subject-matter and pedagogical expertise. Evaluators should be well versed in the Standards (www.corestandards.org/Math) for all grades in which materials are being evaluated. This includes understanding the Widely Applicable Prerequisites (www.achievethecore.org/prerequisites), how the content fits into the progressions in the Standards (www. achievethecore.org/progressions), and the expectations of the Standards with respect to conceptual understanding, procedural skill and fluency, and application. Evaluators also should be familiar with the substantial instructional Shifts (http://www.corestandards.org/other-resources/key-shifts-in-mathematics/) of Focus, Coherence and Rigor that are listed above.

Getting Started
Prior to Evaluation

Assemble all of the materials necessary for the evaluation. It is essential for evaluators to have materials for all grades covered by the program, as some criteria cannot be rated without having access to each grade. In addition, each evaluator should have a reference copy of the Common Core State Standards for Mathematics (CCSSM) and the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).

Before conducting the evaluation itself, it is important to develop a protocol for the evaluation process. The protocol should include having evaluators study the Publishers' Criteria and the IMET. It will also be helpful for evaluators to get a sense of each program overall before beginning the process. At a minimum, this would include reading the front matter of the text, looking at the table of contents and paging through multiple chapters.

Sections 1-3 below should be completed to produce a comprehensive picture of the strengths and weaknesses of the materials under evaluation. Information about areas in need of improvement or supplementation should be shared with internal and external stakeholders.

Navigating the Tool

Begin with Section 1: Non-Negotiable Alignment Criteria

- The Non-Negotiable Alignment Criteria must each be met in full for materials to be considered aligned to the Shifts and the major features of the Common Core State Standards. Each Non-Negotiable Alignment Criterion has one or more metrics associated with it; every one of these metrics must be met in order for the criterion as a whole to be met.

- Examine the relevant materials and use evidence to rate the materials against each criterion and its associated metric(s).

- Record and explain the evidence upon which the rating is based.

Continue to Section 2: Alignment Criteria

- The Alignment Criteria must each be met for materials to be considered aligned to the Shifts and the major features of the Common Core State Standards. Each Alignment Criterion has one or more metric associated with it; a specific number of these metrics must be met or partially met in order for the criterion as a whole to be met.

- Examine the materials in relation to these criteria, assigning each metric a point value. Rate the criterion as "Meets" or "Does Note Meet" based on the number of points assigned. The more points the materials receive on the alignment Criteria, the better they are aligned.

- Record and explain the evidence upon which the rating is based.

Proceed to Section 4: Indicators of Quality

- Indicators of Quality are important considerations that will help evaluators better understand the overall quality of instructional materials. These considerations are not criteria for alignment to the CCSS, but they provide valuable information about additional program characteristics. Evaluators may want to add their own indicators to the examples provided.

Directions for Non-Negotiable 1

Focus and Coherence

Criterion	Evidence- Give specific examples.	Rating: (Reviewer only.)
Non-Negotiable 1: Focus and Coherence- Materials must focus coherently on the Widely Applicable Prerequisites in a way that is consistent with the progressions in the Standards. Focus and coherence are the two major evidence-based design principles of the Common Core State Standards for Mathematics (CCSSM, p. 3). Focus is necessary in order to fulfill the ambitious promise the states have made to their students by adopting the Standards: greater achievement at the college and career-ready level; greater depth of understanding of mathematics; and a rich classroom environment in which reasoning, sense-making, applications, and a range of mathematical practices flourish. In high school courses, narrowing and deepening the curriculum creates a structure that ties topics together. Thus, materials must focus coherently on the Widely Applicable Prerequisites in a way that is consistent with the progressions in the Standards.	Focus and coherence are the two major evidence-based design principles of the Common Core State Standards for Mathematics (CCSSM, p. 3). Focus is necessary in order to fulfill the ambitious promise the states have made to their students by adopting the Standards: greater achievement at the college and career-ready level; greater depth of understanding of mathematics; and a rich classroom environment in which reasoning, sense-making, applications, and a range of mathematical practices flourish. In high school courses, narrowing and deepening the curriculum creates a structure that ties topics together. Thus, materials must focus coherently on the Widely Applicable Prerequisites in a way that is consistent with the progressions in the Standards. **Required Materials:** • Common Core State Standards for Mathematics (www.corestandards.org/wpcontent/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_HS_Spring_2013_FINAL1.pdf) • Widely Applicable Prerequisites for College and Careers (http://achievethecore.org/prerequisites) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion:** Non-Negotiable 1 is rated as Meets or Does Not Meet. To rate Non-Negotiable 1, first rate Metrics 1A–1H. Each of these eight metrics must be rated as Meets in order for Non-Negotiable 1 to be rated as Meets. Rate each metric 1A–1H as Meets or Does Not Meet/Insufficient Evidence. If the evidence examined shows that the Criterion is met, then mark the Criterion as Meets. If the evidence examined shows that the Criterion is not met—or if there is insufficient evidence to make a determination—then mark the Criterion as Does Not Meet/Insufficient Evidence. Support all ratings with evidence.

Metric NN1A: **In any single course, students spend at least 50% of their time on Widely Applicable Prerequisites.** **How to Find the Evidence:** Familiarize yourself with the Widely Applicable Prerequisites. Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, lessons, homework assignments, and assessments. (Evaluate both student and teacher materials.) Consider time spent on the Widely Applicable Prerequisites and judge qualitatively whether students and teachers using the materials as designed will devote the majority of time to the Widely Applicable Prerequisites For context, read Criterion #1 in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** Core Plus 2 covers the following WAP: N.RN.2, A.SSE.1a, 1b, A.SSE.3a, 3b, 3c, A.CED.1, 2, 4, A.REI.4a, 4b, A.REI.7, F.IF.4 and 5, F.IF.7a, 7b, 8a, 8b, and 9, I.BF.1a, G.CO.10, G.SRT.4, 5, 6, 7, and 8 Core Plus 2 does NOT cover the following WAP: N.RN.1, 3. A.APR.1, I.BF.1b, G.CO. 9 Total Lessons: 29 Lessons Spent on WAP: 18 % of time spent on WAP: 62% However, Core Plus 2 does not align to the Appendix A WAP for a second year course. Two out of the 8 Units focus on CCSS not aligned to Integrated II WAP. The entire Core Plus program does cover all CCSS in Appendix A.	**__X__Meets** **____Does Not Meet Insufficient Evidence**
Metric NN1B: **Student work in Geometry involves significant work with applications/modeling and problems that use algebra skills.** **How to Find the Evidence:** Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, lessons, homework assignments, and assessments. (Evaluate both student and teacher materials. NOTE: Since Geometry contains relatively fewer Widely Applicable Prerequisites, this Criterion is important to help foster students' college and career readiness. Problems that use algebra skills might include, for example, algebraic geometry problems in a coordinate setting, or problems of measurement involving unknown quantities.	**Evidence-** Core Plus 2 contains significant work with applications and modeling. The text contains many investigative tasks that require students to use modeling and algebra skills. This is evident in the following: Unit 3- Lesson 1, 2, On Your Own Problems Unit 5- Lesson 1, On Your Own Problems Unit 6- Lesson 1, On Your Own Problems Unit 7- Lesson 1, 2, On Your Own Problems	**__X__Meets** **____Does Not Meet Insufficient Evidence**

Metric NN1C: **There are problems at a level of sophistication appropriate to high school (beyond mere review of middle school topics) that involve the application of knowledge and skills from grades 6-8.** **How to Find the Evidence:** Evaluate lessons, chapter/unit assessments, and homework assignments. NOTE: Problems should include application of the following topics from grades 6-8: • Ratios and proportional relationships. • Percentage and unit conversions, e.g., in the context of complex measurement problems involving quantities with derived or compound units (such as mg/mL, kg/ m3, acre-feet, etc.). • Basic function concepts, e.g., by interpreting the features of a graph in the context of an applied problem. • Concepts and skills of geometric measurement e.g., when analyzing a diagram or schematic. • Concepts and skills of basic statistics and probability (see grades 6–8.SP) • Performing rational number arithmetic fluently. For context, read Table 1 on Page 8 of the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** Core Plus 2 contains problems at an appropriate level for high school that involve the extension of knowledge and skills from grades 6-8. The tasks and problems presented in the text require high level thinking strategies. The problems are focused and geared towards high school students and their level of thinking. This is evident in the following: Ratios and Proportional Relationships: Unit 1 Percentage and Unit Conversions: All Units Basic Function Concepts: Unit 1, 5 Geometric Measurement: Unit 3, 7 Basic Statistics and Probability: Unit 4, 8 Ration Number Arithmetic Fluency: All Units	**__X__Meets** **____Does Not Meet Insufficient Evidence**
Metric NN1D: **Materials base courses on the content specified in the Standards.** **How to Find the Evidence:** Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, and lessons in both student and teacher materials. For context, read Criterion #3a in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** The standards covered in this course are aligned to the content specified in the CCSS. Each lesson is equipped with a breakdown of which standards are focused on and how they connect to other standards (this can be seen in the margins of the teacher edition of the text.) However, not all WAP are covered; for example circles are covered in year 2, where the Core Plus program covers them in year 3.	**__X__Meets** **____Does Not Meet Insufficient Evidence**

Metric NN1E: **Materials give all students extensive work with course-level problems.** **How to Find the Evidence:** Evaluate both student and teacher materials. If the materials provide resources for differentiated learning, consider whether lower-performing students have opportunities to engage with course-level problems. Also consider whether higher-performing students are given opportunities to learn current course-level content in greater depth. For context, read Criterion #3b in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** The curriculum provides a teacher edition and within the teacher edition there are side notes that suggest differentiation for higher and lower level students but the differentiation is not adequate (TE p. 152); however there are not many suggestions to help special population students. There are notes on common misconceptions and each lesson has a corresponding "On Your Own" section that allows the teacher to meet the needs of students who are absent, need additional practice, or to accelerate those that are ready to move forward with the material. The practice problems within the text are designed in a way that they start easy and gradually increase in difficulty in order to give as many students as possible work with the course-level material.	**__X__Meets** **____Does Not Meet Insufficient Evidence**
Metric NN1F: **Materials relate course-level concepts explicitly to prior knowledge from earlier grades or courses. The materials are designed so that prior knowledge becomes reorganized and extended to accommodate the new knowledge.** **How to Find the Evidence:** Evaluate student and teacher materials, looking for problems that involve extending the knowledge learned in earlier grades and courses. NOTE: An example of evaluating this Criterion might be to look at whether materials connect the equation of a circle with the distance formula and the Pythagorean theorem. For context, read Criterion #3c in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** In order to relate the curriculum to previous concepts students have already learned, lessons are equipped with "Just-In-Time" review problems/tasks that give students practice with previously learned concepts that they will see in upcoming investigations. Each unit is equipped with a "Looking Back" lesson that helps students formalize concepts learned. "On Your Own" sections for every lesson review previously learned concepts from previous courses and help students connect them to what they are learning in their current lesson.	**__X__Meets** **____Does Not Meet Insufficient Evidence**
Metric NN1G: **Materials include learning objectives that are visibly shaped by CCSSM cluster and domain headings.** **How to Find the Evidence:** Select several clusters from the course being evaluated. Evaluate teacher and student materials in relation to these clusters. For context, read Criterion #4a in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** In the teacher edition of course materials each lesson has specific learning objectives. These learning objectives are aligned to the CCSS listed in the lesson. The teacher materials also align the CCSS to specific investigations in each lesson. The objectives and related CCSS are listed in the Unit Overview as well and are easily accessible by teachers.	**__X__Meets** **____Does Not Meet Insufficient Evidence**

Metric NN1H: **Materials include problems and activities that serve to connect two or more clusters in a domain, or two or more domains in a category, or two or more categories, in cases where these connections are natural and important.** **How to Find the Evidence:** In the course being evaluated, choose two or more clusters, two or more domains, or two or more categories for which connections are natural and important. Evaluate the units, chapters, and lessons that deal with the chosen topics, looking for problems and activities that serve to connect the chosen clusters or domains. NOTE: An example of evaluating this Criterion might be to look at whether materials include problems in which students analyze a situation by building a function, graphing it, and using it to create and solve an equation. For context, read Criterion #4b in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** The Core Plus 2 program has clusters and domains interwoven in every unit. In each lesson investigations are labeled with the CCSS they meet. Most investigations connect 2 or more clusters in a domain. See evidence below. Clusters Connected: Unit 1: A.SSE, A.REI, A.CED, F.IF, F.BF, S.ID Unit 2: A.CED, A.REI, N.VM Unit 3: N.VM, G.CO, G.SRT, G.GPE, G.MG Unit 4: S.ID, S.IC Unit 5: A.SSE, A.CED, A.APR, A.REI, F.IF, F.BF, F.LE	**__X__Meets** **____Does Not Meet Insufficient Evidence**
Non-Negotiable 1: Focus and Coherence- Materials must focus coherently on the Widely Applicable Prerequisites in a way that is consistent with the progressions in the Standards. **Metric NN 1:** If all metrics 1A–1H were rated as Meets, then rate Non-Negotiable 1 as Meets. If one or more metrics were rated as Does Not Meet/Insufficient Evidence, then rate Non-Negotiable 1 as Does Not Meet. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)** **Before moving to Alignment Criterion 1, record the final Meets or Does Not Meet rating in the Evaluation Summary.**		**__X__Meets** **____Does Not Meet** **Strengths/Weaknesses:** The text overall is a cohesive and rigorous course for the mathematics presented. However it does align to the Appendix A Integrated II WAP and the support for special population is weak.

Now continue by evaluating Alignment Criterion 1 for Rigor and Balance.

Directions for Alignment Criterion 1

Rigor and Balance

Alignment Criterion 1: **Rigor and Balance- Materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.** The Standards set expectations for attention to all three aspects of rigor: conceptual understanding, procedural skill and fluency, and applications. Thus, materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.	The Standards set expectations for attention to all three aspects of rigor: conceptual understanding, procedural skill and fluency, and applications. Thus, materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations. • Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_HS_Spring_2013_FINAL1.pdf) • Widely Applicable Prerequisites for College and Careers (http://achievethecore.org/prerequisites) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion:** Alignment Criterion 1 is rated as Meets or Does Not Meet. To rate Alignment Criterion 1, first rate metrics 1A, 1B, and 1C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). For each metric, guiding questions are provided to aid in gathering evidence. Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 1 if the materials rate 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as rigor and balance, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.
AC Metric 1A: **The materials support the development of students' conceptual understanding of key mathematical concepts, especially where called for in specific content Standards or cluster headings.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Widely Applicable Prerequisites that relate specifically to conceptual understanding to use throughout the questions associated with this metric. NOTE: Some examples of clusters or Standards that call for conceptual understanding include: N-RN.A.1, A-APR.B, A-REI.A.1, A-REI.D.10, A.REI.D.11, F.IF.A.1, F-LE.A.1, G.SRT.A.2, G-SRT.C.6, S-ID.C.7 For context, read Criterion #2a in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	• Choose a cluster/Standard from the Widely Applicable Prerequisites that is aligned to each aspect of rigor and use it to evaluate these metrics. It is most helpful if the same clusters and Standards are chosen for all of the programs being evaluated. (Guidance in choosing clusters/Standards is included in "How to Find the Evidence" below.)	**Use the questions for AC Metric 1A to evaluate Metric 1A. Record evidence for each question and rate Metric 1A.** **__X__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Is conceptual understanding attended to thoroughly where the Standards set explicit expectations for understanding or interpreting? Evaluate lessons, chapter/unit assessments and homework assignments, paying attention to work aligned to Standards that explicitly call for understanding or interpreting.	**Evidence-** Conceptual understanding is attended to thoroughly in the Core Plus 2 curriculum. Each chapter builds on the development of student's conceptual understanding of the CCSS covered in each lesson. For example, A.SS.1a is addressed heavily in unit 5 of Core Plus 2 through investigations that allow students access to a conceptual understanding of the structure of expressions. All standards are approached in an investigative way to allow students to conceptually understand the course content specified in the CCSS.	

Do the materials feature high-quality conceptual problems and conceptual discussion questions? Evaluate lessons, chapter/unit assessments, and homework assignments. NOTE: Examples of conceptual problems might include such questions as "What is the maximum value of the function f(t) = 5 – t2 ?" or "Is √2 a polynomial? How about ½(x + √2)+ ½ (-x + √2)?"	**Evidence-** All standards are approached in an investigative way that is intended to lead students to a deep conceptual understanding. This is evident in all lesson and investigations.	
Do the materials feature opportunities to identify correspondences across mathematical representations? Evaluate lessons, chapter/unit assessments and homework assignments. NOTE: An example of evaluating this metric might include looking at whether materials support students in identifying correspondences among the expression that defines a function, the graph that shows the relationship, and the behavior of the phenomenon being modeled (if any).	**Evidence-** Students are required to use multiple representations of mathematical concepts in almost every investigation and instances where they are asked to solve tasks and problems. For example students are asked to look at equations and graphs of direct variations in Unit 1.	
AC Metric 1B: **The materials are designed so that students attain the fluencies and procedural skills required by the Standards.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Widely Applicable Prerequisites that relate specifically to fluency and procedural skill to use throughout the questions associated with this metric. NOTE: Some examples of Standards that call for procedural skill and fluency include: A-SSE.A.1b, A-SSE.2, A-APR.A.1, A-APR.C.6, F-BF.B.3, G-GPE.B.4, G-GPE.B.5, G-GPE.B.7, G-CO.A.1, G-SRT.B.5 For context, read Criterion #2b in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).		**Use the questions for AC Metric 1B to evaluate Metric 1B. Record evidence for each question and rate Metric 1B.** **__X__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Is progress toward fluency and procedural skill interwoven with the student's developing conceptual understanding of the skills in question? Evaluate lessons, chapter/unit assessments, daily routines, and homework assignments for evidence that the development of fluency and procedural skill is supported by conceptual understanding.	**Evidence-** Progress towards fluency and procedural skills are interwoven within this text. Students are asked to complete purely procedural skills during classroom investigations that lead them to a conceptual understanding of the material. Applications and conceptual understanding of concepts with a procedural emphasis is also achieved through classroom investigations and "On Your Own" problems that students can complete as homework.	

Are purely procedural problems and exercises present that include cases in which opportunistic strategies are valuable and generic cases that require efficient and general procedures present? Evaluate lessons, chapter/unit assessments, daily routines, and homework assignments. NOTE: Problems in which opportunistic strategies are valuable might include such examples as solving x2 + 5 = 49 + 5 or (3x – 2)2 = 6x – 4. Generic cases that require efficient and general procedures might include such problems as solving c + 8 – c2 = 3(c – 1)2 – 5).	**Evidence-** Purely procedural problems and exercises are included within the text. These can be seen in investigations in the classroom as well as homework problems students complete on their own that area aligned to the lesson students complete in class.	
AC Metric 1C: **The materials are designed so that teachers and students spend sufficient time working with engaging applications, without losing focus on the Widely Applicable Prerequisites.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Widely Applicable Prerequisites that relate specifically to application to use throughout the questions associated with this metric. NOTE: Some examples of clusters or Standards that call for application include: N-Q.A, A-SSE.B.3, A-REI.D.11, F-IF.B, F-IF.C.7, F-BF.A.1, G-SRT.C.8, S-ID.A.2, S-IC.A.1 For context, read Criterion #2c in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).		**Use the questions for AC Metric 1C to evaluate Metric 1C. Record evidence for each question and rate Metric 1C.** **__X__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Are there single- and multi-step contextual problems, including non-routine problems, that develop the mathematics of the course, afford opportunities for practice, and engage students in problem solving? Do the problems attend thoroughly to those places in the content Standards where expectations for multi-step and real-world problems are explicit? Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** The text focuses heavily on contextual problems (Lesson Investigations) to help students gain a conceptual understanding of the WAP. The text does include non-routine problems designed to develop the mathematics of the course. The real world connections (Lesson Investigations) engage students in problem solving. This can be seen in all lesson investigations included in the text.	
Do application problems particularly stress applying the Widely Applicable Prerequisites? Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** The application problems are designed to connect what students have learned in that section, as well as connecting to previously learned concepts earlier in the text/previous courses. The text meets almost all WAP for the course and these are seen in the application problems present in each lesson and homework assignments.	
Are there ample opportunities for students to engage with modeling problems? Do materials require students to use both individual parts of the modeling cycle as well as the full modeling cycle? Read the pages on High School—Modeling in the Standards for Mathematics (pp. 72 and 73). Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** The text connects students to the modeling cycle through real world problems in the lesson investigations. Students are asked to model situations using tables, graphs and equations and interpret the results that they receive.	

Alignment Criterion 1: Materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.

AC 1: Materials must earn at least 5 of 6 points to meet this Alignment Criterion. If materials earn less than 5 points, the Criterion has not been met. Check the final rating.
Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)**

Before moving to Alignment Criterion 2, record the final Meets or Does Not Meet rating in the Evaluation Summary.

__X__Meets

____Does Not Meet

Strengths/Weaknesses:
The text in strongest in its design to lead students to a strong conceptual understanding of the mathematics presented in the CCSS.

Alignment Criterion 2:
Standards for Mathematical Practice- Materials must demonstrate authentic connections between content Standards and practice Standards.

The Standards require that designers of instructional materials connect the mathematical practices to mathematical content in instruction. Thus, materials must demonstrate authentic connections between content Standards and practice Standards.

The Standards require that designers of instructional materials connect the mathematical practices to mathematical content in instruction. Thus, materials must demonstrate authentic connections between content Standards and practice Standards.

Required Materials:

- Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf)
- Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_HS_Spring_2013_FINAL1.pdf)
- Widely Applicable Prerequisites for College and Careers (http://achievethecore.org/prerequisites)
- From the materials being evaluated: teacher guides, student texts and workbooks

Rating this Criterion:
Alignment Criterion 2 is rated as Meets or Does Not Meet.
To rate Alignment Criterion 2, first rate metrics 2A, 2B, and 2C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). For each metric, guiding questions are provided to aid in gathering evidence.
Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 2 if the materials rate 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as mathematical practices, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.

AC Metric 2A: **Materials address the practice Standards in such a way as to enrich the Widely Applicable Prerequisites; practices strengthen the focus of the course instead of detracting from it, in both teacher and student materials.** **How to Find the Evidence:** Familiarize yourself with the Widely Applicable Prerequisites. Evaluate teacher and student materials for evidence that the mathematical practices support and connect to the focus of the course. NOTE: An example of evaluating this Criterion might include looking at whether materials use regularity in repeated reasoning to illuminate formal algebra as well as functions, particularly recursive definitions of functions. For context, read Criterion #6 in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** MP #1- Every lesson includes a "Check Your Understanding" section that allows students to determine if they are on the right path for conceptual understanding. Students are also given opportunities to preserve through problem solving in all tasks that they complete. MP#2- The text includes numerous story problems that ask students to reason abstractly and quantitatively. This is seen in all lesson investigations that students complete. MP#3- This can be seen in the text when students are asked in investigations to explain their reasoning and to be prepared to defend their answers to their classmates. MP#4- This can be seen in every section of the text. MP#5- Students are asked to use technology such as calculators in lessons to help them reach a deep conceptual understanding of the CCSS. Students are asked to use multiple tools in all sections of the text. MP#6- Students are required to provide exact answers and labels in every problem. They are required to provide clear explanations and descriptions with pictures and diagrams. MP#7- Students are constantly asked to look for a make use of patterns in all work they complete in the text. MP#8- Students are asked to repeatedly use a logical process. Students are asked to explain their reasoning in all work that they complete. This can be seen in lesson investigations as well as "On Your Own" problems.	**__X__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
AC Metric 2B: **Materials attend to the full meaning of each practice Standard.** **How to Find the Evidence:** For context, read Criterion #7 in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).		**Use the questions for AC Metric 2B to evaluate Metric 2B. Record evidence for each question and rate Metric 2B.** **__X__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**

Over the course of any given year of instruction, is each mathematical practice Standard meaningfully present in the form of assignments, activities, or problems that stimulate students to develop the habits of mind described in the practice Standard? Evaluate lessons, chapter/ unit assessments, and homework assignments for evidence of each mathematical practice being meaningfully present in instruction.	**Evidence-** See evidence for AC Metric 2A.	
Are teacher-directed materials that explain the role of the practice Standards in the classroom and in students' mathematical development included? Are alignments to practice Standards accurate? Evaluate teacher materials, paying attention to explanations of the role of the practice Standards in the classroom and in students' mathematical development. Evaluate documents aligning lessons to practice Standards for accuracy. NOTE: Examples to look for when evaluating this metric might include the following: a highly scaffolded problem should not be aligned to MP.1; or a problem that directs a student to use a calculator should not be aligned to MP.5; or a problem about merely extending a pattern should not be aligned to MP.8.	**Evidence-** The CCSS guide to Core-Plus mathematics lists all MP standards met in the course. It gives page numbers broken down by MP standards.	
AC Metric 2C: **Materials support the Standards' emphasis on mathematical reasoning.** **How to Find the Evidence:** For context, read Criterion #8 in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).		**Use the questions for AC Metric 2C to evaluate Metric 2C. Record evidence for each question and rate Metric 2C.** **__X__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Do the materials support students in constructing viable arguments and critiquing the arguments of others concerning course-level mathematics that is detailed in the content Standards? Read Standard for Mathematical Practice 3. Evaluate teacher and student materials to ensure that students are given opportunities to reason with grade-level mathematics.	**Evidence-** The materials presented in Core Plus 2 aid students in constructing viable arguments by first leading them through a carefully thought out investigation of the CCSS. Students are then asked to justify the mathematics that they have encountered in the investigation and are then asked to share their reasoning and listen to the reasoning of others, critiquing when necessary.	
Do the materials support students in producing not only answers and solutions, but also, in a course-appropriate way, arguments, explanations, diagrams, mathematical models, etc., especially in the Widely Applicable Prerequisites? Familiarize yourself with the Widely Applicable Prerequisites. Evaluate teacher and student materials to understand the types of work students are expected to produce.	**Evidence-** All investigations in the text ask students to do more than simply produce an answer. They are asked to justify their reasoning and their answers using appropriate mathematical tools. This can be seen in all lessons of the text.	
Do materials explicitly attend to the specialized language of mathematics? Is the language of argument, problem solving, and mathematical explanations taught rather than assumed? Evaluate teacher and student materials, paying attention to how mathematical language is taught. NOTE: An example of evaluating this Criterion might include looking at whether students are supported in: basing arguments on definitions; using the method of providing a counter example; or recognizing that examples alone do not establish a general statement.	**Evidence-** Mathematical vocabulary is attended to with precision in the text. Investigations and homework use consistent vocabulary. The text introduces mathematical terminology in each unit.	

Alignment Criterion 2: Materials must demonstrate authentic connections between content Standards and practice Standards

AC 2: Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 points, the Criterion has not been met. Check the final rating.
Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewers only.)**

Before moving to Alignment Criterion 3, record the final Meets or Does Not Meet rating in the Evaluation Summary.

__X__Meets

____Does Not Meet

Strengths/Weaknesses:
The text does a great job of making sure that students are constantly asked to use the 8 mathematical practice standards.

Alignment Criterion 3:
Access to the Standards for All Students- Materials must provide supports for English Language Learners and other special populations.

Because Standards are for all students, alignment requires thoughtful support to ensure all students are able to meet the Standards. Thus, aligned materials must provide supports for English Language Learners and other special populations.

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Required Materials:

- Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf)
- Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math Publishers_Criteria_HS_Spring_2013_FINAL1.pdf)
- From the materials being evaluated: teacher guides, student texts and workbooks

Rating this Criterion:
Alignment Criterion 3 is rated as Meets or Does Not Meet.
To rate Alignment Criterion 3, first rate metrics 3A, 3B, and 3C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points).
Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 3 if the materials rate 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as support for special population, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.

AC Metric 3A:
Support for English Language Learners and other special populations is thoughtful and helps those students meet the same Standards as all other students. The language in which problems are posed is carefully considered.

How to Find the Evidence:

Evaluate teacher and student materials, paying attention to supports offered for special populations.

Evidence-
The text does not include specific support for ELL students beyond a Spanish glossary and minimal lessons available online (3 lessons available for this course). There are answers to tasks and homework questions available for teachers through the online resource. Students are expected to have strong reading skills and some special populations do not have these and no supports are interwoven to help these students. However, students are asked to discuss their mathematical thinking, which allows some special populations to participate when they may normally not.

____Meets (2)

__X__Partially Meets (1)

____Does Not Meet (0)

AC Metric 3B: **Materials provide appropriate level and type of scaffolding, differentiation, intervention, and support for a broad range of learners with gradual removal of supports, when needed, to allow students to demonstrate their mathematical understanding independently.** **How to Find the Evidence:** Evaluate teacher and student materials, paying attention to whether materials provide differentiation that will lead all learners to engage with on-grade-level content.	**Evidence-** The text includes scaffolding for special populations through "Think About This Situation" problems to begin tasks. The tasks begin with easier concepts and gradually increase through the lesson. Scaffolding does exist within the text, but there are no extra resources to support special populations. Differentiation and intervention resources are weak and not always present.	**_X__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
AC Metric 3C: **Design of lessons recommends and facilitates a mix of instructional approaches for a variety of learners such as using multiple representations (e.g., including models, using a range of questions, checking for understanding, flexible grouping, pair-share).** **How to Find the Evidence:** Evaluate teacher materials, noting instructional approaches suggested for whole class and differentiated lessons and activities.	**Evidence-** The text allows students to complete tasks in groups that allow for students to check for understanding and to pair-share. The text also includes a "Check For Understanding" section in each lesson. The text allows students to approach problems with multiple representations through out the text.	**__X__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Alignment Criterion 3: Materials must provide supports for English Language Learners and other special populations. **AC 3** Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 points, the Criterion has not been met. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewers only.)** **Move to the Evaluation Summary and record the final Meets or Does Not Meet rating .**		**__X__Meets** **____Does Not Meet** **Strengths/Weaknesses:** The text has very minimal support for special populations but does do a nice job of using multiple representations to reach a variety of learners.

Once an evaluation for alignment to the Shifts and major features of the CCSS has been conducted using Sections 1-3, it's important to evaluate for overall quality and best practices. A starting list of Indicators of Quality are suggested below. States, districts and others evaluating instructional materials are encouraged to add to this list to ensure materials reflect local contexts. For background information on some of the Indicators of Quality in this section, refer to pp.16–18 in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).

Indicators of Quality	Evidence- Give specific examples.	Rating: (Reviewer only.)
1. Lessons are thoughtfully structured and support the teacher in leading the class through the learning paths at hand, with active participation by all students in their own learning and in the learning of their classmates.	**Evidence-** All lessons in the text work to build on the previous lessons. Lessons are completed in a thoughtful and coherent structure. Lessons involve engaging investigations that lead to active participation by all students in their learning as well as the learning of their classmates. The teacher edition of the text is a great support. It involves notes in the margins and common misconceptions that lead to thoughtful teaching of mathematics.	**(Reviewer only.)** **___X___ Yes** **_____ No**
2. The underlying design of the materials includes both problems and exercises. (In solving problems, students learn new mathematics, whereas in working exercises, students apply what they have already learned to build mastery.) Each problem or exercise has a purpose. **NOTE: This Criterion does not require that the problems and exercises be labeled as such.**	**Evidence-** The design of the text lends itself to students discovering new mathematics through thoughtful investigations. Within these investigations students are asked to solve problems as well as procedural exercises in order to defend their reasoning. Students also complete "On Your Own" problems in order to gain mastery of the CCSS.	**(Reviewer only.)** **__X___ Yes** **_____ No**
3. Design of assignments is not haphazard: exercises are given in intentional sequences in order to strengthen students' mathematical understanding.	**Evidence-** The design of assignments within the text is not haphazard. Students complete in class lesson investigations in order to learn and gain a conceptual understanding of the CCSS. Students are then asked to complete "On Your Own" problems in order to cement their understanding. There are also review sections within the text as needed to ensure that students do not experience material in a haphazard way.	**(Reviewer only.)** **__X___ Yes** **_____ No**
4. There are separate teacher materials that support and reward teacher study including, but not limited to: discussion of the mathematics of the units and the mathematical point of each lesson as it relates to the organizing concepts of the unit, discussion on student ways of thinking and anticipating a variety of students responses, guidance on lesson flow, guidance on questions that prompt students thinking, and discussion of desired mathematical behaviors being elicited among students.	**Evidence-** The teacher text of this material is very helpful. The teacher text includes notes on common student misconceptions and how students may think about problems. It thoroughly explains the mathematics of each investigation. The teacher text gives guidance on lesson flow and includes questions to give students in order to start a mathematical discussion.	**(Reviewer only.)** **___X___ Yes** **_____ No**
5. Manipulatives suggested in the materials are faithful representations of the mathematical objects they represent and are connected to written methods.	**Evidence-** The algebra tiles used in Unit 5 of the text are an accurate and faithful representation of the mathematics.	**(Reviewer only.)** **___X___ Yes** **_____ No**

6. Materials include a variety of curriculum-embedded assessm[illegible]. Examples include pre-, formative, summative, and self-assessment resources.	**Evidence-** The text includes [illegible]view lesson with every chapter. Students self-assess with "Check Your Understanding" sections in each lesson. Every section includes review HW. Every lesson includes a quiz that teachers can have students complete. No evidence of pre-assessment was found within the text or online resource.	**(Reviewer only.)** ___X___ **Yes** _____ **No**
7. Assessments contain aligned rubrics, answer keys, and scoring guidelines that provide sufficient guidance for interpreting student performance.	**Evidence-** The online and text teacher editions do provide answers in English and Spanish to tasks and homework questions. There are no rubrics or scoring guidelines available. There were no answer keys for quizzes found within the text or online edition.	**(Reviewer only.)** _____ **Yes** ___X__ **No**
8. Materials assess student proficiency using methods that are accessible and unbiased, including the use of course-level language in student prompts.	**Evidence-** The materials asses student learning/proficiency using different methods through out the text. There is no bias and consistent language is used through out the text.	**(Reviewer only.)** ___X___ **Yes** _____ **No**
9. Materials are carefully evaluated by qualified individuals, whose names are listed, in an effort to ensure freedom from mathematical errors and course-level appropriateness.	**Evidence-** The text lists one evaluation consultant from the University of Wisconsin. There was no evidence found of evaluators with specific credentials listed but there was a development team listed with their credentials. List of reviewers was not present.	**(Reviewer only.)** _____ **Yes** ___X___ **No**
10. The visual design supports students in engaging thoughtfully with the subject. Navigation through the text is clear.	**Evidence-** The front cover is not visually appealing. The students can easily tell from the visual design where investigations start and end. The pictures included within investigations do not always enhance student's mathematical understanding because they do not lend to visual representations of the mathematics being covered.	**(Reviewer only.)** _____ **Yes** ___X___ **No**

Reviewer IMET Evaluation Summary **Title/Level:** _____

Publisher: _____ **Copyright:** _____ **ISBN:**_____

Reviewer ID # _____ **Date Review Completed:**_____

Non-Negotiable Criteria-The Non-Negotiable must be met in order for the Non-Negotiable Alignment Criteria to be met overall.

Non- Negotiable 1: Focus and Coherence

___X__ Meets

____ Does Not Meet

Non-Negotiable Overall:

__X___ Meets ____ Does Not Meet

Alignment Criteria- Each Alignment Criterion must be met with a sufficient number of points in order for Alignment Criteria to be labeled as "Meets" overall. The more points the materials receive on the Alignment Criteria, the better they are aligned.

Alignment Criterion 1: Rigor and Balance	Alignment Criterion 2: Standards of Mathematical Practice	Alignment Criterion 3: Access to Standards for All Learners
Points: __6___ of 6 possible. (Materials must receive at least 5 of 6 points to align.)	**Points: __6___ of 6 possible.** (Materials must receive at least 5 of 6 points to align.)	**Points: __5___ of 6 possible.** (Materials must receive at least 5 of 6 points to align.)
___X____ Meets	**___X____ Meets**	**___X____ Meets**
_____ Does Not Meet	**_____ Does Not Meet**	**_____ Does Not Meet**

Alignment Criteria Overall:

__X___ Meets _____ Does Not Meet

If the materials meet the Non-Negotiable Criterion and each Alignment Criterion, they are aligned to the Shifts and major features of the Co[illegible]tandards. **Do the materials meet every Non-Negoti[illegible]e and Alignment Criterion? ___X__ Yes _____ N[illegible]**

What are the specific areas of strength and weakness based on this evaluation? Publishers or others modifying or developing assessments can use this information to make improvements and/or to remedy gaps in the alignment of assessment materials.

Strengths:

- The investigative tasks are well designed.
- The text is cohesive.
- The text does a nice job of using multiple representations of mathematics to reach a variety of learners.

Weaknesses:

- Minimal ELL and Special population support.
- No summative assessments were provided.
- Answer keys for quizzes were not available.

2015-16 Mathematics Interim Review Recommendation & Summary

Publisher Name:	McGraw-Hill School Education LLC
Title:	Core-Plus Mathematics Course 3
ISBN #	978-0-07-6658-01-5
Grade Level(s) or Course:	Course 3
Reviewer ID:	MF MN

RECOMMENDED AS:

____X____**Core Mathematics Program-** a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials. Substantial evidence clearly supports the designation of this program as Core.

_____**Other Mathematics Program-** a program that substantially, but partially, meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for supplemental materials. Substantial evidence clearly supports the designation of this program as Other.

_____**Component Mathematics Program-** a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs. Substantial evidence clearly supports the designation of this program as Component.

_____**Intervention Program-** a program designed and intended to target and support students' specific needs. Substantial evidence clearly supports the designation of this program as Intervention.

_____ **Does not meet criteria** for recommendation as a Curricular Material or Online Resource for Mathematics.

EVIDENCE SUMMARY:

FOCUS-

The focus of this course is to use a problem based model to teach deep understanding of the Common Core State Standards.

COHERENCE-

This course applies previous knowledge to new concepts in a way that allows for conceptual understanding while building what students will need for the next course level.

RIGOR-

The rigor of the problems in this course are level appropriate and require students to argue and critique their work. This course allows for students of different entry levels to excel in the knowledge of the material.

CONCEPTUAL UNDERSTANDING-

The real world problems of this course allow for students conceptual knowledge to grow deeper.

MATHEMATICAL PRACTICES-

The mathematical practices are well represented and are used in the model of how this course is designed to work with students.

ACCESSIBILITY OF STANDARDS TO ALL STUDENTS-

There are many approaches to engage students of all levels throughout this course in problems that contain interesting topics. The vocabulary in this course is defined when needed and the group work supports all students.

OTHER:
Overall, strengths we saw were that this is a problem based course which deepens students understanding conceptually, the layout is clear, and the problems are interesting and engaging for students. The tools provided were appropriate for the problems they were applied to. Teacher resources were strong in support of student learning. Keep up the good work!

2015-1 Interim Mathematics Review

Mathematics Evaluation Tool – High School

Publisher: McGraw Hill Education LLC

Title of Material: Core-Plus Mathematics Course 3

Author: Christian R Hirsh, James T Fey, Eric W Hart, Ann E Watkins

ISBN #: 978-0-07-665801-5 **Copyright** 2015

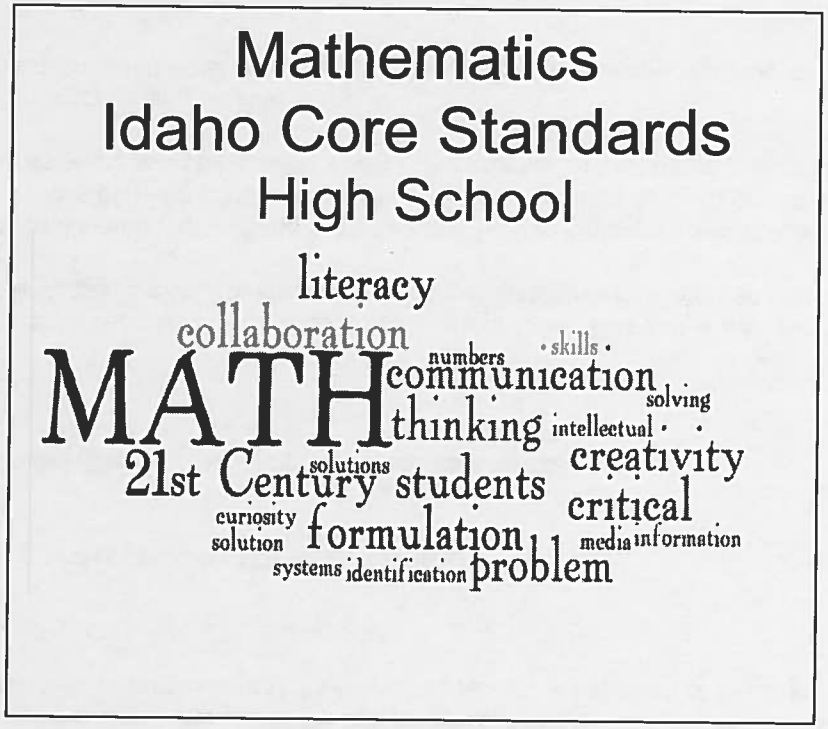
Reviewer ID: MN MF

Core Mathematics Program- a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Core.

Other Mathematics Program- a program that substantially, but partially, meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Other.

Component Mathematics Program- a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs.
Substantial evidence clearly supports the designation of this program as Component.

Intervention Program- a program designed and intended to target and support students' specific needs.
Substantial evidence clearly supports the designation of this program as Intervention.



- Evaluation Form adapted from Instructional Materials Evaluation Toolkit (IMET).

The IMET was developed by Student Achievement Partners. Educators may use or adapt. http://creativecommons.org/licenses/by/3.0/ Download this tool at http://achievethecore.org/IMET

Instructional Materials Evaluation Tool
Mathematics, High School

What Are the Purposes of the IMET?

This Math IMET is designed to help educators determine whether instructional materials are aligned to the Shifts and major features of the Common Core State Standards (CCSS). The substantial instructional Shifts (http://www.corestandards.org/other-resources/key-shifts-in-mathematics/) at the heart of the Common Core State Standards are:

- **Focus** strongly where the Standards focus
- **Coherence**: Think across grades and link to major topics within the grade
- **Rigor**: In major topics, pursue conceptual understanding, procedural skill and fluency, and application with equal intensity.

The IMET draws directly from the following documents:

- Common Core State Standards for Mathematics (www.corestandards.org/Math)
- Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013) (http://www. corestandards.org/wp-content/uploads/Math_Publishers_Criteria_ HS_Spring_2013_FINAL1.pdf)

When to use the IMET

1. Purchasing materials: Many factors go into local purchasing decisions. Alignment to the Standards is a critical factor to consider. This tool is designed to evaluate alignment of instructional materials to the Shifts and the major features of the CCSS. It also provides suggestions of additional indicators to consider in the materials evaluation and purchasing process
2. Evaluating materials currently in use: The IMET can be used to analyze the degree of alignment of existing materials and help to highlight specific, concrete flaws in alignment. Even where materials and tools currently in use fail to meet one or more of these criteria, the pattern of failure is likely to be informative. States and districts can use the evaluation to create a thoughtful plan to modify or combine existing resources in such a way that students' actual learning experiences approach the focus, coherence, and rigor of the Standards.
3. Developing programs: Those developing new programs can use this tool as guidance for creating aligned curricula.

Please note this tool was designed for evaluating comprehensive curricula (including any supplemental or ancillary materials), but it was not designed for the evaluation of standalone supplemental materials.

Who Uses the IMET?

Evaluating instructional materials requires both subject-matter and pedagogical expertise. Evaluators should be well versed in the Standards (www.corestandards.org/Math) for all grades in which materials are being evaluated. This includes understanding the Widely Applicable Prerequisites (www.achievethecore.org/prerequisites), how the content fits into the progressions in the Standards (www. achievethecore.org/progressions), and the expectations of the Standards with respect to conceptual understanding, procedural skill and fluency, and application. Evaluators also should be familiar with the substantial instructional Shifts (http://www.corestandards.org/other-resources/key-shifts-in-mathematics/) of Focus, Coherence and Rigor that are listed above.

Getting Started
Prior to Evaluation

Assemble all of the materials necessary for the evaluation. It is essential for evaluators to have materials for all grades covered by the program, as some criteria cannot be rated without having access to each grade. In addition, each evaluator should have a reference copy of the Common Core State Standards for Mathematics (CCSSM) and the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).

Before conducting the evaluation itself, it is important to develop a protocol for the evaluation process. The protocol should include having evaluators study the Publishers' Criteria and the IMET. It will also be helpful for evaluators to get a sense of each program overall before beginning the process. At a minimum, this would include reading the front matter of the text, looking at the table of contents and paging through multiple chapters.

Sections 1-3 below should be completed to produce a comprehensive picture of the strengths and weaknesses of the materials under evaluation. Information about areas in need of improvement or supplementation should be shared with internal and external stakeholders.

Navigating the Tool

Begin with Section 1: Non-Negotiable Alignment Criteria

- The Non-Negotiable Alignment Criteria must each be met in full for materials to be considered aligned to the Shifts and the major features of the Common Core State Standards. Each Non-Negotiable Alignment Criterion has one or more metrics associated with it; every one of these metrics must be met in order for the criterion as a whole to be met.

- Examine the relevant materials and use evidence to rate the materials against each criterion and its associated metric(s).

- Record and explain the evidence upon which the rating is based.

Continue to Section 2: Alignment Criteria

- The Alignment Criteria must each be met for materials to be considered aligned to the Shifts and the major features of the Common Core State Standards. Each Alignment Criterion has one or more metric associated with it; a specific number of these metrics must be met or partially met in order for the criterion as a whole to be met.

- Examine the materials in relation to these criteria, assigning each metric a point value. Rate the criterion as "Meets" or "Does Note Meet" based on the number of points assigned. The more points the materials receive on the alignment Criteria, the better they are aligned.

- Record and explain the evidence upon which the rating is based.

Proceed to Section 4: Indicators of Quality

- Indicators of Quality are important considerations that will help evaluators better understand the overall quality of instructional materials. These considerations are not criteria for alignment to the CCSS, but they provide valuable information about additional program characteristics. Evaluators may want to add their own indicators to the examples provided.

Directions for Non-Negotiable 1

Focus and Coherence

Criterion	Evidence- Give specific examples.	Rating: (Reviewer only.)
Non-Negotiable 1: Focus and Coherence- Materials must focus coherently on the Widely Applicable Prerequisites in a way that is consistent with the progressions in the Standards. Focus and coherence are the two major evidence-based design principles of the Common Core State Standards for Mathematics (CCSSM, p. 3). Focus is necessary in order to fulfill the ambitious promise the states have made to their students by adopting the Standards: greater achievement at the college and career-ready level; greater depth of understanding of mathematics; and a rich classroom environment in which reasoning, sense-making, applications, and a range of mathematical practices flourish. In high school courses, narrowing and deepening the curriculum creates a structure that ties topics together. Thus, materials must focus coherently on the Widely Applicable Prerequisites in a way that is consistent with the progressions in the Standards.	Focus and coherence are the two major evidence-based design principles of the Common Core State Standards for Mathematics (CCSSM, p. 3). Focus is necessary in order to fulfill the ambitious promise the states have made to their students by adopting the Standards: greater achievement at the college and career-ready level; greater depth of understanding of mathematics; and a rich classroom environment in which reasoning, sense-making, applications, and a range of mathematical practices flourish. In high school courses, narrowing and deepening the curriculum creates a structure that ties topics together. Thus, materials must focus coherently on the Widely Applicable Prerequisites in a way that is consistent with the progressions in the Standards. **Required Materials:** • Common Core State Standards for Mathematics (www.corestandards.org/wpcontent/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_HS_Spring_2013_FINAL1.pdf) • Widely Applicable Prerequisites for College and Careers (http://achievethecore.org/prerequisites) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion**: Non-Negotiable 1 is rated as Meets or Does Not Meet. To rate Non-Negotiable 1, first rate Metrics 1A–1H. Each of these eight metrics must be rated as Meets in order for Non-Negotiable 1 to be rated as Meets. Rate each metric 1A–1H as Meets or Does Not Meet/Insufficient Evidence. If the evidence examined shows that the Criterion is met, then mark the Criterion as Meets. If the evidence examined shows that the Criterion is not met—or if there is insufficient evidence to make a determination—then mark the Criterion as Does Not Meet/Insufficient Evidence. Support all ratings with evidence.

Metric NN1A: **In any single course, students spend at least 50% of their time on Widely Applicable Prerequisites.** **How to Find the Evidence:** Familiarize yourself with the Widely Applicable Prerequisites. Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, lessons, homework assignments, and assessments. (Evaluate both student and teacher materials.) Consider time spent on the Widely Applicable Prerequisites and judge qualitatively whether students and teachers using the materials as designed will devote the majority of time to the Widely Applicable Prerequisites For context, read Criterion #1 in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** **ASSE1 Throughout units 1,2,4,5,7, and 8** **ASSE2 pgs. 192, 281, 577-583** **AAPR1 pg. 327-335, 338, 393** **AAPR They are asked to interpret zeroes throughout the course** **Missing AAPR4 and 5, but they are addressed in the next course (Course 4).** **AREI2 pgs. 120, 124** **AREI11 pgs. 114 STM** **FIF 109-111**	**__X__Meets** **____Does Not Meet Insufficient Evidence**
Metric NN1B: **Student work in Geometry involves significant work with applications/modeling and problems that use algebra skills.** **How to Find the Evidence:** Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, lessons, homework assignments, and assessments. (Evaluate both student and teacher materials. NOTE: Since Geometry contains relatively fewer Widely Applicable Prerequisites, this Criterion is important to help foster students' college and career readiness. Problems that use algebra skills might include, for example, algebraic geometry problems in a coordinate setting, or problems of measurement involving unknown quantities.	**Evidence-** Unit 3 Supports that they are using geometry appropriately. Also on pages 45 and 50.	**__X__Meets** **____Does Not Meet Insufficient Evidence**

Metric NN1C: **There are problems at a level of sophistication appropriate to high school (beyond mere review of middle school topics) that involve the application of knowledge and skills from grades 6-8.** **How to Find the Evidence:** Evaluate lessons, chapter/unit assessments, and homework assignments. NOTE: Problems should include application of the following topics from grades 6-8: • Ratios and proportional relationships. • Percentage and unit conversions, e.g., in the context of complex measurement problems involving quantities with derived or compound units (such as mg/mL, kg/ m3, acre-feet, etc.). • Basic function concepts, e.g., by interpreting the features of a graph in the context of an applied problem. • Concepts and skills of geometric measurement e.g., when analyzing a diagram or schematic. • Concepts and skills of basic statistics and probability (see grades 6–8.SP) • Performing rational number arithmetic fluently. For context, read Table 1 on Page 8 of the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** Pg. 13-16 Reflections Pg. 29-39 Geometric Measurement Pg. 109-111 Inequalities Pg. 127-143 Graphing Inequalities w/ Two Variables Pg. 208-215 Ratios and Proportional Relationships Pg. 320-345 Polynomials Pg. 363-376 Rational Number Arithmetic Fluency Pg. 380-385 Basic Function Concepts Pg. 401-403 Chords, Arcs, and Central Angles	**__X__Meets** **____Does Not Meet Insufficient Evidence**
Metric NN1D: **Materials base courses on the content specified in the Standards.** **How to Find the Evidence:** Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, and lessons in both student and teacher materials. For context, read Criterion #3a in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** Refer to CCSS Guide to Core-Plus Mathematics. Pg. 319 Polynomial & Rational Functions Pg. 420 Circular Functions	**__X__Meets** **____Does Not Meet Insufficient Evidence**
Metric NN1E: **Materials give all students extensive work with course-level problems.** **How to Find the Evidence:** Evaluate both student and teacher materials. If the materials provide resources for differentiated learning, consider whether lower-performing students have opportunities to engage with course-level problems. Also consider whether higher-performing students are given opportunities to learn current course-level content in greater depth. For context, read Criterion #3b in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** Above and beyond the standard, and also has practice for standardized testing which is appropriate for the grade level of the students. Not as many low level entry problems, but a lot of scaffolding.	**__X__Meets** **____Does Not Meet Insufficient Evidence**

Metric NN1F: **Materials relate course-level concepts explicitly to prior knowledge from earlier grades or courses. The materials are designed so that prior knowledge becomes reorganized and extended to accommodate the new knowledge.** **How to Find the Evidence:** Evaluate student and teacher materials, looking for problems that involve extending the knowledge learned in earlier grades and courses. NOTE: An example of evaluating this Criterion might be to look at whether materials connect the equation of a circle with the distance formula and the Pythagorean theorem. For context, read Criterion #3c in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** Each lesson has an introduction that references prior knowledge. Also, each Unit has a "Looking Back" lesson to tie previous knowledge and concepts together.	**__X__Meets** **____Does Not Meet Insufficient Evidence**
Metric NN1G: **Materials include learning objectives that are visibly shaped by CCSSM cluster and domain headings.** **How to Find the Evidence:** Select several clusters from the course being evaluated. Evaluate teacher and student materials in relation to these clusters. For context, read Criterion #4a in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** Titles reflect standards clearly. All standards listed in each section in the Teacher Edition.	**__X__Meets** **____Does Not Meet Insufficient Evidence**
Metric NN1H: **Materials include problems and activities that serve to connect two or more clusters in a domain, or two or more domains in a category, or two or more categories, in cases where these connections are natural and important.** **How to Find the Evidence:** In the course being evaluated, choose two or more clusters, two or more domains, or two or more categories for which connections are natural and important. Evaluate the units, chapters, and lessons that deal with the chosen topics, looking for problems and activities that serve to connect the chosen clusters or domains. NOTE: An example of evaluating this Criterion might be to look at whether materials include problems in which students analyze a situation by building a function, graphing it, and using it to create and solve an equation. For context, read Criterion #4b in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** Shown throughout the text. Unit 6 has proving by construction then they explore this concept then check for understanding, finishing with exercises and analyzing. Pg. 400-405 Units 5 and 8 are Polynomial Functions and then Inverse Functions which are connected concepts.	**__X__Meets** **____Does Not Meet Insufficient Evidence**

Non-Negotiable 1: Focus and Coherence- Materials must focus coherently on the Widely Applicable Prerequisites in a way that is consistent with the progressions in the Standards.	__X__Meets ____Does Not Meet
Metric NN 1: If all metrics 1A–1H were rated as Meets, then rate Non-Negotiable 1 as Meets. If one or more metrics were rated as Does Not Meet/Insufficient Evidence, then rate Non-Negotiable 1 as Does Not Meet. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)** **Before moving to Alignment Criterion 1, record the final Meets or Does Not Meet rating in the Evaluation Summary.**	**Strengths/Weaknesses**

Now continue by evaluating Alignment Criterion 1 for Rigor and Balance.

Directions for Alignment Criterion 1

Rigor and Balance

Alignment Criterion 1: **Rigor and Balance- Materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.** The Standards set expectations for attention to all three aspects of rigor: conceptual understanding, procedural skill and fluency, and applications. Thus, materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.	The Standards set expectations for attention to all three aspects of rigor: conceptual understanding, procedural skill and fluency, and applications. Thus, materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations. • Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_HS_Spring_2013_FINAL1.pdf) • Widely Applicable Prerequisites for College and Careers (http://achievethecore.org/prerequisites) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion:** Alignment Criterion 1 is rated as Meets or Does Not Meet. To rate Alignment Criterion 1, first rate metrics 1A, 1B, and 1C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). For each metric, guiding questions are provided to aid in gathering evidence. Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 1 if the materials rate 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as rigor and balance, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.

AC Metric 1A: **The materials support the development of students' conceptual understanding of key mathematical concepts, especially where called for in specific content Standards or cluster headings.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Widely Applicable Prerequisites that relate specifically to conceptual understanding to use throughout the questions associated with this metric. NOTE: Some examples of clusters or Standards that call for conceptual understanding include: N-RN.A.1, A-APR.B, A-REI.A.1, A-REI.D.10, A.REI.D.11, F.IF.A.1, F-LE.A.1, G.SRT.A.2, G-SRT.C.6, S-ID.C.7 For context, read Criterion #2a in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	• Choose a cluster/Standard from the Widely Applicable Prerequisites that is applied to each aspect of rigor and use it to evaluate these metrics. It is most helpful if the same clusters and Standards are chosen for all of the programs being evaluated. (Guidance in choosing clusters/Standards is included in "How to Find the Evidence" below.)	**Use the questions for AC Metric 1A to evaluate Metric 1A. Record evidence for each question and rate Metric** **__X__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Is conceptual understanding attended to thoroughly where the Standards set explicit expectations for understanding or interpreting? Evaluate lessons, chapter/unit assessments and homework assignments, paying attention to work aligned to Standards that explicitly call for understanding or interpreting.	**Evidence-** Pg. 63, 492 and throughout there are conceptual understanding problems, and they often call for interpreting/comparing with others.	
Do the materials feature high-quality conceptual problems and conceptual discussion questions? Evaluate lessons, chapter/unit assessments, and homework assignments. NOTE: Examples of conceptual problems might include such questions as "What is the maximum value of the function f(t) = 5 – t2 ?" or "Is √2 a polynomial? How about ½(x + √2)+ ½ (-x + √2)?"	**Evidence-** Pg. 115-117 The students are asked to interpret what they are doing. "Think About the Situation" problems and "Summarize the Math" problems.	
Do the materials feature opportunities to identify correspondences across mathematical representations? Evaluate lessons, chapter/unit assessments and homework assignments. NOTE: An example of evaluating this metric might include looking at whether materials support students in identifying correspondences among the expression that defines a function, the graph that shows the relationship, and the behavior of the phenomenon being modeled (if any).	**Evidence-** Pg. 118 They are analyzing a graph Pg. 151 They are explaining what a maximum value represents.	

AC Metric 1B: **The materials are designed so that students attain the fluencies and procedural skills required by the Standards.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Widely Applicable Prerequisites that relate specifically to fluency and procedural skill to use throughout the questions associated with this metric. NOTE: Some examples of Standards that call for procedural skill and fluency include: A-SSE.A.1b, A-SSE.2, A-APR.A.1, A-APR.C.6, F-BF.B.3, G-GPE.B.4, G-GPE.B.5, G-GPE.B.7, G-CO.A.1, G-SRT.B.5 For context, read Criterion #2b in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).		**Use the questions for AC Metric 1B to evaluate Metric 1B. Record evidence for each question and rate Metric 1B.** **__X__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Is progress toward fluency and procedural skill interwoven with the student's developing conceptual understanding of the skills in question? Evaluate lessons, chapter/unit assessments, daily routines, and homework assignments for evidence that the development of fluency and procedural skill is supported by conceptual understanding.	**Evidence-** Pg. 63 They are having them use and adapt their knowledge. Pg. 492 They are using conceptual understanding. Check for Understanding sections. On Your Own Sections. Just In Time-Review sections.	
Are purely procedural problems and exercises present that include cases in which opportunistic strategies are valuable and generic cases that require efficient and general procedures present? Evaluate lessons, chapter/unit assessments, daily routines, and homework assignments. NOTE: Problems in which opportunistic strategies are valuable might include such examples as solving x2 + 5 = 49 + 5 or (3x – 2)2 = 6x – 4. Generic cases that require efficient and general procedures might include such problems as solving c + 8 – c2 = 3(c – 1)2 – 5).	**Evidence-** Pg. 114, 324, 353, 392 and several others throughout the On Your Own section have similar procedural problems.	
AC Metric 1C: **The materials are designed so that teachers and students spend sufficient time working with engaging applications, without losing focus on the Widely Applicable Prerequisites.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Widely Applicable Prerequisites that relate specifically to application to use throughout the questions associated with this metric. NOTE: Some examples of clusters or Standards that call for application include: N-Q.A, A-SSE.B.3, A-REI.D.11, F-IF.B, F-IF.C.7, F-BF.A.1, G-SRT.C.8, S-ID.A.2, S-IC.A.1 For context, read Criterion #2c in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).		**Use the questions for AC Metric 1C to evaluate Metric 1C. Record evidence for each question and rate Metric 1C.** **__X__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**

Are there single- and multi-step contextual problems, including non-routine problems, that develop the mathematics of the course, afford opportunities for practice, and engage students in problem solving? Do the problems attend thoroughly to those places in the content Standards where expectations for multi-step and real-world problems are explicit? Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** The real-world problems require multi-steps to solve.	
Do application problems particularly stress applying the Widely Applicable Prerequisites? Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** Yes there were several problems throughout that applied Widely Applicable Prerequisites.	
Are there ample opportunities for students to engage with modeling problems? Do materials require students to use both individual parts of the modeling cycle as well as the full modeling cycle? Read the pages on High School—Modeling in the Standards for Mathematics (pp. 72 and 73). Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** Many problems model different situations. An example is pg. 455 where students deal with a wheel of fortune problem and then a problem about bridges. Problems contain abstract modeling.	
Alignment Criterion 1: Materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations. **AC 1:** Materials must earn at least 5 of 6 points to meet this Alignment Criterion. If materials earn less than 5 points, the Criterion has not been met. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)** **Before moving to Alignment Criterion 2, record the final Meets or Does Not Meet rating in the Evaluation Summary.**		**__X__Meets** **____Does Not Meet** **Strengths/Weaknesses:**

Alignment Criterion 2: **Standards for Mathematical Practice- Materials must demonstrate authentic connections between content Standards and practice Standards.** The Standards require that designers of instructional materials connect the mathematical practices to mathematical content in instruction. Thus, materials must demonstrate authentic connections between content Standards and practice Standards.	The Standards require that designers of instructional materials connect the mathematical practices to mathematical content in instruction. Thus, materials must demonstrate authentic connections between content Standards and practice Standards. **Required Materials**: • Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_HS_Spring_2013_FINAL1.pdf) • Widely Applicable Prerequisites for College and Careers (http://achievethecore.org/prerequisites) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion:** Alignment Criterion 2 is rated as Meets or Does Not Meet. To rate Alignment Criterion 2, first rate metrics 2A, 2B, and 2C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). For each metric, guiding questions are provided to aid in gathering evidence. Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 2 if the materials rate 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as mathematical practices, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.
AC Metric 2A: **Materials address the practice Standards in such a way as to enrich the Widely Applicable Prerequisites; practices strengthen the focus of the course instead of detracting from it, in both teacher and student materials.** **How to Find the Evidence:** Familiarize yourself with the Widely Applicable Prerequisites. Evaluate teacher and student materials for evidence that the mathematical practices support and connect to the focus of the course. NOTE: An example of evaluating this Criterion might include looking at whether materials use regularity in repeated reasoning to illuminate formal algebra as well as functions, particularly recursive definitions of functions. For context, read Criterion #6 in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** Problems are scaffolded so that students may preserve in solving them. They are asked to check for understanding in the lessons. An example is on pg. 112-117. Each lesson introduces new material but begins with previous knowledge. Teacher materials are focused on enriching the course.	**__x__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
AC Metric 2B: **Materials attend to the full meaning of each practice Standard.** **How to Find the Evidence:** For context, read Criterion #7 in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).		**Use the questions for AC Metric 2B to evaluate Metric 2B. Record evidence for each question and rate Metric 2B.** **__x__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**

Over the course of any given year of instruction, is each mathematical practice Standard meaningfully present in the form of assignments, activities, or problems that stimulate students to develop the habits of mind described in the practice Standard? Evaluate lessons, chapter/ unit assessments, and homework assignments for evidence of each mathematical practice being meaningfully present in instruction.	**Evidence-** All mathematical practices are represented. Examples: Pg. 32-33, 338, 233, 405-406, 495-506, 597, 519-522	
Are teacher-directed materials that explain the role of the practice Standards in the classroom and in students' mathematical development included? Are alignments to practice Standards accurate? Evaluate teacher materials, paying attention to explanations of the role of the practice Standards in the classroom and in students' mathematical development. Evaluate documents aligning lessons to practice Standards for accuracy. NOTE: Examples to look for when evaluating this metric might include the following: a highly scaffolded problem should not be aligned to MP.1; or a problem that directs a student to use a calculator should not be aligned to MP.5; or a problem about merely extending a pattern should not be aligned to MP.8.	**Evidence-** In the teacher edition, there are notes on the side, including when students may need to fulfill a mathematical practice. Scaffolding in problems help students make sense of problems. Pg. 360 gives an example of reasoning abstractly. Pg. 220 has students justifying. Modeling is abstract but is present. There are technology tools provided that help enrich the curriculum.	
AC Metric 2C: **Materials support the Standards' emphasis on mathematical reasoning.** **How to Find the Evidence:** For context, read Criterion #8 in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).		**Use the questions for AC Metric 2C to evaluate Metric 2C. Record evidence for each question and rate Metric 2C.** **__X__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Do the materials support students in constructing viable arguments and critiquing the arguments of others concerning course-level mathematics that is detailed in the content Standards? Read Standard for Mathematical Practice 3. Evaluate teacher and student materials to ensure that students are given opportunities to reason with grade-level mathematics.	**Evidence-** In Unit 1, students are taught to construct arguments and critiques of others work. They are then asked to do this throughout the course. Example: pg. 206	
Do the materials support students in producing not only answers and solutions, but also, in a course-appropriate way, arguments, explanations, diagrams, mathematical models, etc., especially in the Widely Applicable Prerequisites? Familiarize yourself with the Widely Applicable Prerequisites. Evaluate teacher and student materials to understand the types of work students are expected to produce.	**Evidence-** The focus in many of the problems presented is to interpret the solution. This is present throughout the text, especially in the "On Your Own" section.	
Do materials explicitly attend to the specialized language of mathematics? Is the language of argument, problem solving, and mathematical explanations taught rather than assumed? Evaluate teacher and student materials, paying attention to how mathematical language is taught. NOTE: An example of evaluating this Criterion might include looking at whether students are supported in: basing arguments on definitions; using the method of providing a counter example; or recognizing that examples alone do not establish a general statement.	**Evidence-** Vocabulary is defined clearly throughout. Unit 1 and Unit 3 have examples. The language of mathematics is used appropriately. Unit 1 teaches how to create an argument.	

Alignment Criterion 2: Materials must demonstrate authentic connections between content Standards and practice Standards. **AC 2:** Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 points, the Criterion has not been met. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewers only.)** **Before moving to Alignment Criterion 3, record the final Meets or Does Not Meet rating in the Evaluation Summary.**		**____Meets** **____Does Not Meet** **Strengths/Weaknesses:**
Alignment Criterion 3: **Access to the Standards for All Students- Materials must provide supports for English Language Learners and other special populations.** Because Standards are for all students, alignment requires thoughtful support to ensure all students are able to meet the Standards. Thus, aligned materials must provide supports for English Language Learners and other special populations.	Because Standards are for all students, alignment requires thoughtful support to ensure all students are able to meet the Standards. Thus, aligned materials must provide supports for English Language Learners and other special populations. **Required Materials:** • Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math Publishers_Criteria_HS_Spring_2013_FINAL1.pdf) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion:** Alignment Criterion 3 is rated as Meets or Does Not Meet. To rate Alignment Criterion 3, first rate metrics 3A, 3B, and 3C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 3 if the materials rate 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as support for special population, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.
AC Metric 3A: **Support for English Language Learners and other special populations is thoughtful and helps those students meet the same Standards as all other students. The language in which problems are posed is carefully considered.** **How to Find the Evidence:** Evaluate teacher and student materials, paying attention to supports offered for special populations.	**Evidence-** **There are differentiation notes and ELL tips in the Teacher guide. There are also video tutorials in Spanish in the online section. Language is straight forward in the text. Group work is assumed which would be a support for special populations.**	**__X__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**

AC Metric 3B: **Materials provide appropriate level and type of scaffolding, differentiation, intervention, and support for a broad range of learners with gradual removal of supports, when needed, to allow students to demonstrate their mathematical understanding independently.** **How to Find the Evidence:** Evaluate teacher and student materials, paying attention to whether materials provide differentiation that will lead all learners to engage with on-grade-level content.	**Evidence-** **There is a broad range of difficulty in problems throughout the lessons. An example on pg. 164 which steps through the problem then has them compare with other students.**	**__x__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
AC Metric 3C: **Design of lessons recommends and facilitates a mix of instructional approaches for a variety of learners such as using multiple representations (e.g., including models, using a range of questions, checking for understanding, flexible grouping, pair-share).** **How to Find the Evidence:** Evaluate teacher materials, noting instructional approaches suggested for whole class and differentiated lessons and activities.	**Evidence-** There are lots of different approaches found throughout the lessons. They are asked to check their understanding and justify their work through each lesson.	**__X__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Alignment Criterion 3: Materials must provide supports for English Language Learners and other special populations. **AC 3** Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 points, the Criterion has not been met. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewers only.)** **Move to the Evaluation Summary and record the final Meets or Does Not Meet rating .**		**__X__Meets** **____Does Not Meet** **Strengths/Weaknesses:**

Once an evaluation for alignment to the Shifts and major features of the CCSS has been conducted using Sections 1-3, it's important to evaluate for overall quality and best practices. A starting list of Indicators of Quality are suggested below. States, districts and others evaluating instructional materials are encouraged to add to this list to ensure materials reflect local contexts. For background information on some of the Indicators of Quality in this section, refer to pp.16–18 in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).

Indicators of Quality	Evidence- Give specific examples.	Rating: (Reviewer only.)
1. Lessons are thoughtfully structured and support the teacher in leading the class through the learning paths at hand, with active participation by all students in their own learning and in the learning of their classmates.	Evidence- There is a "Promoting Mathematical Discourse" section that allows teachers to see what student discussions would be like. The text is well planned out and follows appropriate sequencing.	(Reviewer only.) ___x___ Yes _____ No
2. The underlying design of the materials includes both problems and exercises. (In solving problems, students learn new mathematics, whereas in working exercises, students apply what they have already learned to build mastery.) Each problem or exercise has a purpose. NOTE: This Criterion does not require that the problems and exercises be labeled as such.	Evidence- There are investigations through the lessons, then a looking back section in each unit, where they tie in knowledge of what they have previously learned. Problems are real world based and are engaging. There are exercises that practice the material of the lesson.	(Reviewer only.) ___x___ Yes _____ No
3. Design of assignments is not haphazard: exercises are given in intentional sequences in order to strengthen students' mathematical understanding.	Evidence- Each assignment contains an Applications, Connections, Reflections, and Extensions section. Each of these sections builds student understanding through this curriculum to have intentional sequencing and not be haphazard.	(Reviewer only.) ___x___ Yes _____ No
4. There are separate teacher materials that support and reward teacher study including, but not limited to: discussion of the mathematics of the units and the mathematical point of each lesson as it relates to the organizing concepts of the unit, discussion on student ways of thinking and anticipating a variety of students responses, guidance on lesson flow, guidance on questions that prompt students thinking, and discussion of desired mathematical behaviors being elicited among students.	Evidence- There is a "Promoting Mathematical Discourse" section on pages T3B, T111B, T20B and more. The beginning pages of the teacher edition refer to the model used to teach mathematics. There are also online tools available through ConnectEd which are easily accessible. There are also timing guides provided in each unit.	(Reviewer only.) ___x___ Yes _____ No
5. Manipulatives suggested in the materials are faithful representations of the mathematical objects they represent and are connected to written methods.	Evidence- Manipulatives are accurately used when they are used. Most modeling is abstract throughout.	(Reviewer only.) __x____ Yes _____ No

6. Materials include a variety of curriculum-embedded assessments. Examples include pre-, formative, summative, and self-assessment resources.	Evidence- ConnectEd contains online assessments for students. There is also practice for standardized testing available online.	(Reviewer only.) ___x___ Yes _____ No
7. Assessments contain aligned rubrics, answer keys, and scoring guidelines that provide sufficient guidance for interpreting student performance.	Evidence- Solutions were not easily discovered, but are available online. Teacher edition contains possible solutions for student work.	(Reviewer only.) ___x___ Yes _____ No
8. Materials assess student proficiency using methods that are accessible and unbiased, including the use of course-level language in student prompts.	Evidence- Language is standard for mathematics problems. Appropriate language is used that shows that this course in not biased.	(Reviewer only.) ___x___ Yes _____ No
9. Materials are carefully evaluated by qualified individuals, whose names are listed, in an effort to ensure freedom from mathematical errors and course-level appropriateness.	Evidence- Field Test Schools are provided on pg. iv and the reviewers are also provided on pg. v. They give explanations of the evaluations that were done on the curriculum.	(Reviewer only.) ___x___ Yes _____ No
10. The visual design supports students in engaging thoughtfully with the subject. Navigation through the text is clear.	Evidence- Navigation is clear through the text. Images are relevant to problems in curriculum.	(Reviewer only.) ___x___ Yes _____ No

Reviewer: IMET Evaluation Summary Title/Level: ____Core-Plus Mathematics Course 3_____

Publisher: ____McGraw Hill Education LLC_____ Copyright: ____2015____ ISBN:__978-0-07-665801-5 _

Reviewer ID # _____MN MF_____Date Review Completed:_____3-8-16_____

Non-Negotiable Criteria-The Non-Negotiable must be met in order for the Non-Negotiable Alignment Criteria to be met overall.

Non- Negotiable 1: Focus and Coherence

___x__ Meets

_____ Does Not Meet

Non-Negotiable Overall:

___x__ Meets _____ Does Not Meet

Alignment Criteria- Each Alignment Criterion must be met with a sufficient number of points in order for Alignment Criteria to be labeled as "Meets" overall. The more points the materials receive on the Alignment Criteria, the better they are aligned.

Alignment Criterion 1: Rigor and Balance	Alignment Criterion 2: Standards of Mathematical Practice	Alignment Criterion 3: Access to Standards for All Learners
Points: ___6__ of 6 possible. (Materials must receive at least 5 of 6 points to align.)	**Points: ___6__ of 6 possible.** (Materials must receive at least 5 of 6 points to align.)	**Points: ___6__ of 6 possible.** (Materials must receive at least 5 of 6 points to align.)
____x___ Meets	**____x___ Meets**	**___x____ Meets**
_____ Does Not Meet	**_____ Does Not Meet**	**_____ Does Not Meet**

Alignment Criteria Overall:

___x__ Meets _____ Does Not Meet

If the materials meet the Non-Negotiable Criterion and each Alignment Criterion, they are aligned to the Shifts and major features of the Core standards. **Do the materials meet every Non-Negotiable and Alignment Criterion? __x___ Yes _____ No**

What are the specific areas of strength and weakness based on this evaluation? Publishers or others modifying or developing assessments can use this information to make improvements and/or to remedy gaps in the alignment of assessment materials.

Overall, strengths we saw were that this is a problem based course which deepens students understanding conceptually, the layout is clear, and the problems are interesting and engaging for students. The tools provided were appropriate for the problems they were applied to. Teacher resources were strong in support of student learning. Keep up the good work!

2015-16 Mathematics Interim Review Recommendation & Summary

Publisher Name:	McGraw-Hill Education LLC
Title:	Core-Plus Mathematics Course 4
ISBN #	978-0-07-665790-2
Grade Level(s) or Course:	Course 4
Reviewer ID:	MF JN

RECOMMENDED AS:

__X__ **Core Mathematics Program-** a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials. Substantial evidence clearly supports the designation of this program as Core.

_____ **Other Mathematics Program-** a program that substantially, but partially, meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for supplemental materials. Substantial evidence clearly supports the designation of this program as Other.

_____ **Component Mathematics Program-** a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs. Substantial evidence clearly supports the designation of this program as Component.

_____ **Intervention Program-** a program designed and intended to target and support students' specific needs. Substantial evidence clearly supports the designation of this program as Intervention.

_____ **Does not meet criteria** for recommendation as a Curricular Material or Online Resource for Mathematics.

EVIDENCE SUMMARY:

FOCUS- The main intent of this course is to build off of the Widely Applicable Prerequisites and to deepen students' conceptual understanding in preparing them for calculus.

COHERENCE-
This course is set up in a way that builds upon previous courses. Each lesson is designed so students and teachers have a clear understanding of what is expected.

RIGOR-
Problems reflect correct level of students and give ample opportunity to model, solve, argue, and critique.

CONCEPTUAL UNDERSTANDING-
Students are expected to use prior knowledge from the Widely Applicable Prerequisites to deepen their conceptual understanding. They use their prior, more concrete knowledge to develop a more abstract way of thinking.

MATHEMATICAL PRACTICES-
Mathematical practices are used throughout the course and are evident not only in student, but also the teacher text. The guide provided points to mathematical practices throughout the course accurately.

ACCESSIBILITY OF STANDARDS TO ALL STUDENTS-
Although this is an upper level class, scaffolding, groupwork, a spanish glossary, video tutorials in spanish, and clear text are provided and show an unbiased course. Mathematical vocabulary is defined throughout.

OTHER:

This text ~~is~~ is a problem-based text that lends itself to strong mathematical practices throughout the entire content. Students are expected to develop deep conceptual understandings that are built off of widely Applicable Prerequisites. The teachers support in the annotated teacher's edition is beneficial to promote mathematical discussions. The organization of the material is easy to follow, and the flow and coherence makes this content easy to use for teachers and students. Through out the text the students are expected to engage with other students to learn rather than just teacher directed.

The online teacher materials are important but there are ~~no hard copy materials for solutions or answers for the~~ tests/assessments.

2015-1 Interim Mathematics Review

Mathematics Evaluation Tool – High School

Publisher: McGraw-Hill Education LLC

Title of Material: Core-Plus Mathematics Course 4

Author: _____

ISBN #: 978-0-07-665790 **Copyright** _____

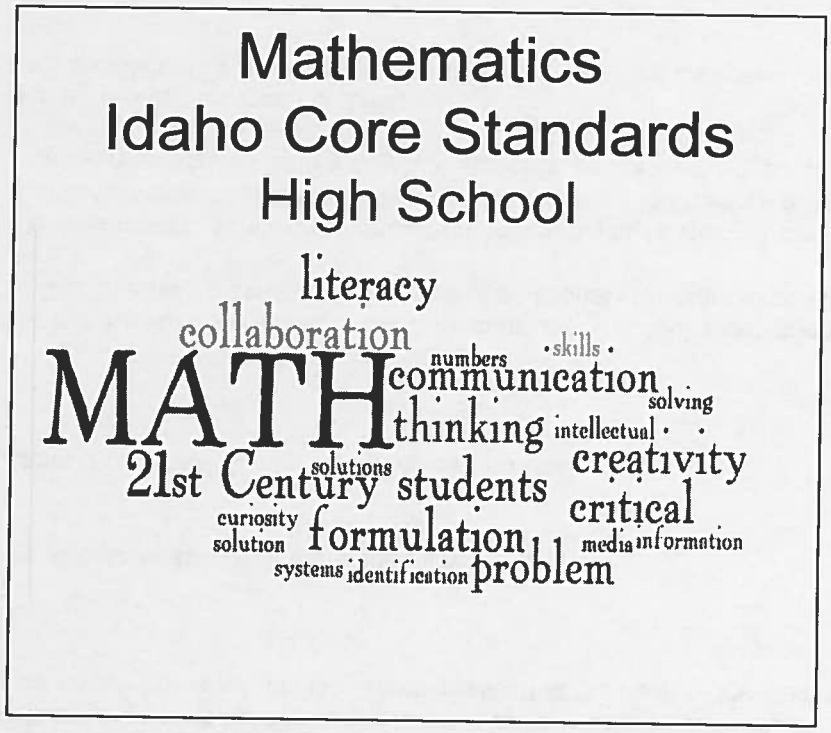
Reviewer ID: MF JN

Core Mathematics Program- a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Core.

Other Mathematics Program- a program that substantially, but partially, meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Other.

Component Mathematics Program- a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs.
Substantial evidence clearly supports the designation of this program as Component.

Intervention Program- a program designed and intended to target and support students' specific needs.
Substantial evidence clearly supports the designation of this program as Intervention.



- Evaluation Form adapted from Instructional Materials Evaluation Toolkit (IMET).

The IMET was developed by Student Achievement Partners. Educators may use or adapt. http://creativecommons.org/licenses/by/3.0/ Download this tool at http://achievethecore.org/IMET

Instructional Materials Evaluation Tool

Mathematics, High School

What Are the Purposes of the IMET?

This Math IMET is designed to help educators determine whether instructional materials are aligned to the Shifts and major features of the Common Core State Standards (CCSS). The substantial instructional Shifts (http://www.corestandards.org/other-resources/key-shifts-in-mathematics/) at the heart of the Common Core State Standards are:

- **Focus** strongly where the Standards focus
- **Coherence**: Think across grades and link to major topics within the grade
- **Rigor**: In major topics, pursue conceptual understanding, procedural skill and fluency, and application with equal intensity.

The IMET draws directly from the following documents:

- Common Core State Standards for Mathematics (www.corestandards.org/Math)
- Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013) (http://www. corestandards.org/wp-content/uploads/Math_Publishers_Criteria_ HS_Spring_2013_FINAL1.pdf)

When to use the IMET

1. Purchasing materials: Many factors go into local purchasing decisions. Alignment to the Standards is a critical factor to consider. This tool is designed to evaluate alignment of instructional materials to the Shifts and the major features of the CCSS. It also provides suggestions of additional indicators to consider in the materials evaluation and purchasing process
2. Evaluating materials currently in use: The IMET can be used to analyze the degree of alignment of existing materials and help to highlight specific, concrete flaws in alignment. Even where materials and tools currently in use fail to meet one or more of these criteria, the pattern of failure is likely to be informative. States and districts can use the evaluation to create a thoughtful plan to modify or combine existing resources in such a way that students' actual learning experiences approach the focus, coherence, and rigor of the Standards.
3. Developing programs: Those developing new programs can use this tool as guidance for creating aligned curricula.

Please note this tool was designed for evaluating comprehensive curricula (including any supplemental or ancillary materials), but it was not designed for the evaluation of standalone supplemental materials.

Who Uses the IMET?

Evaluating instructional materials requires both subject-matter and pedagogical expertise. Evaluators should be well versed in the Standards (www.corestandards.org/Math) for all grades in which materials are being evaluated. This includes understanding the Widely Applicable Prerequisites (www.achievethecore.org/prerequisites), how the content fits into the progressions in the Standards (www. achievethecore.org/progressions), and the expectations of the Standards with respect to conceptual understanding, procedural skill and fluency, and application. Evaluators also should be familiar with the substantial instructional Shifts (http://www.corestandards.org/other-resources/key-shifts-in-mathematics/) of Focus, Coherence and Rigor that are listed above.

Getting Started

Prior to Evaluation

Assemble all of the materials necessary for the evaluation. It is essential for evaluators to have materials for all grades covered by the program, as some criteria cannot be rated without having access to each grade. In addition, each evaluator should have a reference copy of the Common Core State Standards for Mathematics (CCSSM) and the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).

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Mathematics, High School

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Getting Started
Prior to Evaluation

Assemble all of the materials necessary for the evaluation. It is essential for evaluators to have materials for all grades covered by the program, as some criteria cannot be rated without having access to each grade. In addition, each evaluator should have a reference copy of the Common Core State Standards for Mathematics (CCSSM) and the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).

Before conducting the evaluation itself, it is important to develop a protocol for the evaluation process. The protocol should include having evaluators study the Publishers' Criteria and the IMET. It will also be helpful for evaluators to get a sense of each program overall before beginning the process. At a minimum, this would include reading the front matter of the text, looking at the table of contents and paging through multiple chapters.

Sections 1-3 below should be completed to produce a comprehensive picture of the strengths and weaknesses of the materials under evaluation. Information about areas in need of improvement or supplementation should be shared with internal and external stakeholders.

Navigating the Tool

Begin with Section 1: Non-Negotiable Alignment Criteria

- The Non-Negotiable Alignment Criteria must each be met in full for materials to be considered aligned to the Shifts and the major features of the Common Core State Standards. Each Non-Negotiable Alignment Criterion has one or more metrics associated with it; every one of these metrics must be met in order for the criterion as a whole to be met.

- Examine the relevant materials and use evidence to rate the materials against each criterion and its associated metric(s).

- Record and explain the evidence upon which the rating is based.

Continue to Section 2: Alignment Criteria

- The Alignment Criteria must each be met for materials to be considered aligned to the Shifts and the major features of the Common Core State Standards. Each Alignment Criterion has one or more metric associated with it; a specific number of these metrics must be met or partially met in order for the criterion as a whole to be met.

- Examine the materials in relation to these criteria, assigning each metric a point value. Rate the criterion as "Meets" or "Does Note Meet" based on the number of points assigned. The more points the materials receive on the alignment Criteria, the better they are aligned.

- Record and explain the evidence upon which the rating is based.

Proceed to Section 4: Indicators of Quality

- Indicators of Quality are important considerations that will help evaluators better understand the overall quality of instructional materials. These considerations are not criteria for alignment to the CCSS, but they provide valuable information about additional program characteristics. Evaluators may want to add their own indicators to the examples provided.

Directions for Non-Negotiable 1

Focus and Coherence

Criterion	Evidence- Give specific examples.	Rating: (Reviewer only.)
Non-Negotiable 1: Focus and Coherence- Materials must focus coherently on the Widely Applicable Prerequisites in a way that is consistent with the progressions in the Standards. Focus and coherence are the two major evidence-based design principles of the Common Core State Standards for Mathematics (CCSSM, p. 3). Focus is necessary in order to fulfill the ambitious promise the states have made to their students by adopting the Standards: greater achievement at the college and career-ready level; greater depth of understanding of mathematics; and a rich classroom environment in which reasoning, sense-making, applications, and a range of mathematical practices flourish. In high school courses, narrowing and deepening the curriculum creates a structure that ties topics together. Thus, materials must focus coherently on the Widely Applicable Prerequisites in a way that is consistent with the progressions in the Standards.	Focus and coherence are the two major evidence-based design principles of the Common Core State Standards for Mathematics (CCSSM, p. 3). Focus is necessary in order to fulfill the ambitious promise the states have made to their students by adopting the Standards: greater achievement at the college and career-ready level; greater depth of understanding of mathematics; and a rich classroom environment in which reasoning, sense-making, applications, and a range of mathematical practices flourish. In high school courses, narrowing and deepening the curriculum creates a structure that ties topics together. Thus, materials must focus coherently on the Widely Applicable Prerequisites in a way that is consistent with the progressions in the Standards. **Required Materials:** • Common Core State Standards for Mathematics (www.corestandards.org/wpcontent/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_HS_Spring_2013_FINAL1.pdf) • Widely Applicable Prerequisites for College and Careers (http://achievethecore.org/prerequisites) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion:** Non-Negotiable 1 is rated as Meets or Does Not Meet. To rate Non-Negotiable 1, first rate Metrics 1A–1H. Each of these eight metrics must be rated as Meets in order for Non-Negotiable 1 to be rated as Meets. Rate each metric 1A–1H as Meets or Does Not Meet/Insufficient Evidence. If the evidence examined shows that the Criterion is met, then mark the Criterion as Meets. If the evidence examined shows that the Criterion is not met—or if there is insufficient evidence to make a determination—then mark the Criterion as Does Not Meet/Insufficient Evidence. Support all ratings with evidence.

Metric NN1A: **In any single course, students spend at least 50% of their time on Widely Applicable Prerequisites.** **How to Find the Evidence:** Familiarize yourself with the Widely Applicable Prerequisites. Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, lessons, homework assignments, and assessments. (Evaluate both student and teacher materials.) Consider time spent on the Widely Applicable Prerequisites and judge qualitatively whether students and teachers using the materials as designed will devote the majority of time to the Widely Applicable Prerequisites For context, read Criterion #1 in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** **At this level of course there are only a few WAP that apply, but these are revisited and well represented within the content:** **Evidenced by: 186-187, 200, 203, 227-237, 241-245, 253-256**	**__X__Meets** **____Does Not Meet Insufficient Evidence**
Metric NN1B: **Student work in Geometry involves significant work with applications/modeling and problems that use algebra skills.** **How to Find the Evidence:** Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, lessons, homework assignments, and assessments. (Evaluate both student and teacher materials. NOTE: Since Geometry contains relatively fewer Widely Applicable Prerequisites, this Criterion is important to help foster students' college and career readiness. Problems that use algebra skills might include, for example, algebraic geometry problems in a coordinate setting, or problems of measurement involving unknown quantities.	**Evidence-** The content uses algebra skills to create graphs in Geometry. Their geometry skills are directly related to modeling and applications. Evidenced: 313-327, 276-280, 92, 113, 121-125, 291, 250, 407-409, 454-455, 138-176	**__X__Meets** **____Does Not Meet Insufficient Evidence**

Metric NN1C: **There are problems at a level of sophistication appropriate to high school (beyond mere review of middle school topics) that involve the application of knowledge and skills from grades 6-8.** **How to Find the Evidence:** Evaluate lessons, chapter/unit assessments, and homework assignments. NOTE: Problems should include application of the following topics from grades 6-8: • Ratios and proportional relationships. • Percentage and unit conversions, e.g., in the context of complex measurement problems involving quantities with derived or compound units (such as mg/mL, kg/ m3, acre-feet, etc.). • Basic function concepts, e.g., by interpreting the features of a graph in the context of an applied problem. • Concepts and skills of geometric measurement e.g., when analyzing a diagram or schematic. • Concepts and skills of basic statistics and probability (see grades 6–8.SP) • Performing rational number arithmetic fluently. For context, read Table 1 on Page 8 of the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** The content makes use of functions, surface area, equation knowledge from 6-8 that require the students to take that knowledge and apply it to a level of sophistication that is appropriate for high school mathematics. Evidenced by: P 3388, 534,	**__X__Meets** **____Does Not Meet Insufficient Evidence**
Metric NN1D: **Materials base courses on the content specified in the Standards.** **How to Find the Evidence:** Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, and lessons in both student and teacher materials. For context, read Criterion #3a in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** The content materials are based on the specific standards. Examples include: They perform arithmetic with complex numbers, they are highly represented (evidenced on 214-225). They represent and model vector quantities (102-137) and performed operations on vectors (106-116)	**_X___Meets** **____Does Not Meet Insufficient Evidence**
Metric NN1E: **Materials give all students extensive work with course-level problems.** **How to Find the Evidence:** Evaluate both student and teacher materials. If the materials provide resources for differentiated learning, consider whether lower-performing students have opportunities to engage with course-level problems. Also consider whether higher-performing students are given opportunities to learn current course-level content in greater depth. For context, read Criterion #3b in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** Algebraic skills and understanding in equations and functions is extensive through out the content. Extensions to deepen knowledge with continuations in each unit.	**_X___Meets** **____Does Not Meet Insufficient Evidence**

Metric NN1F: **Materia[illegible]late course-level concepts explicitly to prior knowledge from earlier grades or courses. The materials are designed so that prior knowledge becomes reorganized and extended to accommodate the new knowledge.** **How to Find the Evidence:** Evaluate student and teacher materials, looking for problems that involve extending the knowledge learned in earlier grades and courses. NOTE: An example of evaluating this Criterion might be to look at whether materials connect the equation of a circle with the distance formula and the Pythagorean theorem. For context, read Criterion #3c in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** Several concep[illegible]rom Course 3 are built on and the standards are continued from Course 3. Interpret the structure of a n expression, the beginning chapter looks to previous coursework.	**__X__Meets** **____Does Not Meet Insufficient Evidence**
Metric NN1G: **Materials include learning objectives that are visibly shaped by CCSSM cluster and domain headings.** **How to Find the Evidence:** Select several clusters from the course being evaluated. Evaluate teacher and student materials in relation to these clusters. For context, read Criterion #4a in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** Objectives are outlined at the beginning. The course work follows the objective. See unit 7 for example	**__X__Meets** **____Does Not Meet Insufficient Evidence**
Metric NN1H: **Materials include problems and activities that serve to connect two or more clusters in a domain, or two or more domains in a category, or two or more categories, in cases where these connections are natural and important.** **How to Find the Evidence:** In the course being evaluated, choose two or more clusters, two or more domains, or two or more categories for which connections are natural and important. Evaluate the units, chapters, and lessons that deal with the chosen topics, looking for problems and activities that serve to connect the chosen clusters or domains. NOTE: An example of evaluating this Criterion might be to look at whether materials include problems in which students analyze a situation by building a function, graphing it, and using it to create and solve an equation. For context, read Criterion #4b in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** They connect graphs to the rate of change, which then connects to concepts in calculus. They do make these connections. They also make the connections for the "Looking Back" section in each unit connecting previous topics.	**___X_Meets** **____Does Not Meet Insufficient Evidence**

Non-Negotiable 1: Focus and Coherence- Materials must focus coherently on the Widely Applicable Prerequisites in a way that is consistent with the progressions in the Standards.

Metric NN 1: If all metrics 1A–1H were rated as Meets, then rate Non-Negotiable 1 as Meets. If one or more metrics were rated as Does Not Meet/Insufficient Evidence, then rate Non-Negotiable 1 as Does Not Meet. Check the final rating.
Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)**

Before moving to Alignment Criterion 1, record the final Meets or Does Not Meet rating in the Evaluation Summary.

_X___Meets

____Does Not Meet

Strengths/Weaknesses

Now continue by evaluating Alignment Criterion 1 for Rigor and Balance.

Directions for Alignment Criterion 1

Rigor and Balance

Alignment Criterion 1:
Rigor and Balance- Materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.

The Standards set expectations for attention to all three aspects of rigor: conceptual understanding, procedural skill and fluency, and applications. Thus, materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.

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- Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_HS_Spring_2013_FINAL1.pdf)
- Widely Applicable Prerequisites for College and Careers (http://achievethecore.org/prerequisites)
- From the materials being evaluated: teacher guides, student texts and workbooks

Rating this Criterion:

Alignment Criterion 1 is rated as Meets or Does Not Meet.

To rate Alignment Criterion 1, first rate metrics 1A, 1B, and 1C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). For each metric, guiding questions are provided to aid in gathering evidence.

Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 1 if the materials rate 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as rigor and balance, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.

AC Metric 1A: **The materials support the development of students' conceptual understanding of key mathematical concepts, especially where called for in specific content Standards or cluster headings.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Widely Applicable Prerequisites that relate specifically to conceptual understanding to use throughout the questions associated with this metric. NOTE: Some examples of clusters or Standards that call for conceptual understanding include: N-RN.A.1, A-APR.B, A-REI.A.1, A-REI.D.10, A.REI.D.11, F.IF.A.1, F-LE.A.1, G.SRT.A.2, G-SRT.C.6, S-ID.C.7 For context, read Criterion #2a in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	• Choose a cluster/Standard from the Widely Applicable Prerequisites that is related to each aspect of rigor and use it to evaluate these metrics. It is most helpful if the same clusters and Standards are chosen for all of the programs being evaluated. (Guidance in choosing clusters/Standards is included in "How to Find the Evidence" below.)	**Use the questions for AC Metric 1A to evaluate Metric 1A. Record evidence for each question and rate Metric 1A.** **_2___Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Is conceptual understanding attended to thoroughly where the Standards set explicit expectations for understanding or interpreting? Evaluate lessons, chapter/unit assessments and homework assignments, paying attention to work aligned to Standards that explicitly call for understanding or interpreting.	**Evidence- They tie the conceptual knowledge through their connections and apply the previous knowledge to new situations.**	
Do the materials feature high-quality conceptual problems and conceptual discussion questions? Evaluate lessons, chapter/unit assessments, and homework assignments. NOTE: Examples of conceptual problems might include such questions as "What is the maximum value of the function $f(t) = 5 - t2$?" or "Is $\sqrt{2}$ a polynomial? How about $\frac{1}{2}(x + \sqrt{2}) + \frac{1}{2}(-x + \sqrt{2})$?"	**Evidence- A specific examples of building conceptual understanding is on page 396-400. The content then applies their knowledge and explain in many ways. There are other examples, but specifically page 443.**	
Do the materials feature opportunities to identify correspondences across mathematical representations? Evaluate lessons, chapter/unit assessments and homework assignments. NOTE: An example of evaluating this metric might include looking at whether materials support students in identifying correspondences among the expression that defines a function, the graph that shows the relationship, and the behavior of the phenomenon being modeled (if any).	**Evidence- A specific example can be shown on P 460, however multiple representations are shown through out the content.**	

AC Metric 1B: **The materials are designed so that students attain the fluencies and procedural skills required by the Standards.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Widely Applicable Prerequisites that relate specifically to fluency and procedural skill to use throughout the questions associated with this metric. NOTE: Some examples of Standards that call for procedural skill and fluency include: A-SSE.A.1b, A-SSE.2, A-APR.A.1, A-APR.C.6, F-BF.B.3, G-GPE.B.4, G-GPE.B.5, G-GPE.B.7, G-CO.A.1, G-SRT.B.5 For context, read Criterion #2b in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).		**Use the questions for AC Metric 1B to evaluate Metric 1B. Record evidence for each question and rate Metric 1B.** **__2__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Is progress toward fluency and procedural skill interwoven with the student's developing conceptual understanding of the skills in question? Evaluate lessons, chapter/unit assessments, daily routines, and homework assignments for evidence that the development of fluency and procedural skill is supported by conceptual understanding.	**Evidence-** There are many examples of procedural skills and fluency throughout the content. "On Your own" contains specific examples of procedural skills.	
Are purely procedural problems and exercises present that include cases in which opportunistic strategies are valuable and generic cases that require efficient and general procedures present? Evaluate lessons, chapter/unit assessments, daily routines, and homework assignments. NOTE: Problems in which opportunistic strategies are valuable might include such examples as solving x2 + 5 = 49 + 5 or (3x – 2)2 = 6x – 4. Generic cases that require efficient and general procedures might include such problems as solving c + 8 – c2 = 3(c – 1)2 – 5).	**Evidence-** There are many examples of purely procedural problems and exercises present throughout the content that allow for opportunistic strategies to be applied and also generic cases that require efficient and general procedures. Evidenced by: 465, 494, 239 # 8	
AC Metric 1C: **The materials are designed so that teachers and students spend sufficient time working with engaging applications, without losing focus on the Widely Applicable Prerequisites.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Widely Applicable Prerequisites that relate specifically to application to use throughout the questions associated with this metric. NOTE: Some examples of clusters or Standards that call for application include: N-Q.A, A-SSE.B.3, A-REI.D.11, F-IF.B, F-IF.C.7, F-BF.A.1, G-SRT.C.8, S-ID.A.2, S-IC.A.1 For context, read Criterion #2c in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).		**Use the questions for AC Metric 1C to evaluate Metric 1C. Record evidence for each question and rate Metric 1C.** **__2__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**

Are there single- and multi-step contextual problems, including non-routine problems, that develop the mathematics of the course, afford opportunities for practice, and engage students in problem solving? Do the problems attend thoroughly to those places in the content Standards where expectations for multi-step and real-world problems are explicit? Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** Most problems require knowledge of widely applicable prerequisites. Unit 3 covers algebraic functions and equations and the Applications section contains interesting and relevant problems that apply these concepts to real world problems. Expectations for multi-step and real world problems are evident throughout the content.	
Do application problems particularly stress applying the Widely Applicable Prerequisites? Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** This is clearly evident through each unit of the content: Pg 227-237, 241-245, 253-256, 186-187, 200	
Are there ample opportunities for students to engage with modeling problems? Do materials require students to use both individual parts of the modeling cycle as well as the full modeling cycle? Read the pages on High School—Modeling in the Standards for Mathematics (pp. 72 and 73). Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** Modeling is abstract, but is clearly evident. The Applications and Investigations problems are providing opportunities for students to engage in modeling.	
Alignment Criterion 1: Materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations. **AC 1:** Materials must earn at least 5 of 6 points to meet this Alignment Criterion. If materials earn less than 5 points, the Criterion has not been met. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)** **Before moving to Alignment Criterion 2, record the final Meets or Does Not Meet rating in the Evaluation Summary.**	**__X__Meets** **____Does Not Meet** **Strengths/Weaknesses:**	

Alignment Criterion 2: **Standards for Mathematical Practice- Materials must demonstrate authentic connections between content Standards and practice Standards.** The Standards require that designers of instructional materials connect the mathematical practices to mathematical content in instruction. Thus, materials must demonstrate authentic connections between content Standards and practice Standards.	The Standards require that designers of instructional materials connect the mathematical practices to mathematical content in instruction. Thus, materials must demonstrate authentic connections between content Standards and practice Standards. **Required Materials**: • Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_HS_Spring_2013_FINAL1.pdf) • Widely Applicable Prerequisites for College and Careers (http://achievethecore.org/prerequisites) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion:** Alignment Criterion 2 is rated as Meets or Does Not Meet. To rate Alignment Criterion 2, first rate metrics 2A, 2B, and 2C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). For each metric, guiding questions are provided to aid in gathering evidence. Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 2 if the materials rate 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as mathematical practices, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.
AC Metric 2A: **Materials address the practice Standards in such a way as to enrich the Widely Applicable Prerequisites; practices strengthen the focus of the course instead of detracting from it, in both teacher and student materials.** **How to Find the Evidence:** Familiarize yourself with the Widely Applicable Prerequisites. Evaluate teacher and student materials for evidence that the mathematical practices support and connect to the focus of the course. NOTE: An example of evaluating this Criterion might include looking at whether materials use regularity in repeated reasoning to illuminate formal algebra as well as functions, particularly recursive definitions of functions. For context, read Criterion #6 in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** Throughout units 1-8 the content uses the standards for mathematical practices; Rigor and applications are built in that require the students to use other mathematical practices. They also have the course set up to benefit students through groups and reasoning together.	**__X__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
AC Metric 2B: **Materials attend to the full meaning of each practice Standard.** **How to Find the Evidence:** For context, read Criterion #7 in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).		**Use the questions for AC Metric 2B to evaluate Metric 2B. Record evidence for each question and rate Metric 2B.** **_2___Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**

Over the course of any given year of instruction, is each mathematical practice Standard meaningfully present in the form of assignments, activities, or problems that stimulate students to develop the habits of mind described in the practice Standard? Evaluate lessons, chapter/ unit assessments, and homework assignments for evidence of each mathematical practice being meaningfully present in instruction.	**Evidence-** The way the course is set up the mathematical practices are used and seen throughout the content and the "On Your Own" and "Investigations" sections allows students to develop conceptual understandings and develop their mathematical reasoning.	
Are teacher-directed materials that explain the role of the practice Standards in the classroom and in students' mathematical development included? Are alignments to practice Standards accurate? Evaluate teacher materials, paying attention to explanations of the role of the practice Standards in the classroom and in students' mathematical development. Evaluate documents aligning lessons to practice Standards for accuracy. NOTE: Examples to look for when evaluating this metric might include the following: a highly scaffolded problem should not be aligned to MP.1; or a problem that directs a student to use a calculator should not be aligned to MP.5; or a problem about merely extending a pattern should not be aligned to MP.8.	**Evidence-** The T20 there are hints that help to guide the teacher through common issues with the students and they use very accurate representations of the mathematical representations. The Guide in the supplemental resources shows clearly where the mathematical practices are in each lesson.	
AC Metric 2C: **Materials support the Standards' emphasis on mathematical reasoning.** **How to Find the Evidence:** For context, read Criterion #8 in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).		**Use the questions for AC Metric 2C to evaluate Metric 2C. Record evidence for each question and rate Metric 2C.** **__2__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Do the materials support students in constructing viable arguments and critiquing the arguments of others concerning course-level mathematics that is detailed in the content Standards? Read Standard for Mathematical Practice 3. Evaluate teacher and student materials to ensure that students are given opportunities to reason with grade-level mathematics.	**Evidence-** They critique student's work (Pg-124), group work is assumed throughout the content. There is ample opportunity for self critique and critiquing of other students work throughout the content.	
Do the materials support students in producing not only answers and solutions, but also, in a course-appropriate way, arguments, explanations, diagrams, mathematical models, etc., especially in the Widely Applicable Prerequisites? Familiarize yourself with the Widely Applicable Prerequisites. Evaluate teacher and student materials to understand the types of work students are expected to produce.	**Evidence-** Students are asked to explain and justify their solution throughout the content. The teacher materials show suggested solutions.	
Do materials explicitly attend to the specialized language of mathematics? Is the language of argument, problem solving, and mathematical explanations taught rather than assumed? Evaluate teacher and student materials, paying attention to how mathematical language is taught. NOTE: An example of evaluating this Criterion might include looking at whether students are supported in: basing arguments on definitions; using the method of providing a counter example; or recognizing that examples alone do not establish a general statement.	**Evidence-** Mathematical vocabulary is defined and used throughout the content. In Core 3 the students are taught reasoning and arguments so this is a continuation of their previous knowledge.	

Alignment Criterion 2: Materials must demonstrate authentic connections between content Standards and practice Standards. **AC 2:** Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 points, the Criterion has not been met. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewers only.)** **Before moving to Alignment Criterion 3, record the final Meets or Does Not Meet rating in the Evaluation Summary.**		**__X__Meets** **____Does Not Meet** **Strengths/Weaknesses:**
Alignment Criterion 3: **Access to the Standards for All Students- Materials must provide supports for English Language Learners and other special populations.** Because Standards are for all students, alignment requires thoughtful support to ensure all students are able to meet the Standards. Thus, aligned materials must provide supports for English Language Learners and other special populations.	Because Standards are for all students, alignment requires thoughtful support to ensure all students are able to meet the Standards. Thus, aligned materials must provide supports for English Language Learners and other special populations. **Required Materials:** • Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math Publishers_Criteria_HS_Spring_2013_FINAL1.pdf) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion:** Alignment Criterion 3 is rated as Meets or Does Not Meet. To rate Alignment Criterion 3, first rate metrics 3A, 3B, and 3C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 3 if the materials rate 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as support for special population, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.
AC Metric 3A: **Support for English Language Learners and other special populations is thoughtful and helps those students meet the same Standards as all other students. The language in which problems are posed is carefully considered.** **How to Find the Evidence:** Evaluate teacher and student materials, paying attention to supports offered for special populations.	**Evidence-** **The scaffolding helps ELL students understanding the materials. While mathematical vocabulary is presented and used throughout the course, there is good repetition with basic knowledge that might help ELL students understand and learn the appropriate vocabulary. The group work will help support the ELL students learn the mathematics. There is a Spanish Glossary and videos on line in Spanish.**	**__2__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**

AC Metric 3B: **Materials provide appropriate level and type of scaffolding, differentiation, intervention, and support for a broad range of learners with gradual removal of supports, when needed, to allow students to demonstrate their mathematical understanding independently.** **How to Find the Evidence:** Evaluate teacher and student materials, paying attention to whether materials provide differentiation that will lead all learners to engage with on-grade-level content.	**Evidence-** **The Core 4 course is an advanced math class and students can still build their knowledge by scaffolding and teachers can use the broad range of problems for differentiation.**	**__2__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
AC Metric 3C: **Design of lessons recommends and facilitates a mix of instructional approaches for a variety of learners such as using multiple representations (e.g., including models, using a range of questions, checking for understanding, flexible grouping, pair-share).** **How to Find the Evidence:** Evaluate teacher materials, noting instructional approaches suggested for whole class and differentiated lessons and activities.	**Evidence-** Lessons and instructional approaches are presented graphically, analytically, numerically, and verbally. Multiple representations are evident through out the content. There is a check for understanding section that allows students to self asses, and they are encouraged to work in groups through out the units.	**__2__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Alignment Criterion 3: Materials must provide supports for English Language Learners and other special populations. **AC 3** Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 points, the Criterion has not been met. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewers only.)** **Move to the Evaluation Summary and record the final Meets or Does Not Meet rating .**		**_X___Meets** **____Does Not Meet** **Strengths/Weaknesses:**

Once an evaluation for alignment to the Shifts and major features of the CCSS has been conducted using Sections 1-3, it's important to evaluate for overall quality and best practices. A starting list of Indicators of Quality are suggested below. States, districts and others evaluating instructional materials are encouraged to add to this list to ensure materials reflect local contexts. For background information on some of the Indicators of Quality in this section, refer to pp.16–18 in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).

Indicators of Quality	Evidence- Give specific examples.	Rating: (Reviewer only.)
1. Lessons are thoughtfully structured and support the teacher in leading the class through the learning paths at hand, with active participation by all students in their own learning and in the learning of their classmates.	Evidence- The "Promoting Mathematical Discourse" section that supports the teacher. Students are encourage to learn and work from each other. The lessons are structured in such a way that will support the teacher's role in leading and facilitating the course.	(Reviewer only.) ___X___ Yes _____ No
2. The underlying design of the materials includes both problems and exercises. (In solving problems, students learn new mathematics, whereas in working exercises, students apply what they have already learned to build mastery.) Each problem or exercise has a purpose. NOTE: This Criterion does not require that the problems and exercises be labeled as such.	Evidence- The Investigation section covers the problems, the On Your Own section provides exercises for student growth, The Looking Back section allows students to review and make connections.	(Reviewer only.) ___X___ Yes _____ No
3. Design of assignments is not haphazard: exercises are given in intentional sequences in order to strengthen students' mathematical understanding.	Evidence- The Design of assignments is clearly organized and students and teachers understand the process of the conceptual understanding development.	(Reviewer only.) __X____ Yes _____ No
4. There are separate teacher materials that support and reward teacher study including, but not limited to: discussion of the mathematics of the units and the mathematical point of each lesson as it relates to the organizing concepts of the unit, discussion on student ways of thinking and anticipating a variety of students responses, guidance on lesson flow, guidance on questions that prompt students thinking, and discussion of desired mathematical behaviors being elicited among students.	Evidence- The teacher materials explain the lesson/concept set up, and there is a model provided in the Overview that explains the flow and coherence of the units.	(Reviewer only.) ___X___ Yes _____ No
5. Manipulatives suggested in the materials are faithful representations of the mathematical objects they represent and are connected to written methods.	Evidence- Physical manipulatives are not expected at this level of a course, however the mathematical modeling is evident throughout the content. There are examples present in the course where students are required to use geometric tools for modeling such as compass, protractor, etc.	(Reviewer only.) ___X___ Yes _____ No

6. Materials include a variety of curriculum-embedded assessme Examples include pre-, formative, summative, and self-assessment resources.	Evidence- Lesson Quizzes, essments on line, self assessment resources (Check your understanding) , Unit Tests, Take Home assessments are provided in the unit.	(Reviewer only.) ___X___ Yes _____ No
7. Assessments contain aligned rubrics, answer keys, and scoring guidelines that provide sufficient guidance for interpreting student performance.	Evidence- Answers are provided in ConnectEd, this was a little hard to find. They are located under the Asses Tab, but solutions and rubrics are not available.	(Reviewer only.) ___X___ Yes _____ No
8. Materials assess student proficiency using methods that are accessible and unbiased, including the use of course-level language in student prompts.	Evidence- Bias was not evident in the content and the materials were clearly accessible to all students . Mathematical language is heavily used throughout the text, which leads to less bias.	(Reviewer only.) ___X___ Yes _____ No
9. Materials are carefully evaluated by qualified individuals, whose names are listed, in an effort to ensure freedom from mathematical errors and course-level appropriateness.	Evidence- The Development Team is listed and information on field testing was provided.	(Reviewer only.) __X____ Yes _____ No
10. The visual design supports students in engaging thoughtfully with the subject. Navigation through the text is clear.	Evidence- The images were interesting and relevant to the mathematical content. Navigation is clear throughout the content because the set up is clear and concise.	(Reviewer only.) __X____ Yes _____ No

Reviewer IMET Evaluation Summary **Title/Level: __Core -4 __Core-Plue Mathematics © 2015____**

Publisher: _McGraw-Hill School Education LLC_____ Copyright: ___2015_____
ISBN:_____VARIOUS – BOOK 4_____

Reviewer ID # _____MFJN_____ **Date Review Completed:__3/8/2016_____**

Non-Negotiable Criteria-The Non-Negotiable must be met in order for the Non-Negotiable Alignment Criteria to be met overall.

Non- Negotiable 1: Focus and Coherence

___X__ Meets

_____ Does Not Meet

Non-Negotiable Overall:

___X__ Meets **_____ Does Not Meet**

Alignment Criteria- Each Alignment Criterion must be met with a sufficient number of points in order for Alignment Criteria to be labeled as "Meets" overall. The more points the materials receive on the Alignment Criteria, the better they are aligned.

Alignment Criterion 1: Rigor and Balance	Alignment Criterion 2: Standards of Mathematical Practice	Alignment Criterion 3: Access to Standards for All Learners
Points: ___6__ of 6 possible. (Materials must receive at least 5 of 6 points to align.)	**Points: 6 of 6 possible.** (Materials must receive at least 5 of 6 points to align.)	**Points: ___6__ of 6 possible.** (Materials must receive at least 5 of 6 points to align.)
____X___ Meets	**___X____ Meets**	**____X___ Meets**
_____ Does Not Meet	**_____ Does Not Meet**	**_____ Does Not Meet**

Alignment Criteria Overall:

__X___ Meets **_____ Does Not Meet**

If the materials meet the Non-Negotiable Criterion and each Alignment Criterion, they are aligned to the Shifts and major features of the Co tandards. **Do the materials meet every Non-Negotia and Alignment Criterion? ___X__ Yes _____ N**

What are the specific areas of strength and weakness based on this evaluation? Publishers or others modifying or developing assessments can use this information to make improvements and/or to remedy gaps in the alignment of assessment materials.

This text is a problem based text that lends itself to strong mathematical practices throughout the entire content. Students are expected to develop deep conceptual understandings that are built off of Widely Applicable Prerequisites. The teachers support in the annotated teachers edition is beneficial to promote mathematical discussions. The organization of the material is easy to follow, and the flow and coherence makes this content easy to use for teachers and students. Throughout the text students are expected to engage with other students to learn rather than just teacher directed.

The on-line teacher materials are important but there are no hard copy materials for solutions or answers for the tests/assessments.

2015-16 Mathematics Interim Review Recommendation & Summary

Publisher Name:	McGraw-Hill
Title:	Glencoe Algebra I Common Core Edition 2014
ISBN #	9780076639236
Grade Level(s) or Course:	9-12
Reviewer ID:	MB and PVP

RECOMMENDED AS:

__X_____**Core Mathematics Program-** a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials. Substantial evidence clearly supports the designation of this program as Core.

_____**Other Mathematics Program-** a program that substantially, but partially, meets the *focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for* supplemental materials. Substantial evidence clearly supports the designation of this program as Other.

_____**Component Mathematics Program-** a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs. Substantial evidence clearly supports the designation of this program as Component.

_____**Intervention Program-** a program designed and intended to target and support students' specific needs. Substantial evidence clearly supports the designation of this program as Intervention.

_____ **Does not meet criteria** for recommendation as a Curricular Material or Online Resource for Mathematics.

EVIDENCE SUMMARY:

FOCUS- Text addresses CCSS. Focus on prior knowledge and how this is linked to current/new material is clearly addressed.

COHERENCE- Text includes many exercises that move from simple to more complex. Progression through chapters and text is logical and sequential.

RIGOR- Publisher could do a better job of providing suitable problems to address the Practice Standards. While there are problems that address prior knowledge, there are not enough problems that require the learning of new math. More problems should require written student explanations.

CONCEPTUAL UNDERSTANDING- Majority of problems emphasize procedural fluency. While this is good in a first year algebra course, conceptual understanding of the "why" is lacking.

MATHEMATICAL PRACTICES- Practices are not specifically identified throughout the text. A problem may be labeled "Sense-Making", for example, but it is not clear in the problem itself, how this standard applies.

ACCESSIBILITY OF STANDARDS TO ALL STUDENTS- Publisher has done a good job of providing differentiation tools and other teaching tips to make content accessible to all students.

OTHER:
Quality of material used in textbook construction does not lend itself to durability. In the short time of the review process, binding on text began separate. Review copy was missing numerous pages in the student edition. While attempts have been made to make this text "Common Core", it appears to mostly be a traditional algebra textbook with CCSS labels.

2015-1 nterim Mathematics Review

Mathematics Evaluation Tool – High School

Publisher: McGraw-Hill

Title of Material: Glencoe Algebra 1 Common Core Edition

Author: Carter et al

ISBN #: 9780076639236 6E\ **Copyright** 2014

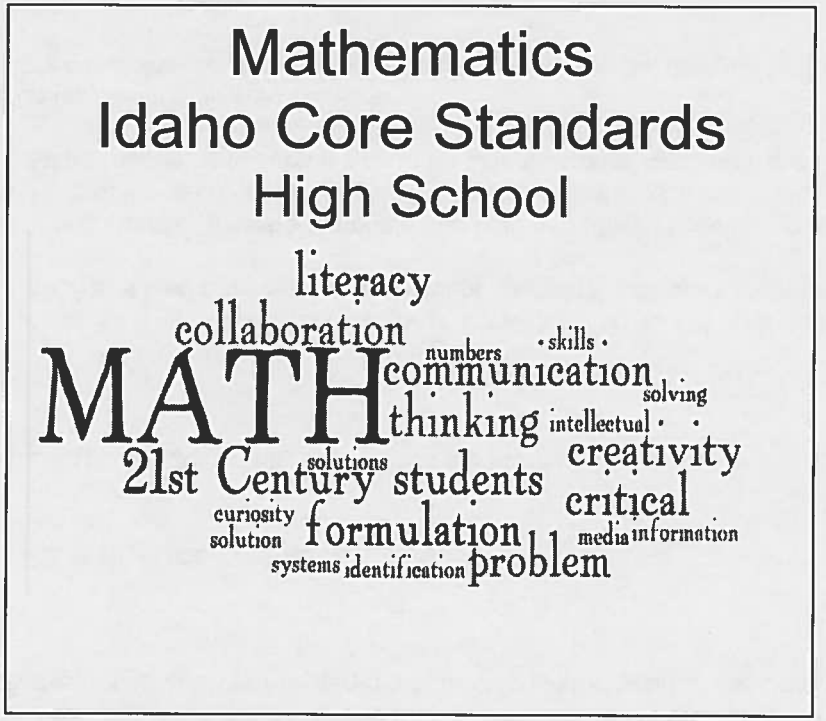
Reviewer ID: MB and PVP

Core Mathematics Program- a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Core.

Other Mathematics Program- a program that substantially, but partially, meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Other.

Component Mathematics Program- a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs.
Substantial evidence clearly supports the designation of this program as Component.

Intervention Program- a program designed and intended to target and support students' specific needs.
Substantial evidence clearly supports the designation of this program as Intervention.



- Evaluation Form adapted from Instructional Materials Evaluation Toolkit (IMET).

The IMET was developed by Student Achievement Partners. Educators may use or adapt. http://creativecommons.org/licenses/by/3.0/ Download this tool at http://achievethecore.org/IMET

Metric NN1A: **In any s e course, students spend at least 50% of their time on Widely Applicable Prerequisites.** **How to Find the Evidence:** Familiarize yourself with the Widely Applicable Prerequisites. Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, lessons, homework assignments, and assessments. (Evaluate both student and teacher materials.) Consider time spent on the Widely Applicable Prerequisites and judge qualitatively whether students and teachers using the materials as designed will devote the majority of time to the Widely Applicable Prerequisites For context, read Criterion #1 in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** **Chapters 2-9, 11 12 contain Widely Applicable Prerequisites. Each of these chapters starts at a very basic level but builds to a higher level of student engagement and application**	**X Meets** **____Does Not Meet Insufficient Evidence**
Metric NN1B: **Student work in Geometry involves significant work with applications/modeling and problems that use algebra skills.** **How to Find the Evidence:** Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, lessons, homework assignments, and assessments. (Evaluate both student and teacher materials. NOTE: Since Geometry contains relatively fewer Widely Applicable Prerequisites, this Criterion is important to help foster students' college and career readiness. Problems that use algebra skills might include, for example, algebraic geometry problems in a coordinate setting, or problems of measurement involving unknown quantities.	**Evidence-** **Very little evidence with modeling/application problems with algebra and geometry. There appears to be one algebra application problem per lesson. Geometry applications appear in some sections at a basic level, usually in the Standardized Test Practice section. Text does use graphing throughout.** **Section 8-6 Example 3 Real-World Example application of geometry problem** **Section 8-9 Student exercises 46-50**	**X Meets** **_____ Does Not Meet Insufficient Evidence**

Metric NN1C: **There are problems at a level of sophistication appropriate to high school (beyond mere review of middle school topics) that involve the application of knowledge and skills from grades 6-8.** **How to Find the Evidence:** Evaluate lessons, chapter/unit assessments, and homework assignments. NOTE: Problems should include application of the following topics from grades 6-8: • Ratios and proportional relationships. • Percentage and unit conversions, e.g., in the context of complex measurement problems involving quantities with derived or compound units (such as mg/mL, kg/ m3, acre-feet, etc.). • Basic function concepts, e.g., by interpreting the features of a graph in the context of an applied problem. • Concepts and skills of geometric measurement e.g., when analyzing a diagram or schematic. • Concepts and skills of basic statistics and probability (see grades 6–8.SP) • Performing rational number arithmetic fluently. For context, read Table 1 on Page 8 of the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** **The level of sophistication is widely varied. Early chapters and early portions of every chapter seem too focused on middle school concepts. Chapter 0 – preparing for algebra seems unnecessary. Other chapters seem to progress very quickly from simple to complex problems.** **Chapter 2 Section 6 – Ratios and Proportions – middle school level problem solving and application. Percentage change – middle school level. Very small section on dimensional analysis, but good section on weighted averages. Doesn't move beyond skills from grade 6-8.** **Chapter 3 Algebra Lab – Analyzing Linear Graphs. Very lengthy introductory "lab" to linear graphs. Not sure why this is a lab, where students aren't doing any kind of application problems. Level of sophistication is not very complex throughout this chapter. Very little instances of interpreting features of a graph in the context of an applied problem.**	**X Meets** **____Does Not Meet Insufficient Evidence**
Metric NN1D: **Materials base courses on the content specified in the Standards.** **How to Find the Evidence:** Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, and lessons in both student and teacher materials. For context, read Criterion #3a in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** **Text appears to follow the content specified in the Standards. Each chapter starts with a "Get Ready for the Chapter" review of prior knowledge.**	**X Meets** **____Does Not Meet Insufficient Evidence**

Metric NN1E: **Materials give all students extensive work with course-level problems.** **How to Find the Evidence:** Evaluate both student and teacher materials. If the materials provide resources for differentiated learning, consider whether lower-performing students have opportunities to engage with course-level problems. Also consider whether higher-performing students are given opportunities to learn current course-level content in greater depth. For context, read Criterion #3b in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** All chapters seem to contain way too much content, problems, applications, etc. For example in chapter 6, Get Ready for the Chapter contains 13 problems, introductory section contains a visually packed overview page, two long multi-part examples, a "real world" example, and 9 "check your understanding" problems. The student practice and problem solving section contains 46 problems, 6 "higher-order-thinking" problems, 4 standardized test practice problems, and 20 spiral & skills review problems. Lower-performing student needs may not be adequately addressed. TE has suggestions for "approaching learners" with suggestions like "draw a picture" for the students. Ancillary materials include extra practice, handbook with remediation, and enrichment exercises.	X Meets ____Does Not Meet Insufficient Evidence
Metric NN1F: **Materials relate course-level concepts explicitly to prior knowledge from earlier grades or courses. The materials are designed so that prior knowledge becomes reorganized and extended to accommodate the new knowledge.** **How to Find the Evidence:** Evaluate student and teacher materials, looking for problems that involve extending the knowledge learned in earlier grades and courses. NOTE: An example of evaluating this Criterion might be to look at whether materials connect the equation of a circle with the distance formula and the Pythagorean theorem. For context, read Criterion #3c in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** The TE includes a vertical alignment at the start of each chapter, with a Before the Chapter, During the Chapter, and After the Chapter. These sections outline concepts learned before the current chapter (for example, before 8th grade or earlier in algebra), what concepts will be covered during the chapter that relate to other algebra 1 concepts, and what topics are covered that are preparing students for algebra 2. Each lesson includes a spiral & skills review	X Meets ____Does Not Meet Insufficient Evidence
Metric NN1G: **Materials include learning objectives that are visibly shaped by CCSSM cluster and domain headings.** **How to Find the Evidence:** Select several clusters from the course being evaluated. Evaluate teacher and student materials in relation to these clusters. For context, read Criterion #4a in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** The margins of each new chapter section list what Common Core State Standards will be addressed in the section. It is difficult to identify the learning objectives in the student text. Although the Standards are listed, they are not written in language that can be readily understood by algebra students and not clearly related to the learning objective. The TE lists specific CCSS in the Chapter Planner section at the beginning of each chapter.	__X__Meets _____ Does Not Meet Insufficient Evidence

Metric NN1H: **Materials include problems and activities that serve to connect two or more clusters in a domain, or two or more domains in a category, or two or more categories, in cases where these connections are natural and important.** **How to Find the Evidence:** In the course being evaluated, choose two or more clusters, two or more domains, or two or more categories for which connections are natural and important. Evaluate the units, chapters, and lessons that deal with the chosen topics, looking for problems and activities that serve to connect the chosen clusters or domains. NOTE: An example of evaluating this Criterion might be to look at whether materials include problems in which students analyze a situation by building a function, graphing it, and using it to create and solve an equation. For context, read Criterion #4b in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** **In most sections students are expected to solve problems using multiple interpretations such as modeling, graphing, and solving algebraically. For example section 4-4 connects F.LE.2 and S.I.D.7 constructing linear function form a graph, a description of a relationship, and interpreting slope.**	**X Meets** **____Does Not Meet Insufficient Evidence**
Non-Negotiable 1: Focus and Coherence- Materials must focus coherently on the Widely Applicable Prerequisites in a way that is consistent with the progressions in the Standards. **Metric NN 1:** If all metrics 1A–1H were rated as Meets, then rate Non-Negotiable 1 as Meets. If one or more metrics were rated as Does Not Meet/Insufficient Evidence, then rate Non-Negotiable 1 as Does Not Meet. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)** **Before moving to Alignment Criterion 1, record the final Meets or Does Not Meet rating in the Evaluation Summary.**		**X Meets** **____ Does Not Meet** **Strengths/Weaknesses** **Strengths—many problems throughout each lesson. Focus on prior knowledge and how it ties in to current lesson clearly addressed. Weaknesses—overwhelming visually, does not address basic or advanced learners very well. Standards seem to be added in the margins in lessons as an afterthought.**

Now continue by evaluating Alignment Criterion 1 for Rigor and Balance.

Directions for Alignment Criterion 1

Rigor and Balance

Alignment Criterion 1: **Rigor and Balance- Materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.** The Standards set expectations for attention to all three aspects of rigor: conceptual understanding, procedural skill and fluency, and applications. Thus, materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.	The Standards set expectations for attention to all three aspects of rigor: conceptual understanding, procedural skill and fluency, and applications. Thus, materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations. • Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_HS_Spring_2013_FINAL1.pdf) • Widely Applicable Prerequisites for College and Careers (http://achievethecore.org/prerequisites) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion:** Alignment Criterion 1 is rated as Meets or Does Not Meet. To rate Alignment Criterion 1, first rate metrics 1A, 1B, and 1C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). For each metric, guiding questions are provided to aid in gathering evidence. Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 1 if the materials rate 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as rigor and balance, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.
AC Metric 1A: **The materials support the development of students' conceptual understanding of key mathematical concepts, especially where called for in specific content Standards or cluster headings.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Widely Applicable Prerequisites that relate specifically to conceptual understanding to use throughout the questions associated with this metric. NOTE: Some examples of clusters or Standards that call for conceptual understanding include: N-RN.A.1, A-APR.B, A-REI.A.1, A-REI.D.10, A.REI.D.11, F.IF.A.1, F-LE.A.1, G.SRT.A.2, G-SRT.C.6, S-ID.C.7 For context, read Criterion #2a in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	• Choose a cluster/Standard from the Widely Applicable Prerequisites that is aligned to each aspect of rigor and use it to evaluate these metrics. It is most helpful if the same clusters and Standards are chosen for all of the programs being evaluated. (Guidance in choosing clusters/Standards is included in "How to Find the Evidence" below.)	**Use the questions for AC Metric 1A to evaluate Metric 1A. Record evidence for each question and rate Metric 1A.** **__X_Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Is conceptual understanding attended to thoroughly where the Standards set explicit expectations for understanding or interpreting? Evaluate lessons, chapter/unit assessments and homework assignments, paying attention to work aligned to Standards that explicitly call for understanding or interpreting.	**Evidence-** **Some interpreting is required in homework assignments. The chapter/unit assessments do not include understanding or interpreting. Examples provide some explanation, but students are not expected to do so in their assignments.**	

Do the materials feature high-quality conceptual problems and conceptu[illegible]ussion questions? Evaluate lessons, chapter/unit assessments, and homework assignments. NOTE: Examples of conceptual problems might include such questions as "What is the maximum value of the function f(t) = 5 – t2 ?" or "Is √2 a polynomial? How about ½(x + √2)+ ½ (-x + √2)?"	**Evidence-** **Each assignmen[illegible]ains a H.O.T. (higher order thinking) set of problems designed to foster reasoning skills, but there is insufficient evidence that these problems enhance conceptual understanding. Example: lesson 8-7 "What should you consider when solving a quadratic equation that models a real-world situation?"**	
Do the materials feature opportunities to identify correspondences across mathematical representations? Evaluate lessons, chapter/unit assessments and homework assignments. NOTE: An example of evaluating this metric might include looking at whether materials support students in identifying correspondences among the expression that defines a function, the graph that shows the relationship, and the behavior of the phenomenon being modeled (if any).	**Evidence-** **Each practice & problem solving (assignment) section contains a Multiple Representations problem in which the students are asked to express their solutions logically, algebraically, analytically, or graphically, and in combination.**	
AC Metric 1B: **The materials are designed so that students attain the fluencies and procedural skills required by the Standards.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Widely Applicable Prerequisites that relate specifically to fluency and procedural skill to use throughout the questions associated with this metric. NOTE: Some examples of Standards that call for procedural skill and fluency include: A-SSE.A.1b, A-SSE.2, A-APR.A.1, A-APR.C.6, F-BF.B.3, G-GPE.B.4, G-GPE.B.5, G-GPE.B.7, G-CO.A.1, G-SRT.B.5 For context, read Criterion #2b in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).		**Use the questions for AC Metric 1B to evaluate Metric 1B. Record evidence for each question and rate Metric 1B.** **__X__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Is progress toward fluency and procedural skill interwoven with the student's developing conceptual understanding of the skills in question? Evaluate lessons, chapter/unit assessments, daily routines, and homework assignments for evidence that the development of fluency and procedural skill is supported by conceptual understanding.	**Evidence-** **The majority of problems are specifically focused on procedural skill and fluency with little evidence of practice with conceptual understanding. Sections 8.1-8.4 includes lab using algebra tiles to add/subtract polynomials.**	
Are purely procedural problems and exercises present that include cases in which opportunistic strategies are valuable and generic cases that require efficient and general procedures present? Evaluate lessons, chapter/unit assessments, daily routines, and homework assignments. NOTE: Problems in which opportunistic strategies are valuable might include such examples as solving x2 + 5 = 49 + 5 or (3x – 2)2 = 6x – 4. Generic cases that require efficient and general procedures might include such problems as solving c + 8 – c2 = 3(c – 1)2 – 5).	**Evidence-** **Most procedural problems are generic cases that require general procedures. Section 8-3 students move from generic cases to having to use strategies for more complex problems applications—using multiplying polynomials to find the areas of geometric figures.**	

AC Metric 1C: **The materials are designed so that teachers and students spend sufficient time working with engaging applications, without losing focus on the Widely Applicable Prerequisites.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Widely Applicable Prerequisites that relate specifically to application to use throughout the questions associated with this metric. NOTE: Some examples of clusters or Standards that call for application include: N-Q.A, A-SSE.B.3, A-REI.D.11, F-IF.B, F-IF.C.7, F-BF.A.1, G-SRT.C.8, S-ID.A.2, S-IC.A.1 For context, read Criterion #2c in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).		**Use the questions for AC Metric 1C to evaluate Metric 1C. Record evidence for each question and rate Metric** **____Meets (2)** **__X__Partially Meets (1)** **____Does Not Meet (0)**
Are there single- and multi-step contextual problems, including non-routine problems, that develop the mathematics of the course, afford opportunities for practice, and engage students in problem solving? Do the problems attend thoroughly to those places in the content Standards where expectations for multi-step and real-world problems are explicit? Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** **Very little evidence. A couple of modeling problems in each assignment along with problems in the H.O.T. sections with CCSS labels. Example problem 42 in lesson 8-2. Label is given as "CCSS Modeling". Problem does not address all aspects of the modeling cycle. Problem could be more rigorous.**	
Do application problems particularly stress applying the Widely Applicable Prerequisites? Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** **Some evidence of "real world" application. For example, lesson 3-1 problem 49 "If Mrs. Johnson has only $160 to spend on the rental car, can she afford to rent the car? Explain your reasoning."**	
Are there ample opportunities for students to engage with modeling problems? Do materials require students to use both individual parts of the modeling cycle as well as the full modeling cycle? Read the pages on High School—Modeling in the Standards for Mathematics (pp. 72 and 73). Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** **Some lessons include a specific modeling problem and other lessons include structure problems where the students are asked to explain their reasoning. Teacher would have to stress all parts of the modeling cycle, as most modeling problems use individual parts of the cycle. Section 2-7 includes algebra lab.**	

Alignment Criterion 1: Materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.

AC 1: Materials must earn at least 5 of 6 points to meet this Alignment Criterion. If materials earn less than 5 points, the Criterion has not been met. Check the final rating.
Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)**

Before moving to Alignment Criterion 2, record the final Meets or Does Not Meet rating in the Evaluation Summary.

__X__Meets

____Does Not Meet

5 points out of 6

Strengths/Weaknesses:

Strengths: Clear emphasis on procedural problems.
Weaknesses: Not enough evidence of modeling, non-routine, or engaging application problems. Little evidence of problems designed to enhance conceptual understanding.

Alignment Criterion 2:
Standards for Mathematical Practice- Materials must demonstrate authentic connections between content Standards and practice Standards.

The Standards require that designers of instructional materials connect the mathematical practices to mathematical content in instruction. Thus, materials must demonstrate authentic connections between content Standards and practice Standards.

The Standards require that designers of instructional materials connect the mathematical practices to mathematical content in instruction. Thus, materials must demonstrate authentic connections between content Standards and practice Standards.

Required Materials:

- Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf)
- Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_HS_Spring_2013_FINAL1.pdf)
- Widely Applicable Prerequisites for College and Careers (http://achievethecore.org/prerequisites)
- From the materials being evaluated: teacher guides, student texts and workbooks

Rating this Criterion:

Alignment Criterion 2 is rated as Meets or Does Not Meet.

To rate Alignment Criterion 2, first rate metrics 2A, 2B, and 2C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). For each metric, guiding questions are provided to aid in gathering evidence.
Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 2 if the materials rate 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as mathematical practices, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.

AC Metric 2A: **Materials address the practice Standards in such a way as to enrich the Widely Applicable Prerequisites; practices strengthen the focus of the course instead of detracting from it, in both teacher and student materials.** **How to Find the Evidence:** Familiarize yourself with the Widely Applicable Prerequisites. Evaluate teacher and student materials for evidence that the mathematical practices support and connect to the focus of the course. NOTE: An example of evaluating this Criterion might include looking at whether materials use regularity in repeated reasoning to illuminate formal algebra as well as functions, particularly recursive definitions of functions. For context, read Criterion #6 in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** **Each assignment contains problems emphasizing repeating reasoning to understand concepts. Problems are linked to various real-world applications.**	**__X__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
AC Metric 2B: **Materials attend to the full meaning of each practice Standard.** **How to Find the Evidence:** For context, read Criterion #7 in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).		**Use the questions for AC Metric 2B to evaluate Metric 2B. Record evidence for each question and rate Metric 2B.** **____Meets (2)** **_X___Partially Meets (1)** **____Does Not Meet (0)**
Over the course of any given year of instruction, is each mathematical practice Standard meaningfully present in the form of assignments, activities, or problems that stimulate students to develop the habits of mind described in the practice Standard? Evaluate lessons, chapter/ unit assessments, and homework assignments for evidence of each mathematical practice being meaningfully present in instruction.	**Evidence-** **Publisher has tried to provide evidence by having problems in the H.O.T. section labeled with particular practice standard titles, such as "PERSEVERENCE", even though these problems do not necessarily attend to the full meaning of the practice standard.**	
Are teacher-directed materials that explain the role of the practice Standards in the classroom and in students' mathematical development included? Are alignments to practice Standards accurate? Evaluate teacher materials, paying attention to explanations of the role of the practice Standards in the classroom and in students' mathematical development. Evaluate documents aligning lessons to practice Standards for accuracy. NOTE: Examples to look for when evaluating this metric might include the following: a highly scaffolded problem should not be aligned to MP.1; or a problem that directs a student to use a calculator should not be aligned to MP.5; or a problem about merely extending a pattern should not be aligned to MP.8.	**Evidence-** **Teacher materials address the Mathematical Practices in a basic way. Materials often direct teachers to use the problems labeled for "mathematically proficient students" as evidence of Practice Standards. Ancillary materials appear to be more aligned with Practice Standards.**	

AC Metric 2C: **Materi[illegible]upport the Standards' emphasis on mathematical reasoning.** **How to Find the Evidence:** For context, read Criterion #8 in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	[illegible]	**Use the questions for AC Metric 2C to evaluate Metric 2C. Record [illegible]nce for each question and rate Metr[illegible]** **__X__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Do the materials support students in constructing viable arguments and critiquing the arguments of others concerning course-level mathematics that is detailed in the content Standards? Read Standard for Mathematical Practice 3. Evaluate teacher and student materials to ensure that students are given opportunities to reason with grade-level mathematics.	**Evidence-** **Some problems in the H.O.T. section of the assignment include specific argument questions. These tend to be not particularly engaging for argument purposes, but they could be used for reasoning.**	
Do the materials support students in producing not only answers and solutions, but also, in a course-appropriate way, arguments, explanations, diagrams, mathematical models, etc., especially in the Widely Applicable Prerequisites? Familiarize yourself with the Widely Applicable Prerequisites. Evaluate teacher and student materials to understand the types of work students are expected to produce.	**Evidence-** **Several problems in each H.O.T. section of the assignment require modeling, writing, explaining, arguing, reasoning, and sense-making.**	
Do materials explicitly attend to the specialized language of mathematics? Is the language of argument, problem solving, and mathematical explanations taught rather than assumed? Evaluate teacher and student materials, paying attention to how mathematical language is taught. NOTE: An example of evaluating this Criterion might include looking at whether students are supported in: basing arguments on definitions; using the method of providing a counter example; or recognizing that examples alone do not establish a general statement.	**Evidence-** **Materials show clear evidence of attending to the language of mathematics. Every chapter has specific vocabulary sections, including new vocabulary and a review of previously learned vocabulary.**	

Alignment Criterion 2: Materials must demonstrate authentic connections between content Standards and practice Standards

AC 2: Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 points, the Criterion has not been met. Check the final rating.
Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewers only.)**

Before moving to Alignment Criterion 3, record the final Meets or Does Not Meet rating in the Evaluation Summary.

_X___Meets
5 out of 6 points

_____Does Not Meet

Strengths/Weaknesses:

Strengths: the publisher has made an effort to encourage mathematical reasoning through the use of H.O.T. problems in each lesson.
Weaknesses: Most Practice Standards are addressed in name only, with little evidence of actually addressing the full meaning of the Practice Standard.

Alignment Criterion 3:
Access to the Standards for All Students- Materials must provide supports for English Language Learners and other special populations.

Because Standards are for all students, alignment requires thoughtful support to ensure all students are able to meet the Standards. Thus, aligned materials must provide supports for English Language Learners and other special populations.

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Required Materials:

- Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf)
- Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math Publishers_Criteria_HS_Spring_2013_FINAL1.pdf)
- From the materials being evaluated: teacher guides, student texts and workbooks

Rating this Criterion:

Alignment Criterion 3 is rated as Meets or Does Not Meet.

To rate Alignment Criterion 3, first rate metrics 3A, 3B, and 3C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 3 if the materials rate 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as support for special population, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.

AC Metric 3A: **Suppo[illegible] English Language Learners and other special populations is thoughtful and helps those students meet the same Standards as all other students. The language in which problems are posed is carefully considered.** **How to Find the Evidence:** Evaluate teacher and student materials, paying attention to supports offered for special populations.	**Evidence-** **In the TE, the le[illegible]ontains a resource section with ELL suggestions listed. These materials were found in separate resource material books. All evidence was for Spanish speaking students. Difficult to assess whether materials help students meet the same Standards. The beginning of each chapter includes an ELL section under Differentiated Instruction. These suggestions can be toward any ELL student. Online support provides glossary in 13 different languages.**	**__X_Meets (2)** **_____Partially Meets (1)** **____Does Not Meet (0)**
AC Metric 3B: **Materials provide appropriate level and type of scaffolding, differentiation, intervention, and support for a broad range of learners with gradual removal of supports, when needed, to allow students to demonstrate their mathematical understanding independently.** **How to Find the Evidence:** Evaluate teacher and student materials, paying attention to whether materials provide differentiation that will lead all learners to engage with on-grade-level content.	**Evidence-** **In the TE, the lesson contains Approaching Level, On Level, and Beyond Level differentiated resource suggestions. Difficult to determine whether these suggestions will lead learners to engage with on-level content. The online resources have extra support materials to extend learning.**	**__X__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
AC Metric 3C: **Design of lessons recommends and facilitates a mix of instructional approaches for a variety of learners such as using multiple representations (e.g., including models, using a range of questions, checking for understanding, flexible grouping, pair-share).** **How to Find the Evidence:** Evaluate teacher materials, noting instructional approaches suggested for whole class and differentiated lessons and activities.	**Evidence-** **Every chapter begins with study organizers, scaffolded questions, RtI planners, and includes checking for understanding opportunities. Ancillary materials and online component also provides additional instructional approaches.**	**__X__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Alignment Criterion 3: Materials must provide supports for English Language Learners and other special populations. **AC 3** Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 points, the Criterion has not been met. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewers only.)** **Move to the Evaluation Summary and record the final Meets or Does Not Meet rating .**		**_X___Meets** **6 out of 6 points** **____Does Not Meet** **Strengths/Weaknesses:** **Strengths: strong TE organization and suggestions for ELL. Ancillary support materials supported differentiation. Text audio component was good. Weaknesses: majority of content was directed toward Spanish speaking ELL. Separate materials in Spanish are provided.**

Once an evaluation for alignment to the Shifts and major features of the CCSS has been conducted using Sections 1-3, it's important to evaluate for overall quality and best practices. A starting list of Indicators of Quality are suggested below. States, districts and others evaluating instructional materials are encouraged to add to this list to ensure materials reflect local contexts. For background information on some of the Indicators of Quality in this section, refer to pp.16–18 in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).

Indicators of Quality	Evidence- Give specific examples.	Rating: (Reviewer only.)
1. Lessons are thoughtfully structured and support the teacher in leading the class through the learning paths at hand, with active participation by all students in their own learning and in the learning of their classmates.	**Evidence-** **TE provides a very organized Chapter Planner. "Then, Why, How" organization at chapter opener is helpful. Lessons are structured with a somewhat overwhelming amount of content. Teacher tips in margins are useful.**	**(Reviewer only.)** **___X___ Yes** **_____ No**
2. The underlying design of the materials includes both problems and exercises. (In solving problems, students learn new mathematics, whereas in working exercises, students apply what they have already learned to build mastery.) Each problem or exercise has a purpose. **NOTE: This Criterion does not require that the problems and exercises be labeled as such.**	**Evidence-** **Problem sets all look the same. Not a clear distinction between solving problems and working exercises. Most assignments contain roughly 80 problems, so it is difficult to sense that each problem has a specific purpose other than extra practice. Students apply what they already learned in the assignment section labeled "Spiral Review".**	**(Reviewer only.)** **___X___ Yes** **_____ No**
3. Design of assignments is not haphazard: exercises are given in intentional sequences in order to strengthen students' mathematical understanding.	**Evidence-** **Exercises are clearly given in intentional sequences, with more difficult problems near the end of the assignment.**	**(Reviewer only.)** **___X___ Yes** **_____ No**
4. There are separate teacher materials that support and reward teacher study including, but not limited to: discussion of the mathematics of the units and the mathematical point of each lesson as it relates to the organizing concepts of the unit, discussion on student ways of thinking and anticipating a variety of students responses, guidance on lesson flow, guidance on questions that prompt students thinking, and discussion of desired mathematical behaviors being elicited among students.	**Evidence-** **Materials include Study Notebooks, Practice Workbooks, Assessment books, Math handbook, and Chapter Resources. Also online component to support instruction. Margins of TE provide teacher tips and scaffolding questions.**	**(Reviewer only.)** **___X___ Yes** **_____ No**

5. Manipulatives suggested in the materials are faithful representations of the mathematical objects they represent and are connected to written methods.	**Evidence-** Only manipulatives appear to be Dinah Zike's foldables presented in the Get Started section of each new chapter. Algebra tiles are mentioned in some of the lessons. Text does contain graphing calculator activities.	(Reviewer only.) __X____ Yes _____ No
6. Materials include a variety of curriculum-embedded assessments. Examples include pre-, formative, summative, and self-assessment resources.	**Evidence-** Every chapter includes a mid-chapter review, every assignment includes a spiral review and skills review, every chapter also includes a study guide and lesson-by-lesson review, a practice test, a preparing for standardized test section, and a standardized test practice section.	(Reviewer only.) __X____ Yes _____ No
7. Assessments contain aligned rubrics, answer keys, and scoring guidelines that provide sufficient guidance for interpreting student performance.	**Evidence-** Assessments contain answer keys. No scoring guidelines or aligned rubrics are provided to interpret student performance.	(Reviewer only.) _____ Yes ___X___ No
8. Materials assess student proficiency using methods that are accessible and unbiased, including the use of course-level language in student prompts.	**Evidence-** Materials include a separate practice workbook for ELL. Assessments are free of bias.	(Reviewer only.) __X____ Yes _____ No
9. Materials are carefully evaluated by qualified individuals, whose names are listed, in an effort to ensure freedom from mathematical errors and course-level appropriateness.	**Evidence-** Approximately 40 consultants and reviewers are listed in the TE See pages T4-T7	(Reviewer only.) ___X___ Yes _____ No
10. The visual design supports students in engaging thoughtfully with the subject. Navigation through the text is clear.	**Evidence-** The visual design of the TE is overwhelming with too much content, graphics, and text on each page. Student text is adequate. Navigation through the text is clear.	(Reviewer only.) ___X___ Yes _____ No

Reviewer IMET Evaluation Summary **Title/Level: Glencoe High School Math: Algebra I**

Publisher: McGraw-Hill School Education LLC **Copyright: 2014** **ISBN: 9780076639236**

Reviewer ID # MB **Date Review Completed: 02/06/2016**

Non-Negotiable Criteria-The Non-Negotiable must be met in order for the Non-Negotiable Alignment Criteria to be met overall.

Non- Negotiable 1: Focus and Coherence

___X__ Meets

_____ Does Not Meet

Non-Negotiable Overall:

__X___ Meets _____ Does Not Meet

Alignment Criteria- Each Alignment Criterion must be met with a sufficient number of points in order for Alignment Criteria to be labeled as "Meets" overall. The more points the materials receive on the Alignment Criteria, the better they are aligned.

Alignment Criterion 1: Rigor and Balance	Alignment Criterion 2: Standards of Mathematical Practice	Alignment Criterion 3: Access to Standards for All Learners
Points: ___5__ of 6 possible. (Materials must receive at least 5 of 6 points to align.)	**Points: __5___ of 6 possible.** (Materials must receive at least 5 of 6 points to align.)	**Points: __6___ of 6 possible.** (Materials must receive at least 5 of 6 points to align.)
_____ Meets	**____X___ Meets**	**___X____ Meets**
____X___ Does Not Meet	**_____ Does Not Meet**	**_____ Does Not Meet**

Alignment Criteria Overall:

__X___ Meets **_____ Does Not Meet (16 out of 18 possible points met)**

If the materials meet the Non-Negotiable Criterion and each Alignment Criterion, they are aligned to the Shifts and major features of the Standards. **Do the materials meet every Non-Negotiable and Alignment Criterion? ___X__ Yes _____ No**

What are the specific areas of strength and weakness based on this evaluation? Publishers or others modifying or developing assessments can use this information to make improvements and/or to remedy gaps in the alignment of assessment materials.

Strengths: The TE indicates how the materials are supposed to meet the CCSS. Specific resources are cited for each lesson. The SE has many exercises designed to improve or enhance students' procedural skills.

Weaknesses: The assignments are unbalanced, with way to much emphasis on procedure and very little emphasis on application or engaging problems.

2015-16 Mathematics Interim Review Recommendation & Summary

Publisher Name:	McGraw Hill
Title:	Glencoe Algebra 2
ISBN #	9780076639908
Grade Level(s) or Course:	Algebra 2
Reviewer ID:	SH, MB

RECOMMENDED AS:

_____**Core Mathematics Program-** a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials. Substantial evidence clearly supports the designation of this program as Core.

__X__**Other Mathematics Program-** a program that substantially, but partially, meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for supplemental materials. Substantial evidence clearly supports the designation of this program as Other.

_____**Component Mathematics Program-** a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs. Substantial evidence clearly supports the designation of this program as Component.

_____**Intervention Program-** a program designed and intended to target and support students' specific needs. Substantial evidence clearly supports the designation of this program as Intervention.

_____ **Does not meet criteria** for recommendation as a Curricular Material or Online Resource for Mathematics.

EVIDENCE SUMMARY:

FOCUS- The text contains lessons that are correlated ~~to~~ the Standards.

COHERENCE- Concepts and ideas are connected and presented in a logical sequence. There is a clear connection between Algebra 1 and Algebra 2

RIGOR- Emphasis was primarily on procedural skills. The text needs to have more of an emphasis on conceptual understanding.

CONCEPTUAL UNDERSTANDING- Problem sets ~~for~~ have 1-2 problems that are labeled as promoting conceptual understanding. ~~H~~However, frequently, these problems did not truly require conceptual understanding.

MATHEMATICAL PRACTICES- The beginning of each lesson lists a math practice standard. However, these standards were rarely evident in the lesson.

ACCESSIBILITY OF STANDARDS TO ALL STUDENTS-
Both the chapter planner at the start of each chapter and the teacher notes in each lesson give suggestions on making the standards accessible to all students.

OTHER: One of the biggest strengths of this text is the high level of organization & helpful resources for teachers. This text would address all the content standards for Algebra 2. It would not meet the standards for mathematical practices and would not promote strong conceptual understanding.

2015-1[illegible]terim Mathematics Review

Mathematics Evaluation Tool – High School

Publisher: McGraw Hill

Title of Material: Glencoe Algebra 2

Author: Carter, Cuevas, Day, Malloy, Casey, Holliday

ISBN #: 9780076639908 **Copyright** 2014

Reviewer ID: SH, MB

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Substantial evidence clearly supports the designation of this program as Core.

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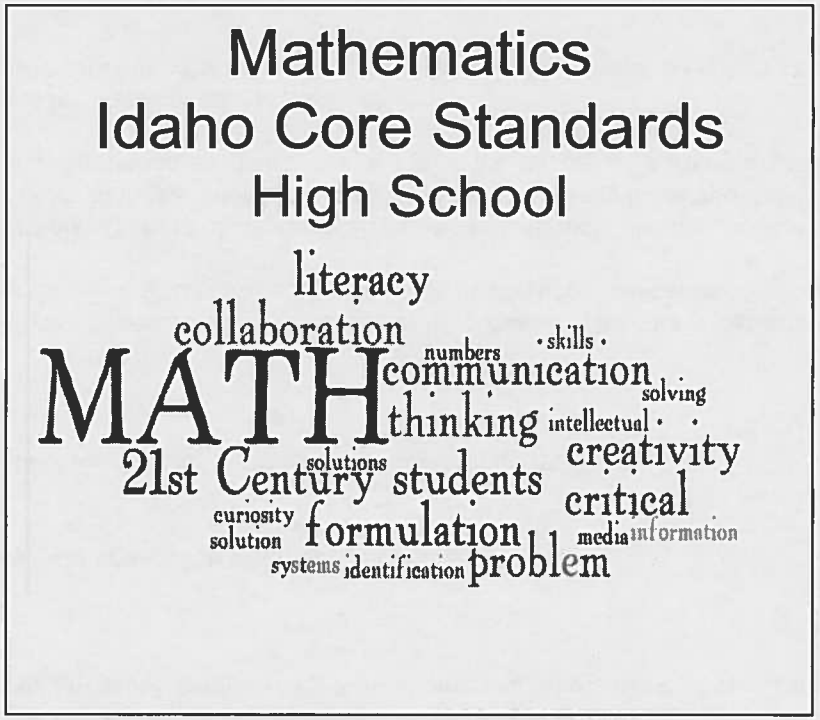
Substantial evidence clearly supports the designation of this program as Other.

Component Mathematics Program- a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs.
Substantial evidence clearly supports the designation of this program as Component.

Intervention Program- a program designed and intended to target and support students' specific needs.
Substantial evidence clearly supports the designation of this program as Intervention.



- Evaluation Form adapted from Instructional Materials Evaluation Toolkit (IMET).

The IMET was developed by Student Achievement Partners. Educators may use or adapt. http://creativecommons.org/licenses/by/3.0/ Download this tool at http://achievethecore.org/IMET

Instructional Materials Evaluation Tool

Mathematics, High School

What Are the Purposes of the IMET?

This Math IMET is designed to help educators determine whether instructional materials are aligned to the Shifts and major features of the Common Core State Standards (CCSS). The substantial instructional Shifts (http://www.corestandards.org/other-resources/key-shifts-in-mathematics/) at the heart of the Common Core State Standards are:

- **Focus** strongly where the Standards focus
- **Coherence**: Think across grades and link to major topics within the grade
- **Rigor**: In major topics, pursue conceptual understanding, procedural skill and fluency, and application with equal intensity.

The IMET draws directly from the following documents:

- Common Core State Standards for Mathematics (www.corestandards.org/Math)
- Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013) (http://www. corestandards.org/wp-content/uploads/Math_Publishers_Criteria_ HS_Spring_2013_FINAL1.pdf)

When to use the IMET

1. Purchasing materials: Many factors go into local purchasing decisions. Alignment to the Standards is a critical factor to consider. This tool is designed to evaluate alignment of instructional materials to the Shifts and the major features of the CCSS. It also provides suggestions of additional indicators to consider in the materials evaluation and purchasing process
2. Evaluating materials currently in use: The IMET can be used to analyze the degree of alignment of existing materials and help to highlight specific, concrete flaws in alignment. Even where materials and tools currently in use fail to meet one or more of these criteria, the pattern of failure is likely to be informative. States and districts can use the evaluation to create a thoughtful plan to modify or combine existing resources in such a way that students' actual learning experiences approach the focus, coherence, and rigor of the Standards.
3. Developing programs: Those developing new programs can use this tool as guidance for creating aligned curricula.

Please note this tool was designed for evaluating comprehensive curricula (including any supplemental or ancillary materials), but it was not designed for the evaluation of standalone supplemental materials.

Who Uses the IMET?

Evaluating instructional materials requires both subject-matter and pedagogical expertise. Evaluators should be well versed in the Standards (www.corestandards.org/Math) for all grades in which materials are being evaluated. This includes understanding the Widely Applicable Prerequisites (www.achievethecore.org/prerequisites), how the content fits into the progressions in the Standards (www. achievethecore.org/progressions), and the expectations of the Standards with respect to conceptual understanding, procedural skill and fluency, and application. Evaluators also should be familiar with the substantial instructional Shifts (http://www.corestandards.org/other-resources/key-shifts-in-mathematics/) of Focus, Coherence and Rigor that are listed above.

Getting Started

Prior to Evaluation

Assemble all of the materials necessary for the evaluation. It is essential for evaluators to have materials for all grades covered by the program, as some criteria cannot be rated without having access to each grade. In addition, each evaluator should have a reference copy of the Common Core State Standards for Mathematics (CCSSM) and the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).

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Getting Started

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Before conducting the evaluation itself, it is important to develop a protocol for the evaluation process. The protocol should include having evaluators study the Publishers' Criteria and the IMET. It will also be helpful for evaluators to get a sense of each program overall before beginning the process. At a minimum, this would include reading the front matter of the text, looking at the table of contents and paging through multiple chapters.

Sections 1-3 below should be completed to produce a comprehensive picture of the strengths and weaknesses of the materials under evaluation. Information about areas in need of improvement or supplementation should be shared with internal and external stakeholders.

Navigating the Tool

Begin with Section 1: Non-Negotiable Alignment Criteria

- The Non-Negotiable Alignment Criteria must each be met in full for materials to be considered aligned to the Shifts and the major features of the Common Core State Standards. Each Non-Negotiable Alignment Criterion has one or more metrics associated with it; every one of these metrics must be met in order for the criterion as a whole to be met.

- Examine the relevant materials and use evidence to rate the materials against each criterion and its associated metric(s).

- Record and explain the evidence upon which the rating is based.

Continue to Section 2: Alignment Criteria

- The Alignment Criteria must each be met for materials to be considered aligned to the Shifts and the major features of the Common Core State Standards. Each Alignment Criterion has one or more metric associated with it; a specific number of these metrics must be met or partially met in order for the criterion as a whole to be met.

- Examine the materials in relation to these criteria, assigning each metric a point value. Rate the criterion as "Meets" or "Does Note Meet" based on the number of points assigned. The more points the materials receive on the alignment Criteria, the better they are aligned.

- Record and explain the evidence upon which the rating is based.

Proceed to Section 4: Indicators of Quality

- Indicators of Quality are important considerations that will help evaluators better understand the overall quality of instructional materials. These considerations are not criteria for alignment to the CCSS, but they provide valuable information about additional program characteristics. Evaluators may want to add their own indicators to the examples provided.

Directions for Non-Negotiable 1

Focus and Coherence

Criterion	Evidence- Give specific examples.	Rating: (Reviewer only.)
Non-Negotiable 1: Focus and Coherence- Materials must focus coherently on the Widely Applicable Prerequisites in a way that is consistent with the progressions in the Standards. Focus and coherence are the two major evidence-based design principles of the Common Core State Standards for Mathematics (CCSSM, p. 3). Focus is necessary in order to fulfill the ambitious promise the states have made to their students by adopting the Standards: greater achievement at the college and career-ready level; greater depth of understanding of mathematics; and a rich classroom environment in which reasoning, sense-making, applications, and a range of mathematical practices flourish. In high school courses, narrowing and deepening the curriculum creates a structure that ties topics together. Thus, materials must focus coherently on the Widely Applicable Prerequisites in a way that is consistent with the progressions in the Standards.	Focus and coherence are the two major evidence-based design principles of the Common Core State Standards for Mathematics (CCSSM, p. 3). Focus is necessary in order to fulfill the ambitious promise the states have made to their students by adopting the Standards: greater achievement at the college and career-ready level; greater depth of understanding of mathematics; and a rich classroom environment in which reasoning, sense-making, applications, and a range of mathematical practices flourish. In high school courses, narrowing and deepening the curriculum creates a structure that ties topics together. Thus, materials must focus coherently on the Widely Applicable Prerequisites in a way that is consistent with the progressions in the Standards. **Required Materials:** • Common Core State Standards for Mathematics (www.corestandards.org/wpcontent/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_HS_Spring_2013_FINAL1.pdf) • Widely Applicable Prerequisites for College and Careers (http://achievethecore.org/prerequisites) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion**: Non-Negotiable 1 is rated as Meets or Does Not Meet. To rate Non-Negotiable 1, first rate Metrics 1A–1H. Each of these eight metrics must be rated as Meets in order for Non-Negotiable 1 to be rated as Meets. Rate each metric 1A–1H as Meets or Does Not Meet/Insufficient Evidence. If the evidence examined shows that the Criterion is met, then mark the Criterion as Meets. If the evidence examined shows that the Criterion is not met—or if there is insufficient evidence to make a determination—then mark the Criterion as Does Not Meet/Insufficient Evidence. Support all ratings with evidence.

Metric NN1A: **In any single course, students spend at least 50% of their time on Widely Applicable Prerequisites.** **How to Find the Evidence:** Familiarize yourself with the Widely Applicable Prerequisites. Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, lessons, homework assignments, and assessments. (Evaluate both student and teacher materials.) Consider time spent on the Widely Applicable Prerequisites and judge qualitatively whether students and teachers using the materials as designed will devote the majority of time to the Widely Applicable Prerequisites For context, read Criterion #1 in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** Chapters 4-8, 11, 12 contain Widely Applicable Prerequisites. This represents 7 out of 13 chapters—more than 50% of the course. Because this is an algebra 2 course, there are additional lessons on (+) content from the CCSS.	**__X__Meets** **____Does Not Meet Insufficient Evidence**
Metric NN1B: **Student work in Geometry involves significant work with applications/modeling and problems that use algebra skills.** **How to Find the Evidence:** Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, lessons, homework assignments, and assessments. (Evaluate both student and teacher materials. NOTE: Since Geometry contains relatively fewer Widely Applicable Prerequisites, this Criterion is important to help foster students' college and career readiness. Problems that use algebra skills might include, for example, algebraic geometry problems in a coordinate setting, or problems of measurement involving unknown quantities.	**Evidence-** Geometry includes graphing, triangle trigonometry, trigonometric identities, and conic sections. All utilize algebra prerequisite skills. The 0 chapter also includes sections on congruent and similar figures, and the Pythagorean Theorem.	**__X__Meets** **____Does Not Meet Insufficient Evidence**

Metric NN1C: **There a[illegible]roblems at a level of sophistication appropriate to high school (beyond mere review of middle school topics) that involve the application of knowledge and skills from grades 6-8.** **How to Find the Evidence:** Evaluate lessons, chapter/unit assessments, and homework assignments. NOTE: Problems should include application of the following topics from grades 6-8: • Ratios and proportional relationships. • Percentage and unit conversions, e.g., in the context of complex measurement problems involving quantities with derived or compound units (such as mg/mL, kg/ m3, acre-feet, etc.). • Basic function concepts, e.g., by interpreting the features of a graph in the context of an applied problem. • Concepts and skills of geometric measurement e.g., when analyzing a diagram or schematic. • Concepts and skills of basic statistics and probability (see grades 6–8.SP) • Performing rational number arithmetic fluently. For context, read Table 1 on Page 8 of the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** Early chapters 0-3[illegible]m to be at a low level of sophistication. These chapters would probably need to be omitted if teaching an advanced algebra 2 course. The remaining chapters involve many instances of application of knowledge and skills from grades 6-8 and algebra 1. Evidence includes rational number arithmetic fluency (combining algebraic fractions), interpreting features of a graph (understanding where a maximum or minimum value occur), and basic probability and statistics. Ratio and proportional relationships in section on geometric sequences. Example of unit conversions in trigonometry unit—students must convert radian and degree measure.	**__X__Meets** **____Does Not Meet Insufficient Evidence**
Metric NN1D: **Materials base courses on the content specified in the Standards.** **How to Find the Evidence:** Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, and lessons in both student and teacher materials. For context, read Criterion #3a in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** Content is specified in the table of contents and also the chapter planner in the TE for each chapter.	**_X___Meets** **____Does Not Meet Insufficient Evidence**
Metric NN1E: **Materials give all students extensive work with course-level problems.** **How to Find the Evidence:** Evaluate both student and teacher materials. If the materials provide resources for differentiated learning, consider whether lower-performing students have opportunities to engage with course-level problems. Also consider whether higher-performing students are given opportunities to learn current course-level content in greater depth. For context, read Criterion #3b in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** TE includes options for differentiated instruction including activities to reach kinesthetic and visual learners, for example. The "beyond level" activities for the higher-performing students are a bit far-fetched. For example, one activity asks students to "write or find a musical score that might model the path of a parabola". Problem sets include extensive practice with problems of low to medium degree of difficulty. Problems are appropriate for level of course.	**__X__Meets** **____Does Not Meet Insufficient Evidence**

Metric NN1F: **Materia late course-level concepts explicitly to prior knowledge from earlier grades or courses. The materials are designed so that prior knowledge becomes reorganized and extended to accommodate the new knowledge.** **How to Find the Evidence:** Evaluate student and teacher materials, looking for problems that involve extending the knowledge learned in earlier grades and courses. NOTE: An example of evaluating this Criterion might be to look at whether materials connect the equation of a circle with the distance formula and the Pythagorean theorem. For context, read Criterion #3c in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** Prior knowledge i plied. For example, Chapter 9 (conic sections) includes applying the distance formula to finding the equation of a circle. Each lesson includes a "then" and "now" heading relating prior knowledge to what will be addressed in the lesson. Systems of equations is extended to systems of three variables and matrices. Solving quadratic equations is extended from algebra 1 to include complex numbers.	**__X__Meets** **____Does Not Meet Insufficient Evidence**
Metric NN1G: **Materials include learning objectives that are visibly shaped by CCSSM cluster and domain headings.** **How to Find the Evidence:** Select several clusters from the course being evaluated. Evaluate teacher and student materials in relation to these clusters. For context, read Criterion #4a in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** A side bar of each lesson includes what CCSS and Mathematical Practices will be addressed in each lesson. These are not specific to the lesson, however, and may be difficult for students to interpret. Some standards and practices do not necessarily apply to the lesson for which they are stated. For example, lesson 6-6 Rational Exponents lists Make Sense of Problems and Persevere in Solving Them, without identifying how/why this is the practice being used.	**__X__Meets** **____Does Not Meet Insufficient Evidence**
Metric NN1H: **Materials include problems and activities that serve to connect two or more clusters in a domain, or two or more domains in a category, or two or more categories, in cases where these connections are natural and important.** **How to Find the Evidence:** In the course being evaluated, choose two or more clusters, two or more domains, or two or more categories for which connections are natural and important. Evaluate the units, chapters, and lessons that deal with the chosen topics, looking for problems and activities that serve to connect the chosen clusters or domains. NOTE: An example of evaluating this Criterion might be to look at whether materials include problems in which students analyze a situation by building a function, graphing it, and using it to create and solve an equation. For context, read Criterion #4b in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** Each lesson includes a "Multiple Representations" problem where students are using more than one approach. These may include graphing and writing an algebraic model for a problem. There are not enough of these in the course content, however. There is very little evidence. Complex numbers are connected to solving quadratic equations (A-REI) and Matrices are connected to systems of equations (A-REI)	**__X__Meets (with reservation)** **____Does Not Meet Insufficient Evidence**

Non-Negotiable 1: Focus and Coherence- Materials must focus coherently on the Widely Applicable Prerequisites in a way that is consistent with the progressions in the Standards.

Metric NN 1: If all metrics 1A–1H were rated as Meets, then rate Non-Negotiable 1 as Meets. If one or more metrics were rated as Does Not Meet/Insufficient Evidence, then rate Non-Negotiable 1 as Does Not Meet. Check the final rating.
Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)**

Before moving to Alignment Criterion 1, record the final Meets or Does Not Meet rating in the Evaluation Summary.

_X___Meets

____Does Not Meet

Strengths/Weaknesses

Strengths: content specific standards, lots of problems
Weaknesses: too much of text focuses on prerequisite low level skills, not always a clear and accurate connection to standards

Now continue by evaluating Alignment Criterion 1 for Rigor and Balance.

Directions for Alignment Criterion 1

Rigor and Balance

Alignment Criterion 1:
Rigor and Balance- Materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.

The Standards set expectations for attention to all three aspects of rigor: conceptual understanding, procedural skill and fluency, and applications. Thus, materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.

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- Widely Applicable Prerequisites for College and Careers (http://achievethecore.org/prerequisites)
- From the materials being evaluated: teacher guides, student texts and workbooks

Rating this Criterion:

Alignment Criterion 1 is rated as Meets or Does Not Meet.

To rate Alignment Criterion 1, first rate metrics 1A, 1B, and 1C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). For each metric, guiding questions are provided to aid in gathering evidence.
Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 1 if the materials rate 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as rigor and balance, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.

AC Metric 1A: **The materials support the development of students' conceptual understanding of key mathematical concepts, especially where called for in specific content Standards or cluster headings.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Widely Applicable Prerequisites that relate specifically to conceptual understanding to use throughout the questions associated with this metric. NOTE: Some examples of clusters or Standards that call for conceptual understanding include: N-RN.A.1, A-APR.B, A-REI.A.1, A-REI.D.10, A.REI.D.11, F.IF.A.1, F-LE.A.1, G.SRT.A.2, G-SRT.C.6, S-ID.C.7 For context, read Criterion #2a in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	• Choose a cluster/Standard from the Widely Applicable Prerequisites that is applied to each aspect of rigor and use it to evaluate these metrics. It is most helpful if the same clusters and Standards are chosen for all of the programs being evaluated. (Guidance in choosing clusters/Standards is included in "How to Find the Evidence" below.)	**Use the questions for AC Metric 1A to evaluate Metric 1A. Record evidence for each question and rate Metric** **____Meets (2)** **_X__Partially Meets (1)** **____Does Not Meet (0)**
Is conceptual understanding attended to thoroughly where the Standards set explicit expectations for understanding or interpreting? Evaluate lessons, chapter/unit assessments and homework assignments, paying attention to work aligned to Standards that explicitly call for understanding or interpreting.	**Evidence-** Very little evidence of conceptual understanding. Majority of assignments contain procedural exercises.	
Do the materials feature high-quality conceptual problems and conceptual discussion questions? Evaluate lessons, chapter/unit assessments, and homework assignments. NOTE: Examples of conceptual problems might include such questions as "What is the maximum value of the function f(t) = 5 – t2 ?" or "Is √2 a polynomial? How about ½(x + √2)+ ½ (-x + √2)?"	**Evidence-** Very few high-quality conceptual problems/discussion questions. One example from the H.O.T. (higher-order thinking problems) lesson 9-7: "When the vertex of a parabola lies on an ellipse, how many solutions can the quadratic system represented by the two graphs have? Explain your reasoning using graphs".	
Do the materials feature opportunities to identify correspondences across mathematical representations? Evaluate lessons, chapter/unit assessments and homework assignments. NOTE: An example of evaluating this metric might include looking at whether materials support students in identifying correspondences among the expression that defines a function, the graph that shows the relationship, and the behavior of the phenomenon being modeled (if any).	**Evidence-** Very few opportunities to identify correspondences across mathematical representations—less than 10 in the problem sets throughout the text. Some lessons included this—for example, Chapter 5 (Polynomials and Polynomial Functions) did show the relationship between roots of a polynomial and x-intercepts on a graph.	

AC Metric 1B: **The materials are designed so that students attain the fluencies and procedural skills required by the Standards.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Widely Applicable Prerequisites that relate specifically to fluency and procedural skill to use throughout the questions associated with this metric. NOTE: Some examples of Standards that call for procedural skill and fluency include: A-SSE.A.1b, A-SSE.2, A-APR.A.1, A-APR.C.6, F-BF.B.3, G-GPE.B.4, G-GPE.B.5, G-GPE.B.7, G-CO.A.1, G-SRT.B.5 For context, read Criterion #2b in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).		**Use the questions for AC Metric 1B to evaluate Metric 1B. Record evidence for each question and rate Metric** **__X__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Is progress toward fluency and procedural skill interwoven with the student's developing conceptual understanding of the skills in question? Evaluate lessons, chapter/unit assessments, daily routines, and homework assignments for evidence that the development of fluency and procedural skill is supported by conceptual understanding.	**Evidence-** Vast majority of student exercises focus on procedural skill with very little evidence tying the procedural to the conceptual.	
Are purely procedural problems and exercises present that include cases in which opportunistic strategies are valuable and generic cases that require efficient and general procedures present? Evaluate lessons, chapter/unit assessments, daily routines, and homework assignments. NOTE: Problems in which opportunistic strategies are valuable might include such examples as solving x2 + 5 = 49 + 5 or (3x – 2)2 = 6x – 4. Generic cases that require efficient and general procedures might include such problems as solving c + 8 – c2 = 3(c – 1)2 – 5).	**Evidence-** Exercises include efficient and general procedures.	
AC Metric 1C: **The materials are designed so that teachers and students spend sufficient time working with engaging applications, without losing focus on the Widely Applicable Prerequisites.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Widely Applicable Prerequisites that relate specifically to application to use throughout the questions associated with this metric. NOTE: Some examples of clusters or Standards that call for application include: N-Q.A, A-SSE.B.3, A-REI.D.11, F-IF.B, F-IF.C.7, F-BF.A.1, G-SRT.C.8, S-ID.A.2, S-IC.A.1 For context, read Criterion #2c in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).		**Use the questions for AC Metric 1C to evaluate Metric 1C. Record evidence for each question and rate Metric 1C.** **____Meets (2)** **__X__Partially Meets (1)** **____Does Not Meet (0)**
Are there single- and multi-step contextual problems, including non-routine problems, that develop the mathematics of the course, afford opportunities for practice, and engage students in problem solving? Do the problems attend thoroughly to those places in the content Standards where expectations for multi-step and real-world problems are explicit? Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** The publisher has made an effort to include applications of problems in a variety of contexts and real-world applications—astronomy, construction, sports, physics, business, entertainment, etc. These are highlighted in the student exercises. There are not any non-routine problems other than those that have worked-out examples provided.	

Do application problems particularly stress applying the Widely Applicable Prerequisites? Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** Problems stress applying the Applicable Prerequisites. The exception to this would be in the chapter practice tests or chapter assessments, where there is very little evidence of application problems.	
Are there ample opportunities for students to engage with modeling problems? Do materials require students to use both individual parts of the modeling cycle as well as the full modeling cycle? Read the pages on High School—Modeling in the Standards for Mathematics (pp. 72 and 73). Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** Modeling problems are identified by the word "Modeling" and appear on occasion in the student Practice and Problem Solving exercises. Individual components are the modeling cycle are present, but not the complete model in all cases.	
Alignment Criterion 1: Materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations. **AC 1:** Materials must earn at least 5 of 6 points to meet this Alignment Criterion. If materials earn less than 5 points, the Criterion has not been met. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)** **Before moving to Alignment Criterion 2, record the final Meets or Does Not Meet rating in the Evaluation Summary.**		**____Meets** **__X__Does Not Meet** **Earned 4 out of 6 possible points.** **Strengths/Weaknesses:** **Strengths: lots of problems requiring procedural fluency** **Weaknesses: very little evidence of problems requiring students to engage in problem-solving in a meaningful way**
Alignment Criterion 2: **Standards for Mathematical Practice- Materials must demonstrate authentic connections between content Standards and practice Standards.** The Standards require that designers of instructional materials connect the mathematical practices to mathematical content in instruction. Thus, materials must demonstrate authentic connections between content Standards and practice Standards.	The Standards require that designers of instructional materials connect the mathematical practices to mathematical content in instruction. Thus, materials must demonstrate authentic connections between content Standards and practice Standards. **Required Materials**: • Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_HS_Spring_2013_FINAL1.pdf) • Widely Applicable Prerequisites for College and Careers (http://achievethecore.org/prerequisites) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion:** Alignment Criterion 2 is rated as Meets or Does Not Meet. To rate Alignment Criterion 2, first rate metrics 2A, 2B, and 2C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). For each metric, guiding questions are provided to aid in gathering evidence. Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 2 if the materials rate 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as mathematical practices, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.

AC Metric 2A: **Materials address the practice Standards in such a way as to enrich the Widely Applicable Prerequisites; practices strengthen the focus of the course instead of detracting from it, in both teacher and student materials.** **How to Find the Evidence:** Familiarize yourself with the Widely Applicable Prerequisites. Evaluate teacher and student materials for evidence that the mathematical practices support and connect to the focus of the course. NOTE: An example of evaluating this Criterion might include looking at whether materials use regularity in repeated reasoning to illuminate formal algebra as well as functions, particularly recursive definitions of functions. For context, read Criterion #6 in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** Concepts seem to be taught too frequently in isolation without enough evidence of enriching the Widely Applicable Prerequisites. Each lesson does include a "then" and "now" section in an effort to show connectedness.	____Meets (2) _X___Partially Meets (1) ____Does Not Meet (0)
AC Metric 2B: **Materials attend to the full meaning of each practice Standard.** **How to Find the Evidence:** For context, read Criterion #7 in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).		**Use the questions for AC Metric 2B to evaluate Metric 2B. Record evidence for each question and rate Metric 2B.** ____Meets (2) __X__Partially Meets (1) ____Does Not Meet (0)
Over the course of any given year of instruction, is each mathematical practice Standard meaningfully present in the form of assignments, activities, or problems that stimulate students to develop the habits of mind described in the practice Standard? Evaluate lessons, chapter/ unit assessments, and homework assignments for evidence of each mathematical practice being meaningfully present in instruction.	**Evidence-** Not thoroughly addressed. For example, a Check Your Understanding section might contain an exercise labeled "CCSS Precision" that does not require the students to attend to precision in a meaningful way. The exercises look no different than others without the word "precision" on the same page (see lesson 6-6 Check Your Understanding)	
Are teacher-directed materials that explain the role of the practice Standards in the classroom and in students' mathematical development included? Are alignments to practice Standards accurate? Evaluate teacher materials, paying attention to explanations of the role of the practice Standards in the classroom and in students' mathematical development. Evaluate documents aligning lessons to practice Standards for accuracy. NOTE: Examples to look for when evaluating this metric might include the following: a highly scaffolded problem should not be aligned to MP.1; or a problem that directs a student to use a calculator should not be aligned to MP.5; or a problem about merely extending a pattern should not be aligned to MP.8.	**Evidence-** The margins of the TE include "Teaching of the Mathematical Practices" stated, but with no tie-in to the lessons themselves.	

AC Metric 2C: **Materials support the Standards' emphasis on mathematical reasoning.** **How to Find the Evidence:** For context, read Criterion #8 in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).		**Use the questions for AC Metric 2C to evaluate Metric 2C. Record evidence for each question and rate Metric 2C.** **____Meets (2)** **__X__Partially Meets (1)** **____Does Not Meet (0)**
Do the materials support students in constructing viable arguments and critiquing the arguments of others concerning course-level mathematics that is detailed in the content Standards? Read Standard for Mathematical Practice 3. Evaluate teacher and student materials to ensure that students are given opportunities to reason with grade-level mathematics.	**Evidence-** Exercises in the Practice and Problem Solving sections of the text are occasionally labeled as "CCSS Reasoning" but may not require any more reasoning skills than prior problems.	
Do the materials support students in producing not only answers and solutions, but also, in a course-appropriate way, arguments, explanations, diagrams, mathematical models, etc., especially in the Widely Applicable Prerequisites? Familiarize yourself with the Widely Applicable Prerequisites. Evaluate teacher and student materials to understand the types of work students are expected to produce.	**Evidence-** Some exercises require students to critique the work of a fictitious student or students and explain what he/she did incorrectly. Other exercises may be labeled as "CCSS Arguments"—example, "For what values of a is $\sqrt{a}\cdot\sqrt{-a}$ a real number? Explain". Teacher materials include questioning that may inspire students to provide a mathematical argument.	
Do materials explicitly attend to the specialized language of mathematics? Is the language of argument, problem solving, and mathematical explanations taught rather than assumed? Evaluate teacher and student materials, paying attention to how mathematical language is taught. NOTE: An example of evaluating this Criterion might include looking at whether students are supported in: basing arguments on definitions; using the method of providing a counter example; or recognizing that examples alone do not establish a general statement.	**Evidence-** The language of mathematics is adhered to throughout the text.	
Alignment Criterion 2: Materials must demonstrate authentic connections between content Standards and practice Standards. **AC 2:** Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 points, the Criterion has not been met. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewers only.)** **Before moving to Alignment Criterion 3, record the final Meets or Does Not Meet rating in the Evaluation Summary.**		**____Meets** **__X__Does Not Meet** **Meets 3 out of 6 points** **Strengths/Weaknesses:** **Strengths: precise language of mathematics is used throughout the materials** **Weaknesses: Practice Standards are addressed in name only, without clear evidence of their applications**

Alignment Criterion 3: **Access[illegible]he Standards for All Students- Materials must provide supports for English Language Learners and other special populations.** Because Standards are for all students, alignment requires thoughtful support to ensure all students are able to meet the Standards. Thus, aligned materials must provide supports for English Language Learners and other special populations.	Because Standards are for all students, alignment requires thoughtful support to ensure a[illegible]ents are able to meet the Standards. Thus, aligned materials m[illegible]ovide supports for English Language Learners and other special populations. **Required Materials:** • Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math Publishers_Criteria_HS_Spring_2013_FINAL1.pdf) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion:** Alignment Criterion 3 is rated as[illegible]s or Does Not Meet. To rate Alignment Criterion 3, first rate metrics 3A, 3B, and 3C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 3 if the materials rate 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as support for special population, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.
AC Metric 3A: **Support for English Language Learners and other special populations is thoughtful and helps those students meet the same Standards as all other students. The language in which problems are posed is carefully considered.** **How to Find the Evidence:** Evaluate teacher and student materials, paying attention to supports offered for special populations.	**Evidence-** In the TE, the lesson contains a resource section with ELL suggestions listed. These materials were found in separate resource material books. There is a multilingual eGlossary available online. Difficult to assess whether these materials help students meet the same Standards. The beginning of each chapter includes an ELL section under Differentiated Instruction. These suggestions can be toward any ELL student.	**__X_Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
AC Metric 3B: **Materials provide appropriate level and type of scaffolding, differentiation, intervention, and support for a broad range of learners with gradual removal of supports, when needed, to allow students to demonstrate their mathematical understanding independently.** **How to Find the Evidence:** Evaluate teacher and student materials, paying attention to whether materials provide differentiation that will lead all learners to engage with on-grade-level content.	**Evidence-** In the TE, the lesson contains Approaching Level, On Level, and Beyond Level differentiated resource suggestions. Difficult to determine whether these suggestions will lead learners to engage with on-level content.	**__X__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
AC Metric 3C: **Design of lessons recommends and facilitates a mix of instructional approaches for a variety of learners such as using multiple representations (e.g., including models, using a range of questions, checking for understanding, flexible grouping, pair-share).** **How to Find the Evidence:** Evaluate teacher materials, noting instructional approaches suggested for whole class and differentiated lessons and activities.	**Evidence-** Every chapter begins with study organizers, scaffolded questions, RtI planners, and includes checking for understanding opportunities.	**__X__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**

Alignment Criterion 3: Materials must provide supports for English Language Learners and other special populations.	__X__Meets 6 out of 6 point met ____Does Not Meet
AC 3 Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 points, the Criterion has not been met. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewers only.)** **Move to the Evaluation Summary and record the final Meets or Does Not Meet rating .**	**Strengths/Weaknesses:** **Strengths: publisher has made a strong effort to address ELL students by providing separate materials in Spanish—including an assessment book** **Weaknesses: emphasis in ELL is primarily for Spanish-speaking students**

Once an evaluation for alignment to the Shifts and major features of the CCSS has been conducted using Sections 1-3, it's important to evaluate for overall quality and best practices. A starting list of Indicators of Quality are suggested below. States, districts and others evaluating instructional materials are encouraged to add to this list to ensure materials reflect local contexts. For background information on some of the Indicators of Quality in this section, refer to pp.16–18 in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).

Indicators of Quality	Evidence- Give specific examples.	Rating: (Reviewer only.)
1. Lessons are thoughtfully structured and support the teacher in leading the class through the learning paths at hand, with active participation by all students in their own learning and in the learning of their classmates.	**Evidence-** TE provides a very organized Chapter Planner. Lessons are structured with a somewhat overwhelming amount of content. Not a strong enough emphasis on active participation by the students.	**(Reviewer only.)** __X____ **Yes** _____ **No**
2. The underlying design of the materials includes both problems and exercises. (In solving problems, students learn new mathematics, whereas in working exercises, students apply what they have already learned to build mastery.) Each problem or exercise has a purpose. **NOTE: This Criterion does not require that the problems and exercises be labeled as such.**	**Evidence-** Problem sets all look the same. Not a clear distinction between solving problems and working exercises. Most assignments contain roughly 80 exercises, so it is difficult to sense that they are problems with a specific purpose. Majority of problems address new mathematics, with applying what they already learned in the assignment section labeled "Spiral Review".	**(Reviewer only.)** _____ **Yes** __X____ **No**

3. Design of assignments is not haphazard: exercises are given in intentional sequences in order to strengthen students' mathematical understanding.	**Evidence-** Exercises are clearly given in intentional sequences, with more difficult problems near the end of the assignment.	**(Reviewer only.)** ___X___ Yes _____ No
4. There are separate teacher materials that support and reward teacher study including, but not limited to: discussion of the mathematics of the units and the mathematical point of each lesson as it relates to the organizing concepts of the unit, discussion on student ways of thinking and anticipating a variety of students responses, guidance on lesson flow, guidance on questions that prompt students thinking, and discussion of desired mathematical behaviors being elicited among students.	**Evidence-** Materials include Study Notebooks, Practice Workbooks, Assessment books, and Chapter Resources. Resources lack discussion of the mathematics of the units and the mathematical point of each lesson.	**(Reviewer only.)** __X____ Yes _____ No
5. Manipulatives suggested in the materials are faithful representations of the mathematical objects they represent and are connected to written methods.	**Evidence-** Algebra tiles are mentioned in some of the lessons. Text contains numerous graphing calculator activities. Chapters begin with having students construct a Dinah Zike Foldable study organizer.	**(Reviewer only.)** ___X___ Yes _____ No
6. Materials include a variety of curriculum-embedded assessments. Examples include pre-, formative, summative, and self-assessment resources.	**Evidence-** Every chapter includes a Get Ready for the Chapter diagnostic quiz, a mid-chapter review, every assignment includes a spiral review and skills review, every chapter also includes a study guide and lesson-by-lesson review, a practice test, a preparing for standardized test section, and a standardized test practice section. TE includes formative assessment suggestions.	**(Reviewer only.)** __X____ Yes _____ No
7. Assessments contain aligned rubrics, answer keys, and scoring guidelines that provide sufficient guidance for interpreting student performance.	**Evidence-** Resource masters include generic form rubrics for grading extended response questions. Answer keys are provided with assessments.	**(Reviewer only.)** ___X__ Yes _____ No
8. Materials assess student proficiency using methods that are accessible and unbiased, including the use of course-level language in student prompts.	**Evidence-** Materials include a separate practice workbook for ELL. Assessments appear to be free of bias and include course-level language.	**(Reviewer only.)** ___X___ Yes _____ No

9. Materials are carefully evaluated by qualified individual[illegible]hose names are listed, in an effort to ensure freedom from mathematical errors and course-level appropriateness.	**Evidence-** TE identifies review[illegible]nd their areas of expertise. Evaluators should have reviewed some of the people who were highlighted in some of the problems—Lance Armstrong is listed along with Mark McGwire. Both of these athletes have admitted using performance enhancing drugs. They probably shouldn't be included in the text.	**(Reviewer only.)** __X____ **Yes** _____ **No**
10. The visual design supports students in engaging thoughtfully with the subject. Navigation through the text is clear.	**Evidence-** Page layout and design is often overwhelming. Lots of words, graphics, and problems on each page. The TE is organized very well, with clear focus on navigating each chapter and the text.	**(Reviewer only.)** ____X__ **Yes** _____ **No**

Reviewer IMET Evaluation Summary Title/Level: Glencoe Algebra 2

Publisher: McGraw-Hill School Education, LLC Copyright: 2014 ISBN: 9780076639908

Reviewer ID # MB Date Review Completed: 02/06/2016

Non-Negotiable Criteria-The Non-Negotiable must be met in order for the Non-Negotiable Alignment Criteria to be met overall.
Non- Negotiable 1: Focus and Coherence ___X__ **Meets** _____ **Does Not Meet**

Non-Negotiable Overall:

__X___ Meets _____ Does Not Meet

Alignment Criteria- Each Alignment Criterion must be met with a sufficient number of points in order for Alignment Criteria to be labeled as "Meets" overall. The more points the materials receive on the Alignment Criteria, the better they are aligned.

Alignment Criterion 1: Rigor and Balance	Alignment Criterion 2: Standards of Mathematical Practice	Alignment Criterion 3: Access to Standards for All Learners
Points: __4___ of 6 possible. **(Materials must receive at least 5 of 6 points to align.)**	**Points: __3___ of 6 possible.** **(Materials must receive at least 5 of 6 points to align.)**	**Points: _6__ of 6 possible.** **(Materials must receive at least 5 of 6 points to align.)**
_____ Meets	**_____ Meets**	**___X____ Meets**
__X_____ Does Not Meet	**___X____ Does Not Meet**	**_____ Does Not Meet**

Alignment Criteria Overall:

_____ Meets __X___ Does Not Meet 13 out of 18 possible points earned

If the materials meet the Non-Negotiable Criterion and each Alignment Criterion, they are aligned to the Shifts and major features of the Core Standards. **Do the materials meet every Non-Negotiable and Alignment Criterion? _____ Yes ___X__ No**

What are the specific areas of strength and weakness based on this evaluation? Publishers or others modifying or developing assessments can use this information to make improvements and/or to remedy gaps in the alignment of assessment materials.

Strengths: Teacher's Edition is very well-organized with chapters outlines and lesson outlines included. Numerous opportunities for students to practice procedural fluency. Materials include a separate chapter resource book with additional problems, although these aren't very visually appealing.

Weaknesses: student exercises clearly focus on procedural fluency with not much effort to include conceptual understanding. Student exercise sets are very long and many teachers may skip the problems that would best emphasize the shifts and major features of the Core Standards.

2015-16 Mathematics Interim Review Recommendation & Summary

Publisher Name:	McGraw-Hill
Title:	Glencoe High School Math - Geometry
ISBN #	978-0-07-663930-4
Grade Level(s) or Course:	9-12
Reviewer ID:	*RW and DG*

RECOMMENDED AS:

____X____**Core Mathematics Program-** a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials. Substantial evidence clearly supports the designation of this program as Core.

_____**Other Mathematics Program-** a program that substantially, but partially, meets the *focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for* supplemental materials. Substantial evidence clearly supports the designation of this program as Other.

_____**Component Mathematics Program-** a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs. Substantial evidence clearly supports the designation of this program as Component.

_____**Intervention Program-** a program designed and intended to target and support students' specific needs. Substantial evidence clearly supports the designation of this program as Intervention.

_____ **Does not meet criteria** for recommendation as a Curricular Material or Online Resource for Mathematics.

EVIDENCE SUMMARY:

FOCUS-
The textbook is completely aligned with the CCSS and consistently incorporates all 8 MPs.

COHERENCE-
The sections do a really good job of scaffolding problems from skill building to application problem solving. The chapters are ordered in a way in which all concepts build on each other.

RIGOR-
Problems definitely meet the standards rigorous expectations. The practice and apply problems are well written with a conceptual understanding basis and includes high order thinking skills.

CONCEPTUAL UNDERSTANDING-
The textbook suggests problems to assign students based on their understanding. At the beginning of each chapter, there is an RTI component to ensure conceptual understanding.

MATHEMATICAL PRACTICES-
The materials do a great job of connecting content standards and practice standards.

ACCESSIBILITY OF STANDARDS TO ALL STUDENTS-
The material does a great job in reaching all types of learners. Including ELL students, special population students as well as advanced students.

OTHER:
This program provides great opportunity for scaffolding learning for all populations. The program is traditional and does not include task based learning and has minimal cooperative learning opportunities (in labs only).

2015-1 nterim Mathematics Review

Mathematics Evaluation Tool – High School

Publisher: McGraw-Hill

Title of Material: Glencoe High School Math-Geometry

Author: Carter, Cuevas, Day, Molloy, Cummins

ISBN #: TE 978-0-07-663930-4 **Copyright** 2014

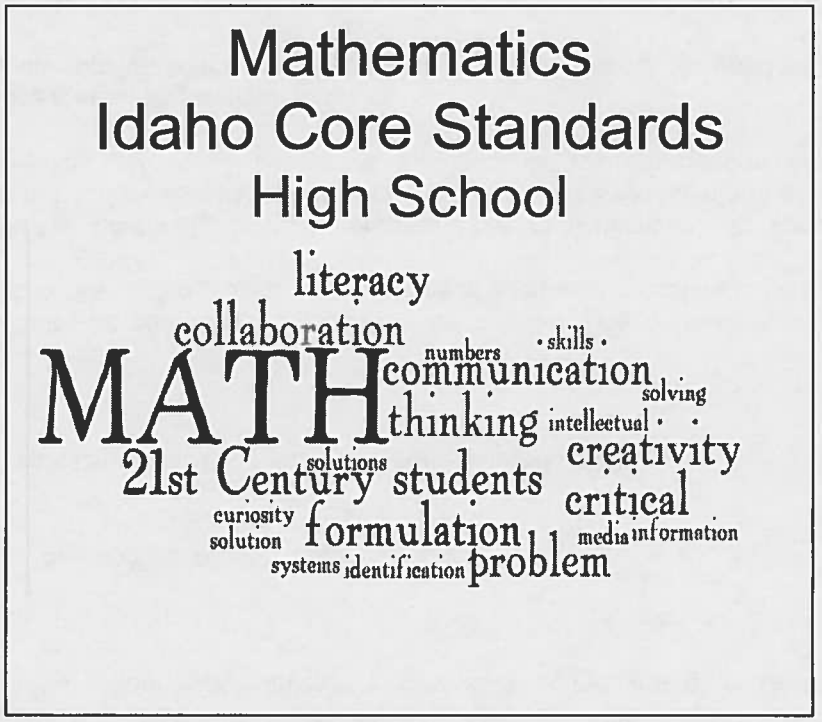
Reviewer ID: DG RW

Core Mathematics Program- a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Core.

Other Mathematics Program- a program that substantially, but partially, meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Other.

Component Mathematics Program- a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs.
Substantial evidence clearly supports the designation of this program as Component.

Intervention Program- a program designed and intended to target and support students' specific needs.
Substantial evidence clearly supports the designation of this program as Intervention.



- Evaluation Form adapted from Instructional Materials Evaluation Toolkit (IMET).

The IMET was developed by Student Achievement Partners. Educators may use or adapt. http://creativecommons.org/licenses/by/3.0/ Download this tool at http://achievethecore.org/IMET

Instructional Materials Evaluation Tool

Mathematics, High School

What Are the Purposes of the IMET?

This Math IMET is designed to help educators determine whether instructional materials are aligned to the Shifts and major features of the Common Core State Standards (CCSS). The substantial instructional Shifts (http://www.corestandards.org/other-resources/key-shifts-in-mathematics/) at the heart of the Common Core State Standards are:

- **Focus** strongly where the Standards focus
- **Coherence**: Think across grades and link to major topics within the grade
- **Rigor**: In major topics, pursue conceptual understanding, procedural skill and fluency, and application with equal intensity.

The IMET draws directly from the following documents:

- Common Core State Standards for Mathematics (www.corestandards.org/Math)
- Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013) (http://www. corestandards.org/wp-content/uploads/Math_Publishers_Criteria_ HS_Spring_2013_FINAL1.pdf)

When to use the IMET

1. Purchasing materials: Many factors go into local purchasing decisions. Alignment to the Standards is a critical factor to consider. This tool is designed to evaluate alignment of instructional materials to the Shifts and the major features of the CCSS. It also provides suggestions of additional indicators to consider in the materials evaluation and purchasing process
2. Evaluating materials currently in use: The IMET can be used to analyze the degree of alignment of existing materials and help to highlight specific, concrete flaws in alignment. Even where materials and tools currently in use fail to meet one or more of these criteria, the pattern of failure is likely to be informative. States and districts can use the evaluation to create a thoughtful plan to modify or combine existing resources in such a way that students' actual learning experiences approach the focus, coherence, and rigor of the Standards.
3. Developing programs: Those developing new programs can use this tool as guidance for creating aligned curricula.

Please note this tool was designed for evaluating comprehensive curricula (including any supplemental or ancillary materials), but it was not designed for the evaluation of standalone supplemental materials.

Who Uses the IMET?

Evaluating instructional materials requires both subject-matter and pedagogical expertise. Evaluators should be well versed in the Standards (www.corestandards.org/Math) for all grades in which materials are being evaluated. This includes understanding the Widely Applicable Prerequisites (www.achievethecore.org/prerequisites), how the content fits into the progressions in the Standards (www. achievethecore.org/progressions), and the expectations of the Standards with respect to conceptual understanding, procedural skill and fluency, and application. Evaluators also should be familiar with the substantial instructional Shifts (http://www.corestandards.org/other-resources/key-shifts-in-mathematics/) of Focus, Coherence and Rigor that are listed above.

Getting Started

Prior to Evaluation

Assemble all of the materials necessary for the evaluation. It is essential for evaluators to have materials for all grades covered by the program, as some criteria cannot be rated without having access to each grade. In addition, each evaluator should have a reference copy of the Common Core State Standards for Mathematics (CCSSM) and the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).

Before conducting the evaluation itself, it is important to develop a protocol for the evaluation process. The protocol should include having evaluators study the Publishers' Criteria and the IMET. It will also be helpful for evaluators to get a sense of each program overall before beginning the process. At a minimum, this would include reading the front matter of the text, looking at the table of contents and paging through multiple chapters.

Sections 1-3 below should be completed to produce a comprehensive picture of the strengths and weaknesses of the materials under evaluation. Information about areas in need of improvement or supplementation should be shared with internal and external stakeholders.

Navigating the Tool

Begin with Section 1: Non-Negotiable Alignment Criteria

- The Non-Negotiable Alignment Criteria must each be met in full for materials to be considered aligned to the Shifts and the major features of the Common Core State Standards. Each Non-Negotiable Alignment Criterion has one or more metrics associated with it; every one of these metrics must be met in order for the criterion as a whole to be met.

- Examine the relevant materials and use evidence to rate the materials against each criterion and its associated metric(s).

- Record and explain the evidence upon which the rating is based.

Continue to Section 2: Alignment Criteria

- The Alignment Criteria must each be met for materials to be considered aligned to the Shifts and the major features of the Common Core State Standards. Each Alignment Criterion has one or more metric associated with it; a specific number of these metrics must be met or partially met in order for the criterion as a whole to be met.

- Examine the materials in relation to these criteria, assigning each metric a point value. Rate the criterion as "Meets" or "Does Note Meet" based on the number of points assigned. The more points the materials receive on the alignment Criteria, the better they are aligned.

- Record and explain the evidence upon which the rating is based.

Proceed to Section 4: Indicators of Quality

- Indicators of Quality are important considerations that will help evaluators better understand the overall quality of instructional materials. These considerations are not criteria for alignment to the CCSS, but they provide valuable information about additional program characteristics. Evaluators may want to add their own indicators to the examples provided.

Directions for Non-Negotiable 1

Focus and Coherence

Criterion	Evidence- Give specific examples.	Rating: (Reviewer only.)
Non-Negotiable 1: Focus and Coherence- Materials must focus coherently on the Widely Applicable Prerequisites in a way that is consistent with the progressions in the Standards. Focus and coherence are the two major evidence-based design principles of the Common Core State Standards for Mathematics (CCSSM, p. 3). Focus is necessary in order to fulfill the ambitious promise the states have made to their students by adopting the Standards: greater achievement at the college and career-ready level; greater depth of understanding of mathematics; and a rich classroom environment in which reasoning, sense-making, applications, and a range of mathematical practices flourish. In high school courses, narrowing and deepening the curriculum creates a structure that ties topics together. Thus, materials must focus coherently on the Widely Applicable Prerequisites in a way that is consistent with the progressions in the Standards.	Focus and coherence are the two major evidence-based design principles of the Common Core State Standards for Mathematics (CCSSM, p. 3). Focus is necessary in order to fulfill the ambitious promise the states have made to their students by adopting the Standards: greater achievement at the college and career-ready level; greater depth of understanding of mathematics; and a rich classroom environment in which reasoning, sense-making, applications, and a range of mathematical practices flourish. In high school courses, narrowing and deepening the curriculum creates a structure that ties topics together. Thus, materials must focus coherently on the Widely Applicable Prerequisites in a way that is consistent with the progressions in the Standards. **Required Materials:** • Common Core State Standards for Mathematics (www.corestandards.org/wpcontent/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_HS_Spring_2013_FINAL1.pdf) • Widely Applicable Prerequisites for College and Careers (http://achievethecore.org/prerequisites) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion:** Non-Negotiable 1 is rated as Meets or Does Not Meet. To rate Non-Negotiable 1, first rate Metrics 1A–1H. Each of these eight metrics must be rated as Meets in order for Non-Negotiable 1 to be rated as Meets. Rate each metric 1A–1H as Meets or Does Not Meet/Insufficient Evidence. If the evidence examined shows that the Criterion is met, then mark the Criterion as Meets. If the evidence examined shows that the Criterion is not met—or if there is insufficient evidence to make a determination—then mark the Criterion as Does Not Meet/Insufficient Evidence. Support all ratings with evidence.

Metric NN1A: **In any single course, students spend at least 50% of their time on Widely Applicable Prerequisites.** **How to Find the Evidence:** Familiarize yourself with the Widely Applicable Prerequisites. Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, lessons, homework assignments, and assessments. (Evaluate both student and teacher materials.) Consider time spent on the Widely Applicable Prerequisites and judge qualitatively whether students and teachers using the materials as designed will devote the majority of time to the Widely Applicable Prerequisites For context, read Criterion #1 in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** In the Geometry portion of the program, students spend less than 50% of their time on Widely Applicable Prerequisites. However, when the program is viewed as a whole, the students spend well over 50% of the time on WAP.	**__X__Meets** **____Does Not Meet Insufficient Evidence**
Metric NN1B: **Student work in Geometry involves significant work with applications/modeling and problems that use algebra skills.** **How to Find the Evidence:** Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, lessons, homework assignments, and assessments. (Evaluate both student and teacher materials. NOTE: Since Geometry contains relatively fewer Widely Applicable Prerequisites, this Criterion is important to help foster students' college and career readiness. Problems that use algebra skills might include, for example, algebraic geometry problems in a coordinate setting, or problems of measurement involving unknown quantities.	**Evidence-** This is the Geometry course of the traditional pathway. Therefore, the entire course covers the geometry standards. In order to effectively complete the material, students must use algebra skills on a daily basis. There is a lot of real-life problems that include the use of algebra.	**__X__Meets** **____Does Not Meet Insufficient Evidence**

Metric NN1C: **There are problems at a level of sophistication appropriate to high school (beyond mere review of middle school topics) that involve the application of knowledge and skills from grades 6-8.** **How to Find the Evidence:** Evaluate lessons, chapter/unit assessments, and homework assignments. NOTE: Problems should include application of the following topics from grades 6-8: • Ratios and proportional relationships. • Percentage and unit conversions, e.g., in the context of complex measurement problems involving quantities with derived or compound units (such as mg/mL, kg/ m3, acre-feet, etc.). • Basic function concepts, e.g., by interpreting the features of a graph in the context of an applied problem. • Concepts and skills of geometric measurement e.g., when analyzing a diagram or schematic. • Concepts and skills of basic statistics and probability (see grades 6–8.SP) • Performing rational number arithmetic fluently. For context, read Table 1 on Page 8 of the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** Students are using their knowledge and skills from grades 6-8 and are building on those skills when completing this program. Throughout the textbook, the students are constantly reviewing their math skills from grades 6-8 as well as skills being learned in previous lessons. The problems are at a level of sophistication to high school students. For example, in chapters 3, 4, 5, 6, 7, 10 and 13, students must rely on skills learned in grades 6-8.	**__X__Meets** **____Does Not Meet Insufficient Evidence**
Metric NN1D: **Materials base courses on the content specified in the Standards.** **How to Find the Evidence:** Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, and lessons in both student and teacher materials. For context, read Criterion #3a in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** All of the standards are addressed in this program. In the margin of the teachers edition, it outlines which standard is being covered when. Standards are being addressed and readdressed throughout the textbook. This can be found at the beginning of each lesson, for example page 364.	**__X__Meets** **____Does Not Meet Insufficient Evidence**
Metric NN1E: **Materials give all students extensive work with course-level problems.** **How to Find the Evidence:** Evaluate both student and teacher materials. If the materials provide resources for differentiated learning, consider whether lower-performing students have opportunities to engage with course-level problems. Also consider whether higher-performing students are given opportunities to learn current course-level content in greater depth. For context, read Criterion #3b in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** Pg. 237 At the beginning of each lesson, in the teachers edition of the textbook, there is a resources section that guides teachers on differentiating and scaffolding of the lesson. Pg. 240 In each lesson, the teachers edition also gives suggestion for different homework problems based on students level of understanding.	**___X_Meets** **____Does Not Meet Insufficient Evidence**

Metric NN1F: **Materials relate course-level concepts explicitly to prior knowledge from earlier grades or courses. The materials are designed so that prior knowledge becomes reorganized and extended to accommodate the new knowledge.** **How to Find the Evidence:** Evaluate student and teacher materials, looking for problems that involve extending the knowledge learned in earlier grades and courses. NOTE: An example of evaluating this Criterion might be to look at whether materials connect the equation of a circle with the distance formula and the Pythagorean theorem. For context, read Criterion #3c in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence- pg. 393** In the Teacher edition and student edition, at the top of each lesson, there is a "Then, Now, Why" section that shows the focus of the lesson. There is also a "Focus" section that shows the vertical alignment.	**_X___Meets** **____Does Not Meet Insufficient Evidence**
Metric NN1G: **Materials include learning objectives that are visibly shaped by CCSSM cluster and domain headings.** **How to Find the Evidence:** Select several clusters from the course being evaluated. Evaluate teacher and student materials in relation to these clusters. For context, read Criterion #4a in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** The objectives for each lesson are clearly stated in the textbook at the beginning of each lesson. The CCSS and the MP's are also listed.	**__X__Meets** **____Does Not Meet Insufficient Evidence**
Metric NN1H: **Materials include problems and activities that serve to connect two or more clusters in a domain, or two or more domains in a category, or two or more categories, in cases where these connections are natural and important.** **How to Find the Evidence:** In the course being evaluated, choose two or more clusters, two or more domains, or two or more categories for which connections are natural and important. Evaluate the units, chapters, and lessons that deal with the chosen topics, looking for problems and activities that serve to connect the chosen clusters or domains. NOTE: An example of evaluating this Criterion might be to look at whether materials include problems in which students analyze a situation by building a function, graphing it, and using it to create and solve an equation. For context, read Criterion #4b in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** Pg. 255 At the beginning of each lesson, the domains are listed and in the majority of the lessons, two or more clusters in a domain are included. These connections naturally flow together and are important in scaffolding learning.	**__X__Meets** **____Does Not Meet Insufficient Evidence**

Non-Negotiable 1: Focus and Coherence- Materials must focus coherently on the Widely Applicable Prerequisites in a way that is consistent with the progressions in the Standards.	__X__Meets ____Does Not Meet
Metric NN 1: If all metrics 1A–1H were rated as Meets, then rate Non-Negotiable 1 as Meets. If one or more metrics were rated as Does Not Meet/Insufficient Evidence, then rate Non-Negotiable 1 as Does Not Meet. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)** **Before moving to Alignment Criterion 1, record the final Meets or Does Not Meet rating in the Evaluation Summary.**	**Strengths/Weaknesses** The text is completely aligned to the CCSS and the WAP are present throughout.

Now continue by evaluating Alignment Criterion 1 for Rigor and Balance.

Directions for Alignment Criterion 1

Rigor and Balance

Alignment Criterion 1: **Rigor and Balance- Materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.** The Standards set expectations for attention to all three aspects of rigor: conceptual understanding, procedural skill and fluency, and applications. Thus, materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.	The Standards set expectations for attention to all three aspects of rigor: conceptual understanding, procedural skill and fluency, and applications. Thus, materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations. • Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_HS_Spring_2013_FINAL1.pdf) • Widely Applicable Prerequisites for College and Careers (http://achievethecore.org/prerequisites) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion:** Alignment Criterion 1 is rated as Meets or Does Not Meet. To rate Alignment Criterion 1, first rate metrics 1A, 1B, and 1C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). For each metric, guiding questions are provided to aid in gathering evidence. Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 1 if the materials rate 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as rigor and balance, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.

AC Metric 1A: **The materials support the development of students' conceptual understanding of key mathematical concepts, especially where called for in specific content Standards or cluster headings.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Widely Applicable Prerequisites that relate specifically to conceptual understanding to use throughout the questions associated with this metric. NOTE: Some examples of clusters or Standards that call for conceptual understanding include: N-RN.A.1, A-APR.B, A-REI.A.1, A-REI.D.10, A.REI.D.11, F.IF.A.1, F-LE.A.1, G.SRT.A.2, G-SRT.C.6, S-ID.C.7 For context, read Criterion #2a in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	• Choose a cluster/Standard from the Widely Applicable Prerequisites that is aligned to each aspect of rigor and use it to evaluate these metrics. It is most helpful if the same clusters and Standards are chosen for all of the programs being evaluated. (Guidance in choosing clusters/Standards is included in "How to Find the Evidence" below.)	**Use the questions for AC Metric 1A to evaluate Metric 1A. Record evidence for each question and rate Metric 1A.** **__X__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Is conceptual understanding attended to thoroughly where the Standards set explicit expectations for understanding or interpreting? Evaluate lessons, chapter/unit assessments and homework assignments, paying attention to work aligned to Standards that explicitly call for understanding or interpreting.	**Evidence-** The problems are based specifically on the Standards.	
Do the materials feature high-quality conceptual problems and conceptual discussion questions? Evaluate lessons, chapter/unit assessments, and homework assignments. NOTE: Examples of conceptual problems might include such questions as "What is the maximum value of the function f(t) = 5 – t2 ?" or "Is √2 a polynomial? How about ½(x + √2)+ ½ (-x + √2)?"	**Evidence-** In each section, there are "H.O.T" problems that require higher order thinking.	
Do the materials feature opportunities to identify correspondences across mathematical representations? Evaluate lessons, chapter/unit assessments and homework assignments. NOTE: An example of evaluating this metric might include looking at whether materials support students in identifying correspondences among the expression that defines a function, the graph that shows the relationship, and the behavior of the phenomenon being modeled (if any).	**Evidence-** In each lesson, there is a "multiple representation" problem that require students to have an understanding of different ways to represent the same problem.	

AC Metric 1B: **The materials are designed so that students attain the fluencies and procedural skills required by the Standards.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Widely Applicable Prerequisites that relate specifically to fluency and procedural skill to use throughout the questions associated with this metric. NOTE: Some examples of Standards that call for procedural skill and fluency include: A-SSE.A.1b, A-SSE.2, A-APR.A.1, A-APR.C.6, F-BF.B.3, G-GPE.B.4, G-GPE.B.5, G-GPE.B.7, G-CO.A.1, G-SRT.B.5 For context, read Criterion #2b in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).		**Use the questions for AC Metric 1B to evaluate Metric 1B. Record evidence for each question and rate Metric 1B.** **__X__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Is progress toward fluency and procedural skill interwoven with the student's developing conceptual understanding of the skills in question? Evaluate lessons, chapter/unit assessments, daily routines, and homework assignments for evidence that the development of fluency and procedural skill is supported by conceptual understanding.	**Evidence-** In each lesson, the new vocabulary is identified and defined. Anytime there is a vocabulary word that shows up again. it is referenced and highlighted in the margin. The glossary is in English and Spanish and includes diagrams.	
Are purely procedural problems and exercises present that include cases in which opportunistic strategies are valuable and generic cases that require efficient and general procedures present? Evaluate lessons, chapter/unit assessments, daily routines, and homework assignments. NOTE: Problems in which opportunistic strategies are valuable might include such examples as solving x2 + 5 = 49 + 5 or (3x – 2)2 = 6x – 4. Generic cases that require efficient and general procedures might include such problems as solving c + 8 – c2 = 3(c – 1)2 – 5).	**Evidence-** In each chapter, there is 1-2 lab sections that lead from basic understanding to more complex thought processes that are not just procedural type questions. "Design" and "Reasoning" questions require higher level thinking.	
AC Metric 1C: **The materials are designed so that teachers and students spend sufficient time working with engaging applications, without losing focus on the Widely Applicable Prerequisites.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Widely Applicable Prerequisites that relate specifically to application to use throughout the questions associated with this metric. NOTE: Some examples of clusters or Standards that call for application include: N-Q.A, A-SSE.B.3, A-REI.D.11, F-IF.B, F-IF.C.7, F-BF.A.1, G-SRT.C.8, S-ID.A.2, S-IC.A.1 For context, read Criterion #2c in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).		**Use the questions for AC Metric 1C to evaluate Metric 1C. Record evidence for each question and rate Metric 1C.** **__X__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**

Are there single- and multi-step contextual problems, including non-routine problems, that develop the mathematics of the course, afford opportunities for practice, and engage students in problem solving? Do the problems attend thoroughly to those places in the content Standards where expectations for multi-step and real-world problems are explicit? Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** Throughout the text, there are single- and multi-step contextual problems, including real life problems.	
Do application problems particularly stress applying the Widely Applicable Prerequisites? Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** The WAP are listed and used in almost every lesson throughout the book.	
Are there ample opportunities for students to engage with modeling problems? Do materials require students to use both individual parts of the modeling cycle as well as the full modeling cycle? Read the pages on High School—Modeling in the Standards for Mathematics (pp. 72 and 73). Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** Each lesson starts with an application problem, then moves to example problems, then to actual exercise problems.	
Alignment Criterion 1: Materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations. **AC 1:** Materials must earn at least 5 of 6 points to meet this Alignment Criterion. If materials earn less than 5 points, the Criterion has not been met. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)** **Before moving to Alignment Criterion 2, record the final Meets or Does Not Meet rating in the Evaluation Summary.**	**__X__Meets** **____Does Not Meet** **Strengths/Weaknesses:** The materials provide extra help for struggling students as well as problems to push the advanced students.	

Alignment Criterion 2: **Standards for Mathematical Practice- Materials must demonstrate authentic connections between content Standards and practice Standards.** The Standards require that designers of instructional materials connect the mathematical practices to mathematical content in instruction. Thus, materials must demonstrate authentic connections between content Standards and practice Standards.	The Standards require that designers of instructional materials connect the mathematical practices to mathematical content in instruction. Thus, materials must demonstrate authentic connections between content Standards and practice Standards. **Required Materials**: • Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_HS_Spring_2013_FINAL1.pdf) • Widely Applicable Prerequisites for College and Careers (http://achievethecore.org/prerequisites) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion:** Alignment Criterion 2 is rated Meets or Does Not Meet. To rate Alignment Criterion 2, first rate metrics 2A, 2B, and 2C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). For each metric, guiding questions are provided to aid in gathering evidence. Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 2 if the materials rate 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as mathematical practices, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.
AC Metric 2A: **Materials address the practice Standards in such a way as to enrich the Widely Applicable Prerequisites; practices strengthen the focus of the course instead of detracting from it, in both teacher and student materials.** **How to Find the Evidence:** Familiarize yourself with the Widely Applicable Prerequisites. Evaluate teacher and student materials for evidence that the mathematical practices support and connect to the focus of the course. NOTE: An example of evaluating this Criterion might include looking at whether materials use regularity in repeated reasoning to illuminate formal algebra as well as functions, particularly recursive definitions of functions. For context, read Criterion #6 in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** Each chapter starts with a vertical alignment. The lessons build upon themselves to mirror the vertical alignment. The practice standards are listed in every unit and the WAP are required to complete the problems throughout the textbook.	**___X_Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
AC Metric 2B: **Materials attend to the full meaning of each practice Standard.** **How to Find the Evidence:** For context, read Criterion #7 in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).		**Use the questions for AC Metric 2B to evaluate Metric 2B. Record evidence for each question and rate Metric 2B.** **_X___Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**

Over the course of any given year of instruction, is each mathematical practice Standard meaningfully present in the form of assignments, activities, or problems that stimulate students to develop the habits of mind described in the practice Standard? Evaluate lessons, chapter/ unit assessments, and homework assignments for evidence of each mathematical practice being meaningfully present in instruction.	**Evidence- pg. 478** The MPs are listed throughout the book in each lesson and are accurate.	
Are teacher-directed materials that explain the role of the practice Standards in the classroom and in students' mathematical development included? Are alignments to practice Standards accurate? Evaluate teacher materials, paying attention to explanations of the role of the practice Standards in the classroom and in students' mathematical development. Evaluate documents aligning lessons to practice Standards for accuracy. NOTE: Examples to look for when evaluating this metric might include the following: a highly scaffolded problem should not be aligned to MP.1; or a problem that directs a student to use a calculator should not be aligned to MP.5; or a problem about merely extending a pattern should not be aligned to MP.8.	**Evidence-** In each lesson, there is a "Teach" section that directs the teachers to make sure the standards and practices are being covered. It gives helpful hints as to common mistakes that can be made. Pg. 486: CCSS questions are available to reinforce teaching of the mathematical practices. The teachers edition of the textbook describes how the question relates to the CCSS.	
AC Metric 2C: **Materials support the Standards' emphasis on mathematical reasoning.** **How to Find the Evidence:** For context, read Criterion #8 in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).		**Use the questions for AC Metric 2C to evaluate Metric 2C. Record evidence for each question and rate Metric 2C.** **__X__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Do the materials support students in constructing viable arguments and critiquing the arguments of others concerning course-level mathematics that is detailed in the content Standards? Read Standard for Mathematical Practice 3. Evaluate teacher and student materials to ensure that students are given opportunities to reason with grade-level mathematics.	**Evidence-** In some of the labs, students are working in pairs or groups and are required to work together to form a solution. This gives students opportunity to construct arguments and critique each others reasoning.	
Do the materials support students in producing not only answers and solutions, but also, in a course-appropriate way, arguments, explanations, diagrams, mathematical models, etc., especially in the Widely Applicable Prerequisites? Familiarize yourself with the Widely Applicable Prerequisites. Evaluate teacher and student materials to understand the types of work students are expected to produce.	**Evidence-** Proofs and constructions are present throughout the lessons.	
Do materials explicitly attend to the specialized language of mathematics? Is the language of argument, problem solving, and mathematical explanations taught rather than assumed? Evaluate teacher and student materials, paying attention to how mathematical language is taught. NOTE: An example of evaluating this Criterion might include looking at whether students are supported in: basing arguments on definitions; using the method of providing a counter example; or recognizing that examples alone do not establish a general statement.	**Evidence- Pg. 416** There is a vocabulary list in each section. There is a review vocabulary box in many sections. There is a key vocabulary list at the end of each chapter. As well as a vocabulary check at the end of each chapter.	

Alignment Criterion 2: Materials must demonstrate authentic connections between content Standards and practice Standards. **AC 2:** Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 points, the Criterion has not been met. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewers only.)** **Before moving to Alignment Criterion 3, record the final Meets or Does Not Meet rating in the Evaluation Summary.**		**__X__Meets** **____Does Not Meet** **Strengths/Weaknesses:** **Vocabulary is throughout the text. Practice standards are listed in each lesson.**
Alignment Criterion 3: **Access to the Standards for All Students- Materials must provide supports for English Language Learners and other special populations.** Because Standards are for all students, alignment requires thoughtful support to ensure all students are able to meet the Standards. Thus, aligned materials must provide supports for English Language Learners and other special populations.	Because Standards are for all students, alignment requires thoughtful support to ensure all students are able to meet the Standards. Thus, aligned materials must provide supports for English Language Learners and other special populations. **Required Materials:** • Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math Publishers_Criteria_HS_Spring_2013_FINAL1.pdf) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion:** Alignment Criterion 3 is rated as Meets or Does Not Meet. To rate Alignment Criterion 3, first rate metrics 3A, 3B, and 3C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 3 if the materials rate 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as support for special population, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.
AC Metric 3A: **Support for English Language Learners and other special populations is thoughtful and helps those students meet the same Standards as all other students. The language in which problems are posed is carefully considered.** **How to Find the Evidence:** Evaluate teacher and student materials, paying attention to supports offered for special populations.	**Evidence-** The online glossary has 13 languages. The text glossary has 2 languages (English and Spanish). There is a differentiated instruction for ELL students before every chapter. (pg. 458f) (pg. 406) Prior to each chapter, the vocab list gives the English words in Spanish and the page those words appear on.	**__X__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**

AC Metric 3B: **Materials provide appropriate level and type of scaffolding, differentiation, intervention, and support for a broad range of learners with gradual removal of supports, when needed, to allow students to demonstrate their mathematical understanding independently.** **How to Find the Evidence:** Evaluate teacher and student materials, paying attention to whether materials provide differentiation that will lead all learners to engage with on-grade-level content.	**Evidence-** At the beginning of each chapter, in the teachers edition of the text, there is an RTI section (pg. 459). There is a differentiated instruction section for each chapter (pg. 460). In each lesson there is a "scaffolding questions" section in the teacher's edition of the text.	**__X__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
AC Metric 3C: **Design of lessons recommends and facilitates a mix of instructional approaches for a variety of learners such as using multiple representations (e.g., including models, using a range of questions, checking for understanding, flexible grouping, pair-share).** **How to Find the Evidence:** Evaluate teacher materials, noting instructional approaches suggested for whole class and differentiated lessons and activities.	**Evidence-** There is a resources section at the bottom of each unit of the teacher's edition of the text. There are ideas of study organizers. (pg. 460-461)	**__X__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Alignment Criterion 3: Materials must provide supports for English Language Learners and other special populations. **AC 3** Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 points, the Criterion has not been met. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewers only.)** **Move to the Evaluation Summary and record the final Meets or Does Not Meet rating .**		**__X__Meets** **____Does Not Meet** **Strengths/Weaknesses:** Lots of support and differentiation.

Once an evaluation for alignment to the Shifts and major features of the CCSS has been conducted using Sections 1-3, it's important to evaluate for overall quality and best practices. A starting list of Indicators of Quality are suggested below. States, districts and others evaluating instructional materials are encouraged to add to this list to ensure materials reflect local contexts. For background information on some of the Indicators of Quality in this section, refer to pp.16–18 in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).

Indicators of Quality	Evidence- Give specific examples.	Rating: (Reviewer only.)
1. Lessons are thoughtfully structured and support the teacher in leading the class through the learning paths at hand, with active participation by all students in their own learning and in the learning of their classmates.	**Evidence-** The students are guided by the "Then, Now, Why". The problem sets start with a "Check for Understanding" section that has all of the answers in the back of the book with step-by-step solutions.	**(Reviewer only.)** **___X___ Yes** **_____ No**
2. The underlying design of the materials includes both problems and exercises. (In solving problems, students learn new mathematics, whereas in working exercises, students apply what they have already learned to build mastery.) Each problem or exercise has a purpose. **NOTE: This Criterion does not require that the problems and exercises be labeled as such.**	**Evidence-** When looking at the practice and problem solving section, the problems are organized and correlated to the examples in that section. The example problem is noted next to the problems so that the students know which example problem to look at when they need help.	**(Reviewer only.)** **__X____ Yes** **_____ No**
3. Design of assignments is not haphazard: exercises are given in intentional sequences in order to strengthen students' mathematical understanding.	**Evidence-** The problems start off easier and gradually get more difficult. They are sequenced well.	**(Reviewer only.)** **__X____ Yes** **_____ No**
4. There are separate teacher materials that support and reward teacher study including, but not limited to: discussion of the mathematics of the units and the mathematical point of each lesson as it relates to the organizing concepts of the unit, discussion on student ways of thinking and anticipating a variety of students responses, guidance on lesson flow, guidance on questions that prompt students thinking, and discussion of desired mathematical behaviors being elicited among students.	**Evidence-** At the beginning of each chapter, there is a professional development section that teachers can access to get more support. In the margins of the teacher's edition of the textbook there are a lot of study tips to aid teachers.	**(Reviewer only.)** **___X___ Yes** **_____ No**
5. Manipulatives suggested in the materials are faithful representations of the mathematical objects they represent and are connected to written methods.	**Evidence-** 9-5 (pg. 670-671) Reflective mirrors. There are not very many manipulatives presented in the book, but when they are, they are faithful representations of what they look like and what they are used for.	**(Reviewer only.)** **__X____ Yes** **_____ No**

6. Materials include a variety of curriculum-embedded assessm . Examples include pre-, formative, summative, and self-assessment resources.	**Evidence-** All are represented well in the textbook.	**(Reviewer only.)** **___X___ Yes** **_____ No**
7. Assessments contain aligned rubrics, answer keys, and scoring guidelines that provide sufficient guidance for interpreting student performance.	**Evidence-** There were no specific scoring guidelines. However, the assessments and answer keys do align.	**(Reviewer only.)** **___X___ Yes** **_____ No**
8. Materials assess student proficiency using methods that are accessible and unbiased, including the use of course-level language in student prompts.	**Evidence-** The tests model the text problems.	**(Reviewer only.)** **___X___ Yes** **_____ No**
9. Materials are carefully evaluated by qualified individuals, whose names are listed, in an effort to ensure freedom from mathematical errors and course-level appropriateness.	**Evidence-** All names and information can be found on Pg. T4-T7	**(Reviewer only.)** **___X___ Yes** **_____ No**
10. The visual design supports students in engaging thoughtfully with the subject. Navigation through the text is clear.	**Evidence-** The text is colorful and appeasing to the eye and is very well structured.	**(Reviewer only.)** **__X____ Yes** **_____ No**

Reviewer IMET Evaluation Summary **Title/Level: __Glencoe High School Math – Geometry 9-12__**

Publisher: ___McGraw-Hill_____ Copyright: ____2014____ ISBN:_978-0-07-663930-4_____

Reviewer ID # _____RW and DG_____ Date Review Completed:_March 8, 2016_____

Non-Negotiable Criteria-The Non-Negotiable must be met in order for the Non-Negotiable Alignment Criteria to be met overall.

Non- Negotiable 1: Focus and Coherence

__X___ Meets

_____ Does Not Meet

Non-Negotiable Overall:

___X__ Meets _____ Does Not Meet

Alignment Criteria- Each Alignment Criterion must be met with a sufficient number of points in order for Alignment Criteria to be labeled as "Meets" overall. The more points the materials receive on the Alignment Criteria, the better they are aligned.

Alignment Criterion 1: Rigor and Balance	Alignment Criterion 2: Standards of Mathematical Practice	Alignment Criterion 3: Access to Standards for All Learners
Points: ___6__ of 6 possible. (Materials must receive at least 5 of 6 points to align.)	**Points: ___6__ of 6 possible.** (Materials must receive at least 5 of 6 points to align.)	**Points: __6___ of 6 possible.** (Materials must receive at least 5 of 6 points to align.)
___X____ Meets	**___X____ Meets**	**___X____ Meets**
_____ Does Not Meet	**_____ Does Not Meet**	**_____ Does Not Meet**

Alignment Criteria Overall:

__X___ Meets _____ Does Not Meet

If the materials meet the Non-Negotiable Criterion and each Alignment Criterion, they are aligned to the Shifts and major features of the Standards. **Do the materials meet every Non-Negotiable and Alignment Criterion? __X___ Yes _____ No**

What are the specific areas of strength and weakness based on this evaluation? Publishers or others modifying or developing assessments can use this information to make improvements and/or to remedy gaps in the alignment of assessment materials.

There is minimal opportunity for cooperative learning and is mostly only present in the "Labs". There is not any errors analysis type of problems.

No list of postulates/theorems.
The title page for the "Student Handbook" is in the back of the book. The front of the book would be a better place.

The book has lots of resources for all types of learners.

In the teacher's edition, the answers for the additional problems are at the end of each unit instead of at the end of the book.

The book is straight traditional learning with lots of support. There is not a lot of opportunity for cooperative learning. No task based learning either.

2015-16 Mathematics Interim Review Recommendation & Summary

Publisher Name:	McGraw Hill
Title:	Precalculus
ISBN #	978007664203-8
Grade Level(s) or Course:	9-12
Reviewer ID:	SH, PVP

RECOMMENDED AS:

__X__ **Core Mathematics Program-** a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials. Substantial evidence clearly supports the designation of this program as Core.

_____ **Other Mathematics Program-** a program that substantially, but partially, meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for supplemental materials. Substantial evidence clearly supports the designation of this program as Other.

_____ **Component Mathematics Program-** a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs. Substantial evidence clearly supports the designation of this program as Component.

_____ **Intervention Program-** a program designed and intended to target and support students' specific needs. Substantial evidence clearly supports the designation of this program as Intervention.

_____ **Does not meet criteria** for recommendation as a Curricular Material or Online Resource for Mathematics.

EVIDENCE SUMMARY:

FOCUS- The course addresses all of the WAP standards for a fourth course and it extends to cover all the + standards.

COHERENCE- The text makes many connections to previous Algebra and Geometry courses. It is well organized and followed a logical sequence.

RIGOR- The text does a good job of teaching procedural skills and application, but it is not as strong on conceptual understanding.

CONCEPTUAL UNDERSTANDING- Conceptual understanding is addressed some of the multi-step and the H.O.T. problems. Some lessons have "explore" and "extend" mini-lessons that help develop conceptual understanding, but it is not integrated within each lesson.

MATHEMATICAL PRACTICES- The publisher does not specifically indicate where the practice standards are used in the text. There is evidence that they are addressed, but not at the level or rigor that the standards suggest.

ACCESSIBILITY OF STANDARDS TO ALL STUDENTS- There are resources, assignments suggestions, and teaching strategies included for all different types and levels of students.

OTHER:
The textbooks do not seem like they would hold up well to several years of use by students. The binding was cracking after just a few weeks of use.

More problems (where students learn new math) needs to be integrated in the assignments.

2015-16 Interim Mathematics Review

Mathematics Evaluation Tool – High School

Publisher: McGraw Hill Education - GLENCOE

Title of Material: PRECALCULUS

Author: CARTER et al

ISBN #: 9780076604203-8 TE **Copyright** 2014

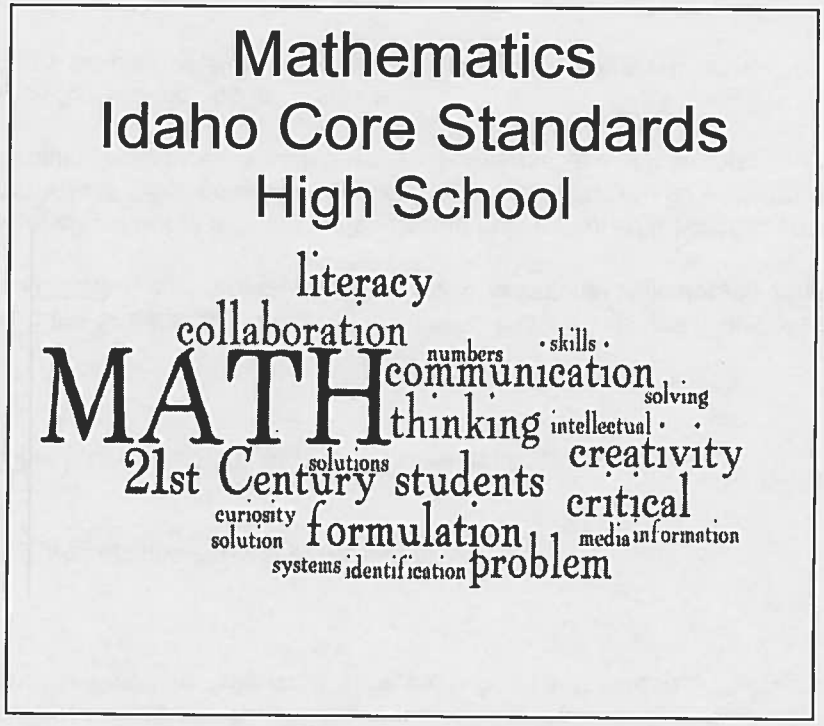
Reviewer ID: SH and PVP

Core Mathematics Program- a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Core.

Other Mathematics Program- a program that substantially, but partially, meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Other.

Component Mathematics Program- a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs.
Substantial evidence clearly supports the designation of this program as Component.

Intervention Program- a program designed and intended to target and support students' specific needs.
Substantial evidence clearly supports the designation of this program as Intervention.



- Evaluation Form adapted from Instructional Materials Evaluation Toolkit (IMET).

The IMET was developed by Student Achievement Partners. Educators may use or adapt. http://creativecommons.org/licenses/by/3.0/ Download this tool at http://achievethecore.org/IMET

Instructional Materials Evaluation Tool

Mathematics, High School

What Are the Purposes of the IMET?

This Math IMET is designed to help educators determine whether instructional materials are aligned to the Shifts and major features of the Common Core State Standards (CCSS). The substantial instructional Shifts (http://www.corestandards.org/other-resources/key-shifts-in-mathematics/) at the heart of the Common Core State Standards are:

- **Focus** strongly where the Standards focus
- **Coherence**: Think across grades and link to major topics within the grade
- **Rigor**: In major topics, pursue conceptual understanding, procedural skill and fluency, and application with equal intensity.

The IMET draws directly from the following documents:

- Common Core State Standards for Mathematics (www.corestandards.org/Math)
- Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_ HS_Spring_2013_FINAL1.pdf)

When to use the IMET

1. Purchasing materials: Many factors go into local purchasing decisions. Alignment to the Standards is a critical factor to consider. This tool is designed to evaluate alignment of instructional materials to the Shifts and the major features of the CCSS. It also provides suggestions of additional indicators to consider in the materials evaluation and purchasing process
2. Evaluating materials currently in use: The IMET can be used to analyze the degree of alignment of existing materials and help to highlight specific, concrete flaws in alignment. Even where materials and tools currently in use fail to meet one or more of these criteria, the pattern of failure is likely to be informative. States and districts can use the evaluation to create a thoughtful plan to modify or combine existing resources in such a way that students' actual learning experiences approach the focus, coherence, and rigor of the Standards.
3. Developing programs: Those developing new programs can use this tool as guidance for creating aligned curricula.

Please note this tool was designed for evaluating comprehensive curricula (including any supplemental or ancillary materials), but it was not designed for the evaluation of standalone supplemental materials.

Who Uses the IMET?

Evaluating instructional materials requires both subject-matter and pedagogical expertise. Evaluators should be well versed in the Standards (www.corestandards.org/Math) for all grades in which materials are being evaluated. This includes understanding the Widely Applicable Prerequisites (www.achievethecore.org/prerequisites), how the content fits into the progressions in the Standards (www. achievethecore.org/progressions), and the expectations of the Standards with respect to conceptual understanding, procedural skill and fluency, and application. Evaluators also should be familiar with the substantial instructional Shifts (http://www.corestandards.org/other-resources/key-shifts-in-mathematics/) of Focus, Coherence and Rigor that are listed above.

Getting Started

Prior to Evaluation

Assemble all of the materials necessary for the evaluation. It is essential for evaluators to have materials for all grades covered by the program, as some crit[illegible]cannot be rated without having access to each grade. In ad[illegible]n, each evaluator should have a reference copy of the Comm[illegible]Core State Standards for Mathematics (CCSSM) and the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).

Before conducting the evaluation itself, it is important to develop a protocol for the evaluation process. The protocol should include having evaluators study the Publishers' Criteria and the IMET. It will also be helpful for evaluators to get a sense of each program overall before beginning the process. At a minimum, this would include reading the front matter of the text, looking at the table of contents and paging through multiple chapters.

Sections 1-3 below should be completed to produce a comprehensive picture of the strengths and weaknesses of the materials under evaluation. Information about areas in need of improvement or supplementation should be shared with internal and external stakeholders.

Navigating the Tool

Begin with Section 1: Non-Negotiable Alignment Criteria

- The Non-Negotiable Alignment Criteria must each be met in full for materials to be considered aligned to the Shifts and the major features of the Common Core State Standards. Each Non-Negotiable Alignment Criterion has one or more metrics associated with it; every one of these metrics must be met in order for the criterion as a whole to be met.

- Examine the relevant materials and use evidence to rate the materials against each criterion and its associated metric(s).

- Record and explain the evidence upon which the rating is based.

Continue to Section 2: Alignment Criteria

- The Alignment Criteria must each be met for materials to be considered aligned to the Shifts and the major features of the Common Core State Standards. Each Alignment Criterion has one or more metric associated with it; a specific number of these metrics must be met or partially met in order for the criterion as a whole to be met.

- Examine the materials in relation to these criteria, assigning each metric a point value. Rate the criterion as "Meets" or "Does Note Meet" based on the number of points assigned. The more points the materials receive on the alignment Criteria, the better they are aligned.

- Record and explain the evidence upon which the rating is based.

Proceed to Section 4: Indicators of Quality

- Indicators of Quality are important considerations that will help evaluators better understand the overall quality of instructional materials. These considerations are not criteria for alignment to the CCSS, but they provide valuable information about additional program characteristics. Evaluators may want to add their own indicators to the examples provided.

Directions for Non-Negotiable 1

Focus and Coherence

Criterion	Evidence- Give specific examples.	Rating: (Reviewer only.)
Non-Negotiable 1: Focus and Coherence- Materials must focus coherently on the Widely Applicable Prerequisites in a way that is consistent with the progressions in the Standards. Focus and coherence are the two major evidence-based design principles of the Common Core State Standards for Mathematics (CCSSM, p. 3). Focus is necessary in order to fulfill the ambitious promise the states have made to their students by adopting the Standards: greater achievement at the college and career-ready level; greater depth of understanding of mathematics; and a rich classroom environment in which reasoning, sense-making, applications, and a range of mathematical practices flourish. In high school courses, narrowing and deepening the curriculum creates a structure that ties topics together. Thus, materials must focus coherently on the Widely Applicable Prerequisites in a way that is consistent with the progressions in the Standards.	Focus and coherence are the two major evidence-based design principles of the Common Core State Standards for Mathematics (CCSSM, p. 3). Focus is necessary in order to fulfill the ambitious promise the states have made to their students by adopting the Standards: greater achievement at the college and career-ready level; greater depth of understanding of mathematics; and a rich classroom environment in which reasoning, sense-making, applications, and a range of mathematical practices flourish. In high school courses, narrowing and deepening the curriculum creates a structure that ties topics together. Thus, materials must focus coherently on the Widely Applicable Prerequisites in a way that is consistent with the progressions in the Standards. **Required Materials:** • Common Core State Standards for Mathematics (www.corestandards.org/wpcontent/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_HS_Spring_2013_FINAL1.pdf) • Widely Applicable Prerequisites for College and Careers (http://achievethecore.org/prerequisites) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion:** Non-Negotiable 1 is rated as Meets or Does Not Meet. To rate Non-Negotiable 1, first rate Metrics 1A–1H. Each of these eight metrics must be rated as Meets in order for Non-Negotiable 1 to be rated as Meets. Rate each metric 1A–1H as Meets or Does Not Meet/Insufficient Evidence. If the evidence examined shows that the Criterion is met, then mark the Criterion as Meets. If the evidence examined shows that the Criterion is not met—or if there is insufficient evidence to make a determination—then mark the Criterion as Does Not Meet/Insufficient Evidence. Support all ratings with evidence.

Metric NN1A: **In any single course, students spend at least 50% of their time on Widely Applicable Prerequisites.** **How to Find the Evidence:** Familiarize yourself with the Widely Applicable Prerequisites. Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, lessons, homework assignments, and assessments. (Evaluate both student and teacher materials.) Consider time spent on the Widely Applicable Prerequisites and judge qualitatively whether students and teachers using the materials as designed will devote the majority of time to the Widely Applicable Prerequisites For context, read Criterion #1 in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** The Widely Applicable Prerequisites outlined for 4th courses were met. This text does not spend 50% of its time on Widely Applicable Prerequisites as well it should not it is extending beyond them in order to prepare students for a college Calculus I course.	**__X__Meets** **____Does Not Meet Insufficient Evidence**
Metric NN1B: **Student work in Geometry involves significant work with applications/modeling and problems that use algebra skills.** **How to Find the Evidence:** Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, lessons, homework assignments, and assessments. (Evaluate both student and teacher materials. NOTE: Since Geometry contains relatively fewer Widely Applicable Prerequisites, this Criterion is important to help foster students' college and career readiness. Problems that use algebra skills might include, for example, algebraic geometry problems in a coordinate setting, or problems of measurement involving unknown quantities.	**Evidence-** This course includes Trigonometry (Ch 4 and 5), Conic Sections (Ch 7), Vectors (Ch 8), Polar Coordinates (Ch 9) which have a heavy emphasis on geometry problems integrated with algebra skills. There are also sections within other chapters that address this as well for example 10.3 Geometric Sequences and Series and 12.5 Area Under a Curve and Integration	**__X__Meets** **____Does Not Meet Insufficient Evidence**

Metric NN1C: **There are problems at a level of sophistication appropriate to high school (beyond mere review of middle school topics) that involve the application of knowledge and skills from grades 6-8.** **How to Find the Evidence:** Evaluate lessons, chapter/unit assessments, and homework assignments. NOTE: Problems should include application of the following topics from grades 6-8: • Ratios and proportional relationships. • Percentage and unit conversions, e.g., in the context of complex measurement problems involving quantities with derived or compound units (such as mg/mL, kg/ m3, acre-feet, etc.). • Basic function concepts, e.g., by interpreting the features of a graph in the context of an applied problem. • Concepts and skills of geometric measurement e.g., when analyzing a diagram or schematic. • Concepts and skills of basic statistics and probability (see grades 6–8.SP) • Performing rational number arithmetic fluently. For context, read Table 1 on Page 8 of the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** The problems in this text are an extension of topics that were built in previous courses. Many of these topics are incorporated throughout the text and it is expected that students will be fluent in these topics as they apply them to more advanced situations.	**__X__Meets** **____Does Not Meet Insufficient Evidence**
Metric NN1D: **Materials base courses on the content specified in the Standards.** **How to Find the Evidence:** Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, and lessons in both student and teacher materials. For context, read Criterion #3a in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** The plus (+) standards are linked to sections in the text on pgs. T11-T15. At the beginning of each chapter there is a chart that connects standards to individual lessons. Some topics are included in this text that are not part of the standards, but that would be expected of a Pre-Calculus text.	**__X__Meets** **____Does Not Meet Insufficient Evidence**
Metric NN1E: **Materials give all students extensive work with course-level problems.** **How to Find the Evidence:** Evaluate both student and teacher materials. If the materials provide resources for differentiated learning, consider whether lower-performing students have opportunities to engage with course-level problems. Also consider whether higher-performing students are given opportunities to learn current course-level content in greater depth. For context, read Criterion #3b in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** There are differentiated homework options in each lesson (for example pg. 115). The problems sets are organized from skills builidng to application problems. The problems on the H.O.T section would provide a challenge to higher students. However, by the time students reach Pre-Calculus they should not need a lot of differentiation. The pro	**__X__Meets** **____Does Not Meet Insufficient Evidence**

Metric NN1F: **Materials [illegible]e course-level concepts explicitly to prior knowledge from earlier grades or courses. The materials are designed so that prior knowledge becomes reorganized and extended to accommodate the new knowledge.** **How to Find the Evidence:** Evaluate student and teacher materials, looking for problems that involve extending the knowledge learned in earlier grades and courses. NOTE: An example of evaluating this Criterion might be to look at whether materials connect the equation of a circle with the distance formula and the Pythagorean theorem. For context, read Criterion #3c in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** This course is su[illegible]rted by previous courses and appropriately extends that learning to prepare students for Pre-Calculus. For example, trig concepts are extended to include circular angles. Function transformations are presented for isolated functions in Algebra 2 and are presented for all functions in Pre-Calculus.	**__X__Meets** **____Does Not Meet Insufficient Evidence**
Metric NN1G: **Materials include learning objectives that are visibly shaped by CCSSM cluster and domain headings.** **How to Find the Evidence:** Select several clusters from the course being evaluated. Evaluate teacher and student materials in relation to these clusters. For context, read Criterion #4a in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** Learning objectives are connected to the CCSSM at the beginning of the book and at the beginning of each chapter in the chapter planner.	**__X__Meets** **____Does Not Meet Insufficient Evidence**
Metric NN1H: **Materials include problems and activities that serve to connect two or more clusters in a domain, or two or more domains in a category, or two or more categories, in cases where these connections are natural and important.** **How to Find the Evidence:** In the course being evaluated, choose two or more clusters, two or more domains, or two or more categories for which connections are natural and important. Evaluate the units, chapters, and lessons that deal with the chosen topics, looking for problems and activities that serve to connect the chosen clusters or domains. NOTE: An example of evaluating this Criterion might be to look at whether materials include problems in which students analyze a situation by building a function, graphing it, and using it to create and solve an equation. For context, read Criterion #4b in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** There are many examples of problems and activities that connect two or more clusters. For example, Chapter 2 ties algebra concepts of factoring to graphing functions. Also, Chapter 6 connects solving systems of equations with writing constraints and with matrices.	**__X__Meets** **____Does Not Meet Insufficient Evidence**
Non-Negotiable 1: Focus and Coherence- Materials must focus coherently on the Widely Applicable Prerequisites in a way that is consistent with the progressions in the Standards.		**__X__Meets**

Metric NN 1. If all metrics 1A–1H were rated as Meets, then rate Non-Negotiable 1 as Meets. If one or more metrics were rated as Does Not Meet/Insufficient Evidence, then rate Non-Negotiable 1 as Does Not Meet. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)** **Before moving to Alignment Criterion 1, record the final Meets or Does Not Meet rating in the Evaluation Summary.**	**____Does Not Meet** **Strengths/Weaknesses** Strengths: This text covers the WAP standards that are not covered in Algebra 2 and it extends to the + standards. Weaknesses: Standards covered in each section are not easily visible.

Now continue by evaluating Alignment Criterion 1 for Rigor and Balance.

Directions for Alignment Criterion 1

Rigor and Balance

Alignment Criterion 1: **Rigor and Balance- Materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.** The Standards set expectations for attention to all three aspects of rigor: conceptual understanding, procedural skill and fluency, and applications. Thus, materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.	The Standards set expectations for attention to all three aspects of rigor: conceptual understanding, procedural skill and fluency, and applications. Thus, materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations. • Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_HS_Spring_2013_FINAL1.pdf) • Widely Applicable Prerequisites for College and Careers (http://achievethecore.org/prerequisites) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion:** Alignment Criterion 1 is rated as Meets or Does Not Meet. To rate Alignment Criterion 1, first rate metrics 1A, 1B, and 1C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). For each metric, guiding questions are provided to aid in gathering evidence. Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 1 if the materials rate 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as rigor and balance, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.

AC Metric 1A: **The materials support the development of students' conceptual understanding of key mathematical concepts, especially where called for in specific content Standards or cluster headings.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Widely Applicable Prerequisites that relate specifically to conceptual understanding to use throughout the questions associated with this metric. NOTE: Some examples of clusters or Standards that call for conceptual understanding include: N-RN.A.1, A-APR.B, A-REI.A.1, A-REI.D.10, A.REI.D.11, F.IF.A.1, F-LE.A.1, G.SRT.A.2, G-SRT.C.6, S-ID.C.7 For context, read Criterion #2a in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	• Choose a cluster/Standard from the Widely Applicable Prerequisites that is aligned to each aspect of rigor and use it to evaluate these metrics. It is most helpful if the same clusters and Standards are chosen for all of the programs being evaluated. (Guidance in choosing clusters/Standards is included in "How to Find the Evidence" below.)	**Use the questions for AC Metric 1A to evaluate Metric 1A. Record evidence for each question and rate Metric 1A.** **__X__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Is conceptual understanding attended to thoroughly where the Standards set explicit expectations for understanding or interpreting? Evaluate lessons, chapter/unit assessments and homework assignments, paying attention to work aligned to Standards that explicitly call for understanding or interpreting.	**Evidence-** Conceptual understanding is developed as exercises progress from simple to more conceptual in the H.O.T. problems. For example - Average rate of change in Lesson 1-4	
Do the materials feature high-quality conceptual problems and conceptual discussion questions? Evaluate lessons, chapter/unit assessments, and homework assignments. NOTE: Examples of conceptual problems might include such questions as "What is the maximum value of the function f(t) = 5 – t2 ?" or "Is √2 a polynomial? How about ½(x + √2)+ ½ (-x + √2)?"	**Evidence-** Each lesson includes a H.O.T. (Higher Order Thinking) problem section that includes various types of conceptual problems. For example - HOT problems on pg. 42.	
Do the materials feature opportunities to identify correspondences across mathematical representations? Evaluate lessons, chapter/unit assessments and homework assignments. NOTE: An example of evaluating this metric might include looking at whether materials support students in identifying correspondences among the expression that defines a function, the graph that shows the relationship, and the behavior of the phenomenon being modeled (if any).	**Evidence -** Some lessons include Multiple Representation problems that require students to represent a problem in multiple ways (for example - pg 146 requires students to complete a table, graph functions, and algebraically solve inequalities)	
AC Metric 1B: **The materials are designed so that students attain the fluencies and procedural skills required by the Standards.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Widely Applicable Prerequisites that relate specifically to fluency and procedural skill to use throughout the questions associated with this metric. NOTE: Some examples of Standards that call for procedural skill and fluency include: A-SSE.A.1b, A-SSE.2, A-APR.A.1, A-APR.C.6, F-BF.B.3, G-GPE.B.4, G-GPE.B.5, G-GPE.B.7, G-CO.A.1, G-SRT.B.5		**Use the questions for AC Metric 1B to evaluate Metric 1B. Record evidence for each question and rate Metric 1B.** **__X__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**

For context, read Criterion #2b in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).		
Is progress toward fluency and procedural skill interwoven with the student's developing conceptual understanding of the skills in question? Evaluate lessons, chapter/unit assessments, daily routines, and homework assignments for evidence that the development of fluency and procedural skill is supported by conceptual understanding.	**Evidence-** The problems in each section move from building skills problems to more conceptual problems.	
Are purely procedural problems and exercises present that include cases in which opportunistic strategies are valuable and generic cases that require efficient and general procedures present? Evaluate lessons, chapter/unit assessments, daily routines, and homework assignments. NOTE: Problems in which opportunistic strategies are valuable might include such examples as solving $x2 + 5 = 49 + 5$ or $(3x - 2)2 = 6x - 4$. Generic cases that require efficient and general procedures might include such problems as solving $c + 8 - c2 = 3(c - 1)2 - 5$).	**Evidence-** Problems are present in the text that allow for opportunistic strategies and that require general strategies. For example, pg. 145 #48-54 require opportunistic strategies and problems #58-61 and 65-68 require general strategies	
AC Metric 1C: **The materials are designed so that teachers and students spend sufficient time working with engaging applications, without losing focus on the Widely Applicable Prerequisites.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Widely Applicable Prerequisites that relate specifically to application to use throughout the questions associated with this metric. NOTE: Some examples of clusters or Standards that call for application include: N-Q.A, A-SSE.B.3, A-REI.D.11, F-IF.B, F-IF.C.7, F-BF.A.1, G-SRT.C.8, S-ID.A.2, S-IC.A.1 For context, read Criterion #2c in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).		**Use the questions for AC Metric 1C to evaluate Metric 1C. Record evidence for each question and rate Metric 1C.** **____Meets (2)** **__X__Partially Meets (1)** **____Does Not Meet (0)**
Are there single- and multi-step contextual problems, including non-routine problems, that develop the mathematics of the course, afford opportunities for practice, and engage students in problem solving? Do the problems attend thoroughly to those places in the content Standards where expectations for multi-step and real-world problems are explicit? Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** There are several single step and multi-step contextual problems in each section. There is some evidence of problems that develop the math of the course (for example pg. 229 #82).	
Do application problems particularly stress applying the Widely Applicable Prerequisites? Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** Most WAP standards are covered in earlier courses. This course uses those standards to extend to more involved problems.	
Are there ample opportunities for students to engage with modeling problems? Do materials require students to use both individual parts of the modeling cycle as well as the full modeling cycle? Read the pages on High School—Modeling in the Standards for Mathematics (pp. 72 and 73). Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** There are problems in each section that require students to use parts of the modeling cycle, but we didn't find any problems that included the full modeling cycle. For example, pg. 105 #68 requires students to formulate an equation and compute a	

	quantity from that equation but it doesn't require the remaining s[illegible])	
Alignment Criterion 1: Materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations. **AC 1:** Materials must earn at least 5 of 6 points to meet this Alignment Criterion. If materials earn less than 5 points, the Criterion has not been met. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)** **Before moving to Alignment Criterion 2, record the final Meets or Does Not Meet rating in the Evaluation Summary.**		**__X__Meets** **____Does Not Meet** **Strengths/Weaknesses:** Strengths: The problem sets integrate modeling problems within the procedural problems instead of grouping all these problems together. Weaknesses: There are not a lot of problems that help students develop the mathematics or that demonstrate the full modeling process.
Alignment Criterion 2: **Standards for Mathematical Practice- Materials must demonstrate authentic connections between content Standards and practice Standards.** The Standards require that designers of instructional materials connect the mathematical practices to mathematical content in instruction. Thus, materials must demonstrate authentic connections between content Standards and practice Standards.	The Standards require that designers of instructional materials connect the mathematical practices to mathematical content in instruction. Thus, materials must demonstrate authentic connections between content Standards and practice Standards. **Required Materials**: • Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_HS_Spring_2013_FINAL1.pdf) • Widely Applicable Prerequisites for College and Careers (http://achievethecore.org/prerequisites) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion:** Alignment Criterion 2 is rated as Meets or Does Not Meet. To rate Alignment Criterion 2, first rate metrics 2A, 2B, and 2C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). For each metric, guiding questions are provided to aid in gathering evidence. Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 2 if the materials rate 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as mathematical practices, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.

AC Metric 2A: **Materials address the practice Standards in such a way as to enrich the Widely Applicable Prerequisites; practices strengthen the focus of the course instead of detracting from it, in both teacher and student materials.** **How to Find the Evidence:** Familiarize yourself with the Widely Applicable Prerequisites. Evaluate teacher and student materials for evidence that the mathematical practices support and connect to the focus of the course. NOTE: An example of evaluating this Criterion might include looking at whether materials use regularity in repeated reasoning to illuminate formal algebra as well as functions, particularly recursive definitions of functions. For context, read Criterion #6 in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** In Precalculus most of the WAP standards have already been covered in other classes. This course enriches student understanding of those standards covered in previous courses. There are some problems in each lesson that address the practice standards and help strengthen students understanding of the math. For example pg. 230 #82 requires students to use a graphing calculator (SMP #5) and pg. 209 #30 addresses constructing viable arguments and critiquing others' reasoning (SMP #3)	**__X__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
AC Metric 2B: **Materials attend to the full meaning of each practice Standard.** **How to Find the Evidence:** For context, read Criterion #7 in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).		**Use the questions for AC Metric 2B to evaluate Metric 2B. Record evidence for each question and rate Metric 2B.** **____Meets (2)** **__X__Partially Meets (1)** **____Does Not Meet (0)**
Over the course of any given year of instruction, is each mathematical practice Standard meaningfully present in the form of assignments, activities, or problems that stimulate students to develop the habits of mind described in the practice Standard? Evaluate lessons, chapter/ unit assessments, and homework assignments for evidence of each mathematical practice being meaningfully present in instruction.	**Evidence-** The practice standards are used to solve some of the problems in each lesson, but they don't stimulate students to develop the habits of mind described in the practice standards. For example, pg. 128 #73 asks students to decide which of two possible solutions in correct. This relates to SMP #3 but doesn't require students to critique the reasoning of others, only to choose between two possible correct answers.	
Are teacher-directed materials that explain the role of the practice Standards in the classroom and in students' mathematical development included? Are alignments to practice Standards accurate? Evaluate teacher materials, paying attention to explanations of the role of the practice Standards in the classroom and in students' mathematical development. Evaluate documents aligning lessons to practice Standards for accuracy. NOTE: Examples to look for when evaluating this metric might include the following: a highly scaffolded problem should not be aligned to MP.1; or a problem that directs a student to use a calculator should not be aligned to MP.5; or a problem about merely extending a pattern should not be aligned to MP.8.	**Evidence-** There is no reference to the Standards for Mathematical Practices in this text.	

AC Metric 2C: **Materials support the Standards' emphasis on mathematical reasoning.** **How to Find the Evidence:** For context, read Criterion #8 in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).		**Use the questions for AC Metric 2C to evaluate Metric 2C. Record evidence for each question and rate Metric 2C.** **__X__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Do the materials support students in constructing viable arguments and critiquing the arguments of others concerning course-level mathematics that is detailed in the content Standards? Read Standard for Mathematical Practice 3. Evaluate teacher and student materials to ensure that students are given opportunities to reason with grade-level mathematics.	**Evidence-** Each problem set features a section called H.O.T. problems. Many of these problems require students to construct viable arguments. However, they are not required to critique the reasoning of others. For example pg. 229 #83 and 84 ask for constructing viable arguments.	
Do the materials support students in producing not only answers and solutions, but also, in a course-appropriate way, arguments, explanations, diagrams, mathematical models, etc., especially in the Widely Applicable Prerequisites? Familiarize yourself with the Widely Applicable Prerequisites. Evaluate teacher and student materials to understand the types of work students are expected to produce.	**Evidence-** The H.O.T. section includes problems that ask for arguments and explanations. Some problems also ask for diagrams and mathematical models. See above examples or pg. 265 #39.	
Do materials explicitly attend to the specialized language of mathematics? Is the language of argument, problem solving, and mathematical explanations taught rather than assumed? Evaluate teacher and student materials, paying attention to how mathematical language is taught. NOTE: An example of evaluating this Criterion might include looking at whether students are supported in: basing arguments on definitions; using the method of providing a counter example; or recognizing that examples alone do not establish a general statement.	**Evidence-** Course specific and appropriate language is used and defined in each section, for example section 4-4. Vocabulary is highlighted and defined with examples.	
Alignment Criterion 2: Materials must demonstrate authentic connections between content Standards and practice Standards. **AC 2:** Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 points, the Criterion has not been met. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewers only.)** **Before moving to Alignment Criterion 3, record the final Meets or Does Not Meet rating in the Evaluation Summary.**		**__X__Meets** **____Does Not Meet** **Strengths/Weaknesses:** Strengths: The H.O.T. problems in each section provide opportunities for students to use the practice standards, as do some of the multi-step problems. Weaknesses: The full rigor of the practice standards are not supported by this text. Teacher materials do not provide

		alignment to the practice standards.
Alignment Criterion 3: **Access to the Standards for All Students- Materials must provide supports for English Language Learners and other special populations.** Because Standards are for all students, alignment requires thoughtful support to ensure all students are able to meet the Standards. Thus, aligned materials must provide supports for English Language Learners and other special populations.	Because Standards are for all students, alignment requires thoughtful support to ensure all students are able to meet the Standards. Thus, aligned materials must provide supports for English Language Learners and other special populations. **Required Materials:** • Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math Publishers_Criteria_HS_Spring_2013_FINAL1.pdf) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion:** Alignment Criterion 3 is rated as Meets or Does Not Meet. To rate Alignment Criterion 3, first rate metrics 3A, 3B, and 3C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 3 if the materials rate 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as support for special population, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.
AC Metric 3A: **Support for English Language Learners and other special populations is thoughtful and helps those students meet the same Standards as all other students. The language in which problems are posed is carefully considered.** **How to Find the Evidence:** Evaluate teacher and student materials, paying attention to supports offered for special populations.	**Evidence-** There are suggestions at the start of each chapter for ELL and there are some suggestions throughout the chapters. There is an online glossary in 13 different languages and most sections are available by audio. Some spanish resources are included with the teacher resources.	**__X__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
AC Metric 3B: **Materials provide appropriate level and type of scaffolding, differentiation, intervention, and support for a broad range of learners with gradual removal of supports, when needed, to allow students to demonstrate their mathematical understanding independently.** **How to Find the Evidence:** Evaluate teacher and student materials, paying attention to whether materials provide differentiation that will lead all learners to engage with on-grade-level content.	**Evidence-** Suggestions for differentiated instruction are included in each section. At this level, there is not as much need for scaffolding, differentiation and intervention	**__X__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**

AC Metric 3C: **Design of lessons recommends and facilitates a mix of instructional approaches for a variety of learners such as using multiple representations (e.g., including models, using a range of questions, checking for understanding, flexible grouping, pair-share).** **How to Find the Evidence:** Evaluate teacher materials, noting instructional approaches suggested for whole class and differentiated lessons and activities.	**Evidence-** There are problems that require multiple approaches. There are teaching suggestions in each lesson for different approaches to the lessons that would reach a variety of learners.	**__X__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Alignment Criterion 3: Materials must provide supports for English Language Learners and other special populations. **AC 3** Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 points, the Criterion has not been met. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewers only.)** **Move to the Evaluation Summary and record the final Meets or Does Not Meet rating .**		**__X__Meets** **____Does Not Meet** **Strengths/Weaknesses:** Strengths: Each chapter and lesson includes suggestions for different types of learners and well as resources that will help ELL and other special populations.

Once an evaluation for alignment to the Shifts and major features of the CCSS has been conducted using Sections 1-3, it's important to evaluate for overall quality and best practices. A starting list of Indicators of Quality are suggested below. States, districts and others evaluating instructional materials are encouraged to add to this list to ensure materials reflect local contexts. For background information on some of the Indicators of Quality in this section, refer to pp.16–18 in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).

Indicators of Quality	**Evidence- Give specific examples.**	**Rating: (Reviewer only.)**
1. Lessons are thoughtfully structured and support the teacher in leading the class through the learning paths at hand, with active participation by all students in their own learning and in the learning of their classmates.	**Evidence-** Lessons start out with then, now and why statements, then step-by-step examples of how to do problems. Lessons are thorough and detailed. The sequence is logical.	**(Reviewer only.)** **___X___ Yes** **_____ No**

2. The underlying design of the materials includes both problems and exercises. (In solving problems, students learn new mathematics, whereas in working exercises, students apply what they have already learned to build mastery.) Each problem or exercise has a purpose. NOTE: This Criterion does not require that the problems and exercises be labeled as such.	**Evidence-** While there are a[illegible]ation problems mixed in with procedural problems, these problems do not teach new math, they just apply math already learned.	**(Reviewer only.)** **___X___ Yes** **_____ No**
3. Design of assignments is not haphazard: exercises are given in intentional sequences in order to strengthen students' mathematical understanding.	**Evidence-** Problems are sequences from easy to harder and from procedural to application to conceptual	**(Reviewer only.)** **___X___ Yes** **_____ No**
4. There are separate teacher materials that support and reward teacher study including, but not limited to: discussion of the mathematics of the units and the mathematical point of each lesson as it relates to the organizing concepts of the unit, discussion on student ways of thinking and anticipating a variety of students responses, guidance on lesson flow, guidance on questions that prompt students thinking, and discussion of desired mathematical behaviors being elicited among students.	**Evidence-** Each chapter has a chapter planner, focus on mathematical content and suggestions for assessment, intervention, and differentiated instruction.	**(Reviewer only.)** **___X___ Yes** **_____ No**
5. Manipulatives suggested in the materials are faithful representations of the mathematical objects they represent and are connected to written methods.	**Evidence-** Graphing calculators are used throughout the text. Other manipulatives aren't applicable to this course.	**(Reviewer only.)** **___X___ Yes** **_____ No**
6. Materials include a variety of curriculum-embedded assessments. Examples include pre-, formative, summative, and self-assessment resources.	**Evidence-** There are chapter tests, quizzes, pre-requisite skills quizzes, mid-chapter assessments and practice tests. These are included in the textbook as well as online.	**(Reviewer only.)** **___X___ Yes** **_____ No**
7. Assessments contain aligned rubrics, answer keys, and scoring guidelines that provide sufficient guidance for interpreting student performance.	**Evidence-** Answers to all exercises and assessments are included in the teacher edition. The esolutions includes full solutions for each problem.	**(Reviewer only.)** **___X___ Yes** **_____ No**

8. Materials assess student proficiency using methods that are accessible and unbiased, including the use of course-level language in student prompts.	**Evidence-** Language on test questions is similar to that in the text. Online tests are available in spanish. Language is appropriate for this level.	**(Reviewer only.)** **___X___ Yes** **_____ No**
9. Materials are carefully evaluated by qualified individuals, whose names are listed, in an effort to ensure freedom from mathematical errors and course-level appropriateness.	**Evidence-** pg. T4-T5 list authors pg. T6 lists consultants pg. T7 lists reviewers	**(Reviewer only.)** **___X___ Yes** **_____ No**
10. The visual design supports students in engaging thoughtfully with the subject. Navigation through the text is clear.	**Evidence-** The chapters are clearly labeled, well-organized, and follow a predicatble format that allows students to navigate through each section.	**(Reviewer only.)** **__X____ Yes** **_____ No**

Reviewer IMET Evaluation Summary Title/Level: __Precalculus_____

Publisher: _McGraw Hill_____ Copyright: ____2014_____ ISBN:__978-0-07-664203-8___

Reviewer ID # __PVP, SNH_____ Date Review Completed:__Mar. 9, 2016_____

Non-Negotiable Criteria-The Non-Negotiable must be met in order for the Non-Negotiable Alignment Criteria to be met overall.

Non- Negotiable 1: Focus and Coherence

__X__ Meets

_____ Does Not Meet

Non-Negotiable Overall:

__X___ Meets _____ Does Not Meet

Alignment Criteria- Each Alignment Criterion must be met with a sufficient number of points in order for Alignment Criteria to be labeled as "Meets" overall. The more points the materials receive on the Alignment Criteria, the better they are aligned.

Alignment Criterion 1: Rigor and Balance	Alignment Criterion 2: Standards of Mathematical Practice	Alignment Criterion 3: Access to Standards for All Learners
Points: __5___ of 6 possible. **(Materials must receive at least 5 of 6 points to align.)**	**Points: __5___ of 6 possible.** **(Materials must receive at least 5 of 6 points to align.)**	**Points: ___6__ of 6 possible.** **(Materials must receive at least 5 of 6 points to align.)**
___X____ Meets	**___X____ Meets**	**___X____ Meets**
_____ Does Not Meet	**_____ Does Not Meet**	**_____ Does Not Meet**

Alignment Criteria Overall:

__X___ Meets _____ Does Not Meet

If the materials meet the Non-Negotiable Criterion and each Alignment Criterion, they are aligned to the Shifts and major features of the Core Standards. **Do the materials meet every Non-Negotiable and Alignment Criterion? __X___ Yes _____ No**

What are the specific areas of strength and weakness based on this evaluation? Publishers or others modifying or developing assessments can use this information to make improvements and/or to remedy gaps in the alignment of assessment materials.

Strengths:

- Lots of procedural and applied problems.
- The text is very well organized and easy to navigate.
- Teacher edition contains lots of helpful resources.
- Students using this text would be prepared for a calculus course.
- Online resources (eSolution guide and test materials) are helpful.

Weaknesses:

- Mathematical practice standards are not addressed in either the student or teacher editions.
- There are no problems that give students the opportunity to learn new mathematics through solving the problems.

2015-16 Mathematics Interim Review Recommendation & Summary

Publisher Name:	Origo Education
Title:	Stepping Stones Grade K
ISBN #	9781921959790
Grade Level(s) or Course:	Kindergarten
Reviewer ID:	K.C., C.N.

RECOMMENDED AS:

__X__ **Core Mathematics Program-** a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials. Substantial evidence clearly supports the designation of this program as Core.

_____ **Other Mathematics Program-** a program that substantially, but partially, meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for supplemental materials. Substantial evidence clearly supports the designation of this program as Other.

_____ **Component Mathematics Program-** a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs. Substantial evidence clearly supports the designation of this program as Component.

_____ **Intervention Program-** a program designed and intended to target and support students' specific needs. Substantial evidence clearly supports the designation of this program as Intervention.

_____ **Does not meet criteria** for recommendation as a Curricular Material or Online Resource for Mathematics.

EVIDENCE SUMMARY:

FOCUS- No topics are assessed before being introduced. Stepping Stones K covers all CCSS identified as the major work of this grade. It stays within Kindergarten level progression and matches the scope and sequence.

COHERENCE-
There are no previous grade levels to reference for Kindergarten.

RIGOR-
This program incorporates conceptual understanding, procedural skill and fluency, and applications.

CONCEPTUAL UNDERSTANDING-
Major clusters for Kindergarten are centered around conceptual rather than procedural understanding. High quality conceptual problems and discussions are featured.

MATHEMATICAL PRACTICES-
One or more mathematical practice standards are used in every lesson. These are stated in many different ways online.

ACCESSIBILITY OF STANDARDS TO ALL STUDENTS-
There are ELL resources provided in each module. Each lesson also includes whole group, small group, practice and differentiation activities.

OTHER:
Number Case with manipulatives is needed for a variety of the activities.

2015-16 Interim Mathematics Review

Mathematics Evaluation Tool Grades K-8

Publisher: Origo Education

Title of Material: Stepping Stones Grade K

Author: J. Burnett, C. Irons, R. Irons

ISBN #: 9781921959790 **Copyright** 2012

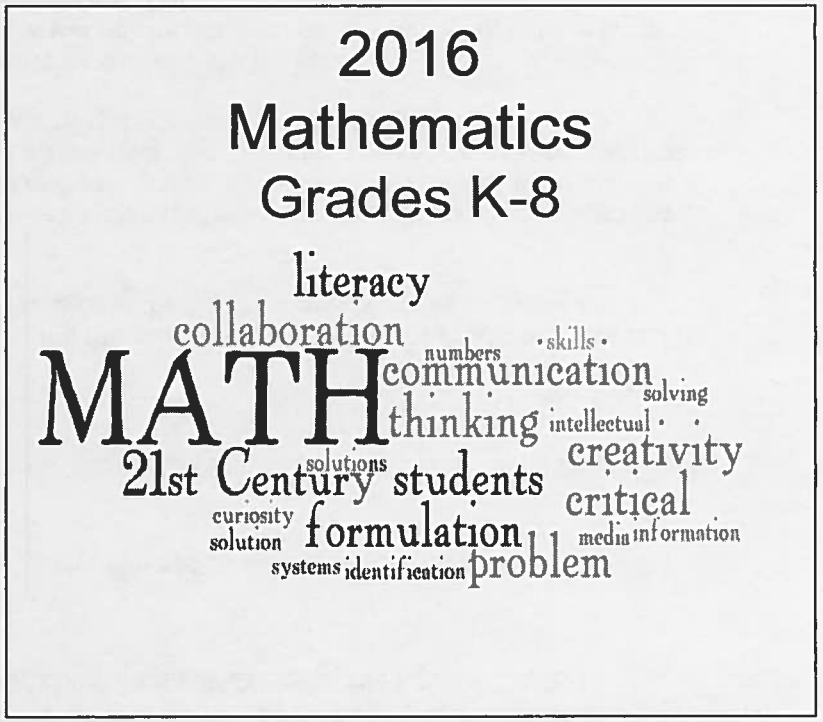
Reviewer ID: K.C, C.N.

Core Mathematics Program- a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Core.

Other Mathematics Program- a program that substantially, but partially, meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Other.

Component Mathematics Program- a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs.
Substantial evidence clearly supports the designation of this program as Component.

Intervention Program- a program designed and intended to target and support students' specific needs.
Substantial evidence clearly supports the designation of this program as Intervention.



- Evaluation Form adapted from Instructional Materials Evaluation Toolkit (IMET).

The IMET was developed by Student Achievement Partners. Educators may use or adapt. http://creativecommons.org/licenses/by/3.0/ Download this tool at http://achievethecore.org/IMET

Instructional Materials Evaluation Tool

Mathematics, Grades K-8

What Are the Purposes of the IMET?

This Math IMET is designed to help educators determine whether instructional materials are aligned to the Shifts and major features of the Common Core State Standards (CCSS). The substantial instructional Shifts (http://www.corestandards.org/other-resources/key-shifts-inmathematics/) at the heart of the Common Core State Standards are:

- **Focus** strongly where the Standards focus
- **Coherence**: Think across grades and link to major topics within the grade
- **Rigor**: In major topics, pursue conceptual understanding, procedural skill and fluency, and application with equal intensity.

The IMET draws directly from the following documents:

- Common Core State Standards for Mathematics (www.corestandards.org/Math)
- Publishers' Criteria for the Common Core State Standards in Mathematics grade K-8 (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)

When to use the IMET

1. Purchasing materials: Many factors go into local purchasing decisions. Alignment to the Standards is a critical factor to consider. This tool is designed to evaluate alignment of instructional materials to the Shifts and the major features of the CCSS. It also provides suggestions of additional indicators to consider in the materials evaluation and purchasing process.

2. Evaluating materials currently in use: The IMET can be used to analyze the degree of alignment of existing materials and help to highlight specific, concrete flaws in alignment. Even where materials and tools currently in use fail to meet one or more of these criteria, the pattern of failure is likely to be informative. States and districts can use the evaluation to create a thoughtful plan to modify or combine existing resources in such a way that students' actual learning experiences approach the focus, coherence, and rigor of the Standards.

3. Developing programs: Those developing new programs can use this tool as guidance for creating aligned curricula.
Please note this tool was designed for evaluating comprehensive curricula (including any supplemental or ancillary materials), but it was not designed for the evaluation of standalone supplemental materials.

Who Uses the IMET?

Evaluating instructional materials requires both subject-matter and pedagogical expertise. Evaluators should be well versed in the Standards (www.corestandards.org/Math) for all grades in which materials are being evaluated. This includes understanding the Major Work of the grade (www.achievethecore/focus), the Supporting and Additional work, how the content fits into the progressions in the Standards (www.achievethecore.org/progressions), and the expectations of the Standards with respect to conceptual understanding, procedural skill and fluency, and application. Evaluators also should be familiar with the substantial instructional Shifts (http:// www.corestandards.org/other-resources/key-shifts-in-mathematics/) of Focus, Coherence and Rigor that are listed above.

Getting Started

Prior to Evaluation

Assemble all of the materials necessary for the evaluation. It is essential for evaluators to have materials for all grades covered by the program, as some criteria cannot be rated without having access to each grade. In addition, each evaluator should have a reference copy of the Common Core State Standards for Mathematics (CCSSM) and the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013).

Before conducting the evaluation itself, it is important to develop a protocol for the evaluation process. The protocol should include having evaluators study the Publishers' Criteria and the IMET. It will also be helpful for evaluators to get a sense of each program overall before beginning the process. At a minimum, this would include reading the front matter of the text, looking at the table of contents and paging through multiple chapters.

Sections 1-3 below should be completed to produce a comprehensive picture of the strengths and weaknesses of the materials under evaluation. Information about areas in need of improvement or supplementation should be shared with internal and external stakeholders.

Navigating the Tool

Begin with Section 1: Non-Negotiable Alignment Criteria

- The Non-Negotiable Alignment Criteria must each be met in full for materials to be considered aligned to the Shifts and the major features of the Common Core State Standards. Each Non-Negotiable Alignment Criterion has one or more metrics associated with it; every one of these metrics must be met in order for the criterion as a whole to be met.

- Examine the relevant materials and use evidence to rate the materials against each criterion and its associated metric(s).

- Record and explain the evidence upon which the rating is based.

Continue to Section 2: Alignment Criteria

- The Alignment Criteria must each be met for materials to be considered aligned to the Shifts and the major features of the Common Core State Standards. Each Alignment Criterion has one or more metric associated with it; a specific number of these metrics must be met or partially met in order for the criterion as a whole to be met.

- Examine the materials in relation to these criteria, assigning each metric a point value. Rate the criterion as "Meets" or "Does Note Meet" based on the number of points assigned. The more points the materials receive on the alignment Criteria, the better they are aligned.

- Record and explain the evidence upon which the rating is based.

Proceed to Section 4: Indicators of Quality

- Indicators of Quality are important considerations that will help evaluators better understand the overall quality of instructional materials. These considerations are not criteria for alignment to the CCSS, but they provide valuable information about additional program characteristics. Evaluators may want to add their own indicators to the examples provided.

Directions for Non-Negotiable 1

Freedom from Obstacles to Focus

Criterion	Evidence- Give specific examples.	Rating: (Reviewer only.)
Non-Negotiable 1: **Freedom from Obstacles to Focus** **Materials must reflect the content architecture of the Standards by not assessing the topics named before the grade level where they first appear in the Standards.** The Standards foster students' progress to algebra by focusing strongly on arithmetic. Consistent with this focus, certain topics from outside of arithmetic appear only in later grades. Thus, to be aligned, materials must reflect the content architecture of the Standards by not assessing the topics named before the grade level where they first appear in the Standards. In this criterion, "topics named" means the topics that are explicitly named in Metric 1A. No other topics should be added to the list in Metric 1A. (Note that other topics in the standards are addressed in criterion NN2.)	**Required Materials** • Common Core State Standards for Mathematics (www.corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf) • From the materials being evaluated: teacher guides and all assessment components	**Rating this Criterion:** Non-Negotiable 1 is rated as Meets or Does Not Meet. To rate Non-Negotiable 1, begin by rating Metric 1A. Since Metric 1A is the only metric for Non-Negotiable 1, the rating for Non-Negotiable 1 is the same as the rating for Metric 1A. If Metric 1A is rated as Does Not Meet, include evidence of when the named topic(s) is/are assessed. If the metric is rated as Meets, list the grade(s) examined in the evaluation.

Metric NN1A: **Materials re the basic architecture of the Standards by not assessing the listed topics before the grade level indicated.** • Probability, including chance, likely outcomes, probability models. (Introduced in the CCSSM in grade 7) • Statistical distributions, including center, variation, clumping, outliers, mean, median, mode, range, quartiles; and statistical association or trends, including two-way tables, bivariate measurement data, scatter plots, trend line, line of best fit, correlation. (Introduced in the CCSSM in grade 6) • Similarity, congruence, or geometric transformations. (Introduced in the CCSSM in grade 8) • Symmetry of shapes, including line/ reflection symmetry, rotational symmetry. (Introduced in the CCSSM in grade 4) **How to Find the Evidence:** Evaluate the table of contents, all chapter tests, all unit tests, and other such assessment components (including rubrics). For context, read Criterion #2 from the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013). NOTE: Grade alignments of other topics are addressed in Non-Negotiable 2, Focus and Coherence.) In this criterion, "topics named" means the topics that are explicitly named in Metric 1A. No other topics should be added to the list in Metric 1A. (Note that other topics in the standards are addressed in criterion NN2.)	**Evidence-** No topics are assessed before introduced. All kindergarten CCSS are taught and evaluated through the 12 modules.	**(Reviewer only.)** X **Meets** ____ **Does Not Meet**
Non-Negotiable 1: Materials must reflect the content architecture of the Standards by not assessing the topics named* before the grade level where they first appear in the Standards. **NN 1** If Metric 1A was rated as Meets, then rate Non-Negotiable 1 as Meets. If Metric 1A was rated as Does Not Meet, then rate Non- Negotiable 1 as Does Not Meet. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion.**(Reviewer only.)** **Before moving to Non-Negotiable 2, record the final Meets or Does Not Meet rating in the Evaluation Summary.**		**(Reviewer only.)** X **Meets** ____ **Does Not Meet** **Strengths/Weaknesses:**

Directions for Non-Negotiable 2

Focus and Coherence

Non-Negotiable 2: **Focus and Coherence** **Materials must focus coherently on the Major Work of the grade in a way that is consistent with the progressions in the Standards.** Focus and coherence are the two major evidence-based design principles of the Common Core State Standards for Mathematics (CCSSM, p. 3). Focus is necessary in order to fulfill the ambitious promise the states have made to their students by adopting the Standards: greater achievement at the college and career ready level; greater depth of understanding of mathematics; and a rich classroom environment in which reasoning, sense-making, applications, and a range of mathematical practices flourish. In simpler terms, a mile-wide, inch-deep curriculum translates to less time per topic. Less time means less depth and moving on without many students. Thus, materials must focus coherently on the Major Work of the grade in a way that is consistent with the progressions in the Standards.	**Required Materials** • Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf) • Focus by Grade Level for the grade being evaluated (www.achievethecore.org/focus) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion:** Non-Negotiable 2 is rated as Meets or Does Not Meet. To rate Non-Negotiable 2, first rate metrics 2A–2H. Each of these eight metrics must be rated as Meets in order for Non-Negotiable 2 to be rated as Meets. Rate each metric 2A-2H as Meets or Does Not Meet/Insufficient Evidence. If the evidence examined shows that the Criterion is met, then mark the Criterion Meets. If the evidence examined shows that the Criterion is not met—or if there is insufficient evidence to make a determination—then mark the Criterion as Does Not Meet/Insufficient Evidence. Support all ratings with evidence.
Metric NN2A: **In each grade K–8, students and teachers using the materials as designed devote the large majority of time to the Major Work of the grade.** **How to Find the Evidence:** Familiarize yourself with the Major Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, lessons, homework assignments, and assessments. (Evaluate both student and teacher materials.) Consider time spent on the Major Work of the grade and judge qualitatively whether students and teachers using the materials as designed will devote the large majority of time to the Major Work of the grade. For context, read Criterion #1 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013)	**Evidence-** Stepping Stones K covers all CCSS identified as the major work of this grade. Counting & Cardinality - 40 lessons Operations & Algebraic Thinking 23 lessons Base 10 - 10 lessons	**(Reviewer only.)** X **Meets** ____ **Does Not Meet/ Insufficient Evidence**

Metric NN2B: **Supporting work, where present, enhances focus and coherence simultaneously by also engaging students in the Major Work of the grade.** **How to Find the Evidence:** Familiarize yourself with the Major Work and Supporting Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate chapters and lessons that focus on Supporting Work. NOTE: Example of evaluating this Criterion might include looking at whether materials for K–5 generally treat data displays as an occasion for solving grade-level word problems using the four operations (e.g., see 3.MD.B.3); or whether materials for grade 7 take advantage of opportunities to use probability to support ratios, proportions, and percentages. For context, read Criterion #3 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Measurement and Data and Geometry are supporting work. 10 lessons total. Examples: Module 1 Lessons 5 & 6 Module 2 Lesson 6 Module 9 Lessons 5 & 6	(Reviewer only.) X Meets ___ Does Not Meet/ Insufficient Evidence
Metric NN2C: **Materials base content progressions on the grade-by-grade progressions in the Standards. Content from previous or future grades does not unduly interfere with or displace on-grade-level content.** **How to Find the Evidence:** Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, and lessons in both student and teacher materials. NOTE: In some cases it may be possible that aligned materials might address some aspects of a topic in a strategic way before or after the grade level in which the topic is central in the Standards' progressions; for example, a curriculum author might purposefully choose to explore adding fractions with unlike denominators in a way appropriate to grade four, recognizing that this work is not really required until the next grade. However, any such purposeful discrepancies in content progressions should enhance the required learning in each grade; not unduly interfere with or displace grade-level content; and be clearly aimed at helping students meet the Standards as written rather than effectively rewriting the progressions in the Standards. And in all cases, note that Non-Negotiable 1 must be met for materials to be aligned. For context, read Criterion #5a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Stepping Stones stays within Kindergarten level progression & matches the scope & sequence. The layout of this curculum is set up for early learners to have the new concepts introduced, practiced & reinforced several times throughout the program.	(Reviewer only.) X Meets ___ Does Not Meet/ Insufficient Evidence

Metric NN2D: **Materials give all students extensive work with on-grade-level problems.** **How to Find the Evidence:** Evaluate both student and teacher materials. If the materials provide resources for differentiated learning, consider whether lower-performing students have opportunities to engage with grade-level problems. Also consider whether higher-performing students are given opportunities to learn current grade-level content in greater depth. For context, read Criterion #5b in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** There are a vast amount of opportunities for students to work with grade level problems. There is a differentiation link in each module that provides extra help, practice & challenge activities.	(Reviewer only.) X Meets ____Does Not Meet/ Insufficient Evidence
Metric NN2E: **Materials relate on-grade-level concepts explicitly to prior knowledge from earlier grades.** **How to Find the Evidence:** Evaluate both student and teacher materials. NOTE: Examples of evaluating this Criterion might include looking at the way the materials extend basic ideas of place value across the decimal point; or the role that properties of operations play when the materials extend arithmetic beyond whole numbers to fractions, variables, and expressions. More generally, cluster headings in the Standards sometimes signal key moments where reorganizing and extending previous knowledge is important in order to accommodate new knowledge (e.g., see cluster headings that use the phrase "Apply and extend previous understanding"). For context, read Criterion #5c in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Stepping Stones K lessons are not based on prior knowledge. New concepts are introduced in a whole group setting & reinforced with additional practice.	(Reviewer only.) X Meets ____Does Not Meet/ Insufficient Evidence
Metric NN2F: **Review of material from previous grades is clearly identified as such to the teacher, and teacher and students can see what their specific responsibility is for the current year.** **How to Find the Evidence:** Evaluate the table of contents, but do not stop there; also evaluate units, chapters, lessons, homework assignments and assessments. (Evaluate both student and teacher materials.) Identify any content from previous grades and check whether it is identified as such. For context, read Criterion #5a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** There are no previous grade levels to reference for Kindergarten.	(Reviewer only.) X Meets ____Does Not Meet/ Insufficient Evidence

Metric NN2G: **Materials include learning objectives that are visibly shaped by CCSSM cluster headings.** **How to Find the Evidence:** Select several clusters from the Major Work in the grade being evaluated. Evaluate teacher and student materials in relation to these clusters. For context, read Criterion #6a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** For each module there is a mathematics link that takes you to the learning targets covered within those lessons.	(Reviewer only.) X Meets ___ Does Not Meet/ Insufficient Evidence
Metric NN2H: **Materials include problems and activities that serve to connect two or more clusters in a domain, or two or more domains in a grade, in cases where these connections are natural and important.** **How to Find the Evidence:** In the grade being evaluated, choose two or more clusters or two or more domains for which connections are natural and important. Evaluate the units, chapters, and lessons that deal with the chosen topics, looking for problems and activities that serve to connect the chosen clusters or domains. NOTE: An example of evaluating this Criterion might include looking at whether problems in grade 4 sometimes or often involve students applying their developing computation skills (detailed in domain NBT) in the context of solving word problems (detailed in domain OA). For context, read Criterion #6b in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Majority of the numbers connect two or more clusters in a domain or two or more K domains. example: Lesson 2.1 connects K.CC.3, K.CC.4, K.CC4a, K.CC.4b.	(Reviewer only.) X Meets ___ Does Not Meet/ Insufficient Evidence
Non-Negotiable 2: **Focus and Coherence** **Materials must focus coherently on the Major Work of the grade in a way that is consistent with the progressions in the Standards.** **NN 2** If all Metrics 2A – 2H were rated as Meets, then rate Non-Negotiable 2 as Meets. If one or more Metric was rated Does Not Meet/Insufficient Evidence, then rate Non-Negotiable 2 as Does Not Meet. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)** **Before moving to Alignment Criterion 1, record the final Meets or Does Not Meet rating in the Evaluation Summary.**		(Reviewer only.) X Meets ___ Does Not Meet **Strengths/Weaknesses:**

Now continue by evaluating the Alignment Criterion 1 for Rigor and Balance.

Directions for Alignment Criterion 1

Rigor and Balance

Alignment Criterion 1: Rigor and Balance

Materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.

The Standards set expectations for attention to all three aspects of rigor: conceptual understanding, procedural skill and fluency, and applications. Thus, materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.

Required Materials

- Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf)
- Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)
- Focus by Grade Level for the grade being evaluated (achievethecore.org/focus)
- Situation Types for the Operations in Word Problems (achievethecore.org/situation-types)
- From the materials being evaluated: teacher guides, student texts and workbooks

Rating this Criterion:

Alignment Criterion 1 is rated as Meets or Does Not Meet.

To rate Alignment Criterion 1, first rate metrics 1A, 1B, and 1C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). For each metric, guiding questions are provided to aid in gathering evidence.

Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 1 if the materials rate 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as rigor and balance, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.

Metric AC1A:

The materials support the development of students' conceptual understanding of key mathematical concepts, especially where called for in specific content Standards or cluster headings.

How to Find the Evidence:

Select one or more cluster(s) or Standard(s) from the Major Work for the grade being evaluated that relate specifically conceptual understanding to use throughout the questions associated with this metric. NOTE: Some examples of clusters or Standards that call for conceptual understanding include: K.OA.A.1, (1.NBT.B, 1.NBT.C), (2.NBT.A, 2.NBT.B), (3.OA.A.1, 3.OA.A.2), 4.NF.A, (4.NBT.A, 4.NBT.B), 5.NF.B, (5.NBT.A, 5.NBT.B), 6.RP.A, 6.EE.A.3, 7.NS.A, 7.EE.A, 8.EE.B, 8.F.A, 8.G.A

Clusters or Standards grouped by parentheses are closely connected and could be analyzed together.

For context, read Criterion #4a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).

-Choose a cluster/Standard from the Major Work that is aligned to each aspect of rigor and use it to evaluate these metrics. It is most helpful if the same clusters/Standards are chosen for all of the programs being evaluated. (Guidance in choosing clusters/Standards is included in "How to Find the Evidence".)

Use the questions for AC Metric 1A to evaluate Metric 1A. Record evidence for each question and rate Metric 1A.

X **Meets (2)**

____ **Partially Meets (1)**

____ **Does Not Meet (0)**

Is conceptual understanding attended to thoroughly where the Standards set e[illegible] expectations for understanding or interpreting? Evaluate lessons, chapter/unit assessments and homework assignments, paying attention to work aligned to Standards that explicitly call for understanding or interpreting. NOTE: Examples of evaluating this Criterion might include looking at how well the multi-digit addition and subtraction algorithms are developed and explained on the basis of place value and properties of operations; or how well the multi-digit multiplication and division algorithms are developed and explained on the basis of place value and properties of operations; or how well solving equations is presented and explained as a process of reasoning.	**Evidence-** Major clusters for K are centered around conceptual rather than procedural understanding.	
Do the materials feature high-quality conceptual problems and conceptual discussion questions? Evaluate lessons, chapter/unit assessments, and homework assignments. NOTE: Example of conceptual problems might include such questions as "Find a number greater than 1/5 and less than 1/4," or "If the divisor does not change and the dividend increases, what happens to the quotient?"	**Evidence-** Yes high quality conceptual problems & discussions are featured. In reflecting sections open ended questions are asked.	
Do the materials feature opportunities to identify correspondences across mathematical representations? Evaluate lessons, chapter/unit assessments and homework assignments. NOTE: Examples of evaluating this Criterion might include looking at whether students are supported in identifying correspondences among: the verbal description of a situation, the diagrams that distill its mathematical features, and the equations that model it; or equivalent forms of numbers (e.g., 3 and 6/2) and the number line; or rational number operations and representations of them via models such as the vector model; or the expression that defines a function and the graph that shows the relationship.	**Evidence-** Opportunities to identify correspondences across mathematical representations is apparent. Ex: Module 9	
Metric AC1B: **The materials are designed so that students attain the fluencies and procedural skills required by the Standards.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Major Work for the grade being evaluated that relate specifically to fluency and procedural skill to use throughout the questions associated with this metric. NOTE: Some examples of Standards that call for procedural skill and fluency include: K.OA.A.5, 1.OA.C.6, 2.OA.B.2, 2.NBT.B.5, 3.OA.C.7, 3.NBT.A.2, 4.NBT.B.4, 5.NBT.B.5, 6.NS.B.2, and 6.NS.B.3, 6.EE.A, 7.NS.A, 7.EE.A.1,7.EE.B.4a, 8.EE.C.7, 8.EE.C.8b For context, read Criterion #4b in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	Standards require fluency through 5 for addition & subtraction. There are 9 lessons throughout 4 modules that teach this.	**Use the questions for Metric 1B to evaluate Metric 1 B. Record evidence for each question and rate Metric 1B.** **(Reviewer only.)** X **Meets (2)** ___ **Partially Meets (1)** ___ **Does Not Meet (0)**

Is progress toward fluency and procedural skill interwoven with students' developing conceptual understanding of the operations in question? Evaluate lessons, chapter/unit assessments, daily routines, and homework assignments for evidence that the development of fluency and procedural skill is supported by conceptual understanding.	**Evidence-** Modules 1-8 introduced & practice counting. Module 6 introduces addition. Module 9 introduces subtraction. Modules 10-12 build fact fluency.	
Are purely procedural problems and exercises present that include cases in which opportunistic strategies are valuable and generic cases that require efficient algorithms present? Evaluate lessons, chapter/unit assessments, daily routines, and homework assignments. NOTE: Examples of problems in which opportunistic strategies are valuable might include the sum 698 + 240 or the system x + y = 1, 2x + 2y = 3. Examples of generic cases that require efficient algorithms might include the sum 8767+2286 or the system 6y + x = x + 3, – x = 1 + 2y.	**Evidence-** There is no formal algorithm for Kindergarten. Algorithms are availible in the extension portion.	
Do the materials in grades K–6 provide repeated practice toward attainment of fluency Standards? Evaluate lessons, daily routines, and homework assignments for evidence of repeated practice toward attainment of the following K–6 Standards that set an explicit expectation of fluent (accurate and reasonably fast) computation: K.OA.A.5, 1.OA.C.6, 2.OA.B.2, 2.NBT.B.5, 3.OA.C.7, 3.NBT.A.2, 4.NBT.B.4, 5.NBT.B.5, 6.NS.B.2, 6.NS.B.3.	**Evidence-** Refer to question 1.	
Metric AC1C: **The materials are designed so that teachers and students spend sufficient time working with engaging applications, without losing focus on the Major Work of each grade.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Major Work for the grade being evaluated that relate specifically application to use throughout the questions associated with this metric. NOTE: Some examples of clusters or Standards that call for application include: K.OA.A.2, 1.OA.A, 2.OA.A, 3.OA.A.3, 3.OA.D.8, 4.OA.A.3, 4.NF.B.3d, 4.NF.B.4c, 5.NF.B.6, 5.NF.B.7c, 6.RP.A.3, 6.NS.A.1, 6.EE.B.7, 6.EE.C.9, 7.RP.A, 7.NS.A.3, 7.EE.B.3, 8.EE.C.8c, 8.F.B For context, read Criterion #4c in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** In stepping stones there are 31 counting lessons and 18 operations lessons. There is no focus lost on major work of grade.	**Use the questions for Metric 1C to evaluate Metric 1C. Record evidence for each question and rate Metric 1C.** **(Reviewer only.)** **X Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Are there are single- and multi-step contextual problems, including non-routine problems, that develop the mathematics of the grade, afford opportunities for practice, and engage students in problem solving? Do the problems attend thoroughly to those places in the content Standards where expectations for multi-step and real-world problems are explicit? Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** Examples of single & multi-step contextual problems are in lessons: 6.1, 9.1, 12.1 & 12.2	

Do application problems particularly stress applying the Major Work of the grade? Evaluate lessons, chapter/unit assessments, and homework assignments. NOTE: Examples of evaluating this Criterion might include looking at: how well, by the end of grade 2, students using the materials as designed can represent and solve a full range of one-step addition and subtraction word problems; or how well, by the end of grade 3, students using the materials as designed can represent and solve a full range of one-step multiplication and division word problems; or how well these basic situation types for each operation are carried coherently across the grades, (e.g., with fractions and algebraic expressions); or, in all grades, whether the problems connect concepts, Standards, and domains in ways that are natural and important. For a list of situation types for one-step addition, subtraction, multiplication, and division problems, see Situation Types for the Operations in Word Problems	**Evidence-** Under online curriculum there is a range of topics across grade levels shown.	
Does modeling build slowly across K–8, with applications that are relatively simple in earlier grades and when students are encountering new content? In grades 6–8, do the problems begin to provide opportunities for students to make their own assumptions or simplifications in order to model a situation mathematically? Read Standard for Mathematical Practice 4, Model with Mathematics. Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** In Kindergarten many of the concepts are introduced through pictures, role play, stories, models & manipulatives.	

Alignment Criterion 1: Rigor and Balance

Materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.

AC1 Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 out of 6 points, the Criterion has not been met. Check the final rating.
Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)**

Before moving to Alignment Criterion 2, record the final Meets or Does Not Meet rating in the Evaluation Summary.

(Reviewer only.)

X **Meets**

____ **Does Not Meet**

Strengths/Weaknesses:

Directions for Alignment Criterion 2

Standards for Mathematical Practice

Alignment Criterion 2: Standards for Mathematical Practice

Materials must demonstrate authentic connections between content Standards and practice Standards.

The Standards require that designers of instructional materials connect the mathematical practices to mathematical content in instruction. Thus, materials must demonstrate authentic connections between content Standards and practice Standards.

Required Materials:

- Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf)
- Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)
- Focus by Grade Level for the grade being evaluated (www.achievethecore.org/focus)
- From the materials being evaluated: teacher guides, student texts and workbooks

Rating this Criterion

Alignment Criterion 2 is rated as Meets or Does Not Meet.

To rate Alignment Criterion 2, first rate metrics 2A, 2B, and 2C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). For each metric, guiding questions are provided to aid in gathering evidence.

Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 2 if the materials earn 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as mathematical practices, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.

Metric AC2A:

Materials address the practice Standards in such a way as to enrich the Major Work of the grade; practices strengthen the focus on Major Work instead of detracting from it, in both teacher and student materials.

How to Find the Evidence:

Familiarize yourself with the Major Work of the grade being evaluated (see the Focus by Grade Level documents.)

Evaluate teacher and student materials for evidence that the mathematical practices support and connect to the focus of the grade.

NOTE: Examples of evaluating this Criterion might include looking at whether, in grades K–5, students using the materials are supported to look for and express regularity in repeated reasoning about the addition table, the multiplication table, the properties of operations, the relationship between addition and subtraction or multiplication and division, and the place value system; or whether, in grades 6–8, students using the materials are supported to look for and express regularity in repeated reasoning about proportional relationships and linear functions.

For context, read Criterion #8 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013).

Evidence-

One or more mathematical practice standards are used in every lesson. These are stated in many different ways / places online including module lesson contents chart and also within each individual lesson.

(Reviewer only.)

X **Meets (2)**

____ **Partially Meets (1)**

____ **Does Not Meet (0)**

Metric AC2B: **Materials attend to the full meaning of each practice Standard.** **How to Find the Evidence:** For context, read Criterion #7 and Criterion #9 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).		**Use the questions for Metric 2B to evaluate Metric 2B. Record evidence for each question and rate Metric 2B.** **(Reviewer only.)** **X Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Over the course of any given year of instruction, is each mathematical practice Standard meaningfully present in the form of assignments, activities, or problems that stimulate students to develop the habits of mind described in the practice Standard? Evaluate lessons, chapter/ unit assessments, and homework assignments for evidence of each mathematical practice being meaningfully present in instruction.	**Evidence-** Practices are given online in a variety of ways - Flow chart - Program overview doc.	
Do the materials treat the practice Standards as developing across grades or grade bands? Are the practice Standards in early grades appropriately simple? Do they display an arc of growing sophistication across the grades?	**Evidence-** Online each grade level is provided with mathematical practices flow chart.	
Are there teacher-directed materials that explain the role of the practice Standards in the classroom and in students' mathematical development? Are alignments to practice Standards accurate?	**Evidence-** Through videos, links & charts mathematical practices are explained.	
Metric AC2C: **Materials support the Standards' emphasis on mathematical reasoning.** **How to Find the Evidence:** For context, read Criterion #10 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).		**Use the questions for Metric 2C to evaluate Metric 2C. Record evidence for each question and rate Metric 2C.** **(Reviewer only.)** **X Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Do the materials support students in constructing viable arguments and critiquing the arguments of others concerning grade-level mathematics that is detailed in the content Standards? Read Standard for Mathematical Practice 3. Evaluate teacher and student materials to ensure that students are given opportunities to reason with grade-level mathematics.	**Evidence-** There are multiple opportunities for students to explain thinking & reason with others.	
Do the materials support students in producing not only answers and solutions, but also, in a grade-appropriate way, arguments, explanations, diagrams, mathematical models, etc., especially in the Major Work of the grade? Familiarize yourself with the Major Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate teacher and student materials, to understand the types of work students are expected to produce.	**Evidence-** Students are pushed to justify answers using drawings, models, argue, & explain.	

Do materials explicitly attend to the specialized language of mathematics? Is the language of argument, problem solving, and mathematical explanations taught rather than assumed? Evaluate teacher and student materials, paying attention to how mathematical language is taught. NOTE: Examples of evaluating this Criterion might include looking at whether students are supported in: basing arguments on definitions; using the method of providing a counterexample; or recognizing that examples alone do not establish a general statement.	**Evidence-** Specialized language of mathematics is introduced in each lesson.	
Alignment Criterion 2: **Standards for Mathematical Practice** **Materials must demonstrate authentic connections between content Standards and practice Standards.** **AC2** Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 out of 6 points, the Criterion has not been met. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)** **Before moving to Alignment Criterion 3, record the final Meets or Does Not Meet rating in the Evaluation Summary.**		**(Reviewer only.)** X **Meets** ____ **Does Not Meet** **Strengths/Weaknesses:**
Alignment Criterion 3: **Access to the Standards for All Students** **Materials must provide supports for English Language Learners and other special populations.** Because Standards are for all students, alignment requires thoughtful support to ensure all students are able to meet the Standards. Thus, aligned materials must provide supports for English Language Learners and other special populations.	**Required Materials:** • Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion:** Alignment Criterion 3 is rated as Meets or Does Not Meet. To rate Alignment Criterion 3, first rate metrics 3A, 3B, and 3C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 3 if the materials earn 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as support for special population, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.

Metric AC3A: **Support for [illegible]ish Language Learners and other special populations is thoughtful and helps those students meet the same Standards as all other students. The language in which problems are posed is carefully considered.** **How to Find the Evidence:** Evaluate teacher and student materials, paying attention to supports offered for special populations.	**Evidence-** There are ELL resources provided in each module. Pictures, manipulatives & visual models are used throughout.	Reviewer only.) X Meets (2) ____Partially Meets (1) ____Does Not Meet (0)
Metric AC3B: **Materials provide appropriate level and type of scaffolding, differentiation, intervention, and support for a broad range of learners with gradual removal of supports, when needed, to allow students to demonstrate their mathematical understanding independently.** **How to Find the Evidence:** Evaluate teacher and student materials, paying attention to whether materials provide differentiation that will lead all learners to engage with on-grade-level content.	**Evidence-** Each lesson includes whole group, small group, practice & differentiation, so that needs of different learners can be met.	Reviewer only.) X Meets (2) ____Partially Meets (1) ____Does Not Meet (0)
Metric AC3C: **Design of lessons recommends and facilitates a mix of instructional approaches for a variety of learners such as using multiple representations (e.g., including models, using a range of questions, checking for understanding, flexible grouping, pair-share).** **How to Find the Evidence:** Evaluate teacher materials, noting instructional approaches suggested for whole class and differentiated lessons and activities.	**Evidence-** There is a wide variety of materials intended to address different learner needs such as games, visual models, big books, etc.	Reviewer only.) X Meets (2) ____Partially Meets (1) ____Does Not Meet (0)

Alignment Criterion 3: **Access to the Standards for All Students** **Materials must provide supports for English Language Learners and other special populations.** **AC3** Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 points, the Criterion has not been met. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion.**(Reviewer only.)** **Move to the Evaluation Summary and record the final Meets or Does Not Meet rating .**	**(Reviewer only.)** ____**Meets** ____**Does Not Meet** **Strengths/Weaknesses:**

Once an evaluation for alignment to the Shifts and major features of the CCSS has been conducted using Sections 1-3, it's important to evaluate for overall quality and best practices. A starting list of Indicators of Quality are suggested below. States, districts and others evaluating instructional materials are encouraged to add to this list to ensure materials reflect local contexts. For background information on some of the Indicators of Quality in this section, refer to pp.18–21 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).

Indicators of Quality	**Evidence- Give specific examples.**	**Rating: (Reviewers only.)**
1. Lessons are thoughtfully structured and support the teacher in leading the class through the learning paths at hand, with active participation by all students in their own learning and in the learning of their classmates.	**Evidence-** Easy to use & online access for teacher to follow. Formatting for grades & modules is the same	**(Reviewer only.)** X **Yes** ____ **No**
2. The underlying design of the materials includes both problems and exercises. (In solving problems, students learn new mathematics, whereas in working exercises, students apply what they have already learned to build mastery.) Each problem or exercise has a purpose. **NOTE: This Criterion does not require that the problems and exercises be labeled as such.**	**Evidence-** Problem solving with new concepts is done in whole group. Practice is done in small group as well.	**(Reviewer only.)** X **Yes** ____ **No**

3. Design of assignments is not haphazard: exercises are given in intentional sequences in order to strengthen students' mathematical understanding.	**Evidence-** The design of spaced learning is focused on major clusters.	(Reviewer only.) X Yes ____ No
4. There are separate teacher materials that support and reward teacher study including, but not limited to: discussion of the mathematics of the units and the mathematical point of each lesson as it relates to the organizing concepts of the unit, discussion on student ways of thinking and anticipating a variety of students responses, guidance on lesson flow, guidance on questions that prompt students thinking, and discussion of desired mathematical behaviors being elicited among students.	**Evidence-** Professional development is availible online for teachers through training videos, focusing documents. & research into practice for each module.	(Reviewer only.) X Yes ____ No
5. Manipulatives suggested in the materials are faithful representations of the mathematical objects they represent and are connected to written methods.	**Evidence-** Number case with manipulatives is provided & used to support learners.	(Reviewer only.) X Yes ____ No
6. Materials include a variety of curriculum-embedded assessments. Examples include pre-, formative, summative, and self-assessment resources.	**Evidence-** Each module has formative & summative assesments.	(Reviewer only.) X Yes ____ No
7. Assessments contain aligned rubrics, answer keys, and scoring guidelines that provide sufficient guidance for interpreting student performance.	**Evidence-** For each module under assesments there are scoring tools provided.	(Reviewer only.) X Yes ____ No
8. Materials assess student proficiency using methods that are accessible and unbiased, including the use of course-level language in student prompts.	**Evidence-** Oral assesments are given in cases where students need task read to them.	(Reviewer only.) X Yes ____ No

9. Materials are carefully evaluated by qualified individuals, whose names are listed, in an effort to ensure freedom from mathematical errors and course-level appropriateness.	**Evidence-** Qualified individuals names are listed on the home page.	**(Reviewer only.)** X **Yes** ____ **No**
10. The visual design supports students in engaging thoughtfully with the subject. Navigation through the text is clear.	**Evidence-** Good balance of text and graphics appropriate for K students.	**(Reviewer only.)** X **Yes** ____ **No**
11. The materials engage parents in appropriate ways. For example, homework assignments in elementary grades, consist of routine problems, practice with getting answers, and fluency-building exercises that parents can easily support.	**Evidence-** For each module there is a letter to home provided in Spanish & english.	**(Reviewer only.)** X **Yes** ____ **No**

Reviewer IMET Evaluation Summary **Title/Level:** Stepping Stones K

Publisher: Origo **Copyright:** 2012 **ISBN:** 9781921959190

Reviewer ID # K.C & C.N. **Date Review Completed:** 3/7/16

Non-Negotiable Criteria- Each Non-Negotiable must be met in order for the Non-Negotiable Alignment Criteria to be met overall.

Non-Negotiable 1: Freedom from Obstacles to Focus	Non- Negotiable 2: Focus and Coherence
X Meets ____ Does Not Meet	X Meets ____ Does Not Meet

Non-Negotiable Overall:

X **Meets** ____ **Does Not Meet**

Alignment Criteria- Each Alignment Criterion must be met with a sufficient number of points in order for Alignment Criteria to be labeled as "Meets" overall. The more points the materials receive on the Alignment Criteria, the better they are aligned.

Alignment Criterion 1: Rigor and Balance	Alignment Criterion 2: Standards of Mathematical Practice	Alignment Criterion 3: Access to Standards for All Learners
Points: 6 of 6 possible. (Materials must receive at least 5 of 6 points to align.) X Meets ____ Does Not Meet	Points: 6 of 6 possible. (Materials must receive at least 5 of 6 points to align.) X Meets ____ Does Not Meet	Points: 6 of 6 possible. (Materials must receive at least 5 of 6 points to align.) X Meets ____ Does Not Meet

Alignment Criteria Overall:

X **Meets** ____ **Does Not Meet**

If the materials meet both Non-Negotiables and relevant Alignment Criterion, they are aligned to the Shifts and major features of the Core Standards. **Do the materials meet every Non-Negotiable and Alignment Criterion?** X **Yes** ____ **No**

What are the specific areas of strength and weakness based on this evaluation? Publishers or others modifying or developing assessments can use this information to make improvements and/or to remedy gaps in the alignment of assessment materials.

ORIGO Stepping Stones for Kindergarten was designed and can be used as a CORE mathematics program. It covers all of the CCSS for Kindergarten with the use of 12 modules and 6 lessons embedded in each module. The use of all 8 mathematical practices is apparent throughout the entirety of this program. The format and progression of each module and lesson is appropriate for early learners to begin building a foundation of these math concepts. Extra support given for both teachers and learners is very useful.

2015-16 Mathematics Interim Review Recommendation & Summary

Publisher Name:	ORIGO - Stepping Stones
Title:	Stepping Stones
ISBN #	987-1921959-79-0
Grade Level(s) or Course:	1st Grade
Reviewer ID:	RO SC

RECOMMENDED AS:

__X__ **Core Mathematics Program-** a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials. Substantial evidence clearly supports the designation of this program as Core.

_____ **Other Mathematics Program-** a program that substantially, but partially, meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for supplemental materials. Substantial evidence clearly supports the designation of this program as Other.

_____ **Component Mathematics Program-** a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs. Substantial evidence clearly supports the designation of this program as Component.

_____ **Intervention Program-** a program designed and intended to target and support students' specific needs. Substantial evidence clearly supports the designation of this program as Intervention.

_____ **Does not meet criteria** for recommendation as a Curricular Material or Online Resource for Mathematics.

EVIDENCE SUMMARY:

FOCUS-

The majority of the text focuses on the major work of the curriculum.

COHERENCE-

Topics are vertically alligned between kindergarten, 1st grade, and 2nd grade.

RIGOR-

Conceptual understanding, procedural skill and fluency, along with applications are evident in this curriculum

CONCEPTUAL UNDERSTANDING-

Each module has problem solving activities to help build conceptual understanding

MATHEMATICAL PRACTICES-

They are evident through all the lessons.

ACCESSIBILITY OF STANDARDS TO ALL STUDENTS-

The curriculum offers a mix of instructional approaches for a variety of learners.

OTHER:

2015-16 Interim Mathematics Review

Mathematics Evaluation Tool Grades K-8

Publisher: ORIGO

Title of Material: Stepping Stones

Author:

ISBN #: 987-1-921959-79-0 **Copyright** 2012

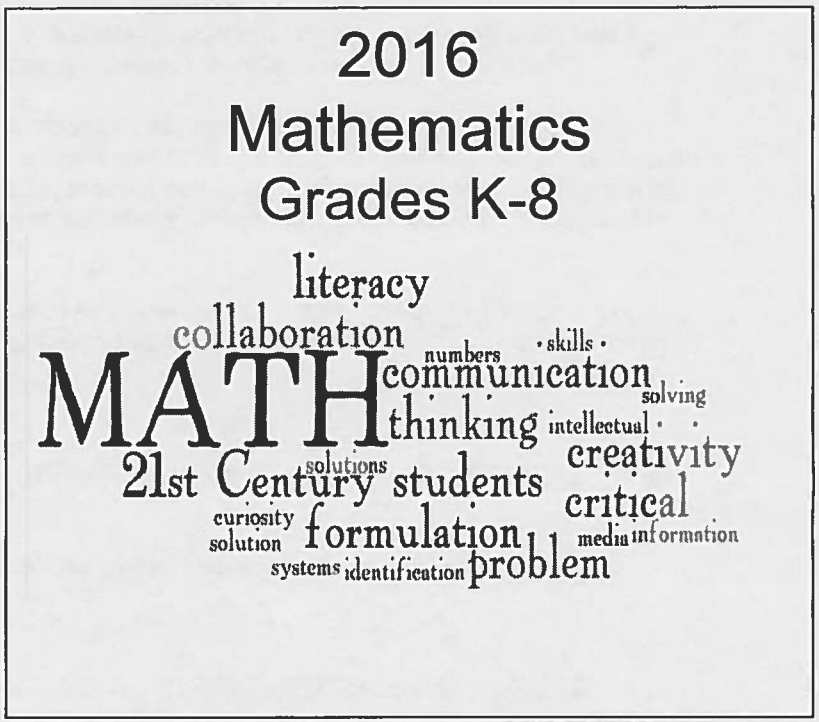
Reviewer ID: RO / SC

Core Mathematics Program- a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Core.

Other Mathematics Program- a program that substantially, but partially, meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Other.

Component Mathematics Program- a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs.
Substantial evidence clearly supports the designation of this program as Component.

Intervention Program- a program designed and intended to target and support students' specific needs.
Substantial evidence clearly supports the designation of this program as Intervention.



- Evaluation Form adapted from Instructional Materials Evaluation Toolkit (IMET).

The IMET was developed by Student Achievement Partners. Educators may use or adapt. http://creativecommons.org/licenses/by/3.0/ Download this tool at http://achievethecore.org/IMET

Instructional Materials Evaluation Tool

Mathematics, Grades K-8

What Are the Purposes of the IMET?

This Math IMET is designed to help educators determine whether instructional materials are aligned to the Shifts and major features of the Common Core State Standards (CCSS). The substantial instructional Shifts (http://www.corestandards.org/other-resources/key-shifts-inmathematics/) at the heart of the Common Core State Standards are:

- **Focus** strongly where the Standards focus
- **Coherence**: Think across grades and link to major topics within the grade
- **Rigor**: In major topics, pursue conceptual understanding, procedural skill and fluency, and application with equal intensity.

The IMET draws directly from the following documents:

- Common Core State Standards for Mathematics (www.corestandards.org/Math)
- Publishers' Criteria for the Common Core State Standards in Mathematics grade K-8 (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)

When to use the IMET

1. Purchasing materials: Many factors go into local purchasing decisions. Alignment to the Standards is a critical factor to consider. This tool is designed to evaluate alignment of instructional materials to the Shifts and the major features of the CCSS. It also provides suggestions of additional indicators to consider in the materials evaluation and purchasing process.

2. Evaluating materials currently in use: The IMET can be used to analyze the degree of alignment of existing materials and help to highlight specific, concrete flaws in alignment. Even where materials and tools currently in use fail to meet one or more of these criteria, the pattern of failure is likely to be informative. States and districts can use the evaluation to create a thoughtful plan to modify or combine existing resources in such a way that students' actual learning experiences approach the focus, coherence, and rigor of the Standards.

3. Developing programs: Those developing new programs can use this tool as guidance for creating aligned curricula.
Please note this tool was designed for evaluating comprehensive curricula (including any supplemental or ancillary materials), but it was not designed for the evaluation of standalone supplemental materials.

Who Uses the IMET?

Evaluating instructional materials requires both subject-matter and pedagogical expertise. Evaluators should be well versed in the Standards (www.corestandards.org/Math) for all grades in which materials are being evaluated. This includes understanding the Major Work of the grade (www.achievethecore/focus), the Supporting and Additional work, how the content fits into the progressions in the Standards (www.achievethecore.org/progressions), and the expectations of the Standards with respect to conceptual understanding, procedural skill and fluency, and application. Evaluators also should be familiar with the substantial instructional Shifts (http:// www.corestandards.org/other-resources/key-shifts-in-mathematics/) of Focus, Coherence and Rigor that are listed above.

Getting Started

Prior to Evaluation

Assemble all of the materials necessary for the evaluation. It is essential for evaluators to have materials for all grades covered by the program, as some criteria cannot be rated without having access to each grade. In addition, each evaluator should have a reference copy of the Common Core State Standards for Mathematics (CCSSM) and the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013).

Instructional Materials Evaluation Tool
Mathematics, Grades K-8

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Getting Started
Prior to Evaluation

Assemble all of the materials necessary for the evaluation. It is essential for evaluators to have materials for all grades covered by the program, as some criteria cannot be rated without having access to each grade. In addition, each evaluator should have a reference copy of the Common Core State Standards for Mathematics (CCSSM) and the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013).

Before conducting the evaluation itself, it is important to develop a protocol for the evaluation process. The protocol should include having evaluators study the Publishers' Criteria and the IMET. It will also be helpful for evaluators to get a sense of each program overall before beginning the process. At a minimum, this would include reading the front matter of the text, looking at the table of contents and paging through multiple chapters.

Sections 1-3 below should be completed to produce a comprehensive picture of the strengths and weaknesses of the materials under evaluation. Information about areas in need of improvement or supplementation should be shared with internal and external stakeholders.

Navigating the Tool

Begin with Section 1: Non-Negotiable Alignment Criteria

- The Non-Negotiable Alignment Criteria must each be met in full for materials to be considered aligned to the Shifts and the major features of the Common Core State Standards. Each Non-Negotiable Alignment Criterion has one or more metrics associated with it; every one of these metrics must be met in order for the criterion as a whole to be met.

- Examine the relevant materials and use evidence to rate the materials against each criterion and its associated metric(s).

- Record and explain the evidence upon which the rating is based.

Continue to Section 2: Alignment Criteria

- The Alignment Criteria must each be met for materials to be considered aligned to the Shifts and the major features of the Common Core State Standards. Each Alignment Criterion has one or more metric associated with it; a specific number of these metrics must be met or partially met in order for the criterion as a whole to be met.

- Examine the materials in relation to these criteria, assigning each metric a point value. Rate the criterion as "Meets" or "Does Note Meet" based on the number of points assigned. The more points the materials receive on the alignment Criteria, the better they are aligned.

Record and explain the evidence upon which the rating is based.

Proceed to Section 4: Indicators of Quality

- Indicators of Quality are important considerations that will help evaluators better understand the overall quality of instructional materials. These considerations are not criteria for alignment to the CCSS, but they provide valuable information about additional program characteristics. Evaluators may want to add their own indicators to the examples provided.

Directions for Non-Negotiable 1

Freedom from Obstacles to Focus

Criterion	Evidence- Give specific examples.	Rating: (Reviewer only.)
Non-Negotiable 1: **Freedom from Obstacles to Focus** **Materials must reflect the content architecture of the Standards by not assessing the topics named before the grade level where they first appear in the Standards.** The Standards foster students' progress to algebra by focusing strongly on arithmetic. Consistent with this focus, certain topics from outside of arithmetic appear only in later grades. Thus, to be aligned, materials must reflect the content architecture of the Standards by not assessing the topics named before the grade level where they first appear in the Standards. In this criterion, "topics named" means the topics that are explicitly named in Metric 1A. No other topics should be added to the list in Metric 1A. (Note that other topics in the standards are addressed in criterion NN2.)	**Required Materials** • Common Core State Standards for Mathematics (www corestandards org/wp-content/uploads/Math_Standards pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf) • From the materials being evaluated: teacher guides and all assessment components	**Rating this Criterion**: Non-Negotiable 1 is rated as Meets or Does Not Meet. To rate Non-Negotiable 1, begin by rating Metric 1A. Since Metric 1A is the only metric for Non-Negotiable 1, the rating for Non-Negotiable 1 is the same as the rating for Metric 1A. If Metric 1A is rated as Does Not Meet, include evidence of when the named topic(s) is/are assessed. If the metric is rated as Meets, list the grade(s) examined in the evaluation.

Metric NN1A: **Materials ref[illegible] the basic architecture of the Standards by not assessing the listed topics before the grade level indicated.** • Probability, including chance, likely outcomes, probability models. (Introduced in the CCSSM in grade 7) • Statistical distributions, including center, variation, clumping, outliers, mean, median, mode, range, quartiles; and statistical association or trends, including two-way tables, bivariate measurement data, scatter plots, trend line, line of best fit, correlation. (Introduced in the CCSSM in grade 6) • Similarity, congruence, or geometric transformations. (Introduced in the CCSSM in grade 8) • Symmetry of shapes, including line/ reflection symmetry, rotational symmetry. (Introduced in the CCSSM in grade 4) **How to Find the Evidence:** Evaluate the table of contents, all chapter tests, all unit tests, and other such assessment components (including rubrics). For context, read Criterion #2 from the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013). NOTE: Grade alignments of other topics are addressed in Non-Negotiable 2, Focus and Coherence.) In this criterion, "topics named" means the topics that are explicitly named in Metric 1A. No other topics should be added to the list in Metric 1A. (Note that other topics in the standards are addressed in criterion NN2.)	**Evidence-** **Curriculum does no[illegible]sess the listed topics on the left before grade level.** **HOWEVER:** **There are several items that are assessed that are outside the first grade standards. Some examples are...** **1) Ordinal numbers are assessed. They are not a part of first grade standards.** **2) Money, including, pennies, nickels, dimes, quarters, and dollars are assessed. This is a second grade standard.** **3) Subtract a 2 digit – 1 digit (39-3). This goes beyond first grade standards. The standard says you can Add 2 digit plus a 1 digit (39+3), but not subtract.** **4) Subtract 2 digit- decade (49-20). The standard says you can Add 2 digit + decade (49+20), but not subtract.** **5) Growing and shrinking patterns. This is a 4th grade skill.** **6) Numbers to 130. The standard is numbers to120.**	**(Reviewer only.)** **__x_Meets** **___Does Not Meet**
Non-Negotiable 1: Materials must reflect the content architecture of the Standards by not assessing the topics named* before the grade level where they first appear in the Standards. **NN 1** If Metric 1A was rated as Meets, then rate Non-Negotiable 1 as Meets. If Metric 1A was rated as Does Not Meet, then rate Non- Negotiable 1 as Does Not Meet. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion.**(Reviewer only.)** **Before moving to Non-Negotiable 2, record the final Meets or Does Not Meet rating in the Evaluation Summary.**		**(Reviewer only.)** **__x_Meets** **___Does Not Meet** **Strengths/Weaknesses:**

Directions for Non-Negotiable 2

Focus and Coherence

Non-Negotiable 2: **Focus and Coherence** **Materials must focus coherently on the Major Work of the grade in a way that is consistent with the progressions in the Standards.** Focus and coherence are the two major evidence-based design principles of the Common Core State Standards for Mathematics (CCSSM, p. 3). Focus is necessary in order to fulfill the ambitious promise the states have made to their students by adopting the Standards: greater achievement at the college and career ready level; greater depth of understanding of mathematics; and a rich classroom environment in which reasoning, sense-making, applications, and a range of mathematical practices flourish. In simpler terms, a mile-wide, inch-deep curriculum translates to less time per topic. Less time means less depth and moving on without many students. Thus, materials must focus coherently on the Major Work of the grade in a way that is consistent with the progressions in the Standards.	**Required Materials** • Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf) • Focus by Grade Level for the grade being evaluated (www.achievethecore.org/focus) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion:** Non-Negotiable 2 is rated as Meets or Does Not Meet. To rate Non-Negotiable 2, first rate metrics 2A–2H. Each of these eight metrics must be rated as Meets in order for Non-Negotiable 2 to be rated as Meets. Rate each metric 2A-2H as Meets or Does Not Meet/Insufficient Evidence. If the evidence examined shows that the Criterion is met, then mark the Criterion Meets. If the evidence examined shows that the Criterion is not met—or if there is insufficient evidence to make a determination—then mark the Criterion as Does Not Meet/Insufficient Evidence. Support all ratings with evidence.
Metric NN2A: **In each grade K–8, students and teachers using the materials as designed devote the large majority of time to the Major Work of the grade.** **How to Find the Evidence:** Familiarize yourself with the Major Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, lessons, homework assignments, and assessments. (Evaluate both student and teacher materials.) Consider time spent on the Major Work of the grade and judge qualitatively whether students and teachers using the materials as designed will devote the large majority of time to the Major Work of the grade. For context, read Criterion #1 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013)	**Evidence-** **The materials devote a lot of the time to the Major Work of first grade, but also includes several standards that are not first grade standards. The curriculum has the majority of the lessons related to the major works of first grade. The rest of the lessons focus on supporting and additional standards.**	**(Reviewer only.)** **__x_Meets** **____Does Not Meet/** **Insufficient Evidence**

Metric NN2B: **Supporting work, where present, enhances focus and coherence simultaneously by also engaging students in the Major Work of the grade.** **How to Find the Evidence:** Familiarize yourself with the Major Work and Supporting Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate chapters and lessons that focus on Supporting Work. NOTE: Example of evaluating this Criterion might include looking at whether materials for K–5 generally treat data displays as an occasion for solving grade-level word problems using the four operations (e.g., see 3.MD.B.3); or whether materials for grade 7 take advantage of opportunities to use probability to support ratios, proportions, and percentages. For context, read Criterion #3 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** **Supporting work includes, time, geometry, and data. The curriculum teaches and assesses the supporting work. Most of them are found in modules 10-12.**	(Reviewer only.) __x_Meets ____Does Not Meet/ Insufficient Evidence
Metric NN2C: **Materials base content progressions on the grade-by-grade progressions in the Standards. Content from previous or future grades does not unduly interfere with or displace on-grade-level content.** **How to Find the Evidence:** Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, and lessons in both student and teacher materials. NOTE: In some cases it may be possible that aligned materials might address some aspects of a topic in a strategic way before or after the grade level in which the topic is central in the Standards' progressions; for example, a curriculum author might purposefully choose to explore adding fractions with unlike denominators in a way appropriate to grade four, recognizing that this work is not really required until the next grade. However, any such purposeful discrepancies in content progressions should enhance the required learning in each grade; not unduly interfere with or displace grade-level content; and be clearly aimed at helping students meet the Standards as written rather than effectively rewriting the progressions in the Standards. And in all cases, note that Non-Negotiable 1 must be met for materials to be aligned. For context, read Criterion #5a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** **Modules 1, 2, 3, 5, 6, 11, and 12 include concepts from second grade, third grade, and fourth grade which are taught and assessed.** **The content sequence tab shows when standards are taught in each grade level. It also shows how each lesson correlates to the standards.**	(Reviewer only.) __x_Meets ____Does Not Meet/ Insufficient Evidence

Metric NN2D: **Materials gi[illegible]l students extensive work with on-grade-level problems.** **How to Find the Evidence:** Evaluate both student and teacher materials. If the materials provide resources for differentiated learning, consider whether lower-performing students have opportunities to engage with grade-level problems. Also consider whether higher-performing students are given opportunities to learn current grade-level content in greater depth. For context, read Criterion #5b in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** **Materials have seve[illegible]ifferent opportunities to receive extensive work with grade level problems in the lessons, investigations, and problem solving activities.**	(Reviewer only.) **__x__Meets** **____Does Not Meet/** **Insufficient Evidence**
Metric NN2E: **Materials relate on-grade-level concepts explicitly to prior knowledge from earlier grades.** **How to Find the Evidence:** Evaluate both student and teacher materials. NOTE: Examples of evaluating this Criterion might include looking at the way the materials extend basic ideas of place value across the decimal point; or the role that properties of operations play when the materials extend arithmetic beyond whole numbers to fractions, variables, and expressions. More generally, cluster headings in the Standards sometimes signal key moments where reorganizing and extending previous knowledge is important in order to accommodate new knowledge (e.g., see cluster headings that use the phrase "Apply and extend previous understanding"). For context, read Criterion #5c in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** **The focus tab under each module tells what kindergarten students were taught.**	(Reviewer only.) **_x__Meets** **____Does Not Meet/** **Insufficient Evidence**
Metric NN2F: **Review of material from previous grades is clearly identified as such to the teacher, and teacher and students can see what their specific responsibility is for the current year.** **How to Find the Evidence:** Evaluate the table of contents, but do not stop there; also evaluate units, chapters, lessons, homework assignments and assessments. (Evaluate both student and teacher materials.) Identify any content from previous grades and check whether it is identified as such. For context, read Criterion #5a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** **Each module has a mathematical focus. The ongoing practice activities for each lesson can be hovered over which shows the standards or fluency being practiced.**	(Reviewer only.) **__x__Meets** **____Does Not Meet/** **Insufficient Evidence**

Metric NN2G: **Materials include learning objectives that are visibly shaped by CCSSM cluster headings.** **How to Find the Evidence:** Select several clusters from the Major Work in the grade being evaluated. Evaluate teacher and student materials in relation to these clusters. For context, read Criterion #6a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** **Materials include objective that are visibly shaped by the CCSSM cluster headings. The curriculum also includes a support for student's learning, DA Development Activity.**	**(Reviewer only.)** __x_Meets ____Does Not Meet/ **Insufficient Evidence**
Metric NN2H: **Materials include problems and activities that serve to connect two or more clusters in a domain, or two or more domains in a grade, in cases where these connections are natural and important.** **How to Find the Evidence:** In the grade being evaluated, choose two or more clusters or two or more domains for which connections are natural and important. Evaluate the units, chapters, and lessons that deal with the chosen topics, looking for problems and activities that serve to connect the chosen clusters or domains. NOTE: An example of evaluating this Criterion might include looking at whether problems in grade 4 sometimes or often involve students applying their developing computation skills (detailed in domain NBT) in the context of solving word problems (detailed in domain OA). For context, read Criterion #6b in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** **When you are in a lesson, if you click on the eye icon, it will show you which standards are being taught or observed. There are several lessons that include problems and activities that serve to connect two or more clusters in a domain, or two or more domains in a grade.**	**(Reviewer only.)** _x__Meets ____Does Not Meet/ **Insufficient Evidence**
Non-Negotiable 2: **Focus and Coherence** **Materials must focus coherently on the Major Work of the grade in a way that is consistent with the progressions in the Standards.** **NN 2** If all Metrics 2A – 2H were rated as Meets, then rate Non-Negotiable 2 as Meets. If one or more Metric was rated Does Not Meet/Insufficient Evidence, then rate Non-Negotiable 2 as Does Not Meet. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)** **Before moving to Alignment Criterion 1, record the final Meets or Does Not Meet rating in the Evaluation Summary.**		**(Reviewer only.)** _x__Meets ____Does Not Meet **Strengths/Weaknesses:**

Now continue by evaluating the Alignment Criterion 1 for Rigor and Balance.

Directions for Alignment Criterion 1

Rigor and Balance

Alignment Criterion 1: Rigor and Balance **Materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.** The Standards set expectations for attention to all three aspects of rigor: conceptual understanding, procedural skill and fluency, and applications. Thus, materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.	**Required Materials** • Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf) • Focus by Grade Level for the grade being evaluated (achievethecore.org/focus) • Situation Types for the Operations in Word Problems (achievethecore.org/situation-types) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion:** Alignment Criterion 1 is rated as Meets or Does Not Meet. To rate Alignment Criterion 1, first rate metrics 1A, 1B, and 1C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). For each metric, guiding questions are provided to aid in gathering evidence. Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 1 if the materials rate 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as rigor and balance, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.
Metric AC1A: **The materials support the development of students' conceptual understanding of key mathematical concepts, especially where called for in specific content Standards or cluster headings.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Major Work for the grade being evaluated that relate specifically conceptual understanding to use throughout the questions associated with this metric. NOTE: Some examples of clusters or Standards that call for conceptual understanding include: K.OA.A.1, (1.NBT.B, 1.NBT.C), (2.NBT.A, 2.NBT.B), (3.OA.A.1, 3.OA.A.2), 4.NF.A, (4.NBT.A, 4.NBT.B), 5.NF.B, (5.NBT.A, 5.NBT.B), 6.RP.A, 6.EE.A.3, 7.NS.A, 7.EE.A, 8.EE.B, 8.F.A, 8.G.A Clusters or Standards grouped by parentheses are closely connected and could be analyzed together. For context, read Criterion #4a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	-Choose a cluster/Standard from the Major Work that is aligned to each aspect of rigor and use it to evaluate these metrics. It is most helpful if the same clusters/Standards are chosen for all of the programs being evaluated. (Guidance in choosing clusters/Standards is included in "How to Find the Evidence".)	**Use the questions for AC Metric 1A to evaluate Metric 1A. Record evidence for each question and rate Metric 1A.** **_x__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**

Is conceptual understanding attended to thoroughly where the Standards set ex expectations for understanding or interpreting? Evaluate lessons, chapter/unit assessments and homework assignments, paying attention to work aligned to Standards that explicitly call for understanding or interpreting. NOTE: Examples of evaluating this Criterion might include looking at how well the multi-digit addition and subtraction algorithms are developed and explained on the basis of place value and properties of operations; or how well the multi-digit multiplication and division algorithms are developed and explained on the basis of place value and properties of operations; or how well solving equations is presented and explained as a process of reasoning.	**Evidence-** **There is plenty of opp nities for students to comprehend mathematical concepts, operations, and mathematical relations for example when you go to the content sequence and hover over the addition of whole numbers there are 31 lessons related to that particular concept. By repeating this process you can see how many lessons are taught for each major work of the grade.**	
Do the materials feature high-quality conceptual problems and conceptual discussion questions? Evaluate lessons, chapter/unit assessments, and homework assignments. NOTE: Example of conceptual problems might include such questions as "Find a number greater than 1/5 and less than 1/4," or "If the divisor does not change and the dividend increases, what happens to the quotient?"	**Evidence-** **Each module has problem solving activities to help build conceptual understanding. Online teacher manuals are written in a step by step fashion including preparing the lesson, starting the lesson, teaching the lesson, and reflecting the work. There are several discussion questions with each step to ensure student learning is being monitored.**	
Do the materials feature opportunities to identify correspondences across mathematical representations? Evaluate lessons, chapter/unit assessments and homework assignments. NOTE: Examples of evaluating this Criterion might include looking at whether students are supported in identifying correspondences among: the verbal description of a situation, the diagrams that distill its mathematical features, and the equations that model it; or equivalent forms of numbers (e.g., 3 and 6/2) and the number line; or rational number operations and representations of them via models such as the vector model; or the expression that defines a function and the graph that shows the relationship.	**Evidence-** **The representations are used throughout the lesson and assessments so students are familiar with what they look like and what they mean.** **Module 4 Lessons 1-3 are very focused on making sure students understand what the symbol of subtraction means and how to represent it. Further lessons go on to practice using subtraction in writing and representing.**	
Metric AC1B: **The materials are designed so that students attain the fluencies and procedural skills required by the Standards.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Major Work for the grade being evaluated that relate specifically to fluency and procedural skill to use throughout the questions associated with this metric. NOTE: Some examples of Standards that call for procedural skill and fluency include: K.OA.A.5, 1.OA.C.6, 2.OA.B.2, 2.NBT.B.5, 3.OA.C.7, 3.NBT.A.2, 4.NBT.B.4, 5.NBT.B.5, 6.NS.B.2, and 6.NS.B.3, 6.EE.A, 7.NS.A, 7.EE.A.1,7.EE.B.4a, 8.EE.C.7, 8.EE.C.8b For context, read Criterion #4b in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).		**Use the questions for Metric 1B to evaluate Metric 1 B. Record evidence for each question and rate Metric 1B.** **(Reviewer only.)** **_x__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**

Is progress toward fluency and procedural skill interwoven with students' develop[illegible]onceptual understanding of the operations in question? Evaluate lessons, chapter/unit assessments, daily routines, and homework assignments for evidence that the development of fluency and procedural skill is supported by conceptual understanding.	**Evidence-** **The lessons spiral an[illegible]ovide lots of practice.**	
Are purely procedural problems and exercises present that include cases in which opportunistic strategies are valuable and generic cases that require efficient algorithms present? Evaluate lessons, chapter/unit assessments, daily routines, and homework assignments. NOTE: Examples of problems in which opportunistic strategies are valuable might include the sum 698 + 240 or the system x + y = 1, 2x + 2y = 3. Examples of generic cases that require efficient algorithms might include the sum 8767+2286 or the system 6y + x = x + 3, – x = 1 + 2y.	**Evidence-** **A variety of problems can be found throughout the curriculum. Strategies with tools can be found throughout the curriculum as well as practice exercises.**	
Do the materials in grades K–6 provide repeated practice toward attainment of fluency Standards? Evaluate lessons, daily routines, and homework assignments for evidence of repeated practice toward attainment of the following K–6 Standards that set an explicit expectation of fluent (accurate and reasonably fast) computation: K.OA.A.5, 1.OA.C.6, 2.OA.B.2, 2.NBT.B.5, 3.OA.C.7, 3.NBT.A.2, 4.NBT.B.4, 5.NBT.B.5, 6.NS.B.2, 6.NS.B.3.	**Evidence-** **The lessons spiral and provide lots of practice. Multiple strategies are provided for students to work with addition and subtraction fluency. Ongoing practice often contains fluency practice.**	
Metric AC1C: **The materials are designed so that teachers and students spend sufficient time working with engaging applications, without losing focus on the Major Work of each grade.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Major Work for the grade being evaluated that relate specifically application to use throughout the questions associated with this metric. NOTE: Some examples of clusters or Standards that call for application include: K.OA.A.2, 1.OA.A, 2.OA.A, 3.OA.A.3, 3.OA.D.8, 4.OA.A.3, 4.NF.B.3d, 4.NF.B.4c, 5.NF.B.6, 5.NF.B.7c, 6.RP.A.3, 6.NS.A.1, 6.EE.B.7, 6.EE.C.9, 7.RP.A, 7.NS.A.3, 7.EE.B.3, 8.EE.C.8c, 8.F.B For context, read Criterion #4c in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** **The Curriculum works sufficiently with the major work of the grade. All lessons have instruction, practice, and differentiation. They also include ELL support.**	**Use the questions for Metric 1C to evaluate Metric 1C. Record evidence for each question and rate Metric 1C.** **(Reviewer only.)** **_x__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Are there are single- and multi-step contextual problems, including non-routine problems, that develop the mathematics of the grade, afford opportunities for practice, and engage students in problem solving? Do the problems attend thoroughly to those places in the content Standards where expectations for multi-step and real-world problems are explicit? Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** **There are single and multi-step problems throughout the curriculum. Each lesson has questions has to deepen students thinking and the opportunity to share how they solved a problem using number talks.**	

Do application problems particularly stress applying the Major Work of the grade? Evaluate lessons, chapter/unit assessments, and homework assignments. NOTE: Examples of evaluating this Criterion might include looking at: how well, by the end of grade 2, students using the materials as designed can represent and solve a full range of one-step addition and subtraction word problems; or how well, by the end of grade 3, students using the materials as designed can represent and solve a full range of one-step multiplication and division word problems; or how well these basic situation types for each operation are carried coherently across the grades, (e.g., with fractions and algebraic expressions); or, in all grades, whether the problems connect concepts, Standards, and domains in ways that are natural and important. For a list of situation types for one-step addition, subtraction, multiplication, and division problems, see Situation Types for the Operations in Word Problems	**Evidence-** **Curriculum work with application of the standards. Application problems in this program are focused on the major works of the grade.**	
Does modeling build slowly across K–8, with applications that are relatively simple in earlier grades and when students are encountering new content? In grades 6–8, do the problems begin to provide opportunities for students to make their own assumptions or simplifications in order to model a situation mathematically? Read Standard for Mathematical Practice 4, Model with Mathematics. Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** **Modeling builds through the curriculum. In module 1, students are using tools to work with numbers. In module 2, students begin to write equations and use tools to with work with numbers. The program also offers other channels such as Flare and Fundamentals to model quantities and representations for any given standard.**	

Alignment Criterion 1: Rigor and Balance

Materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.

(Reviewer only.)

_x__Meets

____Does Not Meet

Strengths/Weaknesses:

AC1 Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 out of 6 points, the Criterion has not been met. Check the final rating.
Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)**

Before moving to Alignment Criterion 2, record the final Meets or Does Not Meet rating in the Evaluation Summary.

Directions for Alignment Criterion 2

Standards for Mathematical Practice

Alignment Criterion 2: Standards for Mathematical Practice

Materials must demonstrate authentic connections between content Standards and practice Standards.

The Standards require that designers of instructional materials connect the mathematical practices to mathematical content in instruction. Thus, materials must demonstrate authentic connections between content Standards and practice Standards.

Required Materials:

- Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf)
- Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)
- Focus by Grade Level for the grade being evaluated (www.achievethecore.org/focus)
- From the materials being evaluated: teacher guides, student texts and workbooks

Rating this Criterion

Alignment Criterion 2 is rated as Meets or Does Not Meet.

To rate Alignment Criterion 2, first rate metrics 2A, 2B, and 2C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). For each metric, guiding questions are provided to aid in gathering evidence.

Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 2 if the materials earn 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as mathematical practices, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.

Metric AC2A:

Materials address the practice Standards in such a way as to enrich the Major Work of the grade; practices strengthen the focus on Major Work instead of detracting from it, in both teacher and student materials.

How to Find the Evidence:

Familiarize yourself with the Major Work of the grade being evaluated (see the Focus by Grade Level documents.)

Evaluate teacher and student materials for evidence that the mathematical practices support and connect to the focus of the grade.

NOTE: Examples of evaluating this Criterion might include looking at whether, in grades K–5, students using the materials are supported to look for and express regularity in repeated reasoning about the addition table, the multiplication table, the properties of operations, the relationship between addition and subtraction or multiplication and division, and the place value system; or whether, in grades 6–8, students using the materials are supported to look for and express regularity in repeated reasoning about proportional relationships and linear functions.

For context, read Criterion #8 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013).

Evidence-

Mathematical practices are evident throughout the curriculum. They are listed at the beginning of each module and found within the lessons.

(Reviewer only.)

_x__Meets (2)

____Partially Meets (1)

____Does Not Meet (0)

Metric AC2B: **Materials att to the full meaning of each practice Standard.** **How to Find the Evidence:** For context, read Criterion #7 and Criterion #9 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).		**Use the questions for Metric 2B to evaluate Metric 2B. Record evidence for each questi nd rate Metric 2B.** **(Reviewer only.)** **_x__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Over the course of any given year of instruction, is each mathematical practice Standard meaningfully present in the form of assignments, activities, or problems that stimulate students to develop the habits of mind described in the practice Standard? Evaluate lessons, chapter/ unit assessments, and homework assignments for evidence of each mathematical practice being meaningfully present in instruction.	**Evidence-** **Mathematical Practices are explicitly mentioned and examples of what to look for within the lesson are given.**	
Do the materials treat the practice Standards as developing across grades or grade bands? Are the practice Standards in early grades appropriately simple? Do they display an arc of growing sophistication across the grades?	**Evidence-** **Mathematical Practices are evident in each lesson.**	
Are there teacher-directed materials that explain the role of the practice Standards in the classroom and in students' mathematical development? Are alignments to practice Standards accurate?	**Evidence-** **There are specific places in the materials that explain the role of the Mathematical Practices and how they are put in action within the lessons.**	
Metric AC2C: **Materials support the Standards' emphasis on mathematical reasoning.** **How to Find the Evidence:** For context, read Criterion #10 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).		**Use the questions for Metric 2C to evaluate Metric 2C. Record evidence for each question and rate Metric 2C.** **(Reviewer only.)** **____Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Do the materials support students in constructing viable arguments and critiquing the arguments of others concerning grade-level mathematics that is detailed in the content Standards? Read Standard for Mathematical Practice 3. Evaluate teacher and student materials to ensure that students are given opportunities to reason with grade-level mathematics.	**Evidence-** **Students are given opportunities to reason with grade-level mathematics within the lessons, investigations, and problem solving tasks.**	
Do the materials support students in producing not only answers and solutions, but also, in a grade-appropriate way, arguments, explanations, diagrams, mathematical models, etc., especially in the Major Work of the grade? Familiarize yourself with the Major Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate teacher and student materials, to understand the types of work students are expected to produce.	**Evidence-** **Students have opportunities to produce explanations, diagrams, and mathematical models within the lessons, investigations, and problem solving tasks. They are also encouraged to use number talks to explain their solutions.**	

Do materials explicitly attend to the specialized language of mathematics? Is the language of argument, problem solving, and mathematical explanations taught rather than assumed? Evaluate teacher and student materials, paying attention to how mathematical language is taught. NOTE: Examples of evaluating this Criterion might include looking at whether students are supported in: basing arguments on definitions; using the method of providing a counterexample; or recognizing that examples alone do not establish a general statement.	**Evidence-** **In each module under the mathematics tab there is a language development tab that tells teachers what language/vocabulary will be used and developed.**	

Alignment Criterion 2:
Standards for Mathematical Practice

Materials must demonstrate authentic connections between content Standards and practice Standards.

AC2 Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 out of 6 points, the Criterion has not been met. Check the final rating.
Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion.
(Reviewer only.)

Before moving to Alignment Criterion 3, record the final Meets or Does Not Meet rating in the Evaluation Summary.

(Reviewer only.)

_x__Meets

____Does Not Meet

Strengths/Weaknesses:

Alignment Criterion 3:
Access to the Standards for All Students

Materials must provide supports for English Language Learners and other special populations.

Because Standards are for all students, alignment requires thoughtful support to ensure all students are able to meet the Standards. Thus, aligned materials must provide supports for English Language Learners and other special populations.

Required Materials:

- Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf)
- Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)
- From the materials being evaluated: teacher guides, student texts and workbooks

Rating this Criterion:
Alignment Criterion 3 is rated as Meets or Does Not Meet.

To rate Alignment Criterion 3, first rate metrics 3A, 3B, and 3C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points).

Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 3 if the materials earn 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as support for special population, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.

Metric AC3A: **Support for [illegible]ish Language Learners and other special populations is thoughtful and helps those students meet the same Standards as all other students. The language in which problems are posed is carefully considered.** **How to Find the Evidence:** Evaluate teacher and student materials, paying attention to supports offered for special populations.	**Evidence-** **Many lessons have a[illegible]L icon to hover over, that give ELL suggestions.**	**Reviewer only.)** **_x__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Metric AC3B: **Materials provide appropriate level and type of scaffolding, differentiation, intervention, and support for a broad range of learners with gradual removal of supports, when needed, to allow students to demonstrate their mathematical understanding independently.** **How to Find the Evidence:** Evaluate teacher and student materials, paying attention to whether materials provide differentiation that will lead all learners to engage with on-grade-level content.	**Evidence-** **There are options for differentiation, which include extra help, extra practice, and extra challenge. Not every lesson includes all three, but each lesson, does include at least two of the helps.**	**Reviewer only.)** **__x_Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Metric AC3C: **Design of lessons recommends and facilitates a mix of instructional approaches for a variety of learners such as using multiple representations (e.g., including models, using a range of questions, checking for understanding, flexible grouping, pair-share).** **How to Find the Evidence:** Evaluate teacher materials, noting instructional approaches suggested for whole class and differentiated lessons and activities.	**Evidence-** **The curriculum offers a mix of instructional approaches for a variety of learners. The Fundamentals Channel offers a variety of representations including models and allows students to share strategies in solving problems.**	**Reviewer only.)** **_x__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**

Alignment Criterion 3: Access to the Standards for All Students Materials must provide supports for English Language Learners and other special populations. AC3 Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 points, the Criterion has not been met. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion.(Reviewer only.) Move to the Evaluation Summary and record the final Meets or Does Not Meet rating .	(Reviewer only.) _x__Meets ____Does Not Meet Strengths/Weaknesses:

Once an evaluation for alignment to the Shifts and major features of the CCSS has been conducted using Sections 1-3, it's important to evaluate for overall quality and best practices. A starting list of Indicators of Quality are suggested below. States, districts and others evaluating instructional materials are encouraged to add to this list to ensure materials reflect local contexts. For background information on some of the Indicators of Quality in this section, refer to pp.18–21 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).

Indicators of Quality	Evidence- Give specific examples.	Rating: (Reviewers only.)
1. Lessons are thoughtfully structured and support the teacher in leading the class through the learning paths at hand, with active participation by all students in their own learning and in the learning of their classmates.	Evidence- New learning is introduced through problem solving situations as a whole class. This learning is reinforced, practiced, and extended in small group activities, journal pages, differentiation, and practice tasks.	(Reviewer only.) __x___ Yes _____ No
2. The underlying design of the materials includes both problems and exercises. (In solving problems, students learn new mathematics, whereas in working exercises, students apply what they have already learned to build mastery.) Each problem or exercise has a purpose. NOTE: This Criterion does not require that the problems and exercises be labeled as such.	Evidence- Lessons are practiced, and extended in small group activities, journal pages, differentiation, and practice tasks.	(Reviewer only.) __x___ Yes _____ No

3. Design of assignments is not haphazard: exercises are [illegible]en in intentional sequences in order to strengthen students' mathematical understanding.	Evidence- Lessons format is co[illegible]ent through each module. Ongoing practice pages spiral for constant review of materials taught.	(Reviewer only.) __x___ Yes _____ No
4. There are separate teacher materials that support and reward teacher study including, but not limited to: discussion of the mathematics of the units and the mathematical point of each lesson as it relates to the organizing concepts of the unit, discussion on student ways of thinking and anticipating a variety of students responses, guidance on lesson flow, guidance on questions that prompt students thinking, and discussion of desired mathematical behaviors being elicited among students.	Evidence- The mathematics down menus that give extra support to the teacher including such things as focus, mathematical practices, correlations, and research in practice. There are also training videos and support on how to use the online program, ORIGO Slate.	(Reviewer only.) __x___ Yes _____ No
5. Manipulatives suggested in the materials are faithful representations of the mathematical objects they represent and are connected to written methods.	Evidence- Dominoes are used to teach doubles, doubles plus one, and doubles plus two. Some other manipulatives used are connecting cubes, 100 charts, ten frames, number lines, and counters.	(Reviewer only.) __x___ Yes _____ No
6. Materials include a variety of curriculum-embedded assessments. Examples include pre-, formative, summative, and self-assessment resources.	Evidence- Assessments include formative and summative assessments. Formative assessments include pre-test, observations and discussions, journals and portfolios. Summative assessments include, check-ups, performance tasks, and interviews.	(Reviewer only.) __x___ Yes _____ No
7. Assessments contain aligned rubrics, answer keys, and scoring guidelines that provide sufficient guidance for interpreting student performance.	Evidence- Under the resources tab, you can find answer keys, scoring rubrics, and teacher check off skills list.	(Reviewer only.) __x___ Yes _____ No
8. Materials assess student proficiency using methods that are accessible and unbiased, including the use of course-level language in student prompts.	Evidence- Materials are kid friendly. The journal pages are simple, yet colorful. Instructions are easy to understand and written in kid friendly language.	(Reviewer only.) __x___ Yes _____ No

9. Materials are carefully evaluated by qualified individuals, whose names are listed, in an effort to ensure freedom from mathematical errors and course-level appropriateness.	**Evidence-** **The names of authors, consultants, publishing teams, and advisors are listed on the home page of the website. It also lists the names of consulting teachers and the school districts in which they teach.**	**(Reviewer only.)** **__x___ Yes** **_____ No**
10. The visual design supports students in engaging thoughtfully with the subject. Navigation through the text is clear.	**Evidence-** **The representations are used throughout the lesson and assessments so students are familiar with what they look like and what they mean.**	**(Reviewer only.)** **__x___ Yes** **_____ No**
11. The materials engage parents in appropriate ways. For example, homework assignments in elementary grades, consist of routine problems, practice with getting answers, and fluency-building exercises that parents can easily support.	**Evidence-** **There are letters home for each module in English and Spanish. They can be downloaded and printed or e-mailed to parents.**	**(Reviewer only.)** **__x___ Yes** **_____ No**

Reviewer IMET Evaluation Summary **Title/Level:** _____

Publisher: _____ **Copyright:** _____ **ISBN:**_____

Reviewer ID # _____ **Date Review Completed:**_____

Non-Negotiable Criteria- Each Non-Negotiable must be met in order for the Non-Negotiable Alignment Criteria to be met overall.

Non-Negotiable 1: Freedom from Obstacles to Focus	Non- Negotiable 2: Focus and Coherence
___x___ Meets _____ Does Not Meet	__x__ Meets _____ Does Not Meet

Non-Negotiable Overall:

__x___ Meets **_____ Does Not Meet**

Alignment Criteria- Each Alignment Criterion must be met with a sufficient number of points in order for Alignment Criteria to be labeled as "Meets" overall. The more points the materials receive on the Alignment Criteria, the better they are aligned.

Alignment Criterion 1: Rigor and Balance	Alignment Criterion 2: Standards of Mathematical Practice	Alignment Criterion 3: Access to Standards for All Learners
Points: __6___ of 6 possible. (Materials must receive at least 5 of 6 points to align.) ___x___ Meets _____ Does Not Meet	Points: __6___ of 6 possible. (Materials must receive at least 5 of 6 points to align.) ___x___ Meets _____ Does Not Meet	Points: __6___ of 6 possible. (Materials must receive at least 5 of 6 points to align.) __x____ Meets _____ Does Not Meet

Alignment Criteria Overall:

__x__ Meets **_____ Does Not Meet**

If the materials meet both Non-Negotiables and relevant Alignment Criterion, they are aligned to the Shifts and major features of the Core Standards. **Do the materials meet every Non-Negotiable and Alignment Criterion? _____ Yes _____ No**

What are the specific areas of strength and weakness based on this evaluation? Publishers or others modifying or developing assessments can use this information to make improvements and/or to remedy gaps in the alignment of assessment materials.

2015-16 Mathematics Interim Review Recommendation & Summary

Publisher Name:	Origo
Title:	Stepping Stones Grade 2
ISBN #	987-1-921959-79-0
Grade Level(s) or Course:	2
Reviewer ID:	*CJS and TB*

RECOMMENDED AS:

___X_____**Core Mathematics Program-** a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials. Substantial evidence clearly supports the designation of this program as Core.

_____**Other Mathematics Program-** a program that substantially, but partially, meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for supplemental materials. Substantial evidence clearly supports the designation of this program as Other.

_____**Component Mathematics Program-** a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs. Substantial evidence clearly supports the designation of this program as Component.

_____**Intervention Program-** a program designed and intended to target and support students' specific needs. Substantial evidence clearly supports the designation of this program as Intervention.

_____ **Does not meet criteria** for recommendation as a Curricular Material or Online Resource for Mathematics.

EVIDENCE SUMMARY:

FOCUS-
Does not assess standards before grade level where they first appear in the standards.

The majority of the lessons are focused the major works of grade 2.

COHERENCE- The majority of the lessons are focused on the major works of grade 2. There are a few lessons outside the 2nd grade curriculum, but they are clearly marked as 1st or 3rd grade standards.

RIGOR-

2NBT.A /2.NBT.B: (44% of the lessons address this)

- Use of manipulatives and pictures
- Use of models that show students standard and word form of numbers
- Use of number tracks and number lines
- Numeral expanders
- Use of ten frames
- Use of hundreds chart
- Use of base ten blocks
- Use of place value chart
- Use of dot cards and dominoes for addition and subtraction
- Big books and games

Each lesson provides sample discussion questions as well as a "reflecting on the work" section designed to wrap up the lesson and check for conceptual understanding.

After significant work in conceptual development lessons contain procedural problems for students to apply this knowledge.

Each lesson contains an on-going practice activity that revisits content from previous modules and lessons to develop fluency with grade level content. Each module in lessons 1, 5, and 9 (total of 36 lessons) has an on-going practice specifically designed for the development of fact fluency.

CONCEPTUAL UNDERSTANDING-

Each lesson provides sample discussion questions as well as a "reflecting on the work" section designed to wrap up the lesson and check for conceptual understanding.

Each lesson has on-going practice activities and each module has problem solving and investigation activities that focus on more open ended problem types.

MATHEMATICAL PRACTICES-
Each module has a document in the Mathematics tab that lists the Mathematical Practices addressed for each lesson. There is a master document that shows the coverage of the Standards for Mathematical Practice in all modules available. If you hover over the title of any lesson it will show the standards addressed.

The practices are also highlighted in the teacher's materials for each lesson along with the objective.

In the Mathematics Tab, each practice is highlighted and there are professional development videos that discuss both Unwrapping the Mathematical Practice Standards and Exploring Habits of Mind.

Each lesson has a Reflecting on the Work section in which students discuss their solutions and approaches. The program approaches the mathematics through dialogue, models, explanations, etc.

ACCESSIBILITY OF STANDARDS TO ALL STUDENTS-

In the Mathematics Tab, there is and English Language Learners portion that provides and overview of key strategies in addressing the needs of EL students. In certain lessons, teachers can hover over an EL icon which provides guidance in helping a teacher deliver instruction more easily accessible to EL students.

Each lesson has a minimum of 2 differentiation activities (extra help, extra practice, extra challenge). The drop down arrow on the top right of any lesson also displays the range of lessons within that topic K-5.

In most lessons, there is a balance of whole group, small group, and individual activities including the use of big books, games, manipulatives, models, and direct instruction. Sample questions are provided for the teacher to use throughout the lesson to check for understanding.

OTHER:

Professional development is a must for Stepping Stones! The publisher says that professional development/training is required. With an adoption teachers receive a 3 hour implementation session. Publisher recommends a follow up 3 hour session.

2015-16 Interim Mathematics Review

Mathematics Evaluation Tool Grades K-8

Publisher: Origo

Title of Material: Stepping Stones Gr 2

Author: James Burnett & Calvin Irons

ISBN #: 987-1-921959-79-0 **Copyright** 2012

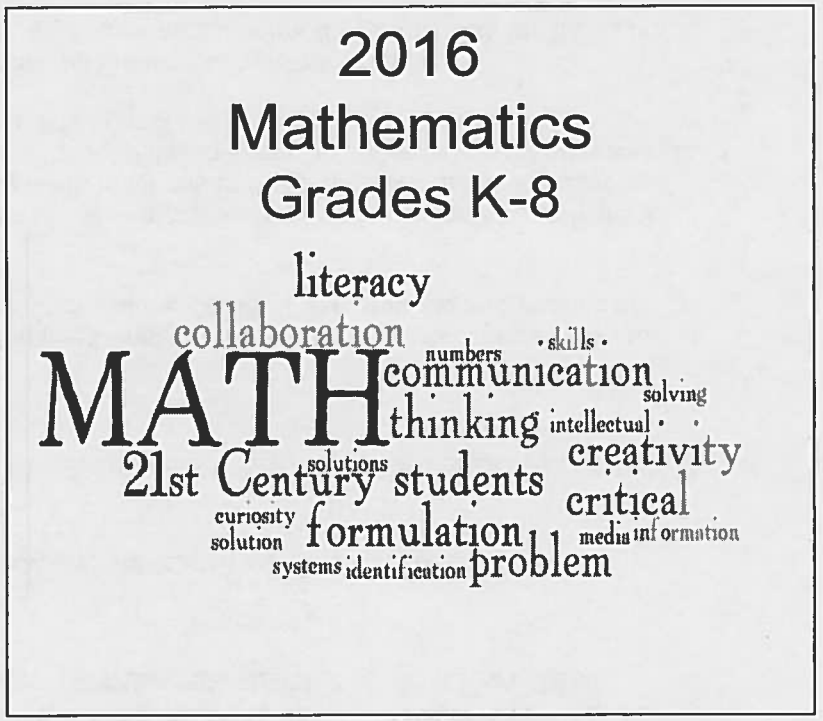
Reviewer ID: CJS & TB

Core Mathematics Program- a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Core.

Other Mathematics Program- a program that substantially, but partially, meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Other.

Component Mathematics Program- a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs.
Substantial evidence clearly supports the designation of this program as Component.

Intervention Program- a program designed and intended to target and support students' specific needs.
Substantial evidence clearly supports the designation of this program as Intervention.



- Evaluation Form adapted from Instructional Materials Evaluation Toolkit (IMET).

The IMET was developed by Student Achievement Partners. Educators may use or adapt. http://creativecommons.org/licenses/by/3.0/ Download this tool at http://achievethecore.org/IMET

2015-16 Interim Mathematics Review

Mathematics Evaluation Tool Grades K-8

Publisher: Origo Education

Title of Material: Stepping Stones Grade 2

Author: J. Burnett, C. Irons, R. Irons

ISBN #: 9781921959790 **Copyright_2012**

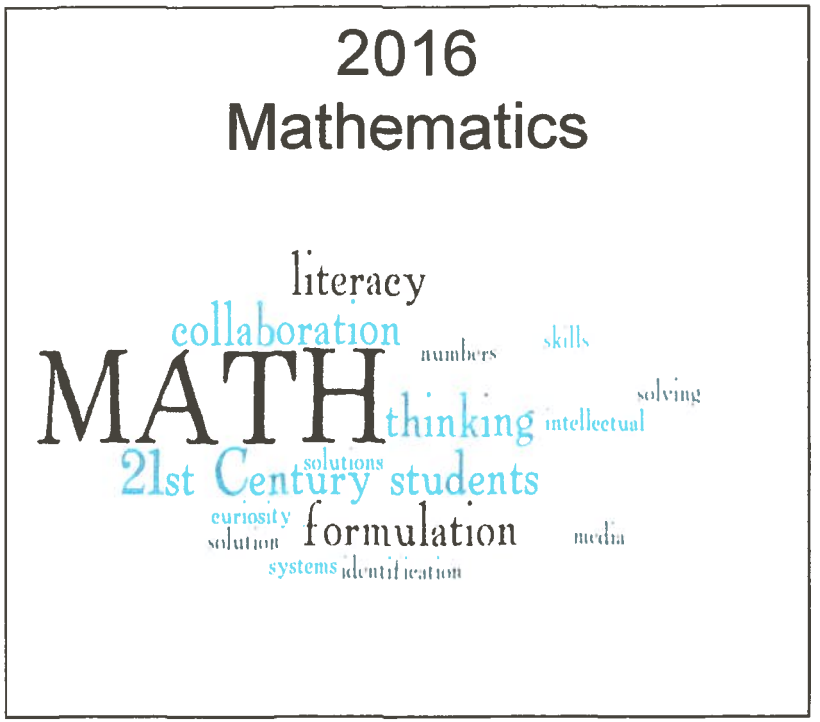
Reviewer ID: CJS

Core Mathematics Program- a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Core.

Other Mathematics Program- a program that substantially, but partially, meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Other.

Component Mathematics Program- a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs.
Substantial evidence clearly supports the designation of this program as Component.

Intervention Program- a program designed and intended to target and support students' specific needs.
Substantial evidence clearly supports the designation of this program as Intervention.



- Evaluation Form adapted from Instructional Materials Evaluation Toolkit (IMET).

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Instructional Materials Evaluation Tool

Mathematics, Grades K-8

What Are the Purposes of the IMET?

This Math IMET is designed to help educators determine whether instructional materials are aligned to the Shifts and major features of the Common Core State Standards (CCSS). The substantial instructional Shifts (http://www.corestandards.org/other-resources/key-shifts-inmathematics/) at the heart of the Common Core State Standards are:

- **Focus** strongly where the Standards focus
- **Coherence**: Think across grades and link to major topics within the grade
- **Rigor**: In major topics, pursue conceptual understanding, procedural skill and fluency, and application with equal intensity.

The IMET draws directly from the following documents:

- Common Core State Standards for Mathematics (www.corestandards.org/Math)
- Publishers' Criteria for the Common Core State Standards in Mathematics grade K-8 (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)

When to use the IMET

1. Purchasing materials: Many factors go into local purchasing decisions. Alignment to the Standards is a critical factor to consider. This tool is designed to evaluate alignment of instructional materials to the Shifts and the major features of the CCSS. It also provides suggestions of additional indicators to consider in the materials evaluation and purchasing process.

2. Evaluating materials currently in use: The IMET can be used to analyze the degree of alignment of existing materials and help to highlight specific, concrete flaws in alignment. Even where materials and tools currently in use fail to meet one or more of these criteria, the pattern of failure is likely to be informative. States and districts can use the evaluation to create a thoughtful plan to modify or combine existing resources in such a way that students' actual learning experiences approach the focus, coherence, and rigor of the Standards.

3. Developing programs: Those developing new programs can use this tool as guidance for creating aligned curricula.
Please note this tool was designed for evaluating comprehensive curricula (including any supplemental or ancillary materials), but it was not designed for the evaluation of standalone supplemental materials.

Who Uses the IMET?

Evaluating instructional materials requires both subject-matter and pedagogical expertise. Evaluators should be well versed in the Standards (www.corestandards.org/Math) for all grades in which materials are being evaluated. This includes understanding the Major Work of the grade (www.achievethecore/focus), the Supporting and Additional work, how the content fits into the progressions in the Standards (www.achievethecore.org/progressions), and the expectations of the Standards with respect to conceptual understanding, procedural skill and fluency, and application. Evaluators also should be familiar with the substantial instructional Shifts (http:// www.corestandards.org/other-resources/key-shifts-in-mathematics/) of Focus, Coherence and Rigor that are listed above.

Getting Started

Prior to Evaluation

Assemble all of the materials necessary for the evaluation. It is essential for evaluators to have materials for all grades covered by the program, as some criteria cannot be rated without having access to each grade. In addition, each evaluator should have a

reference copy of the Common Core State Standards for Mathematics (CCSSM) and the Publishers' Criteria for the Common Core St Standards for Mathematics, Grades K-8 (Spring 2013).

Before conducting the evaluation itself, it is important to develop a protocol for the evaluation process. The protocol should include having evaluators study the Publishers' Criteria and the IMET. It will also be helpful for evaluators to get a sense of each program overall before beginning the process. At a minimum, this would include reading the front matter of the text, looking at the table of contents and paging through multiple chapters.

Sections 1-3 below should be completed to produce a comprehensive picture of the strengths and weaknesses of the materials under evaluation. Information about areas in need of improvement or supplementation should be shared with internal and external stakeholders.

Navigating the Tool

Begin with Section 1: Non-Negotiable Alignment Criteria

- The Non-Negotiable Alignment Criteria must each be met in full for materials to be considered aligned to the Shifts and the major features of the Common Core State Standards. Each Non-Negotiable Alignment Criterion has one or more metrics associated with it; every one of these metrics must be met in order for the criterion as a whole to be met.

- Examine the relevant materials and use evidence to rate the materials against each criterion and its associated metric(s).

- Record and explain the evidence upon which the rating is based.

Continue to Section 2: Alignment Criteria

- The Alignment Criteria must each be met for materials to be considered aligned to the Shifts and the major features of the Common Core State Standards. Each Alignment Criterion has one or more metric associated with it; a specific number of these metrics must be met or partially met in order for the criterion as a whole to be met.

- Examine the materials in relation to these criteria, assigning each metric a point value. Rate the criterion as "Meets" or "Does Note Meet" based on the number of points assigned. The more points the materials receive on the alignment Criteria, the better they are aligned.

- Record and explain the evidence upon which the rating is based.

Proceed to Section 4: Indicators of Quality

- Indicators of Quality are important considerations that will help evaluators better understand the overall quality of instructional materials. These considerations are not criteria for alignment to the CCSS, but they provide valuable information about additional program characteristics. Evaluators may want to add their own indicators to the examples provided.

Directions for Non-Negotiable 1

Freedom from Obstacles to Focus

Criterion	Evidence- Give specific examples.	Rating: (Reviewer only.)
Non-Negotiable 1: **Freedom from Obstacles to Focus** **Materials must reflect the content architecture of the Standards by not assessing the topics named before the grade level where they first appear in the Standards.** The Standards foster students' progress to algebra by focusing strongly on arithmetic. Consistent with this focus, certain topics from outside of arithmetic appear only in later grades. Thus, to be aligned, materials must reflect the content architecture of the Standards by not assessing the topics named before the grade level where they first appear in the Standards. In this criterion, "topics named" means the topics that are explicitly named in Metric 1A. No other topics should be added to the list in Metric 1A. (Note that other topics in the standards are addressed in criterion NN2.)	**Required Materials** • Common Core State Standards for Mathematics (www.corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf) • From the materials being evaluated: teacher guides and all assessment components	**Rating this Criterion**: Non-Negotiable 1 is rated as Meets or Does Not Meet. To rate Non-Negotiable 1, begin by rating Metric 1A. Since Metric 1A is the only metric for Non-Negotiable 1, the rating for Non-Negotiable 1 is the same as the rating for Metric 1A. If Metric 1A is rated as Does Not Meet, include evidence of when the named topic(s) is/are assessed. If the metric is rated as Meets, list the grade(s) examined in the evaluation.

Metric NN1A: **Materials reflect the basic architecture of the Standards by not assessing the listed topics before the grade level indicated.** • Probability, including chance, likely outcomes, probability models. (Introduced in the CCSSM in grade 7) • Statistical distributions, including center, variation, clumping, outliers, mean, median, mode, range, quartiles; and statistical association or trends, including two-way tables, bivariate measurement data, scatter plots, trend line, line of best fit, correlation. (Introduced in the CCSSM in grade 6) • Similarity, congruence, or geometric transformations. (Introduced in the CCSSM in grade 8) • Symmetry of shapes, including line/ reflection symmetry, rotational symmetry. (Introduced in the CCSSM in grade 4) **How to Find the Evidence:** Evaluate the table of contents, all chapter tests, all unit tests, and other such assessment components (including rubrics). For context, read Criterion #2 from the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013). NOTE: Grade alignments of other topics are addressed in Non-Negotiable 2, Focus and Coherence.) In this criterion, "topics named" means the topics that are explicitly named in Metric 1A. No other topics should be added to the list in Metric 1A. (Note that other topics in the standards are addressed in criterion NN2.)	**Evidence-** **No assessments or lessons address any of the listed topics.**	**(Reviewer only.)** **__X__Meets** **____Does Not Meet**
Non-Negotiable 1: Materials must reflect the content architecture of the Standards by not assessing the topics named* before the grade level where they first appear in the Standards. **NN 1** If Metric 1A was rated as Meets, then rate Non-Negotiable 1 as Meets. If Metric 1A was rated as Does Not Meet, then rate Non- Negotiable 1 as Does Not Meet. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion.**(Reviewer only.)** **The focus of instruction is on 2nd grade standards.** **Before moving to Non-Negotiable 2, record the final Meets or Does Not Meet rating in the Evaluation Summary.**		**(Reviewer only.)** **__X__Meets** **____Does Not Meet** **Strengths/Weaknesses:**

Directions for Non-Negotiable 2

Focus and Coherence

Non-Negotiable 2:

Focus and Coherence

Materials must focus coherently on the Major Work of the grade in a way that is consistent with the progressions in the Standards.

Focus and coherence are the two major evidence-based design principles of the Common Core State Standards for Mathematics (CCSSM, p. 3). Focus is necessary in order to fulfill the ambitious promise the states have made to their students by adopting the Standards: greater achievement at the college and career ready level; greater depth of understanding of mathematics; and a rich classroom environment in which reasoning, sense-making, applications, and a range of mathematical practices flourish. In simpler terms, a mile-wide, inch-deep curriculum translates to less time per topic. Less time means less depth and moving on without many students. Thus, materials must focus coherently on the Major Work of the grade in a way that is consistent with the progressions in the Standards.

Required Materials

- Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf)
- Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)
- Focus by Grade Level for the grade being evaluated (www.achievethecore.org/focus)
- From the materials being evaluated: teacher guides, student texts and workbooks

Rating this Criterion:

Non-Negotiable 2 is rated as Meets or Does Not Meet.

To rate Non-Negotiable 2, first rate metrics 2A–2H. Each of these eight metrics must be rated as Meets in order for Non-Negotiable 2 to be rated as Meets. Rate each metric 2A-2H as Meets or Does Not Meet/Insufficient Evidence. If the evidence examined shows that the Criterion is met, then mark the Criterion Meets. If the evidence examined shows that the Criterion is not met—or if there is insufficient evidence to make a determination—then mark the Criterion as Does Not Meet/Insufficient Evidence. Support all ratings with evidence.

Metric NN2A: **In each grade K–8, students and teachers using the materials as designed devote the large majority of time to the Major Work of the grade.** **How to Find the Evidence:** Familiarize yourself with the Major Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, lessons, homework assignments, and assessments. (Evaluate both student and teacher materials.) Consider time spent on the Major Work of the grade and judge qualitatively whether students and teachers using the materials as designed will devote the large majority of time to the Major Work of the grade. For context, read Criterion #1 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013)	**Evidence-** **There are only 144 total lessons. 86% of the lessons are directly tied to the 2nd grade standards.** **63% of the lessons are focused on the major clusters (2.OA.A, 2.OA.B, 2.NBT.A, 2.NBT.B, 2.MD.A, 2.MD.B).** **46 of the lessons focus on *Use place value understanding and properties of operations to add and subtract (2.NBT.B).* A highlight of the major work in grades K-2.** **14% of the lessons go beyond the standards (3rd and 4th grade standards). 4.5% of those focus on 3.OA.B (a major work of 3rd grade). *Understand properties of multiplication and the relationship between multiplication and division* – a direct extension of 2.OA.C and occurs in Module 11 of 12 (6 of the last 18 lessons in the program)**	**(Reviewer only.)** **___X_Meets** **____Does Not Meet/** **Insufficient Evidence**
Metric NN2B: **Supporting Work, where present, enhances focus and coherence simultaneously by also engaging students in the Major Work of the grade.** **How to Find the Evidence:** Familiarize yourself with the Major Work and Supporting Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate chapters and lessons that focus on Supporting Work. NOTE: Example of evaluating this Criterion might include looking at whether materials for K–5 generally treat data displays as an occasion for solving grade-level word problems using the four operations (e.g., see 3.MD.B.3); or whether materials for grade 7 take advantage of opportunities to use probability to support ratios, proportions, and percentages. For context, read Criterion #3 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** **15% of the grade level work supports the major work of 2nd grade by focusing on 2.OA.C, 2.MD.C, 2.MD.D and 2.G.A.** **In several of these lessons, the work in the supporting clusters is in support of/conjunction with the major cluster work.**	**(Reviewer only.)** **__X__Meets** **____Does Not Meet/** **Insufficient Evidence**

Metric NN2C: **Materials ba[illegible]ontent progressions on the grade-by-grade progressions in the Standards. Content from previous or future grades does not unduly interfere with or displace on-grade-level content.** **How to Find the Evidence:** Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, and lessons in both student and teacher materials. NOTE: In some cases it may be possible that aligned materials might address some aspects of a topic in a strategic way before or after the grade level in which the topic is central in the Standards' progressions; for example, a curriculum author might purposefully choose to explore adding fractions with unlike denominators in a way appropriate to grade four, recognizing that this work is not really required until the next grade. However, any such purposeful discrepancies in content progressions should enhance the required learning in each grade; not unduly interfere with or displace grade-level content; and be clearly aimed at helping students meet the Standards as written rather than effectively rewriting the progressions in the Standards. And in all cases, note that Non-Negotiable 1 must be met for materials to be aligned. For context, read Criterion #5a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** 14% of the lessons go beyond the standards (3rd and 4th grade standards). 4.5% of those focus on 3.OA.B (a major work of 3rd grade). *Understand properties of multiplication and the relationship between multiplication and division* – a direct extension of 2.OA.C and occurs in Module 11 of 12 (6 of the last 18 lessons in the program) Stepping Stones has a content chart available in which the teacher can see the progression of lessons within a topic from grade K-5.	**(Reviewer only.)** **__X__Meets** **____Does Not Meet/** **Insufficient Evidence**
Metric NN2D: **Materials give all students extensive work with on-grade-level problems.** **How to Find the Evidence:** Evaluate both student and teacher materials. If the materials provide resources for differentiated learning, consider whether lower-performing students have opportunities to engage with grade-level problems. Also consider whether higher-performing students are given opportunities to learn current grade-level content in greater depth. For context, read Criterion #5b in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** The materials include a student journal, which is a 2 page practice directly related to the lesson. Each lesson has a minimum of 2 differentiation activities (extra help, extra practice, extra challenge). Each lesson has ongoing practice in which students revisit content to gain fluency with grade level concepts. Each module contains 2 additional options for work with on grade level concepts. There are 3 investigations and 3 problem solving activities.	**(Reviewer only.)** **__X__Meets** **____Does Not Meet/** **Insufficient Evidence**

Metric NN2E: **Materials re[illegible] on-grade-level concepts explicitly to prior knowledge from earlier grades.** **How to Find the Evidence:** Evaluate both student and teacher materials. NOTE: Examples of evaluating this Criterion might include looking at the way the materials extend basic ideas of place value across the decimal point; or the role that properties of operations play when the materials extend arithmetic beyond whole numbers to fractions, variables, and expressions. More generally, cluster headings in the Standards sometimes signal key moments where reorganizing and extending previous knowledge is important in order to accommodate new knowledge (e.g., see cluster headings that use the phrase "Apply and extend previous understanding"). For context, read Criterion #5c in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** 6% of the lessons directly relate 1st grade concepts to 2nd grade content in the major clusters. Time is spent using manipulatives, pictures, and models to reinforce conceptual understanding of grade level content.	**(Reviewer only.)** **___X_Meets** **____Does Not Meet/** **Insufficient Evidence**
Metric NN2F: **Review of material from previous grades is clearly identified as such to the teacher, and teacher and students can see what their specific responsibility is for the current year.** **How to Find the Evidence:** Evaluate the table of contents, but do not stop there; also evaluate units, chapters, lessons, homework assignments and assessments. (Evaluate both student and teacher materials.) Identify any content from previous grades and check whether it is identified as such. For context, read Criterion #5a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** In the Lesson Content and Learning Targets resource page for every module, the standards are clearly highlighted if they are attached to previous grade level concepts. Additionally, each lesson in the TE clearly states both the standard and the mathematical practice being addressed. (roll over the title of the lesson and the on-going practice activities to see the standards)	**(Reviewer only.)** **___X_Meets** **____Does Not Meet/** **Insufficient Evidence**
Metric NN2G: **Materials include learning objectives that are visibly shaped by CCSSM cluster headings.** **How to Find the Evidence:** Select several clusters from the Major Work in the grade being evaluated. Evaluate teacher and student materials in relation to these clusters. For context, read Criterion #6a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** In the Lesson Content and Learning Targets resource for each module, Origo lists the Common Core cluster heading along with the standard for every lesson.	**(Reviewer only.)** **__X__Meets** **____Does Not Meet/** **Insufficient Evidence**

Metric NN2H: **Materials include problems and activities that serve to connect two or more clusters in a domain, or two or more domains in a grade, in cases where these connections are natural and important.** **How to Find the Evidence:** In the grade being evaluated, choose two or more clusters or two or more domains for which connections are natural and important. Evaluate the units, chapters, and lessons that deal with the chosen topics, looking for problems and activities that serve to connect the chosen clusters or domains. NOTE: An example of evaluating this Criterion might include looking at whether problems in grade 4 sometimes or often involve students applying their developing computation skills (detailed in domain NBT) in the context of solving word problems (detailed in domain OA). For context, read Criterion #6b in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** In many modules, lessons focus on a connection between clusters in a domain such as Operations and Algebraic Thinking and Number and Operations in Base Ten, and Operations and Algebraic Thinking and Measurement and Data. There are also many connections between two or more clusters in a domain such as understanding place value and use place value understanding and properties of operations to add and subtract within the NBT domain.	**(Reviewer only.)** **__X__Meets** **____Does Not Meet/** **Insufficient Evidence**
Non-Negotiable 2: **Focus and Coherence** **Materials must focus coherently on the Major Work of the grade in a way that is consistent with the progressions in the Standards.** NN 2 If all Metrics 2A – 2H were rated as Meets, then rate Non-Negotiable 2 as Meets. If one or more Metric was rated Does Not Meet/Insufficient Evidence, then rate Non-Negotiable 2 as Does Not Meet. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)** **Before moving to Alignment Criterion 1, record the final Meets or Does Not Meet rating in the Evaluation Summary.**		**(Reviewer only.)** **___X_Meets** **____Does Not Meet** **Strengths/Weaknesses:**

Now continue by evaluating the Alignment Criterion 1 for Rigor and Balance.

Directions for Alignment Criterion 1

Rigor and Balance

Alignment Criterion 1: Rigor and Balance

Materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.

The Standards set expectations for attention to all three aspects of rigor: conceptual understanding, procedural skill and fluency, and applications. Thus, materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.

Required Materials

- Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf)
- Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)
- Focus by Grade Level for the grade being evaluated (achievethecore.org/focus)
- Situation Types for the Operations in Word Problems (achievethecore.org/situation-types)
- From the materials being evaluated: teacher guides, student texts and workbooks

Rating this Criterion:

Alignment Criterion 1 is rated as Meets or Does Not Meet.

To rate Alignment Criterion 1, first rate metrics 1A, 1B, and 1C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). For each metric, guiding questions are provided to aid in gathering evidence.

Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 1 if the materials rate 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as rigor and balance, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.

Metric AC1A:

The materials support the development of students' conceptual understanding of key mathematical concepts, especially where called for in specific content Standards or cluster headings.

How to Find the Evidence:

Select one or more cluster(s) or Standard(s) from the Major Work for the grade being evaluated that relate specifically conceptual understanding to use throughout the questions associated with this metric. NOTE: Some examples of clusters or Standards that call for conceptual understanding include: K.OA.A.1, (1.NBT.B, 1.NBT.C), (2.NBT.A, 2.NBT.B), (3.OA.A.1, 3.OA.A.2), 4.NF.A, (4.NBT.A, 4.NBT.B), 5.NF.B, (5.NBT.A, 5.NBT.B), 6.RP.A, 6.EE.A.3, 7.NS.A, 7.EE.A, 8.EE.B, 8.F.A, 8.G.A

Clusters or Standards grouped by parentheses are closely connected and could be analyzed together.

For context, read Criterion #4a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).

-Choose a cluster/Standard from the Major Work that is aligned to each aspect of rigor and use it to evaluate these metrics. It is most helpful if the same clusters/Standards are chosen for all of the programs being evaluated. (Guidance in choosing clusters/Standards is included in "How to Find the Evidence".)

Use the questions for AC Metric 1A to evaluate Metric 1A. Record evidence for each question and rate Metric 1A.

__2__Meets (2)

____Partially Meets (1)

____Does Not Meet (0)

Is conceptual understanding attended to thoroughly where the Standards set explicit expectations for understanding or interpreting? Evaluate lessons, chapter/unit assessments and homework assignments, paying attention to work aligned to Standards that explicitly call for understanding or interpreting. NOTE: Examples of evaluating this Criterion might include looking at how well the multi-digit addition and subtraction algorithms are developed and explained on the basis of place value and properties of operations; or how well the multi-digit multiplication and division algorithms are developed and explained on the basis of place value and properties of operations; or how well solving equations is presented and explained as a process of reasoning.	**Evidence-** 2NBT.A /2.NBT.B: (44% of the lessons address this) - Use of manipulatives and pictures - Use of models that show students standard and word form of numbers - Use of number tracks and number lines - Numeral expanders - Use of ten frames - Use of hundreds chart - Use of base ten blocks - Use of place value chart - Use of dot cards and dominoes for addition and subtraction - Big books and games	
Do the materials feature high-quality conceptual problems and conceptual discussion questions? Evaluate lessons, chapter/unit assessments, and homework assignments. NOTE: Example of conceptual problems might include such questions as "Find a number greater than 1/5 and less than 1/4," or "If the divisor does not change and the dividend increases, what happens to the quotient?"	**Evidence-** Each lesson provides sample discussion questions as well as a "reflecting on the work" section designed to wrap up the lesson and check for conceptual understanding. Each lesson has on-going practice activities and each module has problem solving and investigation activities that focus on more open ended problem types.	
Do the materials feature opportunities to identify correspondences across mathematical representations? Evaluate lessons, chapter/unit assessments and homework assignments. NOTE: Examples of evaluating this Criterion might include looking at whether students are supported in identifying correspondences among: the verbal description of a situation, the diagrams that distill its mathematical features, and the equations that model it; or equivalent forms of numbers (e.g., 3 and 6/2) and the number line; or rational number operations and representations of them via models such as the vector model; or the expression that defines a function and the graph that shows the relationship.	**Evidence-** 2NBT.A /2.NBT.B: - Use of manipulatives and pictures - Use of models that show students standard and word form of numbers - Use of number tracks and number lines - Numeral expanders - Use of ten frames - Use of hundreds chart - Use of base ten blocks - Use of place value chart - Use of dot cards and dominoes for addition and subtraction - Big books and games Explicit connections between the representations above are made throughout the program in most lessons.	

Metric AC1B: **The materials are designed so that students attain the fluencies and procedural skills required by the Standards.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Major Work for the grade being evaluated that relate specifically to fluency and procedural skill to use throughout the questions associated with this metric. NOTE: Some examples of Standards that call for procedural skill and fluency include: K.OA.A.5, 1.OA.C.6, 2.OA.B.2, 2.NBT.B.5, 3.OA.C.7, 3.NBT.A.2, 4.NBT.B.4, 5.NBT.B.5, 6.NS.B.2, and 6.NS.B.3, 6.EE.A, 7.NS.A, 7.EE.A.1,7.EE.B.4a, 8.EE.C.7, 8.EE.C.8b For context, read Criterion #4b in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).		**Use the questions for Metric 1B to evaluate Metric 1 B. Record evidence for each question and rate Metric 1B.** **(Reviewer only.)** **__2__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Is progress toward fluency and procedural skill interwoven with students' developing conceptual understanding of the operations in question? Evaluate lessons, chapter/unit assessments, daily routines, and homework assignments for evidence that the development of fluency and procedural skill is supported by conceptual understanding.	**Evidence-** Each lesson contains an on-going practice activity that revisits content from previous modules and lessons to develop fluency with grade level content.	
Are purely procedural problems and exercises present that include cases in which opportunistic strategies are valuable and generic cases that require efficient algorithms present? Evaluate lessons, chapter/unit assessments, daily routines, and homework assignments. NOTE: Examples of problems in which opportunistic strategies are valuable might include the sum 698 + 240 or the system x + y = 1, 2x + 2y = 3. Examples of generic cases that require efficient algorithms might include the sum 8767+2286 or the system 6y + x = x + 3, – x = 1 + 2y.	**Evidence-** Yes, after significant work in conceptual development lessons contain procedural problems for students to apply this knowledge. Example for evidence: 2.4, 4.7, 12.8, 11.1, 11.5, 11.6 etc...	
Do the materials in grades K–6 provide repeated practice toward attainment of fluency Standards? Evaluate lessons, daily routines, and homework assignments for evidence of repeated practice toward attainment of the following K–6 Standards that set an explicit expectation of fluent (accurate and reasonably fast) computation: K.OA.A.5, 1.OA.C.6, 2.OA.B.2, 2.NBT.B.5, 3.OA.C.7, 3.NBT.A.2, 4.NBT.B.4, 5.NBT.B.5, 6.NS.B.2, 6.NS.B.3.	**Evidence-** Each lesson contains an on-going practice activity that revisits content from previous modules and lessons to develop fluency with grade level content. Each module in lessons 1, 5, and 9 (total of 36 lessons) has an on-going practice specifically designed for the development of fact fluency.	

Metric AC1C: **The material[illegible]e designed so that teachers and students spend sufficient time working with engaging applications, without losing focus on the Major Work of each grade.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Major Work for the grade being evaluated that relate specifically application to use throughout the questions associated with this metric. NOTE: Some examples of clusters or Standards that call for application include: K.OA.A.2, 1.OA.A, 2.OA.A, 3.OA.A.3, 3.OA.D.8, 4.OA.A.3, 4.NF.B.3d, 4.NF.B.4c, 5.NF.B.6, 5.NF.B.7c, 6.RP.A.3, 6.NS.A.1, 6.EE.B.7, 6.EE.C.9, 7.RP.A, 7.NS.A.3, 7.EE.B.3, 8.EE.C.8c, 8.F.B For context, read Criterion #4c in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** 2.OA.A: There are 16 lessons that are directly tied to this cluster, however, 46 lessons are tied to 2.NBT.B which is connected to this cluster. Example: 2.4, 6.2, 7.5	**Use the questions for Metric 1C to evaluate Metric 1C. Record evidence for each quest[illegible] and rate Metric 1C.** **(Reviewer only.)** **__2__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Are there are single- and multi-step contextual problems, including non-routine problems, that develop the mathematics of the grade, afford opportunities for practice, and engage students in problem solving? Do the problems attend thoroughly to those places in the content Standards where expectations for multi-step and real-world problems are explicit? Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** Most lessons give students the opportunity to apply the concept to problems both bare and contextual. Also, many problem solving activities located in the More Math Section of each module provide problem solving opportunities.	
Do application problems particularly stress applying the Major Work of the grade? Evaluate lessons, chapter/unit assessments, and homework assignments. NOTE: Examples of evaluating this Criterion might include looking at: how well, by the end of grade 2, students using the materials as designed can represent and solve a full range of one-step addition and subtraction word problems; or how well, by the end of grade 3, students using the materials as designed can represent and solve a full range of one-step multiplication and division word problems; or how well these basic situation types for each operation are carried coherently across the grades, (e.g., with fractions and algebraic expressions); or, in all grades, whether the problems connect concepts, Standards, and domains in ways that are natural and important. For a list of situation types for one-step addition, subtraction, multiplication, and division problems, see Situation Types for the Operations in Word Problems	**Evidence-** Most lessons give students the opportunity to apply the concept to problems both bare and contextual. Each lesson also has a Step Ahead section that promotes application of the lesson's focus. Example for evidence: - Lesson 6.2, 12.5 Stepping Stones has a content chart available in which the teacher can see the progression of lessons within a topic from grade K-5. **Drop down arrow in top right of any lesson.*	
Does modeling build slowly across K–8, with applications that are relatively simple in earlier grades and when students are encountering new content? In grades 6–8, do the problems begin to provide opportunities for students to make their own assumptions or simplifications in order to model a situation mathematically? Read Standard for Mathematical Practice 4, Model with Mathematics. Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** MP4 is found throughout the lessons including evidence in the teacher's pages with guided questioning and discussion points. A lot of manipulatives, drawings and models are used to connect the mathematical concepts and ideas.	

Alignment Criterion 1: Rigor and Balance

Materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.

AC1 Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 out of 6 points, the Criterion has not been met. Check the final rating.
Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)**

Before moving to Alignment Criterion 2, record the final Meets or Does Not Meet rating in the Evaluation Summary.

(Reviewer only.)

__X__Meets

____Does Not Meet

Strengths/Weaknesses:

Directions for Alignment Criterion 2

Standards for Mathematical Practice

Alignment Criterion 2: Standards for Mathematical Practice

Materials must demonstrate authentic connections between content Standards and practice Standards.

The Standards require that designers of instructional materials connect the mathematical practices to mathematical content in instruction. Thus, materials must demonstrate authentic connections between content Standards and practice Standards.

Required Materials:

- Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf)
- Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)
- Focus by Grade Level for the grade being evaluated (www.achievethecore.org/focus)
- From the materials being evaluated: teacher guides, student texts and workbooks

Rating this Criterion

Alignment Criterion 2 is rated as Meets or Does Not Meet.

To rate Alignment Criterion 2, first rate metrics 2A, 2B, and 2C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). For each metric, guiding questions are provided to aid in gathering evidence.

Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 2 if the materials earn 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as mathematical practices, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.

Metric AC2A: **Materials address the practice Standards in such a way as to enrich the Major Work of the grade; practices strengthen the focus on Major Work instead of detracting from it, in both teacher and student materials.** **How to Find the Evidence:** Familiarize yourself with the Major Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate teacher and student materials for evidence that the mathematical practices support and connect to the focus of the grade. NOTE: Examples of evaluating this Criterion might include looking at whether, in grades K–5, students using the materials are supported to look for and express regularity in repeated reasoning about the addition table, the multiplication table, the properties of operations, the relationship between addition and subtraction or multiplication and division, and the place value system; or whether, in grades 6–8, students using the materials are supported to look for and express regularity in repeated reasoning about proportional relationships and linear functions. For context, read Criterion #8 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013).	**Evidence-** Each module has a document in the Mathematics tab that lists the Mathematical Practices addressed for each lesson. There is a master document that shows the coverage of the Standards for Mathematical Practice in all modules available. If you hover over the title of any lesson, it will show the standards addressed.	**(Reviewer only.)** **__2__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Metric AC2B: **Materials attend to the full meaning of each practice Standard.** **How to Find the Evidence:** For context, read Criterion #7 and Criterion #9 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).		**Use the questions for Metric 2B to evaluate Metric 2B. Record evidence for each question and rate Metric 2B.** **(Reviewer only.)** **__2__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Over the course of any given year of instruction, is each mathematical practice Standard meaningfully present in the form of assignments, activities, or problems that stimulate students to develop the habits of mind described in the practice Standard? Evaluate lessons, chapter/ unit assessments, and homework assignments for evidence of each mathematical practice being meaningfully present in instruction.	**Evidence-** Each module has a document in the Mathematics tab that lists the Mathematical Practices addressed for each lesson. There is a master document that shows the coverage of the Standards for Mathematical Practice in all modules available. The practices are also highlighted in the teacher's materials for each lesson along with the objective.	

Do the materials treat the practice Standards as developing across grades or grade bands? Are the practice Standards in early grades appropriately simple? Do they display an arc of growing sophistication across the grades?	**Evidence-** Each module has a document in the Mathematics tab that lists the Mathematical Practices addressed for each lesson. There is a master document that shows the coverage of the Standards for Mathematical Practice in all modules available. The practices are also highlighted in the teacher's materials for each lesson along with the objective.	
Are there teacher-directed materials that explain the role of the practice Standards in the classroom and in students' mathematical development? Are alignments to practice Standards accurate?	**Evidence-** In the Mathematics Tab, each practice is highlighted and there are professional development videos that discuss both Unwrapping the Mathematical Practice Standards and Exploring Habits of Mind.	
Metric AC2C: **Materials support the Standards' emphasis on mathematical reasoning.** **How to Find the Evidence:** For context, read Criterion #10 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).		**Use the questions for Metric 2C to evaluate Metric 2C. Record evidence for each question and rate Metric 2C.** **(Reviewer only.)** **__2__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Do the materials support students in constructing viable arguments and critiquing the arguments of others concerning grade-level mathematics that is detailed in the content Standards? Read Standard for Mathematical Practice 3. Evaluate teacher and student materials to ensure that students are given opportunities to reason with grade-level mathematics.	**Evidence-** An example would be each lesson has a Reflecting on the Work section in which students discuss their solutions and approaches. MP3 is highlighted in 32 lessons.	
Do the materials support students in producing not only answers and solutions, but also, in a grade-appropriate way, arguments, explanations, diagrams, mathematical models, etc., especially in the Major Work of the grade? Familiarize yourself with the Major Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate teacher and student materials, to understand the types of work students are expected to produce.	**Evidence-** An example would be each lesson has a Reflecting on the Work section in which students discuss their solutions and approaches. The program approaches the mathematics through dialogue, models, explanations, etc.	
Do materials explicitly attend to the specialized language of mathematics? Is the language of argument, problem solving, and mathematical explanations taught rather than assumed? Evaluate teacher and student materials, paying attention to how mathematical language is taught. NOTE: Examples of evaluating this Criterion might include looking at whether students are supported in: basing arguments on definitions; using the method of providing a counterexample; or recognizing that examples alone do not establish a general statement.	**Evidence-** Each module in the Mathematics section has a language development section that identifies key vocabulary that students will use and develop in that set of 12 lessons.	

Alignment Criterion 2:
Standards for Mathematical Practice

Materials must demonstrate authentic connections between content Standards and practice Standards.

AC2 Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 out of 6 points, the Criterion has not been met. Check the final rating.
Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion.
(Reviewer only.)

Before moving to Alignment Criterion 3, record the final Meets or Does Not Meet rating in the Evaluation Summary.

(Reviewer only.)

__X__Meets

____Does Not Meet

Strengths/Weaknesses:

Alignment Criterion 3:
Access to the Standards for All Students

Materials must provide supports for English Language Learners and other special populations.

Because Standards are for all students, alignment requires thoughtful support to ensure all students are able to meet the Standards. Thus, aligned materials must provide supports for English Language Learners and other special populations.

Required Materials:

- Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf)
- Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)
- From the materials being evaluated: teacher guides, student texts and workbooks

Rating this Criterion:
Alignment Criterion 3 is rated as Meets or Does Not Meet.

To rate Alignment Criterion 3, first rate metrics 3A, 3B, and 3C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points).

Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 3 if the materials earn 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as support for special population, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.

Metric AC3A:
Support for English Language Learners and other special populations is thoughtful and helps those students meet the same Standards as all other students. The language in which problems are posed is carefully considered.

How to Find the Evidence:
Evaluate teacher and student materials, paying attention to supports offered for special populations.

Evidence-

In the Mathematics Tab, there is and English Language Learners portion that provides and overview of key strategies in addressing the needs of EL students. In certain lessons, teachers can hover over an EL icon which provides guidance in helping a teacher deliver instruction more easily accessible to EL students.

Reviewer only.)

__2__Meets (2)

____Partially Meets (1)

____Does Not Meet (0)

Metric AC3B: **Materials pr e appropriate level and type of scaffolding, differentiation, intervention, and support for a broad range of learners with gradual removal of supports, when needed, to allow students to demonstrate their mathematical understanding independently.** **How to Find the Evidence:** Evaluate teacher and student materials, paying attention to whether materials provide differentiation that will lead all learners to engage with on-grade-level content.	**Evidence-** Each lesson has a minimum of 2 differentiation activities (extra help, extra practice, extra challenge). The drop down arrow on the top right of any lesson also displays the range of lessons within that topic K-5.	**Reviewer only.)** **__2__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Metric AC3C: **Design of lessons recommends and facilitates a mix of instructional approaches for a variety of learners such as using multiple representations (e.g., including models, using a range of questions, checking for understanding, flexible grouping, pair-share).** **How to Find the Evidence:** Evaluate teacher materials, noting instructional approaches suggested for whole class and differentiated lessons and activities.	**Evidence-** In most lessons, there is a balance of whole group, small group, and individual activities including the use of big books, games, manipulatives, models, and direct instruction. Sample questions are provided for the teacher to use throughout the lesson to check for understanding.	**Reviewer only.)** **__2__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Alignment Criterion 3: **Access to the Standards for All Students** **Materials must provide supports for English Language Learners and other special populations.** **AC3** Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 points, the Criterion has not been met. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion.**(Reviewer only.)** **Move to the Evaluation Summary and record the final Meets or Does Not Meet rating .**		**(Reviewer only.)** **__X__Meets** **____Does Not Meet** **Strengths/Weaknesses:**

Once an evaluation for alignment to the Shifts and major features of the CCSS has been conducted using Sections 1-3, it's important to evaluate for overall quality and best practices. A starting list of Indicators of Quality are suggested below. States, districts and others evaluating instructional materials are encouraged to add to this list to ensure materials reflect local contexts. For background information on some of the Indicators of Quality in this section, refer to pp.18–21 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).

Indicators of Quality	Evidence- Give specific examples.	Rating: (Reviewers only.)
1. Lessons are thoughtfully structured and support the teacher in leading the class through the learning paths at hand, with active participation by all students in their own learning and in the learning of their classmates.	**Evidence-** In most lessons, there is a balance of whole group, small group, and individual activities including the use of big books, games, manipulatives, models, and direct instruction. Sample questions are provided for the teacher to use throughout the lesson to check for understanding.	**(Reviewer only.)** **____X__ Yes** **_____ No**
2. The underlying design of the materials includes both problems and exercises. (In solving problems, students learn new mathematics, whereas in working exercises, students apply what they have already learned to build mastery.) Each problem or exercise has a purpose. **NOTE: This Criterion does not require that the problems and exercises be labeled as such.**	**Evidence-** The student journal that goes with each lesson provides daily opportunity for students to solve problems. Each lesson has an on-going practice page which provides practice to build mastery.	**(Reviewer only.)** **____X__ Yes** **_____ No**
3. Design of assignments is not haphazard: exercises are given in intentional sequences in order to strengthen students' mathematical understanding.	**Evidence-** There is a scope and sequence which provides a "spaced learning" approach. Students are provided instruction on a portion of a concept then allowed time to practice. Further instruction on that topic continues at a later time which builds on the initial instruction and practice.	**(Reviewer only.)** **___X___ Yes** **_____ No**
4. There are separate teacher materials that support and **reward teacher study including, but not limited to: discussion of the mathematics of the units and the mathematical point of each lesson as it relates to the organizing concepts of the unit, discussion on student ways of thinking and anticipating a variety of students responses, guidance on lesson flow, guidance on questions that prompt students thinking, and discussion of desired mathematical behaviors being elicited among students.**	**Evidence-** Each module contains a Mathematics section that is designed specifically for teacher support and or professional development. That section includes a detailed description of the mathematical focus of the module, including which models, vocabulary words, and manipulatives will be used. Professional development videos are imbedded in this section as well which are designed to support teachers in all areas described on the left. (Focus, Learning Targets, Mathematical Practices, English Language Learners, Language Development, Letter to home, Research into Practice)	**(Reviewer only.)** **___X___ Yes** **_____ No**

5. Manipulatives suggested in the materials are faithful representations of the mathematical objects they represent and are connected to written methods.	**Evidence-** Number lines, base ten blocks, ten frames, shapes etc. both digitally and physical representations some included in the Number Case.	**(Reviewer only.)** **___X___ Yes** **_____ No**
6. Materials include a variety of curriculum-embedded assessments. Examples include pre-, formative, summative, and self-assessment resources.	**Evidence-** Yes, each module contains an assessment section with an overview correlating the learning targets with each form of assessments – formative/summative. Formative include pre-test, observation/discussion, journal/portfolio. Summative include check-up, performance task, interview, and quarterly tests.	**(Reviewer only.)** **___X___ Yes** **_____ No**
7. Assessments contain aligned rubrics, answer keys, and scoring guidelines that provide sufficient guidance for interpreting student performance.	**Evidence-** Rubrics and answer keys are included.	**(Reviewer only.)** **___X___ Yes** **_____ No**
8. Materials assess student proficiency using methods that are accessible and unbiased, including the use of course-level language in student prompts.	**Evidence-** Yes, materials seem unbiased and accessible to second grade students. Assessment graphics match graphics used in instruction and practice.	**(Reviewer only.)** **___X___ Yes** **_____ No**
9. Materials are carefully evaluated by qualified individuals, whose names are listed, in an effort to ensure freedom from mathematical errors and course-level appropriateness.	**Evidence-** James Burnett (Senior writer and executive director and CEO of Origo),Calvin Irons (the Senior Lecturer in math at at Queensland University of Technology in Australia),Rosemary Irons (a primary and early childhood math educator at Queensland University of Technology in Australia) Other authors include Peter Stowasser , and Allan Turton	**(Reviewer only.)** **____X__ Yes** **_____ No**
10. The visual design supports students in engaging thoughtfully with the subject. Navigation through the text is clear.	**Evidence-** Grade appropriate graphics and text.	**(Reviewer only.)** **___X___ Yes** **_____ No**

11. The materials engage parents in appropriate ways. For example, homework assignments in elementary grades, consist of routine problems, practice with getting answers, and fluency-building exercises that parents can easily support.	**Evidence-** Parent letter for each module can be sent home. The on-going practice pages are always review. All materials available in English and Spanish.	**(Reviewer only.)** **____X__ Yes** **_____ No**

Reviewer IMET Evaluation Summary **Title/Level: _Stepping Stones Grade 2**

Publisher: Origo **Copyright: 2015** **ISBN:___987-1-921959-79-0**

Reviewer ID # CJS and TB **Date Review Completed: 3/8/16**

Non-Negotiable Criteria- Each Non-Negotiable must be met in order for the Non-Negotiable Alignment Criteria to be met overall.

Non-Negotiable 1: Freedom from Obstacles to Focus	Non- Negotiable 2: Focus and Coherence
____X___ Meets _____ Does Not Meet	___X__ Meets _____ Does Not Meet

Non-Negotiable Overall:

___X__ Meets **_____ Does Not Meet**

Alignment Criteria- Each Alignment Criterion must be met with a sufficient number of points in order for Alignment Criteria to be labeled as "Meets" overall. The more points the materials receive on the Alignment Criteria, the better they are aligned.

Alignment Criterion 1: Rigor and Balance	Alignment Criterion 2: Standards of Mathematical Practice	Alignment Criterion 3: Access to Standards for All Learners
Points: __6___ of 6 possible. (Materials must receive at least 5 of 6 points to align.) ____X___ Meets _____ Does Not Meet	Points: ___6__ of 6 possible. (Materials must receive at least 5 of 6 points to align.) ___X____ Meets _____ Does Not Meet	Points: __6___ of 6 possible. (Materials must receive at least 5 of 6 points to align.) ____X___ Meets _____ Does Not Meet

Alignment Criteria Overall:

__x___ Meets **_____ Does Not Meet**

If the materials meet both Non-Negotiables and relevant Alignment Criterion, they are aligned to the Shifts and major features of the Core Standards. **Do the materials meet every Non-Negotiable and Alignment Criterion? ___x__ Yes _____ No**

What are the specific areas of strength and weakness based on this evaluation? Publishers or others modifying or developing assessments can use this information to make improvements and/or to remedy gaps in the alignment of assessment materials.

2015-16 Mathematics Interim Review Recommendation & Summary

Publisher Name:	Origo Education, Inc
Title:	Stepping Stones
ISBN #	9781921959790
Grade Level(s) or Course:	Grade 3
Reviewer ID:	T B RP

RECOMMENDED AS:

__X__ **Core Mathematics Program-** a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials. Substantial evidence clearly supports the designation of this program as Core.

_____ **Other Mathematics Program-** a program that substantially, but partially, meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for supplemental materials. Substantial evidence clearly supports the designation of this program as Other.

_____ **Component Mathematics Program-** a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs. Substantial evidence clearly supports the designation of this program as Component.

_____ **Intervention Program-** a program designed and intended to target and support students' specific needs. Substantial evidence clearly supports the designation of this program as Intervention.

_____ **Does not meet criteria** for recommendation as a Curricular Material or Online Resource for Mathematics.

EVIDENCE SUMMARY:

FOCUS-
Materials devote a large majority of time to major work: 68%. Supporting work and materials enhance the major work of the grade.

COHERENCE- Lessons are sequential across grade. Sequence Navigator tab shows sequencing of lessons across all grade levels.

RIGOR- Program seems balanced in concepts, fluency, and applications. Specific fluency practice pages are not available

CONCEPTUAL UNDERSTANDING- Students are asked to explain their thinking and understanding. However there is not much in the way of practice skills.

MATHEMATICAL PRACTICES-
Math practices are easy to find in most lessons and throughout Modules.

ACCESSIBILITY OF STANDARDS TO ALL STUDENTS-
Lessons have differentiated instruction. Most of the instruction is grade level with some ELL. There was not much enrichment for higher-performing students.

OTHER:
This program does meet the evaluation However are found it difficult & time consuming to navigate & find what was needed.

2015-16 Interim Mathematics Review

Mathematics Evaluation Tool Grades K-8

Publisher: Origo Education, icn

Title of Material: Stepping Stones grade 3

Author: J. Burnett, C. Irons, R. Irons

ISBN #: 9781921959790 **Copyright** 2012

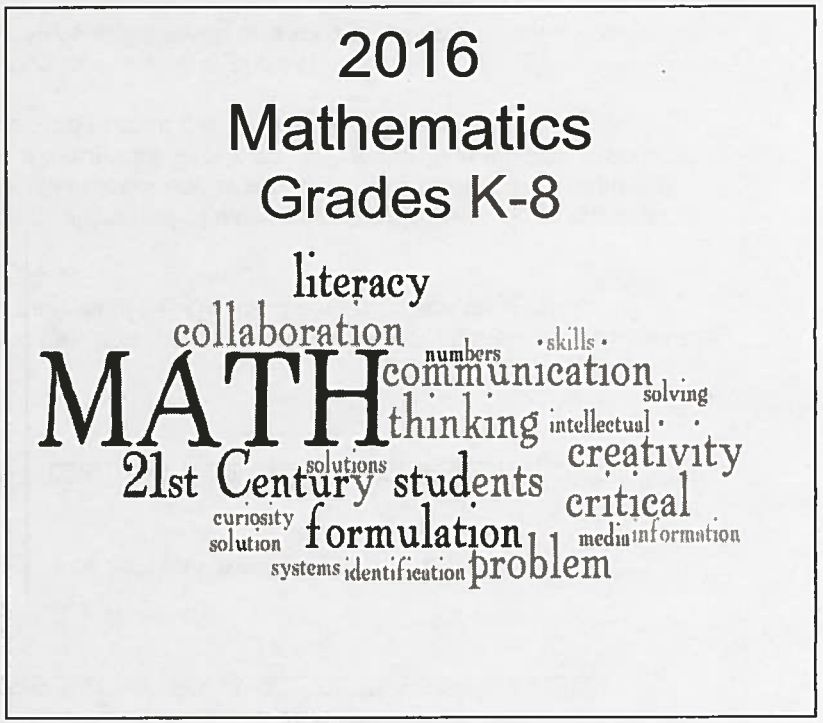
Reviewer ID: TB RP

Core Mathematics Program- a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Core.

Other Mathematics Program- a program that substantially, but partially, meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Other.

Component Mathematics Program- a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs.
Substantial evidence clearly supports the designation of this program as Component.

Intervention Program- a program designed and intended to target and support students' specific needs.
Substantial evidence clearly supports the designation of this program as Intervention.



- Evaluation Form adapted from Instructional Materials Evaluation Toolkit (IMET).

The IMET was developed by Student Achievement Partners. Educators may use or adapt. http://creativecommons.org/licenses/by/3.0/ Download this tool at http://achievethecore.org/IMET

Instructional Materials Evaluation Tool

Mathematics, Grades K-8

What Are the Purposes of the IMET?

This Math IMET is designed to help educators determine whether instructional materials are aligned to the Shifts and major features of the Common Core State Standards (CCSS). The substantial instructional Shifts (http://www.corestandards.org/other-resources/key-shifts-inmathematics/) at the heart of the Common Core State Standards are:

- **Focus** strongly where the Standards focus
- **Coherence**: Think across grades and link to major topics within the grade
- **Rigor**: In major topics, pursue conceptual understanding, procedural skill and fluency, and application with equal intensity.

The IMET draws directly from the following documents:

- Common Core State Standards for Mathematics (www.corestandards.org/Math)
- Publishers' Criteria for the Common Core State Standards in Mathematics grade K-8 (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)

When to use the IMET

1. Purchasing materials: Many factors go into local purchasing decisions. Alignment to the Standards is a critical factor to consider. This tool is designed to evaluate alignment of instructional materials to the Shifts and the major features of the CCSS. It also provides suggestions of additional indicators to consider in the materials evaluation and purchasing process.

2. Evaluating materials currently in use: The IMET can be used to analyze the degree of alignment of existing materials and help to highlight specific, concrete flaws in alignment. Even where materials and tools currently in use fail to meet one or more of these criteria, the pattern of failure is likely to be informative. States and districts can use the evaluation to create a thoughtful plan to modify or combine existing resources in such a way that students' actual learning experiences approach the focus, coherence, and rigor of the Standards.

3. Developing programs: Those developing new programs can use this tool as guidance for creating aligned curricula.
Please note this tool was designed for evaluating comprehensive curricula (including any supplemental or ancillary materials), but it was not designed for the evaluation of standalone supplemental materials.

Who Uses the IMET?

Evaluating instructional materials requires both subject-matter and pedagogical expertise. Evaluators should be well versed in the · Standards (www.corestandards.org/Math) for all grades in which materials are being evaluated. This includes understanding the Major Work of the grade (www.achievethecore/focus), the Supporting and Additional work, how the content fits into the progressions in the Standards (www.achievethecore.org/progressions), and the expectations of the Standards with respect to conceptual understanding, procedural skill and fluency, and application. Evaluators also should be familiar with the substantial instructional Shifts (http:// www.corestandards.org/other-resources/key-shifts-in-mathematics/) of Focus, Coherence and Rigor that are listed above.

Getting Started

Prior to Evaluation

Assemble all of the materials necessary for the evaluation. It is essential for evaluators to have materials for all grades covered by the program, as some criteria cannot be rated without having access to each grade. In addition, each evaluator should have a reference copy of the Common Core State Standards for Mathematics (CCSSM) and the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013).

2015-16 Interim Mathematics Review

Mathematics Evaluation Tool Grades K-8

Publisher: Origo Education, Inc

Title of Material: Stepping Stones Grade 3

Author: J Burnett, C. Irons, R. Irons

ISBN #: 9781921959790 **Copyright** 2012

Reviewer ID: TB, RP

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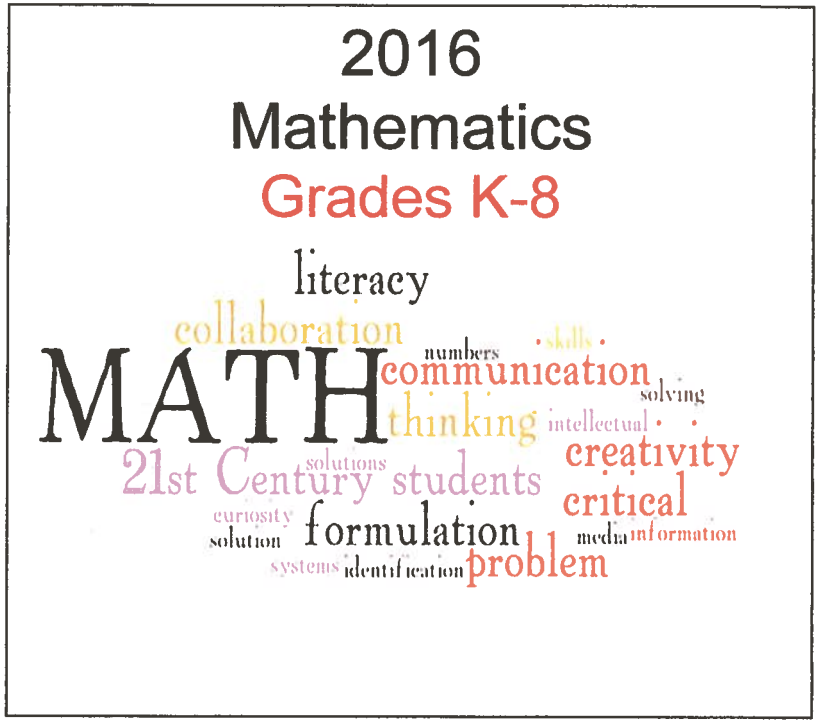

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Instructional Materials Evaluation Tool
Mathematics, Grades K-8

What Are the Purposes of the IMET?
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- **Focus** strongly where the Standards focus
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- Common Core State Standards for Mathematics (www.corestandards.org/Math)
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2. Evaluating materials currently in use: The IMET can be used to analyze the degree of alignment of existing materials and help to highlight specific, concrete flaws in alignment. Even where materials and tools currently in use fail to meet one or more of these criteria, the pattern of failure is likely to be informative. States and districts can use the evaluation to create a thoughtful plan to modify or combine existing resources in such a way that students' actual learning experiences approach the focus, coherence, and rigor of the Standards.

3. Developing programs: Those developing new programs can use this tool as guidance for creating aligned curricula.
Please note this tool was designed for evaluating comprehensive curricula (including any supplemental or ancillary materials), but it was not designed for the evaluation of standalone supplemental materials.

Who Uses the IMET?
Evaluating instructional materials requires both subject-matter and pedagogical expertise. Evaluators should be well versed in the Standards (www.corestandards.org/Math) for all grades in which materials are being evaluated. This includes understanding the Major Work of the grade (www.achievethecore/focus), the Supporting and Additional work, how the content fits into the progressions in the Standards (www.achievethecore.org/progressions), and the expectations of the Standards with respect to conceptual understanding, procedural skill and fluency, and application. Evaluators also should be familiar with the substantial instructional Shifts (http:// www.corestandards.org/other-resources/key-shifts-in-mathematics/) of Focus, Coherence and Rigor that are listed above.

Getting Started
Prior to Evaluation

Assemble all of the materials necessary for the evaluation. It is essential for evaluators to have materials for all grades covered by the program, as some criteria cannot be rated without having access to each grade. In addition, each evaluator should have a reference copy of the Common Core State Standards for Mathematics (CCSSM) and the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013).

Before conducting the evaluation itself, it is important to develop a protocol for the evaluation process. The protocol should include having evaluators study the Publishers' Criteria and the IMET. It will also be helpful for evaluators to get a sense of each program overall before beginning the process. At a minimum, this would include reading the front matter of the text, looking at the table of contents and paging through multiple chapters.

Sections 1-3 below should be completed to produce a comprehensive picture of the strengths and weaknesses of the materials under evaluation. Information about areas in need of improvement or supplementation should be shared with internal and external stakeholders.

Navigating the Tool

Begin with Section 1: Non-Negotiable Alignment Criteria

- The Non-Negotiable Alignment Criteria must each be met in full for materials to be considered aligned to the Shifts and the major features of the Common Core State Standards. Each Non-Negotiable Alignment Criterion has one or more metrics associated with it; every one of these metrics must be met in order for the criterion as a whole to be met.

- Examine the relevant materials and use evidence to rate the materials against each criterion and its associated metric(s).

- Record and explain the evidence upon which the rating is based.

Continue to Section 2: Alignment Criteria

- The Alignment Criteria must each be met for materials to be considered aligned to the Shifts and the major features of the Common Core State Standards. Each Alignment Criterion has one or more metric associated with it; a specific number of these metrics must be met or partially met in order for the criterion as a whole to be met.

- Examine the materials in relation to these criteria, assigning each metric a point value. Rate the criterion as "Meets" or "Does Note Meet" based on the number of points assigned. The more points the materials receive on the alignment Criteria, the better they are aligned.

- Record and explain the evidence upon which the rating is based.

Proceed to Section 4: Indicators of Quality

- Indicators of Quality are important considerations that will help evaluators better understand the overall quality of instructional materials. These considerations are not criteria for alignment to the CCSS, but they provide valuable information about additional program characteristics. Evaluators may want to add their own indicators to the examples provided.

Directions for Non-Negotiable 1

Freedom from Obstacles to Focus

Criterion	Evidence- Give specific examples.	Rating: (Reviewer only.)
Non-Negotiable 1: **Freedom from Obstacles to Focus** **Materials must reflect the content architecture of the Standards by not assessing the topics named before the grade level where they first appear in the Standards.** The Standards foster students' progress to algebra by focusing strongly on arithmetic. Consistent with this focus, certain topics from outside of arithmetic appear only in later grades. Thus, to be aligned, materials must reflect the content architecture of the Standards by not assessing the topics named before the grade level where they first appear in the Standards. In this criterion, "topics named" means the topics that are explicitly named in Metric 1A. No other topics should be added to the list in Metric 1A. (Note that other topics in the standards are addressed in criterion NN2.)	**Required Materials** • Common Core State Standards for Mathematics (www.corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf) • From the materials being evaluated: teacher guides and all assessment components	**Rating this Criterion:** Non-Negotiable 1 is rated as Meets or Does Not Meet. To rate Non-Negotiable 1, begin by rating Metric 1A. Since Metric 1A is the only metric for Non-Negotiable 1, the rating for Non-Negotiable 1 is the same as the rating for Metric 1A. If Metric 1A is rated as Does Not Meet, include evidence of when the named topic(s) is/are assessed. If the metric is rated as Meets, list the grade(s) examined in the evaluation.

Metric NN1A: **Materials reflect the basic architecture of the Standards by not assessing the listed topics before the grade level indicated.** • Probability, including chance, likely outcomes, probability models. (Introduced in the CCSSM in grade 7) • Statistical distributions, including center, variation, clumping, outliers, mean, median, mode, range, quartiles; and statistical association or trends, including two-way tables, bivariate measurement data, scatter plots, trend line, line of best fit, correlation. (Introduced in the CCSSM in grade 6) • Similarity, congruence, or geometric transformations. (Introduced in the CCSSM in grade 8) • Symmetry of shapes, including line/ reflection symmetry, rotational symmetry. (Introduced in the CCSSM in grade 4) **How to Find the Evidence:** Evaluate the table of contents, all chapter tests, all unit tests, and other such assessment components (including rubrics). For context, read Criterion #2 from the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013). NOTE: Grade alignments of other topics are addressed in Non-Negotiable 2, Focus and Coherence.) In this criterion, "topics named" means the topics that are explicitly named in Metric 1A. No other topics should be added to the list in Metric 1A. (Note that other topics in the standards are addressed in criterion NN2.)	**Evidence-** All materials reflect the basic architecture of the Standards. I did not find evidence of assessment before the listed grade level topics.	**(Reviewer only.)** **_X_ Meets** **____Does Not Meet**
Non-Negotiable 1: Materials must reflect the content architecture of the Standards by not assessing the topics named* before the grade level where they first appear in the Standards. **NN 1** If Metric 1A was rated as Meets, then rate Non-Negotiable 1 as Meets. If Metric 1A was rated as Does Not Meet, then rate Non- Negotiable 1 as Does Not Meet. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion.**(Reviewer only.)** **Before moving to Non-Negotiable 2, record the final Meets or Does Not Meet rating in the Evaluation Summary.**		**(Reviewer only.)** **_X_ Meets** **____Does Not Meet** **Strengths/Weaknesses:**

Directions for Non-Negotiable 2

Focus and Coherence

Non-Negotiable 2: **Focus and Coherence** **Materials must focus coherently on the Major Work of the grade in a way that is consistent with the progressions in the Standards.** Focus and coherence are the two major evidence-based design principles of the Common Core State Standards for Mathematics (CCSSM, p. 3). Focus is necessary in order to fulfill the ambitious promise the states have made to their students by adopting the Standards: greater achievement at the college and career ready level; greater depth of understanding of mathematics; and a rich classroom environment in which reasoning, sense-making, applications, and a range of mathematical practices flourish. In simpler terms, a mile-wide, inch-deep curriculum translates to less time per topic. Less time means less depth and moving on without many students. Thus, materials must focus coherently on the Major Work of the grade in a way that is consistent with the progressions in the Standards.	**Required Materials** • Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf) • Focus by Grade Level for the grade being evaluated (www.achievethecore.org/focus) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion:** Non-Negotiable 2 is rated as Meets or Does Not Meet. To rate Non-Negotiable 2, first rate metrics 2A–2H. Each of these eight metrics must be rated as Meets in order for Non-Negotiable 2 to be rated as Meets. Rate each metric 2A-2H as Meets or Does Not Meet/Insufficient Evidence. If the evidence examined shows that the Criterion is met, then mark the Criterion Meets. If the evidence examined shows that the Criterion is not met—or if there is insufficient evidence to make a determination—then mark the Criterion as Does Not Meet/Insufficient Evidence. Support all ratings with evidence.
Metric NN2A: **In each grade K–8, students and teachers using the materials as designed devote the large majority of time to the Major Work of the grade.** **How to Find the Evidence:** Familiarize yourself with the Major Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, lessons, homework assignments, and assessments. (Evaluate both student and teacher materials.) Consider time spent on the Major Work of the grade and judge qualitatively whether students and teachers using the materials as designed will devote the large majority of time to the Major Work of the grade. For context, read Criterion #1 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013)	**Evidence-** Materials devote a large majority of time spent on the Major Work for grade 3. Of 144 lessons 98 lessons meet major work content for 68% of the lessons. Many practice pages also have "extra practices" for Major Work of Grade 3.	**(Reviewer only.)** **__X__Meets** **____Does Not Meet/** **Insufficient Evidence**

Metric NN2B: **Supporting work, where present, enhances focus and coherence simultaneously by also engaging students in the Major Work of the grade.** **How to Find the Evidence:** Familiarize yourself with the Major Work and Supporting Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate chapters and lessons that focus on Supporting Work. NOTE: Example of evaluating this Criterion might include looking at whether materials for K–5 generally treat data displays as an occasion for solving grade-level word problems using the four operations (e.g., see 3.MD.B.3); or whether materials for grade 7 take advantage of opportunities to use probability to support ratios, proportions, and percentages. For context, read Criterion #3 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** All modules have multiple lessons addressing the supporting work of Grade 3. These lessons enhance focus and coherence simultaneously by engaging students in the Major Work of grade 3. Examples: Module 7 lessons 10-12 represent and interpret data Module 10 lessons 9-12 shapes and their attributes	(Reviewer only.) **__X__Meets** **____Does Not Meet/** **Insufficient Evidence**
Metric NN2C: **Materials base content progressions on the grade-by-grade progressions in the Standards. Content from previous or future grades does not unduly interfere with or displace on-grade-level content.** **How to Find the Evidence:** Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, and lessons in both student and teacher materials. NOTE: In some cases it may be possible that aligned materials might address some aspects of a topic in a strategic way before or after the grade level in which the topic is central in the Standards' progressions; for example, a curriculum author might purposefully choose to explore adding fractions with unlike denominators in a way appropriate to grade four, recognizing that this work is not really required until the next grade. However, any such purposeful discrepancies in content progressions should enhance the required learning in each grade; not unduly interfere with or displace grade-level content; and be clearly aimed at helping students meet the Standards as written rather than effectively rewriting the progressions in the Standards. And in all cases, note that Non-Negotiable 1 must be met for materials to be aligned. For context, read Criterion #5a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Materials show sequencing of lesson materials. There is an online component that displays the lesson-by-lesson sequencing. Individual lessons do not show what was previously taught nor where the lesson intends the students to go in the future. Some concepts of other grades do appear in the lessons, but they do not interfere with or displace on-grade level content.	(Reviewer only.) **_X___Meets** **___Does Not Meet/** **Insufficient Evidence**

Metric NN2D: **Materials gi[illegible]ll students extensive work with on-grade-level problems.** **How to Find the Evidence:** Evaluate both student and teacher materials. If the materials provide resources for differentiated learning, consider whether lower-performing students have opportunities to engage with grade-level problems. Also consider whether higher-performing students are given opportunities to learn current grade-level content in greater depth. For context, read Criterion #5b in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Materials give most [illegible]ents extensive work with on grade-level problems. Under the More Math tab for each module there are differentiated activities for the lessons. These include extra help and extra practice. Module 6 provides enrichment for higher performing students. .	(Reviewer only.) **_X___Meets** **___Does Not Meet/** **Insufficient Evidence** Needs more enrichment for higher performing students.
Metric NN2E: **Materials relate on-grade-level concepts explicitly to prior knowledge from earlier grades.** **How to Find the Evidence:** Evaluate both student and teacher materials. NOTE: Examples of evaluating this Criterion might include looking at the way the materials extend basic ideas of place value across the decimal point; or the role that properties of operations play when the materials extend arithmetic beyond whole numbers to fractions, variables, and expressions. More generally, cluster headings in the Standards sometimes signal key moments where reorganizing and extending previous knowledge is important in order to accommodate new knowledge (e.g., see cluster headings that use the phrase "Apply and extend previous understanding"). For context, read Criterion #5c in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Sequence Navigator shows related content between grades. The "focus" and "Research into Practice" tabs at the beginning of each module give teachers an understanding of what is being taught.	(Reviewer only.) **_X ___Meets** **____Does Not Meet/** **Insufficient Evidence**
Metric NN2F: **Review of material from previous grades is clearly identified as such to the teacher, and teacher and students can see what their specific responsibility is for the current year.** **How to Find the Evidence:** Evaluate the table of contents, but do not stop there; also evaluate units, chapters, lessons, homework assignments and assessments. (Evaluate both student and teacher materials.) Identify any content from previous grades and check whether it is identified as such. For context, read Criterion #5a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Review of material from previous grades is listed in "content navigator". Students are not shown what their specific responsibility is for the current year. Standards listed as you hover over each lesson title. Focus tab and Research into practice tab give connections and natural progression of standards.	(Reviewer only.) **_X___Meets** **___Does Not Meet/** **Insufficient Evidence**

Metric NN2G: **Materials include learning objectives that are visibly shaped by CCSSM cluster headings.** **How to Find the Evidence:** Select several clusters from the Major Work in the grade being evaluated. Evaluate teacher and student materials in relation to these clusters. For context, read Criterion #6a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Learning objectives are visibly shaped by the CCSSM cluster headings. These can be found listed under the following tab path: Grade 3, Module 1, Mathematics, Learning targets. Major cluster are found in most module lessons.	(Reviewer only.) **_X___Meets** **____Does Not Meet/** **Insufficient Evidence**
Metric NN2H: **Materials include problems and activities that serve to connect two or more clusters in a domain, or two or more domains in a grade, in cases where these connections are natural and important.** **How to Find the Evidence:** In the grade being evaluated, choose two or more clusters or two or more domains for which connections are natural and important. Evaluate the units, chapters, and lessons that deal with the chosen topics, looking for problems and activities that serve to connect the chosen clusters or domains. NOTE: An example of evaluating this Criterion might include looking at whether problems in grade 4 sometimes or often involve students applying their developing computation skills (detailed in domain NBT) in the context of solving word problems (detailed in domain OA). For context, read Criterion #6b in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Materials include problems and activities that connect two or more clusters in a domain. Many lessons connect several clusters within a domain or several domains in a grade. Two or more clusters are linked throughout modules, but not always within the same lesson. Examples of these can be found under the "Learning Targets" tab for each module.	(Reviewer only.) **_X___Meets** **____Does Not Meet/** **Insufficient Evidence**

Non-Negotiable 2:

Focus and Coherence

Materials must focus coherently on the Major Work of the grade in a way that is consistent with the progressions in the Standards.

NN 2 If all Metrics 2A – 2H were rated as Meets, then rate Non-Negotiable 2 as Meets. If one or more Metric was rated Does Not Meet/Insufficient Evidence, then rate Non-Negotiable 2 as Does Not Meet. Check the final rating.
Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)**

Before moving to Alignment Criterion 1, record the final Meets or Does Not Meet rating in the Evaluation Summary.

(Reviewer only.)

__X__Meets

____Does Not Meet

Strengths/Weaknesses:

Weaknesses: Differentiation is for lower-performing students, but not for higher-performing students.
Materials do not state explicitly what is being focused on from prior grade-levels nor preparation for future grade-levels.

Now continue by evaluating the Alignment Criterion 1 for Rigor and Balance.

Directions for Alignment Criterion 1

Rigor and Balance

Alignment Criterion 1: Rigor and Balance **Materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.** The Standards set expectations for attention to all three aspects of rigor: conceptual understanding, procedural skill and fluency, and applications. Thus, materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.	**Required Materials** • Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf) • Focus by Grade Level for the grade being evaluated (achievethecore.org/focus) • Situation Types for the Operations in Word Problems (achievethecore.org/situation-types) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion:** Alignment Criterion 1 is rated as Meets or Does Not Meet. To rate Alignment Criterion 1, first rate metrics 1A, 1B, and 1C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). For each metric, guiding questions are provided to aid in gathering evidence. Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 1 if the materials rate 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as rigor and balance, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.
Metric AC1A: **The materials support the development of students' conceptual understanding of key mathematical concepts, especially where called for in specific content Standards or cluster headings.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Major Work for the grade being evaluated that relate specifically conceptual understanding to use throughout the questions associated with this metric. NOTE: Some examples of clusters or Standards that call for conceptual understanding include: K.OA.A.1, (1.NBT.B, 1.NBT.C), (2.NBT.A, 2.NBT.B), (3.OA.A.1, 3.OA.A.2), 4.NF.A, (4.NBT.A, 4.NBT.B), 5.NF.B, (5.NBT.A, 5.NBT.B), 6.RP.A, 6.EE.A.3, 7.NS.A, 7.EE.A, 8.EE.B, 8.F.A, 8.G.A Clusters or Standards grouped by parentheses are closely connected and could be analyzed together. For context, read Criterion #4a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	-Choose a cluster/Standard from the Major Work that is aligned to each aspect of rigor and use it to evaluate these metrics. It is most helpful if the same clusters/Standards are chosen for all of the programs being evaluated. (Guidance in choosing clusters/Standards is included in "How to Find the Evidence".)	**Use the questions for AC Metric 1A to evaluate Metric 1A. Record evidence for each question and rate Metric 1A.** **_X__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**

Is conceptual understanding attended to thoroughly where the Standards set explicit expectations for understanding or interpreting? Evaluate lessons, chapter/unit assessments and homework assignments, paying attention to work aligned to Standards that explicitly call for understanding or interpreting. NOTE: Examples of evaluating this Criterion might include looking at how well the multi-digit addition and subtraction algorithms are developed and explained on the basis of place value and properties of operations; or how well the multi-digit multiplication and division algorithms are developed and explained on the basis of place value and properties of operations; or how well solving equations is presented and explained as a process of reasoning.	**Evidence-** Conceptual understanding is attended to where the Standards set explicit expectations for understanding or interpreting. Lessons have a section for students to explain reasoning and understanding called "Reflection on the Work" which is labeled under the "Lesson" "Steps" tabs. There are not many questions to practice with before the Reflection section.	
Do the materials feature high-quality conceptual problems and conceptual discussion questions? Evaluate lessons, chapter/unit assessments, and homework assignments. NOTE: Example of conceptual problems might include such questions as "Find a number greater than 1/5 and less than 1/4," or "If the divisor does not change and the dividend increases, what happens to the quotient?"	**Evidence-** Materials feature high-quality conceptual problems and discussion questions. Many lessons ask students to discuss a concept. Examples are listed under "steps" tab. I did not find sufficient evidence in the student journal or practice book. Could not find online teaching notes.	
Do the materials feature opportunities to identify correspondences across mathematical representations? Evaluate lessons, chapter/unit assessments and homework assignments. NOTE: Examples of evaluating this Criterion might include looking at whether students are supported in identifying correspondences among: the verbal description of a situation, the diagrams that distill its mathematical features, and the equations that model it; or equivalent forms of numbers (e.g., 3 and 6/2) and the number line; or rational number operations and representations of them via models such as the vector model; or the expression that defines a function and the graph that shows the relationship.	**Evidence-** Materials feature opportunities to identify correspondences across mathematical representations. There are several visual/graphic/mathematical representations of a problem such as number lines, place-value charts, and fraction bars. The "Number Case" has manipulatives to support lesson features.	
Metric AC1B: **The materials are designed so that students attain the fluencies and procedural skills required by the Standards.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Major Work for the grade being evaluated that relate specifically to fluency and procedural skill to use throughout the questions associated with this metric. NOTE: Some examples of Standards that call for procedural skill and fluency include: K.OA.A.5, 1.OA.C.6, 2.OA.B.2, 2.NBT.B.5, 3.OA.C.7, 3.NBT.A.2, 4.NBT.B.4, 5.NBT.B.5, 6.NS.B.2, and 6.NS.B.3, 6.EE.A, 7.NS.A, 7.EE.A.1,7.EE.B.4a, 8.EE.C.7, 8.EE.C.8b For context, read Criterion #4b in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).		**Use the questions for Metric 1B to evaluate Metric 1 B. Record evidence for each question and rate Metric 1B.** **(Reviewer only.)** **__X__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**

Is progress toward fluency and procedural skill interwoven with students' devel[illegible] conceptual understanding of the operations in question? Evaluate lessons, chapter/unit assessments, daily routines, and homework assignments for evidence that the development of fluency and procedural skill is supported by conceptual understanding.	**Evidence-** Many lessons have flu[illegible] and procedural skills woven into guided lesson and practice pages in Student Journals, practice pages, and online practices. Additional fluency lessons and worksheets are found in the Ongoing Practices.	
Are purely procedural problems and exercises present that include cases in which opportunistic strategies are valuable and generic cases that require efficient algorithms present? Evaluate lessons, chapter/unit assessments, daily routines, and homework assignments. NOTE: Examples of problems in which opportunistic strategies are valuable might include the sum 698 + 240 or the system $x + y = 1$, $2x + 2y = 3$. Examples of generic cases that require efficient algorithms might include the sum 8767+2286 or the system $6y + x = x + 3$, $-x = 1 + 2y$.	**Evidence-** Many lessons include opportunistic strategies and algorithms. Strategies are developed before the algorithm is introduced. Examples: Student Journal pages 59, 67, 162-163	
Do the materials in grades K–6 provide repeated practice toward attainment of fluency Standards? Evaluate lessons, daily routines, and homework assignments for evidence of repeated practice toward attainment of the following K–6 Standards that set an explicit expectation of fluent (accurate and reasonably fast) computation: K.OA.A.5, 1.OA.C.6, 2.OA.B.2, 2.NBT.B.5, 3.OA.C.7, 3.NBT.A.2, 4.NBT.B.4, 5.NBT.B.5, 6.NS.B.2, 6.NS.B.3.	**Evidence-** Addition and subtraction computation is included in many lessons.	
Metric AC1C: **The materials are designed so that teachers and students spend sufficient time working with engaging applications, without losing focus on the Major Work of each grade.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Major Work for the grade being evaluated that relate specifically application to use throughout the questions associated with this metric. NOTE: Some examples of clusters or Standards that call for application include: K.OA.A.2, 1.OA.A, 2.OA.A, 3.OA.A.3, 3.OA.D.8, 4.OA.A.3, 4.NF.B.3d, 4.NF.B.4c, 5.NF.B.6, 5.NF.B.7c, 6.RP.A.3, 6.NS.A.1, 6.EE.B.7, 6.EE.C.9, 7.RP.A, 7.NS.A.3, 7.EE.B.3, 8.EE.C.8c, 8.F.B For context, read Criterion #4c in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Teachers and students spend sufficient time working with engaging applications without losing focus of the Major Work of the grade. Example: Many lessons are designed for students to work on using multiplication and division within 100 to solve word problems in solutions involving equal groups, arrays, measurement (3.OA.A.3).	**Use the questions for Metric 1C to evaluate Metric 1C. Record evidence for each question and rate Metric 1C.** **(Reviewer only.)** **_X___Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Are there are single- and multi-step contextual problems, including non-routine problems, that develop the mathematics of the grade, afford opportunities for practice, and engage students in problem solving? Do the problems attend thoroughly to those places in the content Standards where expectations for multi-step and real-world problems are explicit? Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** There are single- and multi-step contextual problems to help engage students in problem solving. Most lessons contain real-world problems to help students engage in problem solving. Examples: Module 7, Lesson 5, steps Module 7, lesson 5, student journal pages 160-161	

Do application problems particularly stress applying the Major Work of the grade? Evaluate lessons, chapter/unit assessments, and homework assignments. NOTE: Examples of evaluating this Criterion might include looking at: how well, by the end of grade 2, students using the materials as designed can represent and solve a full range of one-step addition and subtraction word problems; or how well, by the end of grade 3, students using the materials as designed can represent and solve a full range of one-step multiplication and division word problems; or how well these basic situation types for each operation are carried coherently across the grades, (e.g., with fractions and algebraic expressions); or, in all grades, whether the problems connect concepts, Standards, and domains in ways that are natural and important. For a list of situation types for one-step addition, subtraction, multiplication, and division problems, see Situation Types for the Operations in Word Problems	**Evidence-** Application problems stress applying the Major Work of grade 3. Most lessons focus on the Major Work. Examples: Modules 3, 6, 9, 12 have quarterly tests that have criteria to be met from the Major Work of Grade 3.	
Does modeling build slowly across K–8, with applications that are relatively simple in earlier grades and when students are encountering new content? In grades 6–8, do the problems begin to provide opportunities for students to make their own assumptions or simplifications in order to model a situation mathematically? Read Standard for Mathematical Practice 4, Model with Mathematics. Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** Modeling builds slowly. Students are provided modeling before algorithms are introduced. This helps the students move from concrete to abstract strategies. Examples: "Sequential Navigation" shows math strategies by grade. Each lesson begins with "Starting the Lesson" which usually contains modeling for lesson objective.	

Alignment Criterion 1: Rigor and Balance

Materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.

(Reviewer only.)

_X___Meets

____Does Not Meet

Strengths/Weaknesses:

AC1 Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 out of 6 points, the Criterion has not been met. Check the final rating.
Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)**

Before moving to Alignment Criterion 2, record the final Meets or Does Not Meet rating in the Evaluation Summary.

Directions for Alignment Criterion 2

Standards for Mathematical Practice

Alignment Criterion 2: Standards for Mathematical Practice

Materials must demonstrate authentic connections between content Standards and practice Standards.

The Standards require that designers of instructional materials connect the mathematical practices to mathematical content in instruction. Thus, materials must demonstrate authentic connections between content Standards and practice Standards.

Required Materials:

- Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf)
- Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)
- Focus by Grade Level for the grade being evaluated (www.achievethecore.org/focus)
- From the materials being evaluated: teacher guides, student texts and workbooks

Rating this Criterion

Alignment Criterion 2 is rated as Meets or Does Not Meet.

To rate Alignment Criterion 2, first rate metrics 2A, 2B, and 2C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). For each metric, guiding questions are provided to aid in gathering evidence.

Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 2 if the materials earn 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as mathematical practices, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.

Metric AC2A:

Materials address the practice Standards in such a way as to enrich the Major Work of the grade; practices strengthen the focus on Major Work instead of detracting from it, in both teacher and student materials.

How to Find the Evidence:

Familiarize yourself with the Major Work of the grade being evaluated (see the Focus by Grade Level documents.)

Evaluate teacher and student materials for evidence that the mathematical practices support and connect to the focus of the grade.

NOTE: Examples of evaluating this Criterion might include looking at whether, in grades K–5, students using the materials are supported to look for and express regularity in repeated reasoning about the addition table, the multiplication table, the properties of operations, the relationship between addition and subtraction or multiplication and division, and the place value system; or whether, in grades 6–8, students using the materials are supported to look for and express regularity in repeated reasoning about proportional relationships and linear functions.

For context, read Criterion #8 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013).

Evidence-

"Standards for Mathematical Practice" enrich the Major Work of the Grade. They are listed in the materials under each module. Math practices help enrich the Major Work of Grade 3 and do not detract from it in either teacher or student materials.

The practices can be found in the opening paragraphs of the lessons (hover the mouse over beginning paragraph for information to show).

(Reviewer only.)

__X__Meets (2)

____Partially Meets (1)

____Does Not Meet (0)

Metric AC2B: **Materials at[illegible] to the full meaning of each practice Standard.** **How to Find the Evidence:** For context, read Criterion #7 and Criterion #9 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).		**Use the questions for Metric 2B to evaluate Metric 2B. Record evidence for each qu[illegible]n and rate Metric 2B.** **(Reviewer only.)** **_X___Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Over the course of any given year of instruction, is each mathematical practice Standard meaningfully present in the form of assignments, activities, or problems that stimulate students to develop the habits of mind described in the practice Standard? Evaluate lessons, chapter/ unit assessments, and homework assignments for evidence of each mathematical practice being meaningfully present in instruction.	**Evidence-** Mathematical practices are present in the form of assignments, activities, and problems. "Mathematical Practices" tabs are listed under each module. Practices can be found in each lesson.	
Do the materials treat the practice Standards as developing across grades or grade bands? Are the practice Standards in early grades appropriately simple? Do they display an arc of growing sophistication across the grades?	**Evidence-** Materials address the standards throughout the modules. They develop from easier to more sophisticated problems across the year.	
Are there teacher-directed materials that explain the role of the practice Standards in the classroom and in students' mathematical development? Are alignments to practice Standards accurate?	**Evidence-** Each lesson opening paragraph explains the practices being used in the lesson. Also each module has a Mathematical Practices chart to show development across lessons. There are also Professional Development videos for teacher to view.	
Metric AC2C: **Materials support the Standards' emphasis on mathematical reasoning.** **How to Find the Evidence:** For context, read Criterion #10 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).		**Use the questions for Metric 2C to evaluate Metric 2C. Record evidence for each question and rate Metric 2C.** **(Reviewer only.)** **__X__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Do the materials support students in constructing viable arguments and critiquing the arguments of others concerning grade-level mathematics that is detailed in the content Standards? Read Standard for Mathematical Practice 3. Evaluate teacher and student materials to ensure that students are given opportunities to reason with grade-level mathematics.	**Evidence-** There are 16 lessons that incorporate arguments and critiquing of arguments. Examples include: 1.2, 1.4, 1.7, 2.3, 2.5, 2.10, 2.11, 6.10, 7.5, 7.6 8.1, 8.2, 8.6, 9.10,11.10, 12.10	
Do the materials support students in producing not only answers and solutions, but also, in a grade-appropriate way, arguments, explanations, diagrams, mathematical models, etc., especially in the Major Work of the grade? Familiarize yourself with the Major Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate teacher and student materials, to understand the types of work students are expected to produce.	**Evidence-** Lessons ask students to produce answers, arguments, explorations and models. Most lessons give students the model and student fill in the answers. Examples: Student Journal page 78-79, 192-193	

Do materials explicitly attend to the specialized language of mathematics? I[illegible]anguage of argument, problem solving, and mathematical explanations taught rather than assumed? Evaluate teacher and student materials, paying attention to how mathematical language is taught. NOTE: Examples of evaluating this Criterion might include looking at whether students are supported in: basing arguments on definitions; using the method of providing a counterexample; or recognizing that examples alone do not establish a general statement.	**Evidence-** Language developme[illegible] each module is listed. This gives the list of vocabulary for the module, but there are no specific definitions listed. There are definitions listed under the "glossary" tab. Example: Module 3, Mathematics, Language Development.	
Alignment Criterion 2: **Standards for Mathematical Practice** **Materials must demonstrate authentic connections between content Standards and practice Standards.** **AC2** Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 out of 6 points, the Criterion has not been met. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)** **Before moving to Alignment Criterion 3, record the final Meets or Does Not Meet rating in the Evaluation Summary.**		**(Reviewer only.)** **_X___Meets** **____Does Not Meet** **Strengths/Weaknesses:** Weaknesses: No specific vocabulary taught with specific definitions. I couldn't find many explicitly taught vocabulary other than highlighted word in some lessons. Example: 3.1 "steps"
Alignment Criterion 3: **Access to the Standards for All Students** **Materials must provide supports for English Language Learners and other special populations.** Because Standards are for all students, alignment requires thoughtful support to ensure all students are able to meet the Standards. Thus, aligned materials must provide supports for English Language Learners and other special populations.	**Required Materials:** • Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion:** Alignment Criterion 3 is rated as Meets or Does Not Meet. To rate Alignment Criterion 3, first rate metrics 3A, 3B, and 3C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 3 if the materials earn 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as support for special population, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.

Metric AC3A: **Support for English Language Learners and other special populations is thoughtful and helps those students meet the same Standards as all other students. The language in which problems are posed is carefully considered.** **How to Find the Evidence:** Evaluate teacher and student materials, paying attention to supports offered for special populations.	**Evidence-** Support for ELL and other special populations helps those students meet the same standards as all other students. Each module has an ELL section under the "Mathematics" tab. Also many lessons have an ELL icon in the top right corner of the lesson page. Example: Module 2 lesson 1 "steps" Module 11 lesson 1 "steps"	**Reviewer only.)** **__X__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Metric AC3B: **Materials provide appropriate level and type of scaffolding, differentiation, intervention, and support for a broad range of learners with gradual removal of supports, when needed, to allow students to demonstrate their mathematical understanding independently.** **How to Find the Evidence:** Evaluate teacher and student materials, paying attention to whether materials provide differentiation that will lead all learners to engage with on-grade-level content.	**Evidence-** Materials provide appropriate levels and support for a broad range of learners. Content is introduced first in concrete ways and models then moves toward the abstract algorithms. The scaffolding of context may be spaced across many modules. Examples: Journal pages are created for teacher support on first page and individual work on 2nd page. Extra practices may be found through the "differentiation" tab.	**Reviewer only.)** **_X___Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Metric AC3C: **Design of lessons recommends and facilitates a mix of instructional approaches for a variety of learners such as using multiple representations (e.g., including models, using a range of questions, checking for understanding, flexible grouping, pair-share).** **How to Find the Evidence:** Evaluate teacher materials, noting instructional approaches suggested for whole class and differentiated lessons and activities.	**Evidence-** Lessons recommends and facilitates a mix of instructional approaches for a variety of learners. "Steps" help with a variety of learning strategies. Example: Module 4 Lesson 1 has—base 10 blocks, observe, build, place-value chart, numerical chart, converse in small group, whole class practice, independent practice (lesson 1, pages 80-81 in student journal).	**Reviewer only.)** **_X___Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**

Alignment Criterion 3: Access to the Standards for All Students **Materials must provide supports for English Language Learners and other special populations.** AC3 Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 points, the Criterion has not been met. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion.**(Reviewer only.)** **Move to the Evaluation Summary and record the final Meets or Does Not Meet rating .**	**(Reviewer only.)** **_X___Meets** **____Does Not Meet** **Strengths/Weaknesses:**

Once an evaluation for alignment to the Shifts and major features of the CCSS has been conducted using Sections 1-3, it's important to evaluate for overall quality and best practices. A starting list of Indicators of Quality are suggested below. States, districts and others evaluating instructional materials are encouraged to add to this list to ensure materials reflect local contexts. For background information on some of the Indicators of Quality in this section, refer to pp.18–21 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).

Indicators of Quality	Evidence- Give specific examples.	Rating: (Reviewers only.)
1. Lessons are thoughtfully structured and support the teacher in leading the class through the learning paths at hand, with active participation by all students in their own learning and in the learning of their classmates.	**Evidence-** Lessons are thoughtfully structured beginning with modeling and concrete strategies then building toward algorithms, class discussions, and independent practices.	**(Reviewer only.)** **__X____ Yes** **_____ No**
2. The underlying design of the materials includes both problems and exercises. (In solving problems, students learn new mathematics, whereas in working exercises, students apply what they have already learned to build mastery.) Each problem or exercise has a purpose. **NOTE: This Criterion does not require that the problems and exercises be labeled as such.**	**Evidence-** Problems and exercises are developed throughout modules Examples: 10.1 introduces area model 10.3 uses multiplication to calculate area 10.5 uses real-world word problems.	**(Reviewer only.)** **__X____ Yes** **_____ No**

3. Design of assignments is not haphazard: exercises are given in intentional sequences in order to strengthen students' mathematical understanding.	**Evidence-** Stepping Stones uses "Spaced Learning" model. This gives students an initial building block for a skill and builds upon it throughout the curriculum; exploring in smaller practices before introducing the next piece.	**(Reviewer only.)** **___X___ Yes** **_____ No**
4. There are separate teacher materials that support and reward teacher study including, but not limited to: discussion of the mathematics of the units and the mathematical point of each lesson as it relates to the organizing concepts of the unit, discussion on student ways of thinking and anticipating a variety of students responses, guidance on lesson flow, guidance on questions that prompt students thinking, and discussion of desired mathematical behaviors being elicited among students.	**Evidence-** There are some video segments and Professional Development sections for teacher support of modules and lessons. These are listed under "Research into Practices" tab.	**(Reviewer only.)** **__X____ Yes** **_____ No**
5. Manipulatives suggested in the materials are faithful representations of the mathematical objects they represent and are connected to written methods.	**Evidence-** Manipulatives are listed for each module under "Resource Overview" tab. Lessons and practice pages use faithful representations. There is a number case with place value cards, but there are not many other hands-on manipulatives.	**(Reviewer only.)** **__X____ Yes** **_____ No**
6. Materials include a variety of curriculum-embedded assessments. Examples include pre-, formative, summative, and self-assessment resources.	**Evidence-** Every module has formative and summative assessments. There are also quarterly tests after every 3 modules. Every formative assessment includes: pre-test, observations and discussions, and journals and portfolios. Summative is under check-ups, performance tasks, and interviews.	**(Reviewer only.)** **__X____ Yes** **_____ No**
7. Assessments contain aligned rubrics, answer keys, and scoring guidelines that provide sufficient guidance for interpreting student performance.	**Evidence-** Each assessment included has answer keys under the "resources" tab. There are also multiple forms for recording data.	**(Reviewer only.)** **___X___ Yes** **_____ No**
8. Materials assess student proficiency using methods that are accessible and unbiased, including the use of course-level language in student prompts.	**Evidence-** All assessments seem unbiased and are on-grade level and accessible.	**(Reviewer only.)** **___X___ Yes** **_____ No**

9. Materials are carefully evaluated by qualified individuals, whose names are listed, in an effort to ensure freedom from mathematical errors and course-level appropriateness.	**Evidence-** Materials have listed the names of those who evaluated the materials for mathematical errors. These names are listed in the "information" pages from Origo.	**(Reviewer only.)** **__X____ Yes** **_____ No**
10. The visual design supports students in engaging thoughtfully with the subject. Navigation through the text is clear.	**Evidence-** Visual design is in color and is engaging and text is clear and helps the student make sense of content.	**(Reviewer only.)** **___X___ Yes** **_____ No**
11. The materials engage parents in appropriate ways. For example, homework assignments in elementary grades, consist of routine problems, practice with getting answers, and fluency-building exercises that parents can easily support.	**Evidence-** Each module provides a print-out of parent letters to explain module focus, vocabulary, and ideas that can be used from home.	**(Reviewer only.)** **__X____ Yes** **_____ No**

Reviewer IMET Evaluation Summary **Title/Level: _____Stepping Stones Grade 3_____**

Publisher: ___Origo Education, INC_____ Copyright: __2012_____
ISBN:__9781921959790_____

Reviewer ID # __TB, RP_____ Date Review Completed:____3-8-2016_____

Non-Negotiable Criteria- Each Non-Negotiable must be met in order for the Non-Negotiable Alignment Criteria to be met overall.

Non-Negotiable 1: Freedom from Obstacles to Focus	Non- Negotiable 2: Focus and Coherence
___X____ Meets _____ Does Not Meet	_X____ Meets _____ Does Not Meet

Non-Negotiable Overall:

__X___ Meets _____ Does Not Meet

Alignment Criteria- Each Alignment Criterion must be met with a sufficient number of points in order for Alignment Criteria to be labeled as "Meets" overall. The more points the materials receive on the Alignment Criteria, the better they are aligned.

Alignment Criterion 1: Rigor and Balance	Alignment Criterion 2: Standards of Mathematical Practice	Alignment Criterion 3: Access to Standards for All Learners
Points: _6____ of 6 possible. (Materials must receive at least 5 of 6 points to align.) ____X___ Meets _____ Does Not Meet	Points: _6____ of 6 possible. (Materials must receive at least 5 of 6 points to align.) __X_____ Meets _____ Does Not Meet	Points: _6____ of 6 possible. (Materials must receive at least 5 of 6 points to align.) ___X____ Meets _____ Does Not Meet

Alignment Criteria Overall:

__X___ Meets _____ Does Not Meet

If the materials meet both Non-Negotiables and relevant Alignment Criterion, they are aligned to the Shifts and major features of the Core Standards. **the materials meet every Non-Negotiable and Alignment Criterion? __X___ Yes _____ No**

What are the specific areas of strength and weakness based on this evaluation? Publishers or others modifying or developing assessments can use this information to make improvements and/or to remedy gaps in the alignment of assessment materials.

****Origo Stepping Stones meets the IMET Criteria. However, the components are very difficult and time consuming to find and difficult to navigate through. Multiple tabs had to be open in order to find the needed information. Navigation could be difficult for students and families to use.

****Stepping Stones needed several programs downloaded in order to run the program.

2015-16 Mathematics Interim Review Recommendation & Summary

Publisher Name:	Origo Education, Inc.
Title:	Stepping Stones Grade 4
ISBN #	9781219590790
Grade Level(s) or Course:	grade 4
Reviewer ID:	SA RP

RECOMMENDED AS:

__X__ **Core Mathematics Program-** a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials. Substantial evidence clearly supports the designation of this program as Core.

_____ **Other Mathematics Program-** a program that substantially, but partially, meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for supplemental materials. Substantial evidence clearly supports the designation of this program as Other.

_____ **Component Mathematics Program-** a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs. Substantial evidence clearly supports the designation of this program as Component.

_____ **Intervention Program-** a program designed and intended to target and support students' specific needs. Substantial evidence clearly supports the designation of this program as Intervention.

_____ **Does not meet criteria** for recommendation as a Curricular Material or Online Resource for Mathematics.

EVIDENCE SUMMARY:

FOCUS- Materials devote a large majority of time spent on major work of grade. Supporting work + sequencing added to majority work

COHERENCE- Sequencing of lessons is available at a quick glance in "sequence navigator" tab.

RIGOR- Lessons have a section for students to explain understanding. However there is not much practice before students are asked to reflect.

CONCEPTUAL UNDERSTANDING- There are single- & multi- step contextual problems to help engage students in problem solving.

MATHEMATICAL PRACTICES- Math practices are easy to find & readily available in every lesson.

ACCESSIBILITY OF STANDARDS TO ALL STUDENTS- This program covers all students at differing abilities - however there really isn't much enrichment for higher-performing students.

OTHER:

This program meets the IMET evaluation. But we found it to be confusing and time consuming.

2015-16 Interim Mathematics Review

Mathematics Evaluation Tool Grades K-8

Publisher: Origo Education, Inc.

Title of Material: Stepping Stones Grade 4

Author: J. Burnett, C. Irons, R. Irons

ISBN #: 9781219599790 **Copyright** 2012

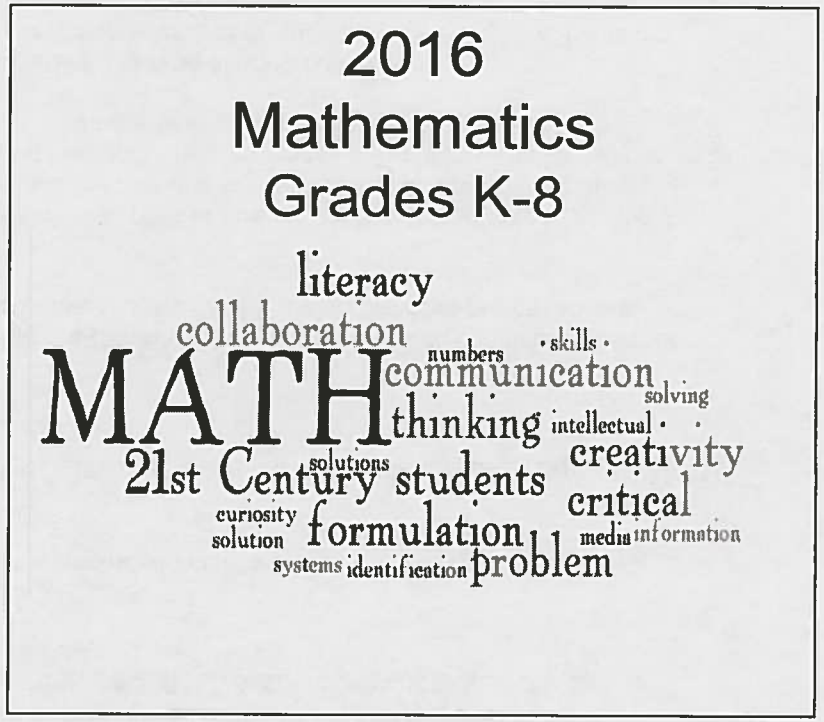
Reviewer ID: SA R.P.

Core Mathematics Program- a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Core.

Other Mathematics Program- a program that substantially, but partially, meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Other.

Component Mathematics Program- a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs.
Substantial evidence clearly supports the designation of this program as Component.

Intervention Program- a program designed and intended to target and support students' specific needs.
Substantial evidence clearly supports the designation of this program as Intervention.



- Evaluation Form adapted from Instructional Materials Evaluation Toolkit (IMET).

The IMET was developed by Student Achievement Partners. Educators may use or adapt. http://creativecommons.org/licenses/by/3.0/ Download this tool at http://achievethecore.org/IMET

Instructional Materials Evaluation Tool

Mathematics, Grades K-8

What Are the Purposes of the IMET?

This Math IMET is designed to help educators determine whether instructional materials are aligned to the Shifts and major features of the Common Core State Standards (CCSS). The substantial instructional Shifts (http://www.corestandards.org/other-resources/key-shifts-inmathematics/) at the heart of the Common Core State Standards are:

- **Focus** strongly where the Standards focus
- **Coherence**: Think across grades and link to major topics within the grade
- **Rigor**: In major topics, pursue conceptual understanding, procedural skill and fluency, and application with equal intensity.

The IMET draws directly from the following documents:

- Common Core State Standards for Mathematics (www.corestandards.org/Math)
- Publishers' Criteria for the Common Core State Standards in Mathematics grade K-8 (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)

When to use the IMET

1. Purchasing materials: Many factors go into local purchasing decisions. Alignment to the Standards is a critical factor to consider. This tool is designed to evaluate alignment of instructional materials to the Shifts and the major features of the CCSS. It also provides suggestions of additional indicators to consider in the materials evaluation and purchasing process.

2. Evaluating materials currently in use: The IMET can be used to analyze the degree of alignment of existing materials and help to highlight specific, concrete flaws in alignment. Even where materials and tools currently in use fail to meet one or more of these criteria, the pattern of failure is likely to be informative. States and districts can use the evaluation to create a thoughtful plan to modify or combine existing resources in such a way that students' actual learning experiences approach the focus, coherence, and rigor of the Standards.

3. Developing programs: Those developing new programs can use this tool as guidance for creating aligned curricula.
Please note this tool was designed for evaluating comprehensive curricula (including any supplemental or ancillary materials), but it was not designed for the evaluation of standalone supplemental materials.

Who Uses the IMET?

Evaluating instructional materials requires both subject-matter and pedagogical expertise. Evaluators should be well versed in the Standards (www.corestandards.org/Math) for all grades in which materials are being evaluated. This includes understanding the Major Work of the grade (www.achievethecore/focus), the Supporting and Additional work, how the content fits into the progressions in the Standards (www.achievethecore.org/progressions), and the expectations of the Standards with respect to conceptual understanding, procedural skill and fluency, and application. Evaluators also should be familiar with the substantial instructional Shifts (http:// www.corestandards.org/other-resources/key-shifts-in-mathematics/) of Focus, Coherence and Rigor that are listed above.

Getting Started

Prior to Evaluation

Assemble all of the materials necessary for the evaluation. It is essential for evaluators to have materials for all grades covered by the program, as some criteria cannot be rated without having access to each grade. In addition, each evaluator should have a reference copy of the Common Core State Standards for Mathematics (CCSSM) and the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013).

2015-16 Interim Mathematics Review

Mathematics Evaluation Tool Grades K-8

Publisher: Origo Education, Inc

Title of Material: Stepping Stones Grade 4

Author: J Burnett, C. Irons, R. Irons

ISBN #: 978121959790 **Copyright** 2012

Reviewer ID: SA, RP

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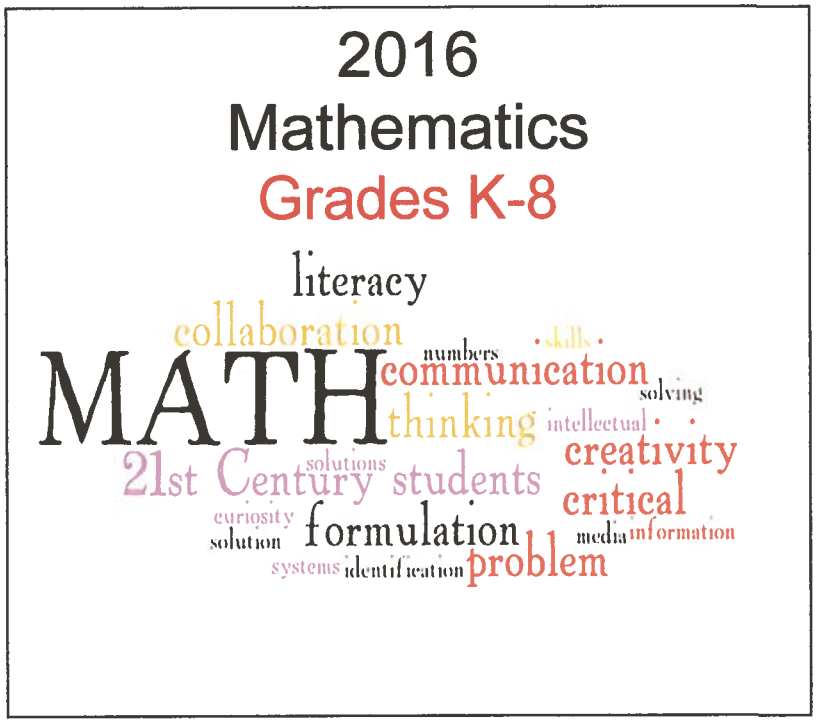

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2. Evaluating materials currently in use: The IMET can be used to analyze the degree of alignment of existing materials and help to highlight specific, concrete flaws in alignment. Even where materials and tools currently in use fail to meet one or more of these criteria, the pattern of failure is likely to be informative. States and districts can use the evaluation to create a thoughtful plan to modify or combine existing resources in such a way that students' actual learning experiences approach the focus, coherence, and rigor of the Standards.

3. Developing programs: Those developing new programs can use this tool as guidance for creating aligned curricula.
Please note this tool was designed for evaluating comprehensive curricula (including any supplemental or ancillary materials), but it was not designed for the evaluation of standalone supplemental materials.

Who Uses the IMET?
Evaluating instructional materials requires both subject-matter and pedagogical expertise. Evaluators should be well versed in the Standards (www.corestandards.org/Math) for all grades in which materials are being evaluated. This includes understanding the Major Work of the grade (www.achievethecore/focus), the Supporting and Additional work, how the content fits into the progressions in the Standards (www.achievethecore.org/progressions), and the expectations of the Standards with respect to conceptual understanding, procedural skill and fluency, and application. Evaluators also should be familiar with the substantial instructional Shifts (http:// www.corestandards.org/other-resources/key-shifts-in-mathematics/) of Focus, Coherence and Rigor that are listed above.

Getting Started
Prior to Evaluation

Assemble all of the materials necessary for the evaluation. It is essential for evaluators to have materials for all grades covered by the program, as some criteria cannot be rated without having access to each grade. In addition, each evaluator should have a reference copy of the Common Core State Standards for Mathematics (CCSSM) and the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013).

Before conducting the evaluation itself, it is important to develop a protocol for the evaluation process. The protocol should include having evaluators study the Publishers' Criteria and the IMET. It will also be helpful for evaluators to get a sense of each program overall before beginning the process. At a minimum, this would include reading the front matter of the text, looking at the table of contents and paging through multiple chapters.

Sections 1-3 below should be completed to produce a comprehensive picture of the strengths and weaknesses of the materials under evaluation. Information about areas in need of improvement or supplementation should be shared with internal and external stakeholders.

Navigating the Tool

Begin with Section 1: Non-Negotiable Alignment Criteria

- The Non-Negotiable Alignment Criteria must each be met in full for materials to be considered aligned to the Shifts and the major features of the Common Core State Standards. Each Non-Negotiable Alignment Criterion has one or more metrics associated with it; every one of these metrics must be met in order for the criterion as a whole to be met.

- Examine the relevant materials and use evidence to rate the materials against each criterion and its associated metric(s).

- Record and explain the evidence upon which the rating is based.

Continue to Section 2: Alignment Criteria

- The Alignment Criteria must each be met for materials to be considered aligned to the Shifts and the major features of the Common Core State Standards. Each Alignment Criterion has one or more metric associated with it; a specific number of these metrics must be met or partially met in order for the criterion as a whole to be met.

- Examine the materials in relation to these criteria, assigning each metric a point value. Rate the criterion as "Meets" or "Does Note Meet" based on the number of points assigned. The more points the materials receive on the alignment Criteria, the better they are aligned.

Record and explain the evidence upon which the rating is based.

Proceed to Section 4: Indicators of Quality

- Indicators of Quality are important considerations that will help evaluators better understand the overall quality of instructional materials. These considerations are not criteria for alignment to the CCSS, but they provide valuable information about additional program characteristics. Evaluators may want to add their own indicators to the examples provided.

Directions for Non-Negotiable 1

Freedom from Obstacles to Focus

Criterion	Evidence- Give specific examples.	Rating: (Reviewer only.)
Non-Negotiable 1: **Freedom from Obstacles to Focus** **Materials must reflect the content architecture of the Standards by not assessing the topics named before the grade level where they first appear in the Standards.** The Standards foster students' progress to algebra by focusing strongly on arithmetic. Consistent with this focus, certain topics from outside of arithmetic appear only in later grades. Thus, to be aligned, materials must reflect the content architecture of the Standards by not assessing the topics named before the grade level where they first appear in the Standards. In this criterion, "topics named" means the topics that are explicitly named in Metric 1A. No other topics should be added to the list in Metric 1A. (Note that other topics in the standards are addressed in criterion NN2.)	**Required Materials** • Common Core State Standards for Mathematics (www.corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf) • From the materials being evaluated: teacher guides and all assessment components	**Rating this Criterion:** Non-Negotiable 1 is rated as Meets or Does Not Meet. To rate Non-Negotiable 1, begin by rating Metric 1A. Since Metric 1A is the only metric for Non-Negotiable 1, the rating for Non-Negotiable 1 is the same as the rating for Metric 1A. If Metric 1A is rated as Does Not Meet, include evidence of when the named topic(s) is/are assessed. If the metric is rated as Meets, list the grade(s) examined in the evaluation.

Metric NN1A: **Materials reflect the basic architecture of the Standards by not assessing the listed topics before the grade level indicated.** • Probability, including chance, likely outcomes, probability models. (Introduced in the CCSSM in grade 7) • Statistical distributions, including center, variation, clumping, outliers, mean, median, mode, range, quartiles; and statistical association or trends, including two-way tables, bivariate measurement data, scatter plots, trend line, line of best fit, correlation. (Introduced in the CCSSM in grade 6) • Similarity, congruence, or geometric transformations. (Introduced in the CCSSM in grade 8) • Symmetry of shapes, including line/ reflection symmetry, rotational symmetry. (Introduced in the CCSSM in grade 4) **How to Find the Evidence:** Evaluate the table of contents, all chapter tests, all unit tests, and other such assessment components (including rubrics). For context, read Criterion #2 from the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013). NOTE: Grade alignments of other topics are addressed in Non-Negotiable 2, Focus and Coherence.) In this criterion, "topics named" means the topics that are explicitly named in Metric 1A. No other topics should be added to the list in Metric 1A. (Note that other topics in the standards are addressed in criterion NN2.)	**Evidence-** All materials reflect the basic architecture of the Standards. I did not find evidence of assessment before the listed grade level topics. See attached Grade 4 CCSS Document topics listed in table which are not assessed before grade level.	**(Reviewer only.)** **_X_ Meets** **____Does Not Meet**
Non-Negotiable 1: Materials must reflect the content architecture of the Standards by not assessing the topics named* before the grade level where they first appear in the Standards. **NN 1** If Metric 1A was rated as Meets, then rate Non-Negotiable 1 as Meets. If Metric 1A was rated as Does Not Meet, then rate Non- Negotiable 1 as Does Not Meet. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion.**(Reviewer only.)** **Before moving to Non-Negotiable 2, record the final Meets or Does Not Meet rating in the Evaluation Summary.**		**(Reviewer only.)** **_X_ Meets** **____Does Not Meet** **Strengths/Weaknesses:**

Directions for Non-Negotiable 2

Focus and Coherence

Non-Negotiable 2: **Focus and Coherence** **Materials must focus coherently on the Major Work of the grade in a way that is consistent with the progressions in the Standards.** Focus and coherence are the two major evidence-based design principles of the Common Core State Standards for Mathematics (CCSSM, p. 3). Focus is necessary in order to fulfill the ambitious promise the states have made to their students by adopting the Standards: greater achievement at the college and career ready level; greater depth of understanding of mathematics; and a rich classroom environment in which reasoning, sense-making, applications, and a range of mathematical practices flourish. In simpler terms, a mile-wide, inch-deep curriculum translates to less time per topic. Less time means less depth and moving on without many students. Thus, materials must focus coherently on the Major Work of the grade in a way that is consistent with the progressions in the Standards.	**Required Materials** • Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf) • Focus by Grade Level for the grade being evaluated (www.achievethecore.org/focus) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion:** Non-Negotiable 2 is rated as Meets or Does Not Meet. To rate Non-Negotiable 2, first rate metrics 2A–2H. Each of these eight metrics must be rated as Meets in order for Non-Negotiable 2 to be rated as Meets. Rate each metric 2A-2H as Meets or Does Not Meet/Insufficient Evidence. If the evidence examined shows that the Criterion is met, then mark the Criterion Meets. If the evidence examined shows that the Criterion is not met—or if there is insufficient evidence to make a determination—then mark the Criterion as Does Not Meet/Insufficient Evidence. Support all ratings with evidence.
Metric NN2A: **In each grade K–8, students and teachers using the materials as designed devote the large majority of time to the Major Work of the grade.** **How to Find the Evidence:** Familiarize yourself with the Major Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, lessons, homework assignments, and assessments. (Evaluate both student and teacher materials.) Consider time spent on the Major Work of the grade and judge qualitatively whether students and teachers using the materials as designed will devote the large majority of time to the Major Work of the grade. For context, read Criterion #1 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013)	**Evidence-** Materials devote a large majority of time spent on the Major Work for grade 4. Of 144 lessons 112 lessons meet major work content for 78% of the lessons. Cross curricular activities also address this work. See attached document.	**(Reviewer only.)** **__X__Meets** **____Does Not Meet/** **Insufficient Evidence**

Metric NN2B: **Supporting work, where present, enhances focus and coherence simultaneously by also engaging students in the Major Work of the grade.** **How to Find the Evidence:** Familiarize yourself with the Major Work and Supporting Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate chapters and lessons that focus on Supporting Work. NOTE: Example of evaluating this Criterion might include looking at whether materials for K–5 generally treat data displays as an occasion for solving grade-level word problems using the four operations (e.g., see 3.MD.B.3); or whether materials for grade 7 take advantage of opportunities to use probability to support ratios, proportions, and percentages. For context, read Criterion #3 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** All modules have multiple lessons addressing the supporting work of Grade 4. These lessons enhance focus and coherence simultaneously by engaging students in the Major Work of grade 4. Examples: 4.OA.B Factors and multiples: 3.1, 3.2, 3.4, 3.5 4.MD.A Solve problems involving measurement from larger to smaller: 2.11, 2.12, 5.10, 8.7-8.12, 9.7-9.12, 1.8-11.12, 12.7-12.12 4.MD.B Represent and interpret data: 9.1-9.6	(Reviewer only.) **__X__Meets** **____Does Not Meet/** **Insufficient Evidence**
Metric NN2C: **Materials base content progressions on the grade-by-grade progressions in the Standards. Content from previous or future grades does not unduly interfere with or displace on-grade-level content.** **How to Find the Evidence:** Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, and lessons in both student and teacher materials. NOTE: In some cases it may be possible that aligned materials might address some aspects of a topic in a strategic way before or after the grade level in which the topic is central in the Standards' progressions; for example, a curriculum author might purposefully choose to explore adding fractions with unlike denominators in a way appropriate to grade four, recognizing that this work is not really required until the next grade. However, any such purposeful discrepancies in content progressions should enhance the required learning in each grade; not unduly interfere with or displace grade-level content; and be clearly aimed at helping students meet the Standards as written rather than effectively rewriting the progressions in the Standards. And in all cases, note that Non-Negotiable 1 must be met for materials to be aligned. For context, read Criterion #5a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Materials show sequencing of lesson materials. There is an online component that displays the lesson-by-lesson sequencing Individual lessons do not show what was previously taught nor where the lesson intends the students to go in the future. Some concepts of other grades do appear in the lessons, but they do not interfere with or displace on-grade level content. Attached document shows progression of lessons taught by the grade. Remediation resources clearly identified as extra help or extra practice. Examples: Module 2 lesson 10, Module 8 lesson 4.	(Reviewer only.) **_X___Meets** **___Does Not Meet/** **Insufficient Evidence**

Metric NN2D: **Materials give students extensive work with on-grade-level problems.** **How to Find the Evidence:** Evaluate both student and teacher materials. If the materials provide resources for differentiated learning, consider whether lower-performing students have opportunities to engage with grade-level problems. Also consider whether higher-performing students are given opportunities to learn current grade-level content in greater depth. For context, read Criterion #5b in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Materials give most students extensive work with on grade-level problems. Under the More Math tab for each module there are differentiated activities for the lessons. These include extra help and extra practice. Modules 11 and 12 provide enrichment for higher performing students. .	(Reviewer only.) **_X___Meets** **___Does Not Meet/** **Insufficient Evidence** Needs more enrichment for higher performing students.
Metric NN2E: **Materials relate on-grade-level concepts explicitly to prior knowledge from earlier grades.** **How to Find the Evidence:** Evaluate both student and teacher materials. NOTE: Examples of evaluating this Criterion might include looking at the way the materials extend basic ideas of place value across the decimal point; or the role that properties of operations play when the materials extend arithmetic beyond whole numbers to fractions, variables, and expressions. More generally, cluster headings in the Standards sometimes signal key moments where reorganizing and extending previous knowledge is important in order to accommodate new knowledge (e.g., see cluster headings that use the phrase "Apply and extend previous understanding"). For context, read Criterion #5c in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Sequence Navigator shows related content between grades. The "focus" and "Research into Practice" tabs at the beginning of each module give teachers an understanding of what is being taught,	(Reviewer only.) **_X ___Meets** **____Does Not Meet/** **Insufficient Evidence**
Metric NN2F: **Review of material from previous grades is clearly identified as such to the teacher, and teacher and students can see what their specific responsibility is for the current year.** **How to Find the Evidence:** Evaluate the table of contents, but do not stop there; also evaluate units, chapters, lessons, homework assignments and assessments. (Evaluate both student and teacher materials.) Identify any content from previous grades and check whether it is identified as such. For context, read Criterion #5a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Review of material from previous grades is listed in "content navigator". Students are not shown what their specific responsibility is for the current year. Standards listed as you hover over each lesson title. Focus tab and Research into practice tab give connections and natural progression of standards. See attached document NN Metric 2F.	(Reviewer only.) **_X___Meets** **___Does Not Meet/** **Insufficient Evidence**

Metric NN2G: **Materials include learning objectives that are visibly shaped by CCSSM cluster headings.** **How to Find the Evidence:** Select several clusters from the Major Work in the grade being evaluated. Evaluate teacher and student materials in relation to these clusters. For context, read Criterion #6a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Learning objectives are visibly shaped by the CCSSM cluster headings. These can be found listed under the following tab path: Grade 4, Module 1, Mathematics, Learning targets. Major cluster are found in most module lessons.	**(Reviewer only.)** **_X___Meets** **____Does Not Meet/** **Insufficient Evidence**
Metric NN2H: **Materials include problems and activities that serve to connect two or more clusters in a domain, or two or more domains in a grade, in cases where these connections are natural and important.** **How to Find the Evidence:** In the grade being evaluated, choose two or more clusters or two or more domains for which connections are natural and important. Evaluate the units, chapters, and lessons that deal with the chosen topics, looking for problems and activities that serve to connect the chosen clusters or domains. NOTE: An example of evaluating this Criterion might include looking at whether problems in grade 4 sometimes or often involve students applying their developing computation skills (detailed in domain NBT) in the context of solving word problems (detailed in domain OA). For context, read Criterion #6b in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Materials include problems and activities that connect two or more clusters in a domain. Many lessons connect several clusters within a domain or several domains in a grade. Two or more clusters are linked throughout modules, but not always within the same lesson. Examples of these can be found under the "Learning Targets" tab for each module.	**(Reviewer only.)** **_X___Meets** **____Does Not Meet/** **Insufficient Evidence**

Non-Negotiable 2:

Focus and Coherence

Materials must focus coherently on the Major Work of the grade in a way that is consistent with the progressions in the Standards.

NN 2 If all Metrics 2A – 2H were rated as Meets, then rate Non-Negotiable 2 as Meets. If one or more Metric was rated Does Not Meet/Insufficient Evidence, then rate Non-Negotiable 2 as Does Not Meet. Check the final rating.
Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)**

Before moving to Alignment Criterion 1, record the final Meets or Does Not Meet rating in the Evaluation Summary.

(Reviewer only.)

____Meets

____Does Not Meet

Strengths/Weaknesses:

Weaknesses: Differentiation is for lower-performing students, but not for higher-performing students.
Materials do not state explicitly what is being focused on from prior grade-levels nor preparation for future grade-levels.

Now continue by evaluating the Alignment Criterion 1 for Rigor and Balance.

Directions for Alignment Criterion 1

Rigor and Balance

Alignment Criterion 1: Rigor and Balance **Materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.** The Standards set expectations for attention to all three aspects of rigor: conceptual understanding, procedural skill and fluency, and applications. Thus, materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.	**Required Materials** • Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf) • Focus by Grade Level for the grade being evaluated (achievethecore.org/focus) • Situation Types for the Operations in Word Problems (achievethecore.org/situation-types) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion:** Alignment Criterion 1 is rated as Meets or Does Not Meet. To rate Alignment Criterion 1, first rate metrics 1A, 1B, and 1C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). For each metric, guiding questions are provided to aid in gathering evidence. Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 1 if the materials rate 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as rigor and balance, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.
Metric AC1A: **The materials support the development of students' conceptual understanding of key mathematical concepts, especially where called for in specific content Standards or cluster headings.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Major Work for the grade being evaluated that relate specifically conceptual understanding to use throughout the questions associated with this metric. NOTE: Some examples of clusters or Standards that call for conceptual understanding include: K.OA.A.1, (1.NBT.B, 1.NBT.C), (2.NBT.A, 2.NBT.B), (3.OA.A.1, 3.OA.A.2), 4.NF.A, (4.NBT.A, 4.NBT.B), 5.NF.B, (5.NBT.A, 5.NBT.B), 6.RP.A, 6.EE.A.3, 7.NS.A, 7.EE.A, 8.EE.B, 8.F.A, 8.G.A Clusters or Standards grouped by parentheses are closely connected and could be analyzed together. For context, read Criterion #4a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	-Choose a cluster/Standard from the Major Work that is aligned to each aspect of rigor and use it to evaluate these metrics. It is most helpful if the same clusters/Standards are chosen for all of the programs being evaluated. (Guidance in choosing clusters/Standards is included in "How to Find the Evidence".)	**Use the questions for AC Metric 1A to evaluate Metric 1A. Record evidence for each question and rate Metric 1A.** **_X__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**

Is conceptual understanding attended to thoroughly where the Standards set explicit expectations for understanding or interpreting? Evaluate lessons, chapter/unit assessments and homework assignments, paying attention to work aligned to Standards that explicitly call for understanding or interpreting. NOTE: Examples of evaluating this Criterion might include looking at how well the multi-digit addition and subtraction algorithms are developed and explained on the basis of place value and properties of operations; or how well the multi-digit multiplication and division algorithms are developed and explained on the basis of place value and properties of operations; or how well solving equations is presented and explained as a process of reasoning.	**Evidence-** Conceptual understanding is attended to where the Standards set explicit expectations for understanding or interpreting. Lessons have a section for students to explain reasoning and understanding called "Reflection on the Work" which is labeled under the "Lesson" "Steps" tabs. There are not many questions to practice with before the Reflection section.	
Do the materials feature high-quality conceptual problems and conceptual discussion questions? Evaluate lessons, chapter/unit assessments, and homework assignments. NOTE: Example of conceptual problems might include such questions as "Find a number greater than 1/5 and less than 1/4," or "If the divisor does not change and the dividend increases, what happens to the quotient?"	**Evidence-** Materials feature high-quality conceptual problems and discussion questions. Many lessons ask students to discuss a concept. Examples are listed under "steps" tab. I did not find sufficient evidence in the student journal or practice book. Could not find online teaching notes.	
Do the materials feature opportunities to identify correspondences across mathematical representations? Evaluate lessons, chapter/unit assessments and homework assignments. NOTE: Examples of evaluating this Criterion might include looking at whether students are supported in identifying correspondences among: the verbal description of a situation, the diagrams that distill its mathematical features, and the equations that model it; or equivalent forms of numbers (e.g., 3 and 6/2) and the number line; or rational number operations and representations of them via models such as the vector model; or the expression that defines a function and the graph that shows the relationship.	**Evidence-** Materials feature opportunities to identify correspondences across mathematical representations. There are several visual/graphic/mathematical representations of a problem such as number lines, place-value charts, and fraction bars. The "Number Case" has manipulatives to support lesson features.	
Metric AC1B: **The materials are designed so that students attain the fluencies and procedural skills required by the Standards.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Major Work for the grade being evaluated that relate specifically to fluency and procedural skill to use throughout the questions associated with this metric. NOTE: Some examples of Standards that call for procedural skill and fluency include: K.OA.A.5, 1.OA.C.6, 2.OA.B.2, 2.NBT.B.5, 3.OA.C.7, 3.NBT.A.2, 4.NBT.B.4, 5.NBT.B.5, 6.NS.B.2, and 6.NS.B.3, 6.EE.A, 7.NS.A, 7.EE.A.1,7.EE.B.4a, 8.EE.C.7, 8.EE.C.8b For context, read Criterion #4b in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	Fluency for 4th grade is to fluently add or subtract multi-digit whole numbers using the standard algorithm.	**Use the questions for Metric 1B to evaluate Metric 1 B. Record evidence for each question and rate Metric 1B.** **(Reviewer only.)** **__X__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**

Is progress toward fluency and procedural skill interwoven with students' develo conceptual understanding of the operations in question? Evaluate lessons, chapter/unit assessments, daily routines, and homework assignments for evidence that the development of fluency and procedural skill is supported by conceptual understanding.	**Evidence-** Many lessons have flu and procedural skills woven into guided lesson and practice pages in Student Journals, practice pages, and online practices. Additional fluency lessons and worksheets are found in the Ongoing Practices.	
Are purely procedural problems and exercises present that include cases in which opportunistic strategies are valuable and generic cases that require efficient algorithms present? Evaluate lessons, chapter/unit assessments, daily routines, and homework assignments. NOTE: Examples of problems in which opportunistic strategies are valuable might include the sum 698 + 240 or the system x + y = 1, 2x + 2y = 3. Examples of generic cases that require efficient algorithms might include the sum 8767+2286 or the system 6y + x = x + 3, – x = 1 + 2y.	**Evidence-** Many lessons include opportunistic strategies and algorithms. Strategies are developed before the algorithm is introduced. Examples: Module 2 Lessons 4, 5, 6, 7 Practice pages 2.6, 2.8, 2.10	
Do the materials in grades K–6 provide repeated practice toward attainment of fluency Standards? Evaluate lessons, daily routines, and homework assignments for evidence of repeated practice toward attainment of the following K–6 Standards that set an explicit expectation of fluent (accurate and reasonably fast) computation: K.OA.A.5, 1.OA.C.6, 2.OA.B.2, 2.NBT.B.5, 3.OA.C.7, 3.NBT.A.2, 4.NBT.B.4, 5.NBT.B.5, 6.NS.B.2, 6.NS.B.3.	**Evidence-** Addition and subtraction computation is included in many lessons.	
Metric AC1C: **The materials are designed so that teachers and students spend sufficient time working with engaging applications, without losing focus on the Major Work of each grade.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Major Work for the grade being evaluated that relate specifically application to use throughout the questions associated with this metric. NOTE: Some examples of clusters or Standards that call for application include: K.OA.A.2, 1.OA.A, 2.OA.A, 3.OA.A.3, 3.OA.D.8, 4.OA.A.3, 4.NF.B.3d, 4.NF.B.4c, 5.NF.B.6, 5.NF.B.7c, 6.RP.A.3, 6.NS.A.1, 6.EE.B.7, 6.EE.C.9, 7.RP.A, 7.NS.A.3, 7.EE.B.3, 8.EE.C.8c, 8.F.B For context, read Criterion #4c in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Teachers and students spend sufficient time working with engaging applications without losing focus of the Major Work of the grade. Example: Many lessons are designed for students to work on using the four operations with whole numbers to solve problems (4.OA.A.3).	**Use the questions for Metric 1C to evaluate Metric 1C. Record evidence for each question and rate Metric 1C.** **(Reviewer only.)** **_X___Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Are there are single- and multi-step contextual problems, including non-routine problems, that develop the mathematics of the grade, afford opportunities for practice, and engage students in problem solving? Do the problems attend thoroughly to those places in the content Standards where expectations for multi-step and real-world problems are explicit? Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** There are single- and multi-step contextual problems to help engage students in problem solving. Most lessons contain real-world problems to help students engage in problem solving. Examples: 7.8 "steps", Mod 9 Investigation 1, Mod. 12 "quarterly tests"	

Do application problems particularly stress applying the Major Work of the grade? Eval[illegible]essons, chapter/unit assessments, and homework assignments. NOTE: Examples of evaluating this Criterion might include looking at: how well, by the end of grade 2, students using the materials as designed can represent and solve a full range of one-step addition and subtraction word problems; or how well, by the end of grade 3, students using the materials as designed can represent and solve a full range of one-step multiplication and division word problems; or how well these basic situation types for each operation are carried coherently across the grades, (e.g., with fractions and algebraic expressions); or, in all grades, whether the problems connect concepts, Standards, and domains in ways that are natural and important. For a list of situation types for one-step addition, subtraction, multiplication, and division problems, see Situation Types for the Operations in Word Problems	**Evidence-** Application problems s[illegible]s applying the Major Work of grade 4. Most lessons focus on the Major Work. Examples: Modules 3, 6, 9, 12 have quarterly tests that have criteria to be met from the Major Work of Grade 4.	
Does modeling build slowly across K–8, with applications that are relatively simple in earlier grades and when students are encountering new content? In grades 6–8, do the problems begin to provide opportunities for students to make their own assumptions or simplifications in order to model a situation mathematically? Read Standard for Mathematical Practice 4, Model with Mathematics. Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** Modeling builds slowly. Students are provided modeling before algorithms are introduced. This helps the students move from concrete to abstract strategies. Examples: "Sequential Navigation" shows math strategies by grade. Each lesson begins with "Starting the Lesson" which usually contains modeling for lesson objective.	

Alignment Criterion 1: Rigor and Balance

Materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.

AC1 Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 out of 6 points, the Criterion has not been met. Check the final rating.
Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)**

Before moving to Alignment Criterion 2, record the final Meets or Does Not Meet rating in the Evaluation Summary.

(Reviewer only.)

_X___Meets

____Does Not Meet

Strengths/Weaknesses:

Directions for Alignment Criterion 2

Standards for Mathematical Practice

Alignment Criterion 2: Standards for Mathematical Practice

Materials must demonstrate authentic connections between content Standards and practice Standards.

The Standards require that designers of instructional materials connect the mathematical practices to mathematical content in instruction. Thus, materials must demonstrate authentic connections between content Standards and practice Standards.

Required Materials:

- Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf)
- Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)
- Focus by Grade Level for the grade being evaluated (www.achievethecore.org/focus)
- From the materials being evaluated: teacher guides, student texts and workbooks

Rating this Criterion

Alignment Criterion 2 is rated as Meets or Does Not Meet.

To rate Alignment Criterion 2, first rate metrics 2A, 2B, and 2C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). For each metric, guiding questions are provided to aid in gathering evidence.

Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 2 if the materials earn 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as mathematical practices, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.

Metric AC2A:

Materials address the practice Standards in such a way as to enrich the Major Work of the grade; practices strengthen the focus on Major Work instead of detracting from it, in both teacher and student materials.

How to Find the Evidence:

Familiarize yourself with the Major Work of the grade being evaluated (see the Focus by Grade Level documents.)

Evaluate teacher and student materials for evidence that the mathematical practices support and connect to the focus of the grade.

NOTE: Examples of evaluating this Criterion might include looking at whether, in grades K–5, students using the materials are supported to look for and express regularity in repeated reasoning about the addition table, the multiplication table, the properties of operations, the relationship between addition and subtraction or multiplication and division, and the place value system; or whether, in grades 6–8, students using the materials are supported to look for and express regularity in repeated reasoning about proportional relationships and linear functions.

For context, read Criterion #8 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013).

Evidence-

"Standards for Mathematical Practice" enrich the Major Work of the Grade. They are listed in the materials under each module. Math practices help enrich the Major Work of Grade 4 and do not detract from it in either teacher or student materials.

The practices can be found in the opening paragraphs of the lessons (hover the mouse over beginning paragraph for information to show).

Example:

Module 5 lesson 4 "steps"

(Reviewer only.)

__X__Meets (2)

____Partially Meets (1)

____Does Not Meet (0)

Metric AC2B: **Materials attend to the full meaning of each practice Standard.** **How to Find the Evidence:** For context, read Criterion #7 and Criterion #9 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).		**Use the questions for Metric 2B to evaluate Metric 2B. Record evidence for each question and rate Metric 2B.** **(Reviewer only.)** **_X___Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Over the course of any given year of instruction, is each mathematical practice Standard meaningfully present in the form of assignments, activities, or problems that stimulate students to develop the habits of mind described in the practice Standard? Evaluate lessons, chapter/ unit assessments, and homework assignments for evidence of each mathematical practice being meaningfully present in instruction.	**Evidence-** Mathematical practices are present in the form of assignments, activities, and problems. "Mathematical Practices" tabs are listed under each module. Practices can be found in each lesson. See attached Module 7 chart.	
Do the materials treat the practice Standards as developing across grades or grade bands? Are the practice Standards in early grades appropriately simple? Do they display an arc of growing sophistication across the grades?	**Evidence-** Materials address the standards throughout the modules. They develop from easier to more sophisticated problems across the year. Examples: 1:1, Lesson 8.5	
Are there teacher-directed materials that explain the role of the practice Standards in the classroom and in students' mathematical development? Are alignments to practice Standards accurate?	**Evidence-** Each lesson opening paragraph explains the practices being used in the lesson. Also each module has a Mathematical Practices chart to show development across lessons. There are also Professional Development videos for teacher to view.	
Metric AC2C: **Materials support the Standards' emphasis on mathematical reasoning.** **How to Find the Evidence:** For context, read Criterion #10 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).		**Use the questions for Metric 2C to evaluate Metric 2C. Record evidence for each question and rate Metric 2C.** **(Reviewer only.)** **__X__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Do the materials support students in constructing viable arguments and critiquing the arguments of others concerning grade-level mathematics that is detailed in the content Standards? Read Standard for Mathematical Practice 3. Evaluate teacher and student materials to ensure that students are given opportunities to reason with grade-level mathematics.	**Evidence-** There are 17 lessons that incorporate arguments and critiquing of arguments. Examples include: 2.1, 2.2, 2.3, 2.9, 3.9, 4.2, 6.6, 6.9, 7.5, 8.12, 9.2, 9.4, 9.11, 12.3, 12.4, 12.11, 12.12	
Do the materials support students in producing not only answers and solutions, but also, in a grade-appropriate way, arguments, explanations, diagrams, mathematical models, etc., especially in the Major Work of the grade? Familiarize yourself with the Major Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate teacher and student materials, to understand the types of work students are expected to produce.	**Evidence-** Lessons ask students to produce answers, arguments, explorations and models. Most lessons give students the model and student fill in the answers. Examples: Student Journal page 78-79, Module 5 lesson 1 "steps"	

Do materials explicitly attend to the specialized language of mathematics? Is the language of argument, problem solving, and mathematical explanations taught rather than assumed? Evaluate teacher and student materials, paying attention to how mathematical language is taught. NOTE: Examples of evaluating this Criterion might include looking at whether students are supported in: basing arguments on definitions; using the method of providing a counterexample; or recognizing that examples alone do not establish a general statement.	**Evidence-** Language development for each module is listed. This gives the list of vocabulary for the module, but there are no specific definitions listed. There are definitions listed under the "glossary" tab. Example: Module 3, Mathematics, Language Development.	

Alignment Criterion 2:
Standards for Mathematical Practice

Materials must demonstrate authentic connections between content Standards and practice Standards.

AC2 Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 out of 6 points, the Criterion has not been met. Check the final rating.
Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion.
(Reviewer only.)

Before moving to Alignment Criterion 3, record the final Meets or Does Not Meet rating in the Evaluation Summary.

(Reviewer only.)

_X___Meets

____Does Not Meet

Strengths/Weaknesses:
Weaknesses: No specific vocabulary taught with specific definitions. I couldn't find many explicitly taught vocabulary other than highlighted word in some lessons. Example: 3.1 "steps"

Alignment Criterion 3:
Access to the Standards for All Students

Materials must provide supports for English Language Learners and other special populations.

Because Standards are for all students, alignment requires thoughtful support to ensure all students are able to meet the Standards. Thus, aligned materials must provide supports for English Language Learners and other special populations.

Required Materials:

- Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf)
- Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)
- From the materials being evaluated: teacher guides, student texts and workbooks

Rating this Criterion:
Alignment Criterion 3 is rated as Meets or Does Not Meet.

To rate Alignment Criterion 3, first rate metrics 3A, 3B, and 3C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points).

Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 3 if the materials earn 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as support for special population, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.

Metric AC3A: **Support for English Language Learners and other special populations is thoughtful and helps those students meet the same Standards as all other students. The language in which problems are posed is carefully considered.** **How to Find the Evidence:** Evaluate teacher and student materials, paying attention to supports offered for special populations.	**Evidence-** Support for ELL and other special populations helps those students meet the same standards as all other students. Each module has an ELL section under the "Mathematics" tab. Also many lessons have an ELL icon in the top right corner of the lesson page. Example: Module 3 lesson 1 "steps" Module 4 lesson 1 "steps" See attached document AC Metric 3 A	Reviewer only.) __X__Meets (2) ____Partially Meets (1) ____Does Not Meet (0)
Metric AC3B: **Materials provide appropriate level and type of scaffolding, differentiation, intervention, and support for a broad range of learners with gradual removal of supports, when needed, to allow students to demonstrate their mathematical understanding independently.** **How to Find the Evidence:** Evaluate teacher and student materials, paying attention to whether materials provide differentiation that will lead all learners to engage with on-grade-level content.	**Evidence-** Materials provide appropriate levels and support for a broad range of learners. Content is introduced first in concrete ways and models then moves toward the abstract algorithms. The scaffolding of context may be spaced across many modules. Examples: Journal pages are created for teacher support on first page and individual work on 2nd page. Extra practices may be found through the "differentiation" tab.	Reviewer only.) _X___Meets (2) ____Partially Meets (1) ____Does Not Meet (0)
Metric AC3C: **Design of lessons recommends and facilitates a mix of instructional approaches for a variety of learners such as using multiple representations (e.g., including models, using a range of questions, checking for understanding, flexible grouping, pair-share).** **How to Find the Evidence:** Evaluate teacher materials, noting instructional approaches suggested for whole class and differentiated lessons and activities.	**Evidence-** Lessons recommends and facilitates a mix of instructional approaches for a variety of learners. "Steps" help with a variety of learning strategies. Example: Module 5 Lesson 1 has—fraction patterns, manipulatives, comparing fractions, compare with partner, whole class discussion, and independent practice.	Reviewer only.) _X___Meets (2) ____Partially Meets (1) ____Does Not Meet (0)

Alignment Criterion 3: **Access to the Standards for All Students** **Materials must provide supports for English Language Learners and other special populations.** AC3 Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 points, the Criterion has not been met. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion.**(Reviewer only.)** **Move to the Evaluation Summary and record the final Meets or Does Not Meet rating .**	**(Reviewer only.)** **_X___Meets** **____Does Not Meet** **Strengths/Weaknesses:**

Once an evaluation for alignment to the Shifts and major features of the CCSS has been conducted using Sections 1-3, it's important to evaluate for overall quality and best practices. A starting list of Indicators of Quality are suggested below. States, districts and others evaluating instructional materials are encouraged to add to this list to ensure materials reflect local contexts. For background information on some of the Indicators of Quality in this section, refer to pp.18–21 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).

Indicators of Quality	**Evidence- Give specific examples.**	**Rating: (Reviewers only.)**
1. Lessons are thoughtfully structured and support the teacher in leading the class through the learning paths at hand, with active participation by all students in their own learning and in the learning of their classmates.	**Evidence-** Lessons are thoughtfully structured beginning with modeling and concrete strategies then building toward algorithms, class discussions, and independent practices.	**(Reviewer only.)** **__X____ Yes** **_____ No**
2. The underlying design of the materials includes both problems and exercises. (In solving problems, students learn new mathematics, whereas in working exercises, students apply what they have already learned to build mastery.) Each problem or exercise has a purpose. **NOTE: This Criterion does not require that the problems and exercises be labeled as such.**	**Evidence-** Problems and exercises are developed throughout modules Examples: 6.1 introduces comparison model 6.2 to 6.5 uses diagrams to compare, differentiate, and explore. 6.6 solves real-world word problems.	**(Reviewer only.)** **__X____ Yes** **_____ No**

3. Design of assignments is not haphazard: exercises are given in intentional sequences in order to strengthen students' mathematical understanding.	**Evidence-** Stepping Stones uses "Spaced Learning" model. This gives students an initial building block for a skill and builds upon it throughout the curriculum; exploring in smaller practices before introducing the next piece.	**(Reviewer only.)** **___X___ Yes** **_____ No**
4. There are separate teacher materials that support and reward teacher study including, but not limited to: discussion of the mathematics of the units and the mathematical point of each lesson as it relates to the organizing concepts of the unit, discussion on student ways of thinking and anticipating a variety of students responses, guidance on lesson flow, guidance on questions that prompt students thinking, and discussion of desired mathematical behaviors being elicited among students.	**Evidence-** There are some video segments and Professional Development sections for teacher support of modules and lessons. These are listed under "Research into Practices" tab.	**(Reviewer only.)** **__X____ Yes** **_____ No**
5. Manipulatives suggested in the materials are faithful representations of the mathematical objects they represent and are connected to written methods.	**Evidence-** Manipulatives are listed for each module under "Resource Overview" tab. Lessons and practice pages use faithful representations. There are not many hands-on manipulatives with this program.	**(Reviewer only.)** **__X____ Yes** **_____ No**
6. Materials include a variety of curriculum-embedded assessments. Examples include pre-, formative, summative, and self-assessment resources.	**Evidence-** Every module has formative and summative assessments. There are also quarterly tests after every 3 modules. Every formative assessment includes: pre-test, observations and discussions, and journals and portfolios. Summative is under check-ups, performance tasks, and interviews. See attached examples for Indicator Quality 6.	**(Reviewer only.)** **__X____ Yes** **_____ No**
7. Assessments contain aligned rubrics, answer keys, and scoring guidelines that provide sufficient guidance for interpreting student performance.	**Evidence-** Each assessment included has answer keys under the "resources" tab. There are also multiple forms for recording data. See attached examples for Indicator Quality 7.	**(Reviewer only.)** **___X___ Yes** **_____ No**

8. Materials assess student proficiency using methods that are accessible and unbiased, including the use of course-level language in student prompts.	**Evidence-** All assessments seem unbiased and are on-grade level and accessible.	**(Reviewer only.)** **___X___ Yes** **_____ No**
9. Materials are carefully evaluated by qualified individuals, whose names are listed, in an effort to ensure freedom from mathematical errors and course-level appropriateness.	**Evidence-** Materials have listed the names of those who evaluated the materials for mathematical errors. These names are listed in the "information" pages from Origo. Authors are found in the Program Tab.	**(Reviewer only.)** **__X____ Yes** **_____ No**
10. The visual design supports students in engaging thoughtfully with the subject. Navigation through the text is clear.	**Evidence-** Visual design is in color and is engaging and text is clear and helps the student make sense of content.	**(Reviewer only.)** **___X___ Yes** **_____ No**
11. The materials engage parents in appropriate ways. For example, homework assignments in elementary grades, consist of routine problems, practice with getting answers, and fluency-building exercises that parents can easily support.	**Evidence-** Each module provides a print-out of parent letters to explain module focus, vocabulary, and ideas that can be used from home. See attached examples for Indicator Quality 11.	**(Reviewer only.)** **__X____ Yes** **_____ No**

Reviewer IMET Evaluation Summary **Title/Level: _____Stepping Stones Grade 4_____**

Publisher: ___Origo Education, INC_____ Copyright: __2012_____
ISBN:__9781921959790_____

Reviewer ID # __SA, RP_____ Date Review Completed:____3-7-2016_____

Non-Negotiable Criteria- Each Non-Negotiable must be met in order for the Non-Negotiable Alignment Criteria to be met overall.	
Non-Negotiable 1: Freedom from Obstacles to Focus **___X____ Meets** **_____ Does Not Meet**	**Non- Negotiable 2: Focus and Coherence** **_X____ Meets** **_____ Does Not Meet**
Non-Negotiable Overall: **__X___ Meets** **_____ Does Not Meet**	

Alignment Criteria- Each Alignment Criterion must be met with a sufficient number of points in order for Alignment Criteria to be labeled as "Meets" overall. The more points the materials receive on the Alignment Criteria, the better they are aligned.

Alignment Criterion 1: Rigor and Balance	**Alignment Criterion 2: Standards of Mathematical Practice**	**Alignment Criterion 3: Access to Standards for All Learners**
Points: _6____ of 6 possible. **(Materials must receive at least 5 of 6 points to align.)** **____X___ Meets** **_____ Does Not Meet**	**Points: _6____ of 6 possible.** **(Materials must receive at least 5 of 6 points to align.)** **__X_____ Meets** **_____ Does Not Meet**	**Points: _6____ of 6 possible.** **(Materials must receive at least 5 of 6 points to align.)** **___X____ Meets** **_____ Does Not Meet**

Alignment Criteria Overall:

__X___ Meets **_____ Does Not Meet**

If the materials meet both Non-Negotiables and relevant Alignment Criterion, they are aligned to the Shifts and major features of the Core Standards. **the materials meet every Non-Negotiable and Alignment Criterion? __X___ Yes _____ No**

What are the specific areas of strength and weakness based on this evaluation? Publishers or others modifying or developing assessments can use this information to make improvements and/or to remedy gaps in the alignment of assessment materials.

Origo Stepping Stones meets the IMET Criteria. However, the components are very difficult and time consuming to find and difficult to navigate through. Multiple tabs had to be open in order to find the needed information.

2015-16 Mathematics Interim Review Recommendation & Summary

Publisher Name:	Origo Education
Title:	Grade 5 Stepping Stones
ISBN #	978921959790
Grade Level(s) or Course:	Grade 5
Reviewer ID:	*PL,TR*

RECOMMENDED AS:

____x____**Core Mathematics Program-** a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials. Substantial evidence clearly supports the designation of this program as Core.

_____**Other Mathematics Program-** a program that substantially, but partially, meets the *focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for* supplemental materials. Substantial evidence clearly supports the designation of this program as Other.

_____**Component Mathematics Program-** a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs. Substantial evidence clearly supports the designation of this program as Component.

_____**Intervention Program-** a program designed and intended to target and support students' specific needs. Substantial evidence clearly supports the designation of this program as Intervention.

_____ **Does not meet criteria** for recommendation as a Curricular Material or Online Resource for Mathematics.

EVIDENCE SUMMARY:

FOCUS- The program maintains consistent focus on the concepts, skills and processes aligned the Common Core Content Standards and Mathematical Practices. It is free of extraneous or non-aligned content.

COHERENCE- Mathematics is presented as interrelated concepts and skills. The online teacher resources support coherence and progressive development of ideas, concepts, skills and processes.

RIGOR- Scope and pacing of materials attends to the components of conceptual understanding, procedural skill, fluency and applications. The program sets high expectations for all three components throughout the materials for teacher and students.

CONCEPTUAL UNDERSTANDING- Conceptual understanding is attended to thoroughly where the Standards set explicit expectations for understanding or interpreting. Materials provide students enactive, iconic and symbolic opportunities to develop and communicate understandings of the major clusters of the grade 5 Standards.

MATHEMATICAL PRACTICES- Standards of Mathematical Practice (SMP) are embedded in each module. All Practice Standards are embedded in the instructions usually providing students opportunities for guided and independent engagement with the SMP.

ACCESSIBILITY OF STANDARDS TO ALL STUDENTS- Materials provide a full range of opportunities for differentiation, both remediation and extension, as well as ELL support.

OTHER:

It might be difficult for teachers to realize the full breadth and depth of these materials without professional development/training.

2015-16 Interim Mathematics Review

Mathematics Evaluation Tool Grades K-8

Publisher: Origo Education

Title of Material: Grade 5 Stepping Stones

Author: J. Burnett, C. Irons, R. Irons

ISBN #: 9781921959790 **Copyright** 2012

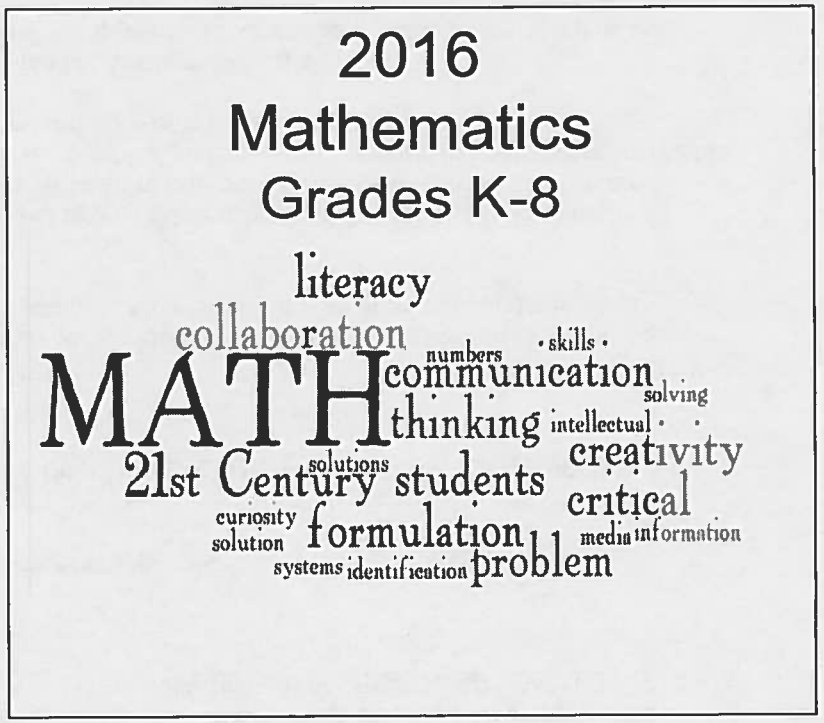
Reviewer ID: TR, PL

Core Mathematics Program- a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Core.

Other Mathematics Program- a program that substantially, but partially, meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Other.

Component Mathematics Program- a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs.
Substantial evidence clearly supports the designation of this program as Component.

Intervention Program- a program designed and intended to target and support students' specific needs.
Substantial evidence clearly supports the designation of this program as Intervention.



- Evaluation Form adapted from Instructional Materials Evaluation Toolkit (IMET).

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2015-16 Interim Mathematics Review

Mathematics Evaluation Tool Grades K-8

Publisher: Origo Education

Title of Material: Grade 5 Stepping Stones

Author: J. Burnet, C. Irons, R. Irons

ISBN #: 987-1-921959-79-0 **Copyright** 2012

Reviewer ID: PL,TR_____

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Substantial evidence clearly supports the designation of this program as Core.

Other Mathematics Program- a program that substantially, but partially, meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for supplemental materials.
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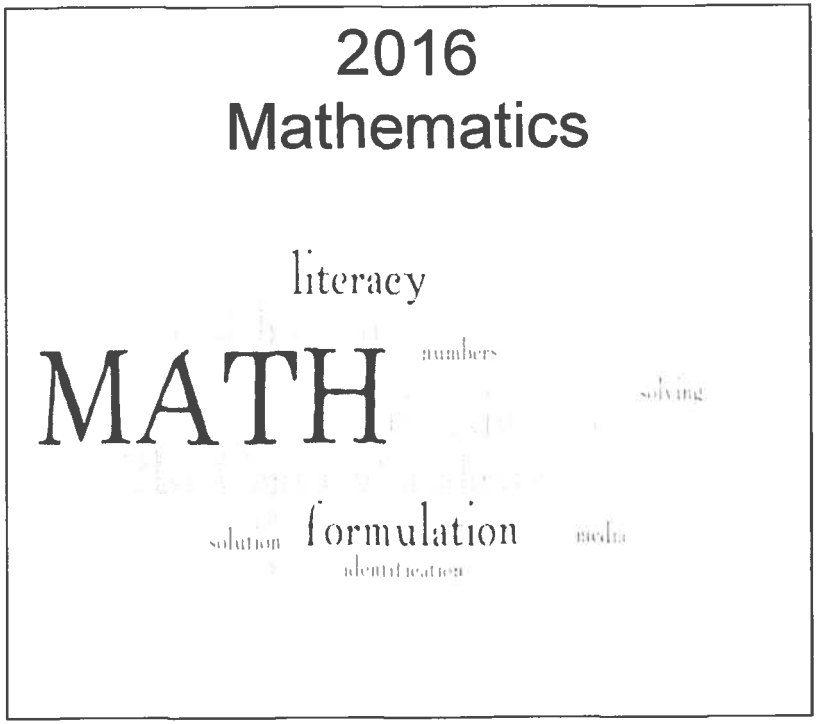

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Instructional Materials Evaluation Tool

Mathematics, Grades K-8

What Are the Purposes of the IMET?

This Math IMET is designed to help educators determine whether instructional materials are aligned to the Shifts and major features of the Common Core State Standards (CCSS). The substantial instructional Shifts ( ) at the heart of the Common Core State Standards are:

- **Focus** strongly where the Standards focus
- **Coherence**: Think across grades and link to major topics within the grade
- **Rigor**: In major topics, pursue conceptual understanding, procedural skill and fluency, and application with equal intensity.

The IMET draws directly from the following documents:

- Common Core State Standards for Mathematics (www.corestandards.org/Math)
- Publishers' Criteria for the Common Core State Standards in Mathematics grade K-8 ( )

When to use the IMET

1. Purchasing materials: Many factors go into local purchasing decisions. Alignment to the Standards is a critical factor to consider. This tool is designed to evaluate alignment of instructional materials to the Shifts and the major features of the CCSS. It also provides suggestions of additional indicators to consider in the materials evaluation and purchasing process.

2. Evaluating materials currently in use: The IMET can be used to analyze the degree of alignment of existing materials and help to highlight specific, concrete flaws in alignment. Even where materials and tools currently in use fail to meet one or more of these criteria, the pattern of failure is likely to be informative. States and districts can use the evaluation to create a thoughtful plan to modify or combine existing resources in such a way that students' actual learning experiences approach the focus, coherence, and rigor of the Standards.

3. Developing programs: Those developing new programs can use this tool as guidance for creating aligned curricula.
Please note this tool was designed for evaluating comprehensive curricula (including any supplemental or ancillary materials), but it was not designed for the evaluation of standalone supplemental materials.

Who Uses the IMET?

Evaluating instructional materials requires both subject-matter and pedagogical expertise. Evaluators should be well versed in the Standards (www.corestandards.org/Math) for all grades in which materials are being evaluated. This includes understanding the Major Work of the grade (www.achievethecore/focus), the Supporting and Additional work, how the content fits into the progressions in the Standards (www.achievethecore.org/progressions), and the expectations of the Standards with respect to conceptual understanding, procedural skill and fluency, and application. Evaluators also should be familiar with the substantial instructional Shifts (http:// www.corestandards.org/other-resources/key-shifts-in-mathematics/) of Focus, Coherence and Rigor that are listed above.

Getting Started

Prior to Evaluation

Assemble all of the materials necessary for the evaluation. It is essential for evaluators to have materials for all grades covered by the program, as some criteria cannot be rated without having access to each grade. In addition, each evaluator should have a reference copy of the Common Core State Standards for Mathematics (CCSSM) and the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013).

Before conducting the evaluation itself, it is important to develop a protocol for the evaluation process. The protocol should include having evaluators study the Publishers' Criteria and the IMET. It will also be helpful for evaluators to get a sense of each program overall before beginning the process. At a minimum, this would include reading the front matter of the text, looking at the table of contents and paging through multiple chapters.

Sections 1-3 below should be completed to produce a comprehensive picture of the strengths and weaknesses of the materials under evaluation. Information about areas in need of improvement or supplementation should be shared with internal and external stakeholders.

Navigating the Tool

Begin with Section 1: Non-Negotiable Alignment Criteria

- The Non-Negotiable Alignment Criteria must each be met in full for materials to be considered aligned to the Shifts and the major features of the Common Core State Standards. Each Non-Negotiable Alignment Criterion has one or more metrics associated with it; every one of these metrics must be met in order for the criterion as a whole to be met.

- Examine the relevant materials and use evidence to rate the materials against each criterion and its associated metric(s).

- Record and explain the evidence upon which the rating is based.

Continue to Section 2: Alignment Criteria

- The Alignment Criteria must each be met for materials to be considered aligned to the Shifts and the major features of the Common Core State Standards. Each Alignment Criterion has one or more metric associated with it; a specific number of these metrics must be met or partially met in order for the criterion as a whole to be met.

- Examine the materials in relation to these criteria, assigning each metric a point value. Rate the criterion as "Meets" or "Does Note Meet" based on the number of points assigned. The more points the materials receive on the alignment Criteria, the better they are aligned.

- Record and explain the evidence upon which the rating is based.

Proceed to Section 4: Indicators of Quality

- Indicators of Quality are important considerations that will help evaluators better understand the overall quality of instructional materials. These considerations are not criteria for alignment to the CCSS, but they provide valuable information about additional program characteristics. Evaluators may want to add their own indicators to the examples provided.

Directions for Non-Negotiable 1

Freedom from Obstacles to Focus

Criterion	Evidence- Give specific examples.	Rating: (Reviewer only.)
Non-Negotiable 1: **Freedom from Obstacles to Focus** **Materials must reflect the content architecture of the Standards by not assessing the topics named before the grade level where they first appear in the Standards.** The Standards foster students' progress to algebra by focusing strongly on arithmetic. Consistent with this focus, certain topics from outside of arithmetic appear only in later grades. Thus, to be aligned, materials must reflect the content architecture of the Standards by not assessing the topics named before the grade level where they first appear in the Standards. In this criterion, "topics named" means the topics that are explicitly named in Metric 1A. No other topics should be added to the list in Metric 1A. (Note that other topics in the standards are addressed in criterion NN2.)	**Required Materials** • Common Core State Standards for Mathematics ( ) • Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf) • From the materials being evaluated: teacher guides and all assessment components	**Rating this Criterion**: Non-Negotiable 1 is rated as Meets or Does Not Meet. To rate Non-Negotiable 1, begin by rating Metric 1A. Since Metric 1A is the only metric for Non-Negotiable 1, the rating for Non-Negotiable 1 is the same as the rating for Metric 1A. If Metric 1A is rated as Does Not Meet, include evidence of when the named topic(s) is/are assessed. If the metric is rated as Meets, list the grade(s) examined in the evaluation.

Metric NN1A **Materials reflect the basic architecture of the Standards by not assessing the listed topics before the grade level indicated.** • Probability, including chance, likely outcomes, probability models. (Introduced in the CCSSM in grade 7) • Statistical distributions, including center, variation, clumping, outliers, mean, median, mode, range, quartiles; and statistical association or trends, including two-way tables, bivariate measurement data, scatter plots, trend line, line of best fit, correlation. (Introduced in the CCSSM in grade 6) • Similarity, congruence, or geometric transformations. (Introduced in the CCSSM in grade 8) • Symmetry of shapes, including line/ reflection symmetry, rotational symmetry. (Introduced in the CCSSM in grade 4) **How to Find the Evidence:** Evaluate the table of contents, all chapter tests, all unit tests, and other such assessment components (including rubrics). For context, read Criterion #2 from the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013). NOTE: Grade alignments of other topics are addressed in Non-Negotiable 2, Focus and Coherence.) In this criterion, "topics named" means the topics that are explicitly named in Metric 1A. No other topics should be added to the list in Metric 1A. (Note that other topics in the standards are addressed in criterion NN2.)	**Evidence-** Teacher [illegible]e Materials, Student Book, Student Journal Ready Common Core Mathematics for Grade 5 does not assess any of the topics indicated on the NN1 Metric 1A list.	**(Reviewer only.)** **__x__Meets** **____Does Not Meet**
Non-Negotiable 1: Materials must reflect the content architecture of the Standards by not assessing the topics named* before the grade level where they first appear in the Standards. **NN 1** If Metric 1A was rated as Meets, then rate Non-Negotiable 1 as Meets. If Metric 1A was rated as Does Not Meet, then rate Non- Negotiable 1 as Does Not Meet. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion.**(Reviewer only.)** **Before moving to Non-Negotiable 2, record the final Meets or Does Not Meet rating in the Evaluation Summary.**		**(Reviewer only.)** **__x__Meets** **____Does Not Meet** **Strengths/Weaknesses:**

Directions for Non-Negotiable 2

Focus and Coherence

Non-Negotiable 2:

Focus and Coherence

Materials must focus coherently on the Major Work of the grade in a way that is consistent with the progressions in the Standards.

Focus and coherence are the two major evidence-based design principles of the Common Core State Standards for Mathematics (CCSSM, p. 3). Focus is necessary in order to fulfill the ambitious promise the states have made to their students by adopting the Standards: greater achievement at the college and career ready level; greater depth of understanding of mathematics; and a rich classroom environment in which reasoning, sense-making, applications, and a range of mathematical practices flourish. In simpler terms, a mile-wide, inch-deep curriculum translates to less time per topic. Less time means less depth and moving on without many students. Thus, materials must focus coherently on the Major Work of the grade in a way that is consistent with the progressions in the Standards.

Required Materials

- Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf)
- Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)
- Focus by Grade Level for the grade being evaluated (www.achievethecore.org/focus)
- From the materials being evaluated: teacher guides, student texts and workbooks

Rating this Criterion:

Non-Negotiable 2 is rated as Meets or Does Not Meet.

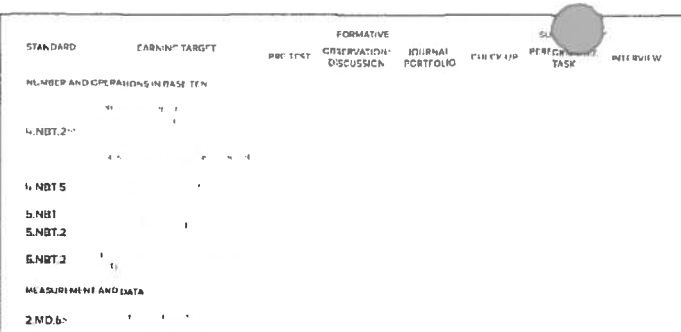
To rate Non-Negotiable 2, first rate metrics 2A–2H. Each of these eight metrics must be rated as Meets in order for Non-Negotiable 2 to be rated as Meets. Rate each metric 2A-2H as Meets or Does Not Meet/Insufficient Evidence. If the evidence examined shows that the Criterion is met, then mark the Criterion Meets. If the evidence examined shows that the Criterion is not met—or if there is insufficient evidence to make a determination—then mark the Criterion as Does Not Meet/Insufficient Evidence. Support all ratings with evidence.

Metric NN2A **In each grade K–8, students and teachers using the materials as designed devote the large majority of time to the Major Work of the grade.** **How to Find the Evidence:** Familiarize yourself with the Major Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, lessons, homework assignments, and assessments. (Evaluate both student and teacher materials.) Consider time spent on the Major Work of the grade and judge qualitatively whether students and teachers using the materials as designed will devote the large majority of time to the Major Work of the grade. For context, read Criterion #1 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013)	**Evidence-** Teacher Online Materials, Student ...ok, Student Journal There are 144 lessons in the Origo Stepping Stones grade 5 program, 92 lessons attend to standards associated with major clusters, 22 lessons attend to standards associated with supporting clusters, and 27 lessons attend to standards associated with additional clusters. Stepping Stones addresses the three (numbered for ease of communication in this document) Major Works of grade 5 as follows: Major Work 1: Understanding fraction models and computations with fractions. Approximately 43% (62/144) of the lessons are devoted directly to this major work. These lessons are included in modules 1, 2, 4, 6, 7, 9, 10, 11, and 12. Major Work 2: Fluency of division procedures with values whole number values as well as decimal values through hundredths. Approximately 17% (24/144) of the lessons are devoted directly to this major work. These lessons are included in modules 2, 5, 8, and 10. Major Work 3: Understanding of volume as cubic units filling a three-dimensional space. Understanding to include finding volume through decomposition of three-dimensional shapes into right rectangular prisms. Approximately 4% (6/144) of the lessons are devoted directly to this major work. These lessons are included in Module 3.	**(Reviewer only.)** **__x__Meets** **____Does Not Meet/ Insufficient Evidence**

Metric NN2B **Supporting Work, where present, enhances focus and coherence simultaneously by also engaging students in the Major Work of the grade.** **How to Find the Evidence:** Familiarize yourself with the Major Work and Supporting Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate chapters and lessons that focus on Supporting Work. NOTE: Example of evaluating this Criterion might include looking at whether materials for K–5 generally treat data displays as an occasion for solving grade-level word problems using the four operations (e.g., see 3.MD.B.3); or whether materials for grade 7 take advantage of opportunities to use probability to support ratios, proportions, and percentages. For context, read Criterion #3 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Teacher Online Materials, Student Book, Student Journal Supporting work includes engaging students in the Major Works of the grade. Lesson 1.7 ties to the Major Work: Understanding fraction models and computations with fractions. The focus of Module 1 is the understanding the concept associated with millions. Lesson 1.10 reviews through application skills necessary to achieve standard 4.NBT.5 and ties to the Major Work: Understanding of volume as cubic units filling a three-dimensional space.	**(Reviewer only.)** **__x__Meets** **____Does Not Meet/ Insufficient Evidence**
Metric NN2C: **Materials base content progressions on the grade-by-grade progressions in the Standards. Content from previous or future grades does not unduly interfere with or displace on-grade-level content.** **How to Find the Evidence:** Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, and lessons in both student and teacher materials. NOTE: In some cases it may be possible that aligned materials might address some aspects of a topic in a strategic way before or after the grade level in	**Evidence-** Teacher Online Materials, Student Book, Student Journal Learning targets (found in the Module Mathematics tab) transparently shows the standards being targeted in the lesson. In the assessment overview for each module, the targeted standards are explicitly identified. This example is from Module 1. Notice the grade 4 standards and even a grade 2 standard. Only Module 1 has assessment elements aligned to standards below grade 5. Module 8 has one assessment element aligned to a related 6th grade standard. In all other modules all assessment elements align to grade 5 standards only.	**(Reviewer only.)** **__x__Meets** **____Does Not Meet/ Insufficient Evidence**

which the topic is central in the Standards' progressions; for example, a curriculum author might purposefully choose to explore adding fractions with unlike denominators in a way appropriate to grade four, recognizing that this work is not really required until the next grade. However, any such purposeful discrepancies in content progressions should enhance the required learning in each grade; not unduly interfere with or displace grade-level content; and be clearly aimed at helping students meet the Standards as written rather than effectively rewriting the progressions in the Standards. And in all cases, note that Non-Negotiable 1 must be met for materials to be aligned.

For context, read Criterion #5a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).



>*Indicates that these standards are addressed at levels beyond the CCSS level.

Lesson 1 connects skills and concepts of standard 4.NBT.2 to those of standard 5.NBT.1.

Lesson 2 focuses is on building the skills and concepts of standard 5.NBT.1 and standard 5.NBT.2.

Lesson 3 reviews through application, skills related to standard 4.NBT.2.

Lesson 4 applies the skills related to standard 2.MD.6 to seven digit numbers.

Lesson 5 applies the skills related to standard 4.NBT.2.

Lesson 6 build on lesson 3 applying and extending the skills related to standard 4.NBT.2.

Lesson 7 builds on the previous lessons and ties to the Major Work: Understanding fraction models and computations with fractions.

Lesson 8 extends skills related to standard 4.NBT.2 and connects with standard 5.NBT.2.

Lesson 9 reviews through application skills necessary to achieve standard 4.NBT.5.

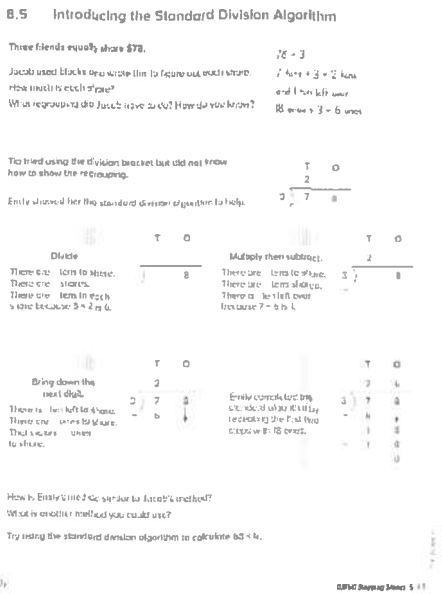
Lesson 10 reviews through application skills necessary to achieve standard 4.NBT.5 and ties to the Major Work: Understanding of volume as cubic units filling a three-dimensional space.

Lesson 11 reviews through application skills necessary to achieve standard 4.NBT.5.

Lesson 12 reviews through application skills necessary to achieve standard 4.NBT.5.

Module 8 references 6.NS.2: Compute fluently with multi-digit numbers and find common factors and multiples. Use an algorithm to divide up to four-digit numbers by one- or two-digit numbers.

In Lesson 8.5 (Journal page below), "students use the standard algorithm for division to divide two-digit dividends by one-digit divisors. All examples involve regrouping."



8.5 Introducing the Standard Division Algorithm

Three friends equally share $78.

Jacob used blocks and base-ten disks to figure out each share.

How much is each share?

What regrouping did Jacob have to do? How do you know?

Tia tried using the division bracket but did not know how to show the regrouping.

Emily showed her the standard division algorithm to help.

Divide

There are tens to share.
There are shares.
There are tens in each share because 5 × 2 = 10.

Multiply then subtract.

There are tens to share.
There are tens shared.
There is ten left over because 7 − 5 = 2.

Bring down the next digit.

There is ten left to share.
There are ones to share.
That makes ones to share.

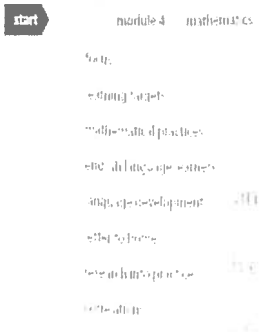
Emily corrected her by saying that Jacob actually regrouping the first ten as ten ones.

How is Emily's method similar to Jacob's method?

What is another method you could use?

Try using the standard division algorithm to calculate 85 ÷ 4.

Metric NN2D **Materials give all students extensive work with on-grade-level problems.** **How to Find the Evidence:** Evaluate both student and teacher materials. If the materials provide resources for differentiated learning, consider whether lower-performing students have opportunities to engage with grade-level problems. Also consider whether higher-performing students are given opportunities to learn current grade-level content in greater depth. For context, read Criterion #5b in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence- Evidence-** Teacher Online Materi[illegible] Student Book, Student Journal In addition to the main lesson and journal activities for each lesson, there are also extra help, extra practice, and extra challenge pages. The practice pages provide mixed practice, some practice targets skills and concepts taught in earlier modules/lessons. Some practice targets developing fluency. Investigations and problem-solving activities provide additional on-grade-level work. Practice reviewed in the grade 5 materials was at grade-level. The teacher has access to practice/materials from previous grade-levels should remediation practice below grade-level be necessary.	**(Reviewer only.)** **__x__Meets** **____Does Not Meet/ Insufficient Evidence**
Metric NN2E: **Materials relate on-grade-level concepts explicitly to prior knowledge from earlier grades.** **How to Find the Evidence:** Evaluate both student and teacher materials. NOTE: Examples of evaluating this Criterion might include looking at the way the materials extend basic ideas of place value across the decimal point; or the role that properties of operations play when the materials extend arithmetic beyond whole numbers to fractions, variables, and expressions. More generally, cluster headings in the Standards sometimes signal key moments where reorganizing and extending previous knowledge is important in order to accommodate new knowledge (e.g., see cluster headings that use the phrase "Apply and extend previous understanding"). For context, read Criterion #5c in the Publishers' Criteria for the Common Core State Standards for Mathematics,	**Evidence-** Teacher Online Materials, Student Book, Student Journal Teacher resources such as the Sequence Navigator provide support for seeing the continuum of development across the Stepping Stones curriculum. The example is from Module 4 Lesson 2. It shows where Module 4 Lesson 2 is situated in the curriculum progression. Here are the titles of the lessons noted above. Grade 4 Module 6 Lesson 11: Adding Mixed Numbers (Composing Whole Numbers) Grade 4 Module 6 Lesson 12: Solving Word Problems Involving Mixed Numbers	**(Reviewer only.)** **__x__Meets** **____Does Not Meet/ Insufficient Evidence**

Grades K–8 (Sp 013).	Grade 5 Module 4 Lesson 1: Reviewing Ad on of Common Fractions and Mixed Numbers (Same Denominator) Grade 5 Module 4 Lesson 2: Adding Common Fractions (Related Denominators) Grade 5 Module 4 Lesson 3: Adding Common Fractions (Unrelated Denominators) Grade 5 Module 4 Lesson 4: Adding Mixed Numbers (Related Denominators) Grade 5 Module 4 Lesson 5: Adding Mixed Numbers (Unrelated Denominators) Teacher resources found in the mathematics tab also include information related to progression of materials, concepts and skills. 	

Metric NN2F **Review of material from previous grades is clearly identified as such to the teacher, and teacher and students can see what their specific responsibility is for the current year.** **How to Find the Evidence:** Evaluate the table of contents, but do not stop there; also evaluate units, chapters, lessons, homework assignments and assessments. (Evaluate both student and teacher materials.) Identify any content from previous grades and check whether it is identified as such. For context, read Criterion #5a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Teacher Online Materials, Student [illegible]ok, Student Journal Review of materials from previous grades is identified for the teacher in the learning targets, in the Sequence Navigator, in the Assessment overview and in the mathematical background information found in the mathematical focus and research into practice sections. Specific indication for students of responsibilities was not found.	**(Reviewer only.)** **__x__Meets** **____Does Not Meet/ Insufficient Evidence**

Metric NN2C **Materials include learning objectives that are visibly shaped by CCSSM cluster headings.** **How to Find the Evidence:** Select several clusters from the Major Work in the grade being evaluated. Evaluate teacher and student materials in relation to these clusters. For context, read Criterion #6a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Teacher Online Materials, Student k, Student Journal Each module contains teacher supports for identifying the focus of the lessons. Each module addresses 2-3 'big ideas'. The heading for these ideas corresponds to the cluster headings, e.g. Number and Operations in Base Ten and Measurement and Data The example is from Module 11: mathematical focus. Approximately two-thirds of the lessons (94/144) are aligned to major clusters for grade 5.	**(Reviewer only.)** **__x__Meets** **____Does Not Meet/ Insufficient Evidence**

Metric NN2H **Materials include problems and activities that serve to connect two or more clusters in a domain, or two or more domains in a grade, in cases where these connections are natural and important.** **How to Find the Evidence:** In the grade being evaluated, choose two or more clusters or two or more domains for which connections are natural and important. Evaluate the units, chapters, and lessons that deal with the chosen topics, looking for problems and activities that serve to connect the chosen clusters or domains. NOTE: An example of evaluating this Criterion might include looking at whether problems in grade 4 sometimes or often involve students applying their developing computation skills (detailed in domain NBT) in the context of solving word problems (detailed in domain OA). For context, read Criterion #6b in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Teacher Online Materials, Student [illegible]k, Student Journal Lesson 1.7 ties to the Major Work: Understanding fraction models and computations with fractions. Cluster headings Numbers and operations in Base Ten connected to Number and operations Fractions. Working with Millions Expressed as Fractions	**(Reviewer only.)** **__x__Meets** **____Does Not Meet/ Insufficient Evidence**

Non-Negotiable 2:

Focus and Coherence

Materials must focus coherently on the Major Work of the grade in a way that is consistent with the progressions in the Standards.

NN 2 If all Metrics 2A – 2H were rated as Meets, then rate Non-Negotiable 2 as Meets. If one or more Metric was rated Does Not Meet/Insufficient Evidence, then rate Non-Negotiable 2 as Does Not Meet. Check the final rating.
Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)**

Before moving to Alignment Criterion 1, record the final Meets or Does Not Meet rating in the Evaluation Summary.

(Reviewer only.)

__x__Meets

____Does Not Meet

Strengths/Weaknesses:

Now continue by evaluating the Alignment Criterion 1 for Rigor and Balance.

Directions for Alignment Criterion 1

Rigor and Balance

Alignment Criterion 1: Rigor and Balance

Materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.

The Standards set expectations for attention to all three aspects of rigor: conceptual understanding, procedural skill and fluency, and applications. Thus, materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.

Required Materials

- Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf)
- Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)
- Focus by Grade Level for the grade being evaluated (achievethecore.org/focus)
- Situation Types for the Operations in Word Problems (achievethecore.org/situation-types)
- From the materials being evaluated: teacher guides, student texts and workbooks

Rating this Criterion:

Alignment Criterion 1 is rated as Meets or Does Not Meet.

To rate Alignment Criterion 1, first rate metrics 1A, 1B, and 1C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). For each metric, guiding questions are provided to aid in gathering evidence.

Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 1 if the materials rate 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as rigor and balance, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.

Metric AC1A **The materials support the development of students' conceptual understanding of key mathematical concepts, especially where called for in specific content Standards or cluster headings.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Major Work for the grade being evaluated that relate specifically conceptual understanding to use throughout the questions associated with this metric. NOTE: Some examples of clusters or Standards that call for conceptual understanding include: K.OA.A.1, (1.NBT.B, 1.NBT.C), (2.NBT.A, 2.NBT.B), (3.OA.A.1, 3.OA.A.2), 4.NF.A, (4.NBT.A, 4.NBT.B), 5.NF.B, (5.NBT.A, 5.NBT.B), 6.RP.A, 6.EE.A.3, 7.NS.A, 7.EE.A, 8.EE.B, 8.F.A, 8.G.A Clusters or Standards grouped by parentheses are closely connected and could be analyzed together. For context, read Criterion #4a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	-Choose a cluster/Standard from th or Work that is aligned to each aspect of rigor and use it to evaluate these metrics. It is most helpful if the same clusters/Standards are chosen for all of the programs being evaluated. (Guidance in choosing clusters/Standards is included in "How to Find the Evidence".)	**Use the questions for A tric 1A to evaluate Metric 1A. Record evidence for each question and rate Metric 1A.** **__2__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**

Is conceptual understanding attended to thoroughly where the Standards set explicit expectations for understanding or interpreting? Evaluate lessons, chapter/unit assessments and homework assignments, paying attention to work aligned to Standards that explicitly call for understanding or interpreting. NOTE: Examples of evaluating this Criterion might include looking at how well the multi-digit addition and subtraction algorithms are developed and explained on the basis of place value and properties of operations; or how well the multi-digit multiplication and division algorithms are developed and explained on the basis of place value and properties of operations; or how well solving equations is presented and explained as a process of reasoning.

Do the materials feature high-quality conceptual problems and conceptual discussion questions? Evaluate lessons, chapter/unit assessments, and homework assignments. NOTE: Example of conceptual problems might include such questions as "Find a number greater than 1/5 and less than 1/4," or "If the divisor does not change and the dividend increases, what happens to the quotient?"

Do the materials feature opportunities to identify correspondences across mathematical representations? Evaluate lessons, chapter/unit assessments and homework assignments. NOTE: Examples of evaluating this Criterion might include looking at whether students are supported in identifying correspondences among: the verbal description of a situation, the diagrams that distill its mathematical features, and the equations that model it; or equivalent forms of numbers (e.g., 3 and 6/2) and the number line; or rational number operations and representations of them via models such as the vector model; or the expression that defines a function and the graph that shows the relationship.

Evidence- Teacher Online Materials, Student Book, Student Journal
Materials attend to conceptual understanding thoroughly. They included high-quality conceptual problems and discussion questions as well as opportunities to identify correspondences across mathematical representations.
Examples

5.NF.B

Number and Operations - Fractions

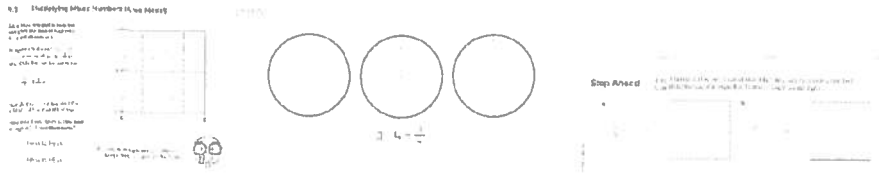
- Apply and extend previous understandings of multiplication and division to multiply and divide fractions.

Modules 9 and 11 focus on this standard.

The focus for this standard in Module 9 "is the development of multiplication of two common fractions and/or mixed numbers. (Grade 5, Module 9, Mathematical Focus)

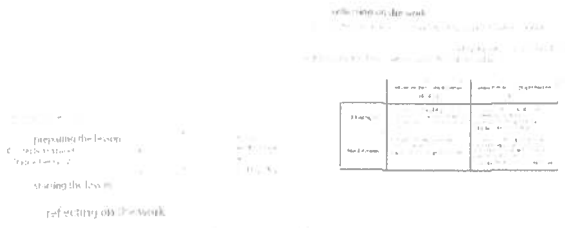
The focus for this stand in Module 11 is "students investigate division involving common fractions. All divisors are either whole numbers or unit fractions. The main aim of the lessons is to establish that an equation involving division by a common fraction such as 1/2 ÷1/4 = _____ can be restated using a multiplication equation 1/2 x 4=____."(Grade 5, Module 11, Mathematical Focus)

Enactive representation is generally shading an area model. Examples 9.5 Steps, 11.2 Steps, 11.3 Student Journal



Iconic representation: Examples 9.1 Steps, 9.1 Student Journal, 9 Problem solving 1,

Symbolic representation 9.2 Steps, 9 problem solving 1 (see above)



Metric AC1B: **The materials are designed so that students attain the fluencies and procedural skills required by the Standards.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Major Work for the grade being evaluated that relate specifically to fluency and procedural skill to use throughout the questions associated with this metric. NOTE: Some examples of Standards that call for procedural skill and fluency include: K.OA.A.5, 1.OA.C.6, 2.OA.B.2, 2.NBT.B.5, 3.OA.C.7, 3.NBT.A.2, 4.NBT.B.4, 5.NBT.B.5, 6.NS.B.2, and 6.NS.B.3, 6.EE.A, 7.NS.A, 7.EE.A.1,7.EE.B.4a, 8.EE.C.7, 8.EE.C.8b For context, read Criterion #4b in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Teacher Resource Book, Student Book, Student Practice and Problem Solving Book	**Use the questions for Metric 1B to evaluate Metric 1 B. Record evidence for each question and rate Metric 1B.** **(Reviewer only.)** **__2__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**

Is progress toward fluency and procedural skill interwoven with students' developing conceptual understanding of the operations in question? Evaluate lessons, chapter/unit assessments, daily routines, and homework assignments for evidence that the development of fluency and procedural skill is supported by conceptual understanding.	Procedural: The use of area models is used throughout Module 9 (multiplication of fractions) and Module 11 (division of fractions). Stepping Stones uses a "spaced learning concept" that distribute practice over time. Practice 9.2, 6 exercises, multiplying a proper fraction/mixed number by a whole number Practice 9.4, 3 exercises, multiplying two proper fractions Practice 9.6, 5 exercises, multiplying two fractions (some proper, some improper) grid for modeling included Practice 9.8, 4 exercises, multiplying two improper fractions Practice 9.10, 4 problems, figuring out multiplication sentences from a diagram (see above in AC Metric 1A) Practice 9.12, 1 story problem finding the area of a room and the cost of tiling it. Practice 10.2, 4 exercises, multiplying a proper fraction/mixed number by a whole number Practice 10.4, 3 exercises, multiplying two proper fractions Practice 11.2, 1 exercise, shading parts of 3 whole and relating it to division of a whole by a fraction Practice 11.4, 1 exercise, relating 3/4 to 3 divided by 4 Practice 11.6, 2 exercises using an area model to divide a fraction by a whole number Practice 11.8, 2 word problems requiring the division of a fraction by a whole number Practice 11.10, 1 problem determining how many fourths are in 5 Practice 11.12, 3 exercises multiplying two mixed fractions Practice 12.2, 2 problems (the same layout as practice 11.10) how many fractional parts are in so many whole Practice 12.4, 2 story problems one requiring division of a whole number by a fraction, one requiring multiplication of a fraction by a whole number Fluency practice for multiplication with multi-digits is distributed in the same manner as all skill development. See the above example with fractions for an idea of this distribution.	

Are purely procedural problems and exercises present that include cases in which opportunistic strategies are valuable and generic cases that require efficient algorithms present? Evaluate lessons, chapter/unit assessments, daily routines, and homework assignments. NOTE: Examples of problems in which opportunistic strategies are valuable might include the sum 698 + 240 or the system x + y = 1, 2x + 2y = 3. Examples of generic cases that require efficient algorithms might include the sum 8767+2286 or the system 6y + x = x + 3, – x = 1 + 2y.	Procedural problems and exercises are present and include cases in which opportunistic strategies are valuable and generic cases that require efficient algorithms are present.	
Do the materials in grades K–6 provide repeated practice toward attainment of fluency Standards? Evaluate lessons, daily routines, and homework assignments for evidence of repeated practice toward attainment of the following K–6 Standards that set an explicit expectation of fluent (accurate and reasonably fast) computation: K.OA.A.5, 1.OA.C.6, 2.OA.B.2, 2.NBT.B.5, 3.OA.C.7, 3.NBT.A.2, 4.NBT.B.4, 5.NBT.B.5, 6.NS.B.2, 6.NS.B.3.	Yes	

Metric AC1C

The materials are designed so that teachers and students spend sufficient time working with engaging applications, without losing focus on the Major Work of each grade.

How to Find the Evidence:

Select one or more cluster(s) or Standard(s) from the Major Work for the grade being evaluated that relate specifically application to use throughout the questions associated with this metric. NOTE: Some examples of clusters or Standards that call for application include: K.OA.A.2, 1.OA.A, 2.OA.A, 3.OA.A.3, 3.OA.D.8, 4.OA.A.3, 4.NF.B.3d, 4.NF.B.4c, 5.NF.B.6, 5.NF.B.7c, 6.RP.A.3, 6.NS.A.1, 6.EE.B.7, 6.EE.C.9, 7.RP.A, 7.NS.A.3, 7.EE.B.3, 8.EE.C.8c, 8.F.B

For context, read Criterion #4c in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).

Evidence- Teacher Resource B Student Book, Student Practice and Problem Solving Book

Module 9 Investigation 2, 9.12 Practice, Module 9 Problem Solving Activity 2, 9 Quarterly test 1, 9 Quarterly test 2

Use the questions for M 1C to evaluate Metric 1C. Record evidence for each question and rate Metric 1C.

(Reviewer only.)

__2__Meets (2)

____Partially Meets (1)

____Does Not Meet (0)

Are there are si[illegible]and multi-step contextual problems, including non-routine problems, that develop the mathematics of the grade, afford opportunities for practice, and engage students in problem solving? Do the problems attend thoroughly to those places in the content Standards where expectations for multi-step and real-world problems are explicit? Evaluate lessons, chapter/unit assessments, and homework assignments.	**Yes**	
Do application problems particularly stress applying the Major Work of the grade? Evaluate lessons, chapter/unit assessments, and homework assignments. NOTE: Examples of evaluating this Criterion might include looking at: how well, by the end of grade 2, students using the materials as designed can represent and solve a full range of one-step addition and subtraction word problems; or how well, by the end of grade 3, students using the materials as designed can represent and solve a full range of one-step multiplication and division word problems; or how well these basic situation types for each operation are carried coherently across the grades, (e.g., with fractions and algebraic expressions); or, in all grades, whether the problems connect concepts, Standards, and domains in ways that are natural and important. For a list of situation types for one-step addition, subtraction, multiplication, and division problems, see Situation Types for the Operations in Word Problems	**Yes**	
Does modeling build slowly across K–8, with applications that are relatively simple in earlier grades and when students are encountering new content? In grades 6–8, do the problems begin to provide opportunities for students to make their own assumptions or simplifications in order to model a situation mathematically? Read Standard for Mathematical Practice 4, Model with Mathematics. Evaluate lessons, chapter/unit assessments, and homework assignments.	**Yes**	

Alignment Criterion 1: Rigor and Balance

Materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.

AC1 Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 out of 6 points, the Criterion has not been met. Check the final rating.
Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)**

Before moving to Alignment Criterion 2, record the final Meets or Does Not Meet rating in the Evaluation Summary.

(Reviewer only.)

__x__Meets

____Does Not Meet

Strengths/Weaknesses:

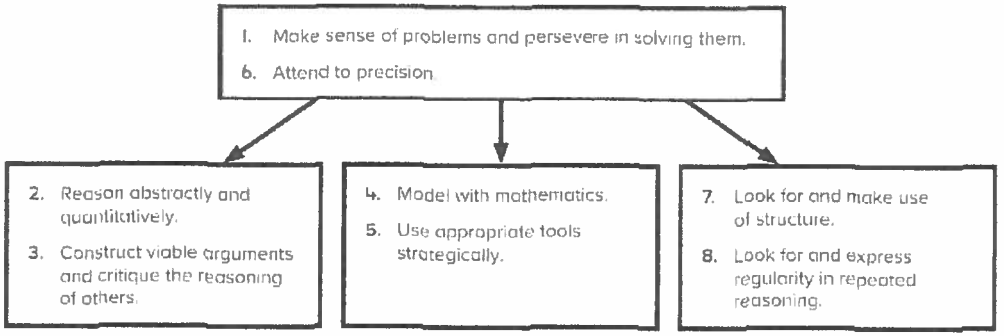
Strength
Scope and pacing of materials attends to the components of conceptual understanding, procedural skill, fluency and applications. The program sets high expectations for all three components throughout the materials for teacher and students.

Directions for Alignment Criterion 2

Standards for Mathematical Practice

Alignment Criterion 2: Standards for Mathematical Practice **Materials must demonstrate authentic connections between content Standards and practice Standards.** The Standards require that designers of instructional materials connect the mathematical practices to mathematical content in instruction. Thus, materials must demonstrate authentic connections between content Standards and practice Standards.	**Required Materials:** • Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf) • Focus by Grade Level for the grade being evaluated (www.achievethecore.org/focus) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion** Alignment Criterion 2 is rated as Meets or Does Not Meet. To rate Alignment Criterion 2, first rate metrics 2A, 2B, and 2C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). For each metric, guiding questions are provided to aid in gathering evidence. Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 2 if the materials earn 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as mathematical practices, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.
Metric AC2A: **Materials address the practice Standards in such a way as to enrich the Major Work of the grade; practices strengthen the focus on Major Work instead of detracting from it, in both teacher and student materials.** **How to Find the Evidence:** Familiarize yourself with the Major Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate teacher and student materials for evidence that the mathematical practices support and connect to the focus of the grade.	**Evidence-** Teacher Resource Book, Student Book, Student Practice and Problem Solving Book Grade 5 Coverage of Standards for Mathematical Practice	**(Reviewer only.)** **__x__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**

NOTE: Example[illegible]valuating this Criterion might include looking at whether, in grades K–5, students using the materials are supported to look for and express regularity in repeated reasoning about the addition table, the multiplication table, the properties of operations, the relationship between addition and subtraction or multiplication and division, and the place value system; or whether, in grades 6–8, students using the materials are supported to look for and express regularity in repeated reasoning about proportional relationships and linear functions.
For context, read Criterion #8 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013).



All coverage of standards for mathematical practice is embedded in the content lessons.

The Mathematical Practices Overview standards addressed in each module. Teacher materials indicate that each lesson aligns to one, two or occasionally 3 standards for mathematical practice.

Stepping Stone Module	Number of Lessons in Each Module Aligned to Each Standard of Mathematical Practice							
	1	2	3	4	5	6	7	8
1	0	2	6	0	0	4	9	5
2	0	5	4	1	0	4	5	2
3	2	7	1	0	1	0	7	3
4	3	3	4	2	0	3	1	4
5	0	3	3	1	2	7	2	0
6	3	4	4	1	0	8	1	0
7	0	8	5	1	2	3	2	0
8	1	0	1	0	1	6	10	3
9	3	2	4	2	0	1	5	3
10	1	1	3	1	0	2	9	4

11	3	5	2	[illegible]	0	3	6	3
12	1	6	0	1	0	2	8	7

(Path to overview: module_1/mathematic/mathematical practices, click resources link upper right, bottom of the list.)

Metric AC2E

Materials attend to the full meaning of each practice Standard.

How to Find the Evidence:
For context, read Criterion #7 and Criterion #9 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).

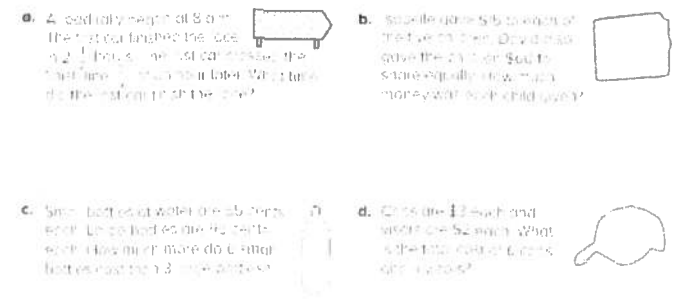
Evidence- Teacher R[illegible]rce Book, Student Book, Student Practice and Problem Solving Book

Below are the indicated lessons alignment to SMP 4: Model with mathematics

2.7 Connection to SMP 4: not recognized

4.11 Connection to SMP 4: writing expressions to model the information in a story problem (Student Journal)

2. Write an expression to show how to solve each problem. You do not need to figure out the answer.



4.12 Connection to SMP 4: similar to that found in 4.11

5.1 Connection to SMP 4: applying symbolic notation < and >, to compare locations of numbers on a number line, which is not connected to a real life situation.

6.12 Connection to SMP 4: creating a line plot to display results of an experiment

Use the questions for Metric 2B [illegible]aluate Metric 2B. Record evidence for each question and rate Metric 2B.

(Reviewer only.)

__x__Meets (2)

____Partially Meets (1)

____Does Not Meet (0)

Over the course of any given year of instruction, is each mathematical practice Standard meaningfully present in the form of assignments, activities, or problems that stimulate students to develop the habits of mind described in the practice Standard? Evaluate lessons, chapter/ unit assessments, and homework assignments for evidence of each mathematical practice being meaningfully present in instruction.	**Yes**	
Do the materials treat the practice Standards as developing across grades or grade bands? Are the practice Standards in early grades appropriately simple? Do they display an arc of growing sophistication across the grades?	**Yes**	
Are there teacher-directed materials that explain the role of the practice Standards in the classroom and in students' mathematical development? Are alignments to practice Standards accurate?	**Yes**	
Metric AC2C: **Materials support the Standards' emphasis on mathematical reasoning.** **How to Find the Evidence:** For context, read Criterion #10 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Teacher Resource Book, Student Book, Student Practice and Problem Solving Book The Grade 5 Coverage of Standards for Mathematical Practice shows SMP 3: Reason abstractly and quantitatively as a specific focus in 37 lessons. Lessons without this specific focus also incorporate opportunities for students to use and convey their reasoning. Examples (Randomly chosen lessons for which SMP 3 is not a noted focus for the lesson) "How did you know the fraction you wrote was equivalent?" (6.2 Steps) "What length is each arrow pointing to? How do you know?" (8.10 Steps) "Ask questions that focus their thinking on the underlying concepts of why that works." (9.3 Steps) "Why does it make sense that 300 is the answer in the last question?" (12.7 Steps)	**Use the questions for Metric 2C to evaluate Metric 2C. Record evidence for each question and rate Metric 2C.** **(Reviewer only.)** **__x__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**

Do the materials support students in constructing viable arguments and critiquing the arguments of others concerning grade-level mathematics that is detailed in the content Standards? Read Standard for Mathematical Practice 3. Evaluate teacher and student materials to ensure that students are given opportunities to reason with grade-level mathematics.	Yes	
Do the materials support students in producing not only answers and solutions, but also, in a grade-appropriate way, arguments, explanations, diagrams, mathematical models, etc., especially in the Major Work of the grade? Familiarize yourself with the Major Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate teacher and student materials, to understand the types of work students are expected to produce.	**Yes**	
Do materials explicitly attend to the specialized language of mathematics? Is the language of argument, problem solving, and mathematical explanations taught rather than assumed? Evaluate teacher and student materials, paying attention to how mathematical language is taught. NOTE: Examples of evaluating this Criterion might include looking at whether students are supported in: basing arguments on definitions; using the method of providing a counterexample; or recognizing that examples alone do not establish a general statement.	**Yes**	

Alignment Criterion 2:
Standards for Mathematical Practice

Materials must demonstrate authentic connections between content Standards and practice Standards.

AC2 Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 out of 6 points, the Criterion has not been met. Check the final rating.
Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion.
(Reviewer only.)

Before moving to Alignment Criterion 3, record the final Meets or Does Not Meet rating in the Evaluation Summary.

(Reviewer only.)

__x__Meets

____Does Not Meet

Strengths/Weaknesses:

Alignment Criterion 3: **Access to the Standards for All Students** **Materials must provide supports for English Language Learners and other special populations.** Because Standards are for all students, alignment requires thoughtful support to ensure all students are able to meet the Standards. Thus, aligned materials must provide supports for English Language Learners and other special populations.	**Required Materials:** • Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion:** Alignment Criterion 3 is rated as Meets or Does Not Meet. To rate Alignment Criterion 3, first rate metrics 3A, 3B, and 3C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 3 if the materials earn 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as support for special population, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.
Metric AC3A: **Support for English Language Learners and other special populations is thoughtful and helps those students meet the same Standards as all other students. The language in which problems are posed is carefully considered.** **How to Find the Evidence:** Evaluate teacher and student materials, paying attention to supports offered for special populations.	**Evidence-** Teacher Resource Book, Student Book, Student Practice and Problem Solving Book Each module contains ELL supports as well as differentiation possibilities. Many of the resources are available in Spanish as well as in English.	**Reviewer only.)** **__x__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**

Metric AC3B **Materials provide appropriate level and type of scaffolding, differentiation, intervention, and support for a broad range of learners with gradual removal of supports, when needed, to allow students to demonstrate their mathematical understanding independently.** **How to Find the Evidence:** Evaluate teacher and student materials, paying attention to whether materials provide differentiation that will lead all learners to engage with on-grade-level content.	**Evidence-** Teacher Resource Book, Student Book, Student Practice and Problem Solving Book Each lesson is structured on the gradual release of responsibility model. First, the teacher does and students watch and partially participate. Second, students do and the teacher watches and partially participates. Third, students do and the teacher watches. Lessons have additional supports for differentiation include extra help, extra practice and extra challenge. Assessments include both formative and summative assessments that allow students to demonstrate their mathematical understanding. The Ongoing Practice pages prove students opportunities to demonstrate understanding across time, as do the cumulative assessments.	**Reviewer only.)** **___x_Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Metric AC3C: **Design of lessons recommends and facilitates a mix of instructional approaches for a variety of learners such as using multiple representations (e.g., including models, using a range of questions, checking for understanding, flexible grouping, pair-share).** **How to Find the Evidence:** Evaluate teacher materials, noting instructional approaches suggested for whole class and differentiated lessons and activities.	**Evidence-** Teacher Resource Book, Student Book, Student Practice and Problem Solving Book The grade 5 Stepping Stones program does employ a variety of instructional approaches. Modeling, question and answer, investigation, problem solving, graphs, charts, use of manipulative, etc. Assessment is also varied, tests, observation/discussion, journal/portfolio, quizzes (check-up), performance tasks, interview, quarterly tests. Student groupings vary including whole class, small group, pairs and individual.	**Reviewer only.)** **__x__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**

Alignment Criterion 3: **Access to the Standards for All Students** **Materials must provide supports for English Language Learners and other special populations.** **AC3** Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 points, the Criterion has not been met. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion.**(Reviewer only.)** **Move to the Evaluation Summary and record the final Meets or Does Not Meet rating .**	**(Reviewer only.)** **__x__Meets** **____Does Not Meet** **Strengths/Weaknesses:**

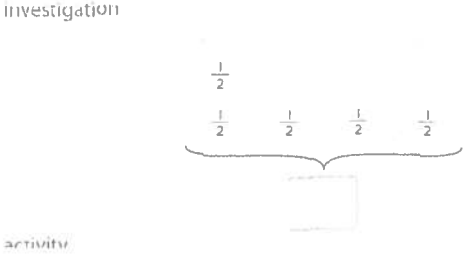
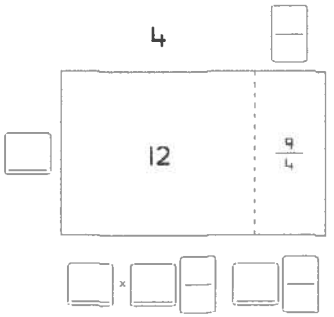
Once an evaluation for alignment to the Shifts and major features of the CCSS has been conducted using Sections 1-3, it's important to evaluate for overall quality and best practices. A starting list of Indicators of Quality are suggested below. States, districts and others evaluating instructional materials are encouraged to add to this list to ensure materials reflect local contexts. For background information on some of the Indicators of Quality in this section, refer to pp.18–21 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).

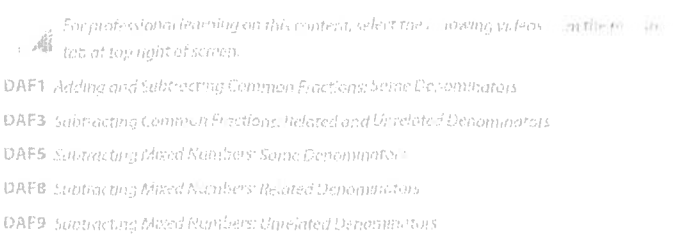
Indicators of Quality	**Evidence- Give specific examples.** **Evidence-** Teacher Resource Book, Student Book, Student Practice and Problem Solving Book	**Rating: (Reviewers only.)**

1. Lessons are thoughtfully structured and support the teacher in leading the class through the learning paths at hand, with active participation by all students in their own learning and in the learning of their classmates.	Stepping Stone teachers materials (Lesson steps) present 5 sections of information. The example is taken from Module 3 Lesson 8. Note that shown below is only some of the information provided in the teacher materials for each introduction/step.
	• An introductory narrative of the lesson, including the targeted standards and mathematical practices, and the intent of the lesson
	• Step 1: preparing the less indicates the resources needed for the lesson
	  ○ If these are Stepping Stone resources, they can be viewed/downloaded from the resource icon in the upper right of the lesson page.
	  ▪ Example: assortment of small to medium-sized boxes such as toothpaste boxes, matchbox, soap box, gift box, cereal box, jewelry box, and so on
		(Reviewer only.)
		
		___x___ Yes
		
		_____ No

- Step 2: starting the lesson provides teachers with suggested questions/prompts and talking points to guide focusing of the lesson on the learning targets.
    - Example: Display the boxes and say, Imagine these boxes are being packed into a cupboard. *How could your figure out the amount of space that each box occupies?* Invite students to share their suggestions. Guide them toward the suggestion of packing each box with smaller objects like cubes. Reflect upon the previous lesson and ask, *What do we call the amount of space that an object occupies?* (Volume)
- Step 3: teaching the lesson provides step-by-step structure for the lesson, including questions/prompts/talking points and student work tasks (group and individual)
    - Example: Arrange the classroom tables into groups so that the students can move freely between them. Place one box and the container of each resource at each group of tables. Organize the students into groups and move each group to a display table. Ask each group to investigate the volume of the box that is on their table. They should identify the unit that they would use to measure the volume. They then use this unit to determine the volume. Make sure they record their data for later discussion.
- Step 4: reflecting on the work provides teachers suggestions for formatively assessing and for supporting consolidation of student understandings.
    - Example: Discuss the students' answers to Student Journal 3.8. Have the students share their rule for determining the total number of cubes when they know the dimension of the base and the number of layers.

      Refer to Step Ahead and ask, *Do you think Tyler's calculation is accurate?* Encourage students to cite the gaps and overlaps that are left by the cubes in the container.

2. The underlying design of the materials includes both problems and exercises. (In solving problems, students learn new mathematics, whereas in working exercises, students apply what they have already learned to build mastery.) Each problem or exercise has a purpose. NOTE: This Criterion does not require that the problems and exercises be labeled as such.	In addition to the questions asked during the lesson, each module includes practice problems, multiple investigations, and multiple problem solving activities. Across each module, materials provide both exercises and problem solving. The example is from Module 9. • On-going practice • Investigations: tape diagram  • Problem solving activity: Working backward 	**(Reviewer only.)** **___x___ Yes** **_____ No**

3. Design of assignments is not haphazard: exercises are given in intentional sequences in order to strengthen students' mathematical understanding.	The publisher stated, "Students are presented with initial building blocks for a concept/skill and given opportunities through *Ongoing Practice* to master these concepts and skills before being given the next building blocks in the structure." It was found in the review that exercises in *Ongoing Practice* provide mixed practice of concepts and skills taught in previous lessons. The *Ongoing Practice* does not necessarily align with the focus of the associated lesson. It does seem that the practice is placed intentionally sequenced and distributed across the practice opportunities. Example from Module 10, Lesson 4. The focus of the lesson is using a partial-product strategy for multiplying decimal fractions (hundredths). The Ongoing Practice page for this lesson requires students to order decimal fractions (from Lesson 5.2), multiply fractions using area model (from Lesson 9.3), and multiply a whole number by a decimal fraction (tenths) by using a number line (from Lesson 10.1).	**(Reviewer only.)** **____x__ Yes** **_____ No**
4. There are separate teacher materials that support and reward teacher study including, but not limited to: discussion of the mathematics of the units and the mathematical point of each lesson as it relates to the organizing concepts of the unit, discussion on student ways of thinking and anticipating a variety of students responses, guidance on lesson flow, guidance on questions that prompt students thinking, and discussion of desired mathematical behaviors being elicited among students.	Teacher support resources exist for each module. The following are examples from Module 6. The mathematics tab for each module contains the following features. • *focus*: describes the major concepts and skills of the module, arranged by CCSS cluster headings; within the focus are links to teacher support videos  • *learning targets*: shows what students should be able to do through completion of the module in relation to CCSS	**(Reviewer only.)** **___x___ Yes** **_____ No**

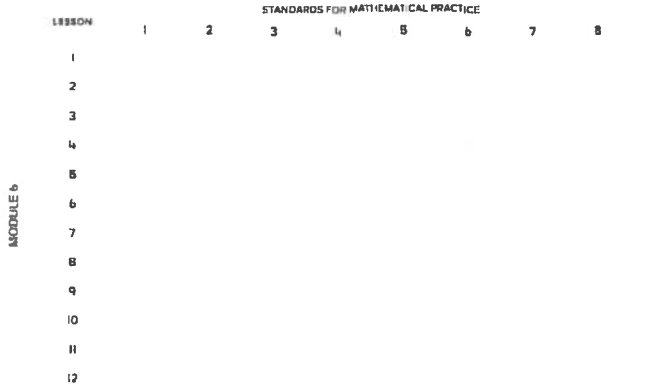
On completion of this module, students should be able to:

Use equivalent fractions as a strategy to add and subtract fractions.

5.NF.1

5.NF.2

- *mathematical practices*: show which mathematical practices are emphasized in the module and in which lessons; within the mathematical practices section are links to teacher support videos

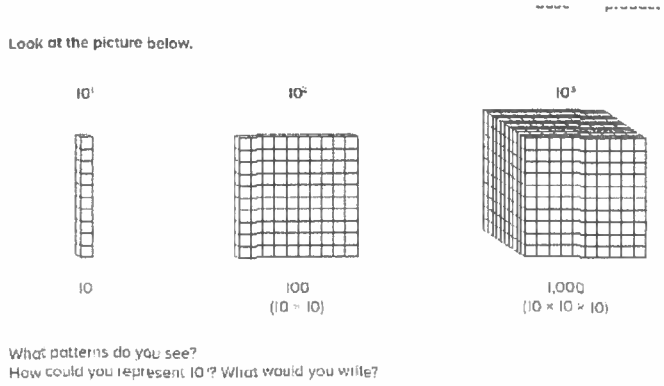


- *research into practice*: gives some cited research behind the structure of the module
- *language development*: gives a list of vocabulary developed in the unit

Each lesson provides teachers with question prompts to elicit mathematical discussion.

reflecting on the work

Discuss the students' answers to Student Journal 6.6. Invite students to summarize the main steps: write the equations so the fractions have the same denominator; then subtract using improper fractions or using mixed numbers where one of the whole numbers must be decomposed. Ask

5. Manipulatives suggested in the materials are faithful representations of the mathematical objects they represent and are connected to written methods.	Visual representations of manipulatives are faithful representations of the objects and are connected to written methods. The example is from Module 1, Lesson 2.  	**(Reviewer only.)** **___x___ Yes** **_____ No**

6. Materials include a variety of curriculum-embedded assessments. Examples include pre-, formative, summative, and self-assessment resources.	Each module has the following assessment resources.
	• Assessment overview
	  ○ A table showing the provided assessments aligned to specific standard being assessed
	
	• Formative assessments
	  ○ Pre-test, observation and discussion, journals and portfolios
	• Summative assessments
	  ○ Check-ups
	• Recording tool
	Summative tests show alignment to standards for each question
		(Reviewer only.)
		___x___ Yes
		_____ No

<table>
<tr>
<td>7. Assessments contain aligned rubrics, answer keys, and scoring guidelines that provide sufficient guidance for interpreting student performance.</td>
<td>Teacher resources provide guidance for interpreting student performance. The examples are from Module 7.

Formative assessments:

Answer key provided for pre-tests

Observation and discussion have "What to Look For."

<table>
<tr><th>STANDARD</th><th>LESSON</th><th>WHAT TO LOOK FOR</th></tr>
<tr><td>5.OA.3
5.G.2</td><td>7.10</td><td>Can the student identify ordered pairs that can be used to represent a pattern?</td></tr>
<tr><td>5.NBT.7</td><td>7.4</td><td>Can the student explain a method for subtracting decimal fractions?</td></tr>
</table>

Journals and portfolios have learning to look for.

<table>
<tr><th>STANDARD</th><th>STUDENT JOURNAL</th><th>MORE MATH</th><th>LEARNING</th></tr>
<tr><td rowspan="3">5.OA.3</td><td>7.9, 7.10</td><td></td><td>Can the student identify a numerical pattern?</td></tr>
<tr><td>7.8, 7.12</td><td></td><td>Can the student graph ordered pairs on coordinate planes?</td></tr>
<tr><td>7.10</td><td></td><td>Can the student use coordinates planes to represent patterns?</td></tr>
<tr><td rowspan="2">5.NBT.7</td><td>7.2, 7.6, 7.7</td><td></td><td>Can the student subtract decimal fractions (with and without regrouping)?</td></tr>
<tr><td></td><td>Problem Solving I</td><td>Can the student identify errors in the use of the standard subtraction algorithm?</td></tr>
<tr><td>5.G.1</td><td>7.8, 7.12</td><td></td><td>Can the student graph ordered pairs on coordinate planes?</td></tr>
<tr><td rowspan="2">5.G.2</td><td>7.10</td><td></td><td>Can the student use coordinates planes to represent patterns?</td></tr>
<tr><td>7.12</td><td></td><td>Can the student interpret ordered pairs on coordinate planes?</td></tr>
</table>

Summative assessments:

Check ups have answer keys

Performance tasks have rubrics and/or answers.

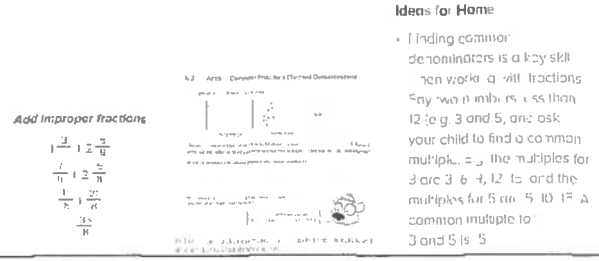
Interviews have rubrics and/or answers.</td>
<td>(Reviewer only.)

___x___ Yes

_____ No</td>
</tr>
<tr>
<td>8. Materials assess student proficiency using methods that are accessible and unbiased, including the use of course-level language in student prompts.</td>
<td>Methods of assessment are accessible, use grade-level language and show no signs of bias.</td>
<td>(Reviewer only.)

___x___ Yes

_____ No</td>
</tr>
</table>

9. Materials are carefully evaluated by qualified individuals, whose names are listed, in an effort to ensure freedom from mathematical errors and course-level appropriateness.	Stepping Stones authors, consultants, implementation advisors and publishing team are listed on the website home page. www.origoslate.com/3/index.php#/17157 Biographical information about the authors can be found on the website as well. http://www.origoeducation.com/origomath-support/	**(Reviewer only.)** **___x___ Yes** **_____ No**
10. The visual design supports students in engaging thoughtfully with the subject. Navigation through the text is clear.	Student materials consist of a Student Journal and a Student Workbook. Navigation of each page is supported by layout and color. Navigation	**(Reviewer only.)** **___x___ Yes** **_____ No**
11. The materials engage parents in appropriate ways. For example, homework assignments in elementary grades, consist of routine problems, practice with getting answers, and fluency-building exercises that parents can easily support.	Each module has a letter home. The letter includes suggested activities for helping students at home and supports for exercises. The examples are from Module 4.  *Add improper fractions* Ideas for Home • Finding common denominators is a key skill when working with fractions. Say two numbers less than 12 (e.g. 3 and 5), and ask your child to find a common multiple. E.g. the multiples for 3 are 3, 6, 9, 12, 15, and the multiples for 5 are 5, 10, 15. A common multiple for 3 and 5 is 15.	**(Reviewer only.)** **___x___ Yes** **_____ No**

Reviewer IMET Evaluation Summary **Title/Level: Grade 5 Stepping Stones**

Publisher: Origo Education **Copyright: 2012** **ISBN: 9781921959790**

Reviewer ID # PL,TR_____ **Date Review Completed: March 9, 2016**

Non-Negotiable Criteria- Each Non-Negotiable must be met in order for the Non-Negotiable Alignment Criteria to be met overall.

Non-Negotiable 1: Freedom from Obstacles to Focus	Non- Negotiable 2: Focus and Coherence
_____x__ Meets _____ Does Not Meet	___x__ Meets _____ Does Not Meet

Non-Negotiable Overall:

___x__ Meets **_____ Does Not Meet**

Alignment Criteria- Each Alignment Criterion must be met with a sufficient number of points in order for Alignment Criteria to be labeled as "Meets" overall. The more points the materials receive on the Alignment Criteria, the better they are aligned.

Alignment Criterion 1: Rigor and Balance	Alignment Criterion 2: Standards of Mathematical Practice	Alignment Criterion 3: Access to Standards for All Learners
Points: __6___ of 6 possible. (Materials must receive at least 5 of 6 points to align.) ____x___ Meets _____ Does Not Meet	Points: ___6__ of 6 possible. (Materials must receive at least 5 of 6 points to align.) _____x__ Meets _____ Does Not Meet	Points: __6___ of 6 possible. (Materials must receive at least 5 of 6 points to align.) ___x____ Meets _____ Does Not Meet

Alignment Criteria Overall:

___x__ Meets **_____ Does Not Meet**

If the mater meet both Non-Negotiables and relevant Alignment C rion, they are aligned to the Shifts and major features e Core Standards. **Do the materials meet every Non-Negotiable and Alignment Criterion? ___x__ Yes _____ No**

What are the specific areas of strength and weakness based on this evaluation? Publishers or others modifying or developing assessments can use this information to make improvements and/or to remedy gaps in the alignment of assessment materials.

Strength

- Layout of online teacher materials, once familiar with navigation.
- Login-the program opens to the page you were viewing when last closing the program.
- Geometry is interspersed throughout the modules
- All teachers receive the mathematical content of all grade levels. This is especially helpful for interventions (both remedial and extending).
- Teacher materials include a means for viewing the sequence of lessons across grade levels that develop the concepts and skills for that lesson

Weakness

- The program uses everyday items in lessons/investigation, such as boxes or scales as well as specific items such as pattern blocks. There seems to be no master list of resources needed for the entire program.
- Practice exercises, pre-tests, and summative assessments are not limited to the content of the associated module. It is not clear when any given concept or skill is expected to be mastered or when/where practice for any give skill will be presented.
- Modules seem to be organized by the constraint of 12 lessons, rather than topics that are related.
- Binding on the workbook fell apart with the second opening.

Note: Professional development would greatly impact successful implementation, as there are many components to the online resource. Program success depends upon reliable internet access for the teacher (and the student, if the student books are not purchased).

2015-16 Mathematics Interim Review Recommendation & Summary

Publisher Name:	Pearson
Title:	enVision math 2.0
ISBN #	9780328847587
Grade Level(s) or Course:	Kindergarten
Reviewer ID:	SJ CJ

RECOMMENDED AS:

__X__ **Core Mathematics Program-** a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials. Substantial evidence clearly supports the designation of this program as Core.

_____ **Other Mathematics Program-** a program that substantially, but partially, meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for supplemental materials. Substantial evidence clearly supports the designation of this program as Other.

_____ **Component Mathematics Program-** a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs. Substantial evidence clearly supports the designation of this program as Component.

_____ **Intervention Program-** a program designed and intended to target and support students' specific needs. Substantial evidence clearly supports the designation of this program as Intervention.

_____ **Does not meet criteria** for recommendation as a Curricular Material or Online Resource for Mathematics.

EVIDENCE SUMMARY:

FOCUS-
The majority of time is spent on the major work of kindergarten. 76% of the lessons address the major works.

COHERENCE-
Each topic has a coherence section that lays out students prior knowledge, new on-level knowledge, and future applications and how the on-level standard connects to grade 1 standards.

RIGOR-
there are many opportunities throughout EnVisions 2.0 for students to use strategies that make sense to the student.

CONCEPTUAL UNDERSTANDING-
Kindergarten students are asked to use pictorial, concrete, and symbolic models for mathematical concepts.

MATHEMATICAL PRACTICES-
Mathematical practices are infused into all aspects of the program.

ACCESSIBILITY OF STANDARDS TO ALL STUDENTS-
Daily ELL support is provided for each lesson. Independent practice, and homework is leveled throughout with additional support for RTI students.

OTHER:
EnVisions math 2.0 is easy to navigate and use as a teacher. There is a technology componet built into each lesson.

2015-16 Interim Mathematics Review

Mathematics Evaluation Tool Grades K-8

Publisher: Pearson

Title of Material: enVision Math 2.0 K

Author:

ISBN #: 9780328847587 **Copyright** 2016

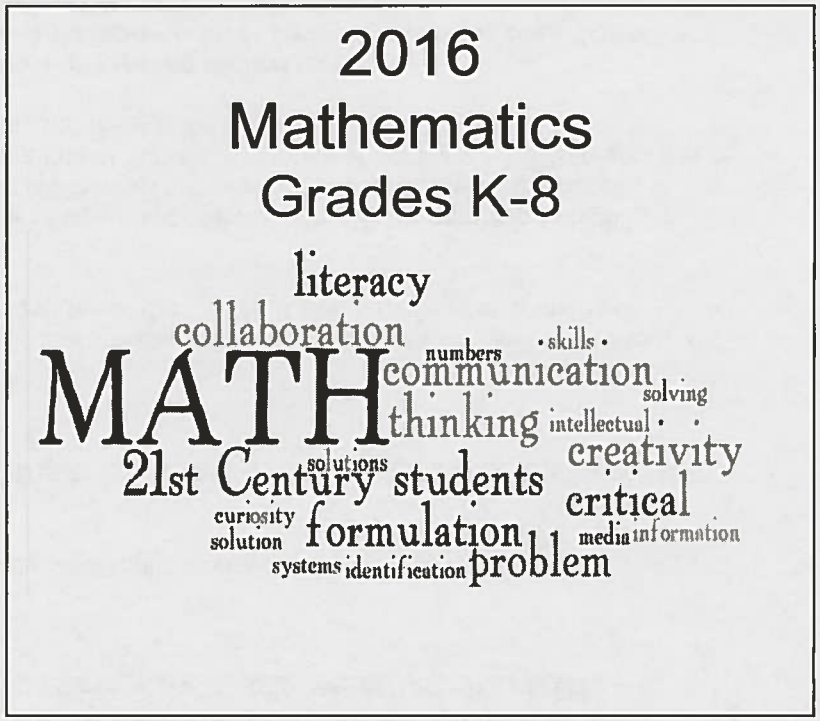
Reviewer ID: SJ CJ

Core Mathematics Program- a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Core.

Other Mathematics Program- a program that substantially, but partially, meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Other.

Component Mathematics Program- a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs.
Substantial evidence clearly supports the designation of this program as Component.

Intervention Program- a program designed and intended to target and support students' specific needs.
Substantial evidence clearly supports the designation of this program as Intervention.



- Evaluation Form adapted from Instructional Materials Evaluation Toolkit (IMET).

The IMET was developed by Student Achievement Partners. Educators may use or adapt. http://creativecommons.org/licenses/by/3.0/ Download this tool at http://achievethecore.org/IMET

Instructional Materials Evaluation Tool

Mathematics, Grades K-8

What Are the Purposes of the IMET?

This Math IMET is designed to help educators determine whether instructional materials are aligned to the Shifts and major features of the Common Core State Standards (CCSS). The substantial instructional Shifts (http://www.corestandards.org/other-resources/key-shifts-inmathematics/) at the heart of the Common Core State Standards are:

- **Focus** strongly where the Standards focus
- **Coherence**: Think across grades and link to major topics within the grade
- **Rigor**: In major topics, pursue conceptual understanding, procedural skill and fluency, and application with equal intensity.

The IMET draws directly from the following documents:

- Common Core State Standards for Mathematics (www.corestandards.org/Math)
- Publishers' Criteria for the Common Core State Standards in Mathematics grade K-8 (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)

When to use the IMET

1. Purchasing materials: Many factors go into local purchasing decisions. Alignment to the Standards is a critical factor to consider. This tool is designed to evaluate alignment of instructional materials to the Shifts and the major features of the CCSS. It also provides suggestions of additional indicators to consider in the materials evaluation and purchasing process.

2. Evaluating materials currently in use: The IMET can be used to analyze the degree of alignment of existing materials and help to highlight specific, concrete flaws in alignment. Even where materials and tools currently in use fail to meet one or more of these criteria, the pattern of failure is likely to be informative. States and districts can use the evaluation to create a thoughtful plan to modify or combine existing resources in such a way that students' actual learning experiences approach the focus, coherence, and rigor of the Standards.

3. Developing programs: Those developing new programs can use this tool as guidance for creating aligned curricula.
Please note this tool was designed for evaluating comprehensive curricula (including any supplemental or ancillary materials), but it was not designed for the evaluation of standalone supplemental materials.

Who Uses the IMET?

Evaluating instructional materials requires both subject-matter and pedagogical expertise. Evaluators should be well versed in the Standards (www.corestandards.org/Math) for all grades in which materials are being evaluated. This includes understanding the Major Work of the grade (www.achievethecore/focus), the Supporting and Additional work, how the content fits into the progressions in the Standards (www.achievethecore.org/progressions), and the expectations of the Standards with respect to conceptual understanding, procedural skill and fluency, and application. Evaluators also should be familiar with the substantial instructional Shifts (http:// www.corestandards.org/other-resources/key-shifts-in-mathematics/) of Focus, Coherence and Rigor that are listed above.

Getting Started

Prior to Evaluation

Assemble all of the materials necessary for the evaluation. It is essential for evaluators to have materials for all grades covered by the program, as some criteria cannot be rated without having access to each grade. In addition, each evaluator should have a reference copy of the Common Core State Standards for Mathematics (CCSSM) and the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013).

Instructional Materials Evaluation Tool
Mathematics, Grades K-8

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Getting Started
Prior to Evaluation

Assemble all of the materials necessary for the evaluation. It is essential for evaluators to have materials for all grades covered by the program, as some criteria cannot be rated without having access to each grade. In addition, each evaluator should have a reference copy of the Common Core State Standards for Mathematics (CCSSM) and the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013).

Before conducting the evaluation itself, it is important to develop a protocol for the evaluation process. The protocol should include having evaluators study the Publishers' Criteria and the IMET. It will also be helpful for evaluators to get a sense of each program overall before beginning the process. At a minimum, this would include reading the front matter of the text, looking at the table of contents and paging through multiple chapters.

Sections 1-3 below should be completed to produce a comprehensive picture of the strengths and weaknesses of the materials under evaluation. Information about areas in need of improvement or supplementation should be shared with internal and external stakeholders.

Navigating the Tool

Begin with Section 1: Non-Negotiable Alignment Criteria

- The Non-Negotiable Alignment Criteria must each be met in full for materials to be considered aligned to the Shifts and the major features of the Common Core State Standards. Each Non-Negotiable Alignment Criterion has one or more metrics associated with it; every one of these metrics must be met in order for the criterion as a whole to be met.

- Examine the relevant materials and use evidence to rate the materials against each criterion and its associated metric(s).

- Record and explain the evidence upon which the rating is based.

Continue to Section 2: Alignment Criteria

- The Alignment Criteria must each be met for materials to be considered aligned to the Shifts and the major features of the Common Core State Standards. Each Alignment Criterion has one or more metric associated with it; a specific number of these metrics must be met or partially met in order for the criterion as a whole to be met.

- Examine the materials in relation to these criteria, assigning each metric a point value. Rate the criterion as "Meets" or "Does Note Meet" based on the number of points assigned. The more points the materials receive on the alignment Criteria, the better they are aligned.

Record and explain the evidence upon which the rating is based.

Proceed to Section 4: Indicators of Quality

- Indicators of Quality are important considerations that will help evaluators better understand the overall quality of instructional materials. These considerations are not criteria for alignment to the CCSS, but they provide valuable information about additional program characteristics. Evaluators may want to add their own indicators to the examples provided.

Directions for Non-Negotiable 1

Freedom from Obstacles to Focus

Criterion	Evidence- Give specific examples.	Rating: (Reviewer only.)
Non-Negotiable 1: **Freedom from Obstacles to Focus** **Materials must reflect the content architecture of the Standards by not assessing the topics named before the grade level where they first appear in the Standards.** The Standards foster students' progress to algebra by focusing strongly on arithmetic. Consistent with this focus, certain topics from outside of arithmetic appear only in later grades. Thus, to be aligned, materials must reflect the content architecture of the Standards by not assessing the topics named before the grade level where they first appear in the Standards. In this criterion, "topics named" means the topics that are explicitly named in Metric 1A. No other topics should be added to the list in Metric 1A. (Note that other topics in the standards are addressed in criterion NN2.)	**Required Materials** • Common Core State Standards for Mathematics (www.corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf) • From the materials being evaluated: teacher guides and all assessment components	**Rating this Criterion**: Non-Negotiable 1 is rated as Meets or Does Not Meet. To rate Non-Negotiable 1, begin by rating Metric 1A. Since Metric 1A is the only metric for Non-Negotiable 1, the rating for Non-Negotiable 1 is the same as the rating for Metric 1A. If Metric 1A is rated as Does Not Meet, include evidence of when the named topic(s) is/are assessed. If the metric is rated as Meets, list the grade(s) examined in the evaluation.

Metric NN1A: **Materials re[illegible] the basic architecture of the Standards by not assessing the listed topics before the grade level indicated.** • Probability, including chance, likely outcomes, probability models. (Introduced in the CCSSM in grade 7) • Statistical distributions, including center, variation, clumping, outliers, mean, median, mode, range, quartiles; and statistical association or trends, including two-way tables, bivariate measurement data, scatter plots, trend line, line of best fit, correlation. (Introduced in the CCSSM in grade 6) • Similarity, congruence, or geometric transformations. (Introduced in the CCSSM in grade 8) • Symmetry of shapes, including line/ reflection symmetry, rotational symmetry. (Introduced in the CCSSM in grade 4) **How to Find the Evidence:** Evaluate the table of contents, all chapter tests, all unit tests, and other such assessment components (including rubrics). For context, read Criterion #2 from the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013). NOTE: Grade alignments of other topics are addressed in Non-Negotiable 2, Focus and Coherence.) In this criterion, "topics named" means the topics that are explicitly named in Metric 1A. No other topics should be added to the list in Metric 1A. (Note that other topics in the standards are addressed in criterion NN2.)	**Evidence-** The following standards are not assessed in the topics before the grade level indicated.	**(Reviewer only.)** **__X__Meets** **____Does Not Meet**
Non-Negotiable 1: Materials must reflect the content architecture of the Standards by not assessing the topics named* before the grade level where they first appear in the Standards. **NN 1** If Metric 1A was rated as Meets, then rate Non-Negotiable 1 as Meets. If Metric 1A was rated as Does Not Meet, then rate Non- Negotiable 1 as Does Not Meet. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion.**(Reviewer only.)** **Before moving to Non-Negotiable 2, record the final Meets or Does Not Meet rating in the Evaluation Summary.**		**(Reviewer only.)** **__X__Meets** **____Does Not Meet** **Strengths/Weaknesses:**

Directions for Non-Negotiable 2

Focus and Coherence

Non-Negotiable 2: **Focus and Coherence** **Materials must focus coherently on the Major Work of the grade in a way that is consistent with the progressions in the Standards.** Focus and coherence are the two major evidence-based design principles of the Common Core State Standards for Mathematics (CCSSM, p. 3). Focus is necessary in order to fulfill the ambitious promise the states have made to their students by adopting the Standards: greater achievement at the college and career ready level; greater depth of understanding of mathematics; and a rich classroom environment in which reasoning, sense-making, applications, and a range of mathematical practices flourish. In simpler terms, a mile-wide, inch-deep curriculum translates to less time per topic. Less time means less depth and moving on without many students. Thus, materials must focus coherently on the Major Work of the grade in a way that is consistent with the progressions in the Standards.	**Required Materials** • Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf) • Focus by Grade Level for the grade being evaluated (www.achievethecore.org/focus) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion:** Non-Negotiable 2 is rated as Meets or Does Not Meet. To rate Non-Negotiable 2, first rate metrics 2A–2H. Each of these eight metrics must be rated as Meets in order for Non-Negotiable 2 to be rated as Meets. Rate each metric 2A-2H as Meets or Does Not Meet/Insufficient Evidence. If the evidence examined shows that the Criterion is met, then mark the Criterion Meets. If the evidence examined shows that the Criterion is not met—or if there is insufficient evidence to make a determination—then mark the Criterion as Does Not Meet/Insufficient Evidence. Support all ratings with evidence.
Metric NN2A: **In each grade K–8, students and teachers using the materials as designed devote the large majority of time to the Major Work of the grade.** **How to Find the Evidence:** Familiarize yourself with the Major Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, lessons, homework assignments, and assessments. (Evaluate both student and teacher materials.) Consider time spent on the Major Work of the grade and judge qualitatively whether students and teachers using the materials as designed will devote the large majority of time to the Major Work of the grade. For context, read Criterion #1 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013)	**Evidence-** Majority of time is devoted to the Major Work of kindergarten. K.CC.A: 4 topics K.CC.B: 3 topics K.CC.C: 1 topic K.NBT.A: 1 topic 11/14 topics are devoted to the Major Work. 76% of the lessons address the Major Works. Supporting Clusters, Additional Clusters, and Supporting Clusters are color coded throughout the TE so teachers are aware of type of cluster they are teaching.	**(Reviewer only.)** **__X__Meets** **____Does Not Meet/** **Insufficient Evidence**

Metric NN2B: **Supporting Work, where present, enhances focus and coherence simultaneously by also engaging students in the Major Work of the grade.** **How to Find the Evidence:** Familiarize yourself with the Major Work and Supporting Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate chapters and lessons that focus on Supporting Work. NOTE: Example of evaluating this Criterion might include looking at whether materials for K–5 generally treat data displays as an occasion for solving grade-level word problems using the four operations (e.g., see 3.MD.B.3); or whether materials for grade 7 take advantage of opportunities to use probability to support ratios, proportions, and percentages. For context, read Criterion #3 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Additional Clusters are identified as such and include: K.G.A: 1 Topic K.G.B: 1 Topic K.MD.A: 1 Topic Supporting Clusters are identified as such and include: K.MD.B: 1 Topic	**(Reviewer only.)** **_X___Meets** **____Does Not Meet/** **Insufficient Evidence**
Metric NN2C: **Materials base content progressions on the grade-by-grade progressions in the Standards. Content from previous or future grades does not unduly interfere with or displace on-grade-level content.** **How to Find the Evidence:** Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, and lessons in both student and teacher materials. NOTE: In some cases it may be possible that aligned materials might address some aspects of a topic in a strategic way before or after the grade level in which the topic is central in the Standards' progressions; for example, a curriculum author might purposefully choose to explore adding fractions with unlike denominators in a way appropriate to grade four, recognizing that this work is not really required until the next grade. However, any such purposeful discrepancies in content progressions should enhance the required learning in each grade; not unduly interfere with or displace grade-level content; and be clearly aimed at helping students meet the Standards as written rather than effectively rewriting the progressions in the Standards. And in all cases, note that Non-Negotiable 1 must be met for materials to be aligned. For context, read Criterion #5a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Each topic overview has a Coherence section that lays out student prior knowledge, new on-level knowledge, and future applications and how the standard connects to grade 1 standard.	**(Reviewer only.)** **_X___Meets** **____Does Not Meet/** **Insufficient Evidence**

Metric NN2D: **Materials gi[illegible]l students extensive work with on-grade-level problems.** **How to Find the Evidence:** Evaluate both student and teacher materials. If the materials provide resources for differentiated learning, consider whether lower-performing students have opportunities to engage with grade-level problems. Also consider whether higher-performing students are given opportunities to learn current grade-level content in greater depth. For context, read Criterion #5b in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Every lesson has [illegible]ny opportunities to practice current grade-level standards regardless of instructional level. Each lesson includes: -Daily Common Core Review -Solve and Share -Visual Learning -Do you understand? Show me! -Guided practice -Reteach -Independent practice -Leveled practice and homework	**(Reviewer only.)** **__X__Meets** **____Does Not Meet/ Insufficient Evidence**
Metric NN2E: **Materials relate on-grade-level concepts explicitly to prior knowledge from earlier grades.** **How to Find the Evidence:** Evaluate both student and teacher materials. NOTE: Examples of evaluating this Criterion might include looking at the way the materials extend basic ideas of place value across the decimal point; or the role that properties of operations play when the materials extend arithmetic beyond whole numbers to fractions, variables, and expressions. More generally, cluster headings in the Standards sometimes signal key moments where reorganizing and extending previous knowledge is important in order to accommodate new knowledge (e.g., see cluster headings that use the phrase "Apply and extend previous understanding"). For context, read Criterion #5c in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Each topic overview has a Coherence section that lays out student prior knowledge, new on-level knowledge, and future applications and how the standard connects to grade 1 standard.	**(Reviewer only.)** **__X__Meets** **____Does Not Meet/ Insufficient Evidence**
Metric NN2F: **Review of material from previous grades is clearly identified as such to the teacher, and teacher and students can see what their specific responsibility is for the current year.** **How to Find the Evidence:** Evaluate the table of contents, but do not stop there; also evaluate units, chapters, lessons, homework assignments and assessments. (Evaluate both student and teacher materials.) Identify any content from previous grades and check whether it is identified as such. For context, read Criterion #5a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Each lesson has a Show What You Know piece where students will review prior learning; each topic also has a Coherence section that relates to prior knowledge (Even relates it back to pre-school).	**(Reviewer only.)** **__X__Meets** **____Does Not Meet/ Insufficient Evidence**

Metric NN2G **Materials include learning objectives that are visibly shaped by CCSSM cluster headings.** **How to Find the Evidence:** Select several clusters from the Major Work in the grade being evaluated. Evaluate teacher and student materials in relation to these clusters. For context, read Criterion #6a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** **Each lesson has color coded headers indicating what cluster is being taught. Topic planner for each topic is specifically names standard and is listed at the beginning of each lesson.**	(Reviewer only.) **__X__Meets** **____Does Not Meet/ Insufficient Evidence**
Metric NN2H: **Materials include problems and activities that serve to connect two or more clusters in a domain, or two or more domains in a grade, in cases where these connections are natural and important.** **How to Find the Evidence:** In the grade being evaluated, choose two or more clusters or two or more domains for which connections are natural and important. Evaluate the units, chapters, and lessons that deal with the chosen topics, looking for problems and activities that serve to connect the chosen clusters or domains. NOTE: An example of evaluating this Criterion might include looking at whether problems in grade 4 sometimes or often involve students applying their developing computation skills (detailed in domain NBT) in the context of solving word problems (detailed in domain OA). For context, read Criterion #6b in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** **Each Common Core cluster is the focus of one or more topics. Topics contain connections to other clusters and other domains where sensible.** **Example:** **K.CC.A, K.CC.B: Topic 1, Topic 3, Topic 9, Topic 11**	(Reviewer only.) **__X__Meets** **____Does Not Meet/ Insufficient Evidence**
Non-Negotiable 2: **Focus and Coherence** **Materials must focus coherently on the Major Work of the grade in a way that is consistent with the progressions in the Standards.** **NN 2** If all Metrics 2A – 2H were rated as Meets, then rate Non-Negotiable 2 as Meets. If one or more Metric was rated Does Not Meet/Insufficient Evidence, then rate Non-Negotiable 2 as Does Not Meet. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)** **Before moving to Alignment Criterion 1, record the final Meets or Does Not Meet rating in the Evaluation Summary.**		(Reviewer only.) **__X__Meets** **____Does Not Meet** **Strengths/Weaknesses:** **Very organized and intentional. Teachers are very aware of what cluster they are in, if it's a Major Cluster, Additional Cluster, and Supporting Cluster**

Now continue by evaluating the Alignment Criterion 1 for Rigor and Balance.

Directions for Alignment Criterion 1

Rigor and Balance

Alignment Criterion 1: Rigor and Balance **Materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.** The Standards set expectations for attention to all three aspects of rigor: conceptual understanding, procedural skill and fluency, and applications. Thus, materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.	**Required Materials** • Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf) • Focus by Grade Level for the grade being evaluated (achievethecore.org/focus) • Situation Types for the Operations in Word Problems (achievethecore.org/situation-types) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion:** Alignment Criterion 1 is rated as Meets or Does Not Meet. To rate Alignment Criterion 1, first rate metrics 1A, 1B, and 1C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). For each metric, guiding questions are provided to aid in gathering evidence. Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 1 if the materials rate 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as rigor and balance, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.
Metric AC1A: **The materials support the development of students' conceptual understanding of key mathematical concepts, especially where called for in specific content Standards or cluster headings.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Major Work for the grade being evaluated that relate specifically conceptual understanding to use throughout the questions associated with this metric. NOTE: Some examples of clusters or Standards that call for conceptual understanding include: K.OA.A.1, (1.NBT.B, 1.NBT.C), (2.NBT.A, 2.NBT.B), (3.OA.A.1, 3.OA.A.2), 4.NF.A, (4.NBT.A, 4.NBT.B), 5.NF.B, (5.NBT.A, 5.NBT.B), 6.RP.A, 6.EE.A.3, 7.NS.A, 7.EE.A, 8.EE.B, 8.F.A, 8.G.A Clusters or Standards grouped by parentheses are closely connected and could be analyzed together. For context, read Criterion #4a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	-Choose a cluster/Standard from the Major Work that is aligned to each aspect of rigor and use it to evaluate these metrics. It is most helpful if the same clusters/Standards are chosen for all of the programs being evaluated. (Guidance in choosing clusters/Standards is included in "How to Find the Evidence".)	**Use the questions for AC Metric 1A to evaluate Metric 1A. Record evidence for each question and rate Metric 1A.** **_x___Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**

Is conceptual understanding attended to thoroughly where the Standards set explicit expectations for understanding or interpreting? Evaluate lessons, chapter/unit assessments and homework assignments, paying attention to work aligned to Standards that explicitly call for understanding or interpreting. NOTE: Examples of evaluating this Criterion might include looking at how well the multi-digit addition and subtraction algorithms are developed and explained on the basis of place value and properties of operations; or how well the multi-digit multiplication and division algorithms are developed and explained on the basis of place value and properties of operations; or how well solving equations is presented and explained as a process of reasoning.	**Evidence-** Developing understanding is the focus of 10 out of the 14 kindergarten topics.	
Do the materials feature high-quality conceptual problems and conceptual discussion questions? Evaluate lessons, chapter/unit assessments, and homework assignments. NOTE: Example of conceptual problems might include such questions as "Find a number greater than 1/5 and less than 1/4," or "If the divisor does not change and the dividend increases, what happens to the quotient?"	**Evidence-** Every lesson begins with Solve and Share, this gives students a non-routine problem to solve, these non-routine problems are used to introduce new ideas in mathematics.	
Do the materials feature opportunities to identify correspondences across mathematical representations? Evaluate lessons, chapter/unit assessments and homework assignments. NOTE: Examples of evaluating this Criterion might include looking at whether students are supported in identifying correspondences among: the verbal description of a situation, the diagrams that distill its mathematical features, and the equations that model it; or equivalent forms of numbers (e.g., 3 and 6/2) and the number line; or rational number operations and representations of them via models such as the vector model; or the expression that defines a function and the graph that shows the relationship.	**Evidence-** Kindergarten students are asked to use pictorial, concrete, and symbolic models for mathematical concepts.	
Metric AC1B: **The materials are designed so that students attain the fluencies and procedural skills required by the Standards.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Major Work for the grade being evaluated that relate specifically to fluency and procedural skill to use throughout the questions associated with this metric. NOTE: Some examples of Standards that call for procedural skill and fluency include: K.OA.A.5, 1.OA.C.6, 2.OA.B.2, 2.NBT.B.5, 3.OA.C.7, 3.NBT.A.2, 4.NBT.B.4, 5.NBT.B.5, 6.NS.B.2, and 6.NS.B.3, 6.EE.A, 7.NS.A, 7.EE.A.1,7.EE.B.4a, 8.EE.C.7, 8.EE.C.8b For context, read Criterion #4b in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).		**Use the questions for Metric 1B to evaluate Metric 1 B. Record evidence for each question and rate Metric 1B.** **(Reviewer only.)** **__X__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**

Is progress toward fluency and procedural skill interwoven with students' developing conceptual understanding of the operations in question? Evaluate lessons, chapter/unit assessments, daily routines, and homework assignments for evidence that the development of fluency and procedural skill is supported by conceptual understanding.	**Evidence-** Fluency is practiced in topics 9-14 after time has been spent developing the skills needed.	
Are purely procedural problems and exercises present that include cases in which opportunistic strategies are valuable and generic cases that require efficient algorithms present? Evaluate lessons, chapter/unit assessments, daily routines, and homework assignments. NOTE: Examples of problems in which opportunistic strategies are valuable might include the sum 698 + 240 or the system x + y = 1, 2x + 2y = 3. Examples of generic cases that require efficient algorithms might include the sum 8767+2286 or the system 6y + x = x + 3, – x = 1 + 2y.	**Evidence-** There are many opportunities throughout EnVisions for students to use strategies that make sense to them.	
Do the materials in grades K–6 provide repeated practice toward attainment of fluency Standards? Evaluate lessons, daily routines, and homework assignments for evidence of repeated practice toward attainment of the following K–6 Standards that set an explicit expectation of fluent (accurate and reasonably fast) computation: K.OA.A.5, 1.OA.C.6, 2.OA.B.2, 2.NBT.B.5, 3.OA.C.7, 3.NBT.A.2, 4.NBT.B.4, 5.NBT.B.5, 6.NS.B.2, 6.NS.B.3.	**Evidence-** Students are given many opportunities to practice adding and subtracting within 5. -Fluency Practice Activities -Fluency Practice/Assessment Worksheets -Game Center -Math Diagnosis and Intervention System 2.0 -"My Fluency Progress" form.	
Metric AC1C: **The materials are designed so that teachers and students spend sufficient time working with engaging applications, without losing focus on the Major Work of each grade.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Major Work for the grade being evaluated that relate specifically application to use throughout the questions associated with this metric. NOTE: Some examples of clusters or Standards that call for application include: K.OA.A.2, 1.OA.A, 2.OA.A, 3.OA.A.3, 3.OA.D.8, 4.OA.A.3, 4.NF.B.3d, 4.NF.B.4c, 5.NF.B.6, 5.NF.B.7c, 6.RP.A.3, 6.NS.A.1, 6.EE.B.7, 6.EE.C.9, 7.RP.A, 7.NS.A.3, 7.EE.B.3, 8.EE.C.8c, 8.F.B For context, read Criterion #4c in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Topics 6-8 are the only places where k.OA.A.2 is addressed.	**Use the questions for Metric 1C to evaluate Metric 1C. Record evidence for each question and rate Metric 1C.** **(Reviewer only.)** **__X__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**

Are there are s and multi-step contextual problems, including non-routine prob s, that develop the mathematics of the grade, afford opportunities for practice, and engage students in problem solving? Do the problems attend thoroughly to those places in the content Standards where expectations for multi-step and real-world problems are explicit? Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** There are many si e-step problems including at least 1 non-routine problem at the beginning of each lesson.	
Do application problems particularly stress applying the Major Work of the grade? Evaluate lessons, chapter/unit assessments, and homework assignments. NOTE: Examples of evaluating this Criterion might include looking at: how well, by the end of grade 2, students using the materials as designed can represent and solve a full range of one-step addition and subtraction word problems; or how well, by the end of grade 3, students using the materials as designed can represent and solve a full range of one-step multiplication and division word problems; or how well these basic situation types for each operation are carried coherently across the grades, (e.g., with fractions and algebraic expressions); or, in all grades, whether the problems connect concepts, Standards, and domains in ways that are natural and important. For a list of situation types for one-step addition, subtraction, multiplication, and division problems, see Situation Types for the Operations in Word Problems	**Evidence-** In topics 6-8 there are a variety of problems types.	
Does modeling build slowly across K–8, with applications that are relatively simple in earlier grades and when students are encountering new content? In grades 6–8, do the problems begin to provide opportunities for students to make their own assumptions or simplifications in order to model a situation mathematically? Read Standard for Mathematical Practice 4, Model with Mathematics. Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** There are many different mathematical models that are used through out this program. This builds a solid understanding for kindergarten students.	

Alignment Criterion 1: Rigor and Balance

Materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.

AC1 Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 out of 6 points, the Criterion has not been met. Check the final rating.
Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)**

Before moving to Alignment Criterion 2, record the final Meets or Does Not Meet rating in the Evaluation Summary.

(Reviewer only.)

__X_Meets

____Does Not Meet

Strengths/Weaknesses:

Directions for Alignment Criterion 2

Standards for Mathematical Practice

Alignment Criterion 2: Standards for Mathematical Practice **Materials must demonstrate authentic connections between content Standards and practice Standards.** The Standards require that designers of instructional materials connect the mathematical practices to mathematical content in instruction. Thus, materials must demonstrate authentic connections between content Standards and practice Standards.	**Required Materials:** • Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf) • Focus by Grade Level for the grade being evaluated (www.achievethecore.org/focus) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion** Alignment Criterion 2 is rated as Meets or Does Not Meet. To rate Alignment Criterion 2, first rate metrics 2A, 2B, and 2C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). For each metric, guiding questions are provided to aid in gathering evidence. Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 2 if the materials earn 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as mathematical practices, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.
Metric AC2A: **Materials address the practice Standards in such a way as to enrich the Major Work of the grade; practices strengthen the focus on Major Work instead of detracting from it, in both teacher and student materials.** **How to Find the Evidence:** Familiarize yourself with the Major Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate teacher and student materials for evidence that the mathematical practices support and connect to the focus of the grade. NOTE: Examples of evaluating this Criterion might include looking at whether, in grades K–5, students using the materials are supported to look for and express regularity in repeated reasoning about the addition table, the multiplication table, the properties of operations, the relationship between addition and subtraction or multiplication and division, and the place value system; or whether, in grades 6–8, students using the materials are supported to look for and express regularity in repeated reasoning about proportional relationships and linear functions. For context, read Criterion #8 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013).	**Evidence-** Mathematical Practices are infused into all aspects of the program. -Solve and Share requires students to select, implement, and manage multiple mathematical practices. -Visual Learning Bridge: discussion questions from the teacher materials connect to mathematical practices -Do You Understand? Show Me!: focuses on a specific mathematical practice -Each lesson's Independent Practice, Math Practice, and Problem Solving, and Homework and Practice specific items are labeled with at least one mathematical practice.	**(Reviewer only.)** **__X__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**

Metric AC2B: **Materials attend to the full meaning of each practice Standard.** **How to Find the Evidence:** For context, read Criterion #7 and Criterion #9 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).		**Use the questions for Metric 2B to evaluate Metric 2B. Record evidence for each question and rate Metric 2B.** **(Reviewer only.)** **__X__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Over the course of any given year of instruction, is each mathematical practice Standard meaningfully present in the form of assignments, activities, or problems that stimulate students to develop the habits of mind described in the practice Standard? Evaluate lessons, chapter/ unit assessments, and homework assignments for evidence of each mathematical practice being meaningfully present in instruction.	**Evidence-** **There is a problem-solving handbook at the beginning of the TE and SE, there is a classroom set of Mathematical Practices posters, MP rubrics, and MP listed for each lesson.**	
Do the materials treat the practice Standards as developing across grades or grade bands? Are the practice Standards in early grades appropriately simple? Do they display an arc of growing sophistication across the grades?	**Evidence-**	
Are there teacher-directed materials that explain the role of the practice Standards in the classroom and in students' mathematical development? Are alignments to practice Standards accurate?	**Evidence-**	
Metric AC2C: **Materials support the Standards' emphasis on mathematical reasoning.** **How to Find the Evidence:** For context, read Criterion #10 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).		**Use the questions for Metric 2C to evaluate Metric 2C. Record evidence for each question and rate Metric 2C.** **(Reviewer only.)** **__X__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Do the materials support students in constructing viable arguments and critiquing the arguments of others concerning grade-level mathematics that is detailed in the content Standards? Read Standard for Mathematical Practice 3. Evaluate teacher and student materials to ensure that students are given opportunities to reason with grade-level mathematics.	**Evidence-** MP 3 is supported in Solve and Share, Look Back, The Visual Learning Bridge, Do You Understand? Show Me! As well as in Homework and practice.	
Do the materials support students in producing not only answers and solutions, but also, in a grade-appropriate way, arguments, explanations, diagrams, mathematical models, etc., especially in the Major Work of the grade? Familiarize yourself with the Major Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate teacher and student materials, to understand the types of work students are expected to produce.	**Evidence-** Students are encouraged to use reason and explain their strategies using diagrams, models, and tools appropriately.	

Do materials explicitly attend to the specialized language of mathematics? Is the language of argument, problem solving, and mathematical explanations taught rather than assumed? Evaluate teacher and student materials, paying attention to how mathematical language is taught. NOTE: Examples of evaluating this Criterion might include looking at whether students are supported in: basing arguments on definitions; using the method of providing a counterexample; or recognizing that examples alone do not establish a general statement.	**Evidence-** Math Practices and Problem Solving lessons are opportunities to focus on specific math practice during problem solving.	

Alignment Criterion 2:
Standards for Mathematical Practice

Materials must demonstrate authentic connections between content Standards and practice Standards.

AC2 Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 out of 6 points, the Criterion has not been met. Check the final rating.
Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion.
(Reviewer only.)

Before moving to Alignment Criterion 3, record the final Meets or Does Not Meet rating in the Evaluation Summary.

(Reviewer only.)

__X__Meets

____Does Not Meet

Strengths/Weaknesses:

Alignment Criterion 3:
Access to the Standards for All Students

Materials must provide supports for English Language Learners and other special populations.

Because Standards are for all students, alignment requires thoughtful support to ensure all students are able to meet the Standards. Thus, aligned materials must provide supports for English Language Learners and other special populations.

Required Materials:

- Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf)
- Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)
- From the materials being evaluated: teacher guides, student texts and workbooks

Rating this Criterion:
Alignment Criterion 3 is rated as Meets or Does Not Meet.

To rate Alignment Criterion 3, first rate metrics 3A, 3B, and 3C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points).

Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 3 if the materials earn 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as support for special population, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.

Metric AC3 **Support for English Language Learners and other special populations is thoughtful and helps those students meet the same Standards as all other students. The language in which problems are posed is carefully considered.** **How to Find the Evidence:** Evaluate teacher and student materials, paying attention to supports offered for special populations.	**Evidence-** Daily ELL instruction support is provided in the TE for every lesson. Visual Learning Animation uses motion and sound, where questions are real aloud to students; there is also many pictures throughout the program.	Reviewer only.) **_X___Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Metric AC3B: **Materials provide appropriate level and type of scaffolding, differentiation, intervention, and support for a broad range of learners with gradual removal of supports, when needed, to allow students to demonstrate their mathematical understanding independently.** **How to Find the Evidence:** Evaluate teacher and student materials, paying attention to whether materials provide differentiation that will lead all learners to engage with on-grade-level content.	**Evidence-** EnVision meets the needs of all students and provides Response to Intervention during each lesson, at the end of each lesson, at the end of each Topic, and as indicated: -On Going, during the lesson -Strategic Intervention, at the end of the lesson -Intensive Intervention -Math Diagnosis and Intervention System 2.0	Reviewer only.) **_X___Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Metric AC3C: **Design of lessons recommends and facilitates a mix of instructional approaches for a variety of learners such as using multiple representations (e.g., including models, using a range of questions, checking for understanding, flexible grouping, pair-share).** **How to Find the Evidence:** Evaluate teacher materials, noting instructional approaches suggested for whole class and differentiated lessons and activities.	**Evidence-** Students are asked to use models to represent their thinking and solutions in the Problem-Based learning part of each lesson. Students are also asked to use models in: -Do You Understand? Show Me! -Convince Me!	Reviewer only.) **__X__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**

Alignment Criterion 3: **Access to the Standards for All Students** **Materials must provide supports for English Language Learners and other special populations.** AC3 Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 points, the Criterion has not been met. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion.**(Reviewer only.)** **Move to the Evaluation Summary and record the final Meets or Does Not Meet rating .**	**(Reviewer only.)** **__X__Meets** **____Does Not Meet** **Strengths/Weaknesses:**

Once an evaluation for alignment to the Shifts and major features of the CCSS has been conducted using Sections 1-3, it's important to evaluate for overall quality and best practices. A starting list of Indicators of Quality are suggested below. States, districts and others evaluating instructional materials are encouraged to add to this list to ensure materials reflect local contexts. For background information on some of the Indicators of Quality in this section, refer to pp.18–21 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).

Indicators of Quality	Evidence- Give specific examples.	Rating: (Reviewers only.)
1. Lessons are thoughtfully structured and support the teacher in leading the class through the learning paths at hand, with active participation by all students in their own learning and in the learning of their classmates.	**Evidence-** enVisionmath2.0 uses two key steps to the core instructional model. Step 1: Problem-Based Learning -Where concepts and procedures are introduced Step 2: Visual Learning -Makes the important mathematics explicit with enhanced direct instruction connected to Step 1.	**(Reviewer only.)** **___X___ Yes** **_____ No**
2. The underlying design of the materials includes both problems and exercises. (In solving problems, students learn new mathematics, whereas in working exercises, students apply what they have already learned to build mastery.) Each problem or exercise has a purpose. **NOTE: This Criterion does not require that the problems and exercises be labeled as such.**	**Evidence-** Students are engaged with a wide variety of problems and exercises. -Problem-Based Learning -Visual Learning Bridge -Independent Practice -Differentiation Lessons	**(Reviewer only.)** **___X___ Yes** **_____ No**

3. Design of assignments is not haphazard: exercises are given in intentional sequences in order to strengthen students' mathematical understanding.	**Evidence-** The design of assignments have many different models to strengthen students' mathematical understanding such as: -Hands-on activities -Pictures -Symbols	**(Reviewer only.)** **___X___ Yes** **_____ No**
4. There are separate teacher materials that support and reward teacher study including, but not limited to: discussion of the mathematics of the units and the mathematical point of each lesson as it relates to the organizing concepts of the unit, discussion on student ways of thinking and anticipating a variety of students responses, guidance on lesson flow, guidance on questions that prompt students thinking, and discussion of desired mathematical behaviors being elicited among students.	**Evidence-** At the beginning of each TE there is an explanation of Mathematical Practices and Common Core connections. There are also online videos available, explanation of student misconceptions, background knowledge, as well as, answer keys and examples of student work.	**(Reviewer only.)** **___X___ Yes** **_____ No**
5. Manipulatives suggested in the materials are faithful representations of the mathematical objects they represent and are connected to written methods.	**Evidence-** Manipulative are available as individual kits, teacher demonstration kits, center kits, and online virtual manipulatives. Examples of manipulatives include: linking cubes, foam blocks, counters, 3-D shapes, etc.	**(Reviewer only.)** **___X___ Yes** **_____ No**
6. Materials include a variety of curriculum-embedded assessments. Examples include pre-, formative, summative, and self-assessment resources.	**Evidence-** Each Topic includes a pre-assessment, post assessment and performance task. Each lesson includes formative assessment ideas.	**(Reviewer only.)** **____X__ Yes** **_____ No**
7. Assessments contain aligned rubrics, answer keys, and scoring guidelines that provide sufficient guidance for interpreting student performance.	**Evidence-** There are rubrics for each of the Mathematical Practices, there are also answer keys for each of the Topic assessments.	**(Reviewer only.)** **___X___ Yes** **_____ No**
8. Materials assess student proficiency using methods that are accessible and unbiased, including the use of course-level language in student prompts.	**Evidence-** Two choices for assessment: performance task and topic assessment	**(Reviewer only.)** **___X___ Yes** **_____ No**

9. Materials are carefully evaluated by qualified individuals, whose names are listed, in an effort to ensure freedom from mathematical errors and course-level appropriateness.	**Evidence-** Authors are listed. Authors are math and educational professionals.	**(Reviewer only.)** **__X____ Yes** **_____ No**
10. The visual design supports students in engaging thoughtfully with the subject. Navigation through the text is clear.	**Evidence-** Every lesson follows the same 2 step design: Step 1: Problem-Based Learning Step 2: Visual Learning	**(Reviewer only.)** **___X___ Yes** **_____ No**
11. The materials engage parents in appropriate ways. For example, homework assignments in elementary grades, consist of routine problems, practice with getting answers, and fluency-building exercises that parents can easily support.	**Evidence-** There is online homework support, directions for parents at the bottom of each of the SE workbook page, Parent letters, as well as, online support videos for parents.	**(Reviewer only.)** **___X___ Yes** **_____ No**

Reviewer IMET Evaluation Summary Title/Level _____enVisionsmath2.0 _____

Publisher: _____Pearson Education, Ins_____ Copyright: _____2016_____
ISBN:_____

Reviewer ID # _____SJ CJ_____ Date Review Completed:_____3/9/16_____

Non-Negotiable Criteria- Each Non-Negotiable must be met in order for the Non-Negotiable Alignment Criteria to be met overall.

Non-Negotiable 1: Freedom from Obstacles to Focus	Non- Negotiable 2: Focus and Coherence
___X___ Meets _____ Does Not Meet	__X___ Meets _____ Does Not Meet

Non-Negotiable Overall:

__X___ Meets _____ Does Not Meet

Alignment Criteria- Each Alignment Criterion must be met with a sufficient number of points in order for Alignment Criteria to be labeled as "Meets" overall. The more points the materials receive on the Alignment Criteria, the better they are aligned.

Alignment Criterion 1: Rigor and Balance	Alignment Criterion 2: Standards of Mathematical Practice	Alignment Criterion 3: Access to Standards for All Learners
Points: __6___ of 6 possible. (Materials must receive at least 5 of 6 points to align.) ___X___ Meets _____ Does Not Meet	Points: ___6__ of 6 possible. (Materials must receive at least 5 of 6 points to align.) ___X___ Meets _____ Does Not Meet	Points: ___6__ of 6 possible. (Materials must receive at least 5 of 6 points to align.) ___X___ Meets _____ Does Not Meet

Alignment Criteria Overall:

__X___ Meets _____ Does Not Meet

If the mate[illegible] meet both Non-Negotiables and relevant Alignment C[illegible]rion, they are aligned to the Shifts and major features of [illegible] Core Standards. **Do the materials meet every Non-Negotiable and Alignment Criterion? __X___ Yes _____ No**

What are the specific areas of strength and weakness based on this evaluation? Publishers or others modifying or developing assessments can use this information to make improvements and/or to remedy gaps in the alignment of assessment materials.

2015-16 Mathematics Interim Review Recommendation & Summary

Publisher Name:	Pearson Education, Inc.
Title:	enVision math 2.0 Grade 1
ISBN #	9780328847655
Grade Level(s) or Course:	Grade 1
Reviewer ID:	C.J.T.B

RECOMMENDED AS:

__X__ **Core Mathematics Program-** a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials. Substantial evidence clearly supports the designation of this program as Core.

_____ **Other Mathematics Program-** a program that substantially, but partially, meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for supplemental materials. Substantial evidence clearly supports the designation of this program as Other.

_____ **Component Mathematics Program-** a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs. Substantial evidence clearly supports the designation of this program as Component.

_____ **Intervention Program-** a program designed and intended to target and support students' specific needs. Substantial evidence clearly supports the designation of this program as Intervention.

_____ **Does not meet criteria** for recommendation as a Curricular Material or Online Resource for Mathematics.

EVIDENCE SUMMARY:

FOCUS- Envision Math 2.0 uses an easy-to-read color coding system so teachers can easily see what topics are addressing major clusters, Additional clusters, and Supporting clusters.

COHERENCE-

Each Topic in Envision Math 2.0 has a Coherence heading where teachers can see prior knowledge, new on-grade-level knowledge, and future applications and standards.

RIGOR-

There are many opportunities throughout Topics and lessons for students to use strategies, practice fluency, connect to prior knowledge, and use many different models.

CONCEPTUAL UNDERSTANDING-

TE for Envision math provides many opportunities for discussion questions before, during, and after each lesson. This program also helps students develop solid strategies.

MATHEMATICAL PRACTICES-

There is a Comprehensive math practice and problem solving lesson in every topic that is completely devoted and gives special focus to one of the eight math practices.

ACCESSIBILITY OF STANDARDS TO ALL STUDENTS-

Daily ELL instruction support in every lesson, Each lesson can be leveled as Intervention, on-level, and Advanced. Assignments, homework, and practice can be leveled. There are also many online tools that can be used as support.

OTHER:

This program addresses all standards and Mathematical Practices in an easy to use form. This program includes connections to science, technology, art, and language arts.

2015-16 Interim Mathematics Review

Mathematics Evaluation Tool Grades K-8

Publisher: Pearson Education, Inc.

Title of Material: enVision math 2.0 Grade 1

Author: R.I. Charles, et al

ISBN #: 9780328847655 **Copyright** 2016

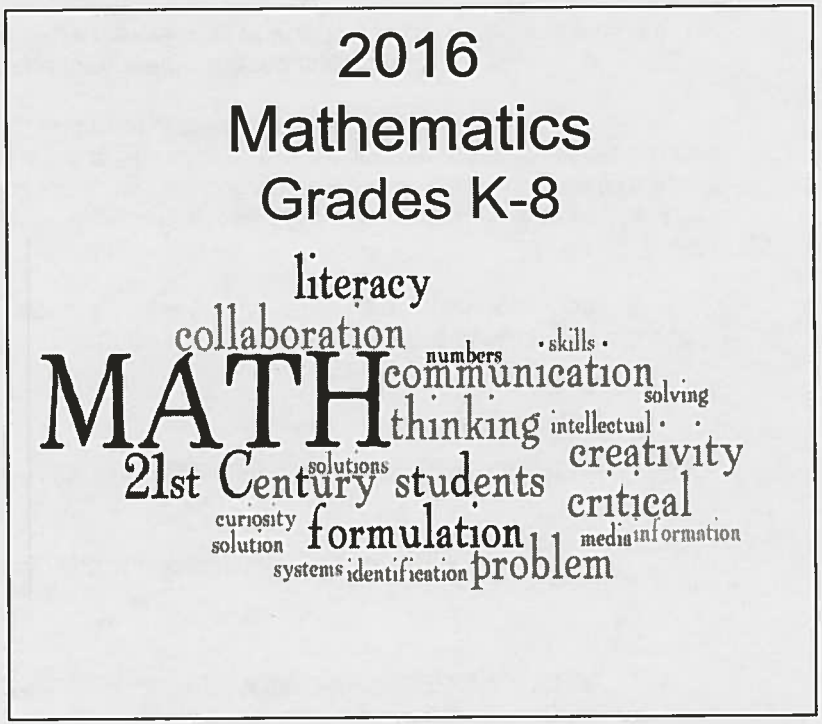
Reviewer ID: C.J. T.B

Core Mathematics Program- a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Core.

Other Mathematics Program- a program that substantially, but partially, meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Other.

Component Mathematics Program- a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs.
Substantial evidence clearly supports the designation of this program as Component.

Intervention Program- a program designed and intended to target and support students' specific needs.
Substantial evidence clearly supports the designation of this program as Intervention.



- Evaluation Form adapted from Instructional Materials Evaluation Toolkit (IMET).

The IMET was developed by Student Achievement Partners. Educators may use or adapt. http://creativecommons.org/licenses/by/3.0/ Download this tool at http://achievethecore.org/IMET

Instructional Materials Evaluation Tool

Mathematics, Grades K-8

What Are the Purposes of the IMET?

This Math IMET is designed to help educators determine whether instructional materials are aligned to the Shifts and major features of the Common Core State Standards (CCSS). The substantial instructional Shifts (http://www.corestandards.org/other-resources/key-shifts-inmathematics/) at the heart of the Common Core State Standards are:

- **Focus** strongly where the Standards focus
- **Coherence**: Think across grades and link to major topics within the grade
- **Rigor**: In major topics, pursue conceptual understanding, procedural skill and fluency, and application with equal intensity.

The IMET draws directly from the following documents:

- Common Core State Standards for Mathematics (www.corestandards.org/Math)
- Publishers' Criteria for the Common Core State Standards in Mathematics grade K-8 (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)

When to use the IMET

1. Purchasing materials: Many factors go into local purchasing decisions. Alignment to the Standards is a critical factor to consider. This tool is designed to evaluate alignment of instructional materials to the Shifts and the major features of the CCSS. It also provides suggestions of additional indicators to consider in the materials evaluation and purchasing process.

2. Evaluating materials currently in use: The IMET can be used to analyze the degree of alignment of existing materials and help to highlight specific, concrete flaws in alignment. Even where materials and tools currently in use fail to meet one or more of these criteria, the pattern of failure is likely to be informative. States and districts can use the evaluation to create a thoughtful plan to modify or combine existing resources in such a way that students' actual learning experiences approach the focus, coherence, and rigor of the Standards.

3. Developing programs: Those developing new programs can use this tool as guidance for creating aligned curricula.
Please note this tool was designed for evaluating comprehensive curricula (including any supplemental or ancillary materials), but it was not designed for the evaluation of standalone supplemental materials.

Who Uses the IMET?

Evaluating instructional materials requires both subject-matter and pedagogical expertise. Evaluators should be well versed in the Standards (www.corestandards.org/Math) for all grades in which materials are being evaluated. This includes understanding the Major Work of the grade (www.achievethecore/focus), the Supporting and Additional work, how the content fits into the progressions in the Standards (www.achievethecore.org/progressions), and the expectations of the Standards with respect to conceptual understanding, procedural skill and fluency, and application. Evaluators also should be familiar with the substantial instructional Shifts (http:// www.corestandards.org/other-resources/key-shifts-in-mathematics/) of Focus, Coherence and Rigor that are listed above.

Getting Started

Prior to Evaluation

Assemble all of the materials necessary for the evaluation. It is essential for evaluators to have materials for all grades covered by the program, as some criteria cannot be rated without having access to each grade. In addition, each evaluator should have a reference copy of the Common Core State Standards for Mathematics (CCSSM) and the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013).

Before conducting the evaluation itself, it is important to develop a protocol for the evaluation process. The protocol should include having evaluators study the Publishers' Criteria and the IMET. It will also be helpful for evaluators to get a sense of each program overall before beginning the process. At a minimum, this would include reading the front matter of the text, looking at the table of contents and paging through multiple chapters.

Sections 1-3 below should be completed to produce a comprehensive picture of the strengths and weaknesses of the materials under evaluation. Information about areas in need of improvement or supplementation should be shared with internal and external stakeholders.

Navigating the Tool

Begin with Section 1: Non-Negotiable Alignment Criteria

- The Non-Negotiable Alignment Criteria must each be met in full for materials to be considered aligned to the Shifts and the major features of the Common Core State Standards. Each Non-Negotiable Alignment Criterion has one or more metrics associated with it; every one of these metrics must be met in order for the criterion as a whole to be met.

- Examine the relevant materials and use evidence to rate the materials against each criterion and its associated metric(s).

- Record and explain the evidence upon which the rating is based.

Continue to Section 2: Alignment Criteria

- The Alignment Criteria must each be met for materials to be considered aligned to the Shifts and the major features of the Common Core State Standards. Each Alignment Criterion has one or more metric associated with it; a specific number of these metrics must be met or partially met in order for the criterion as a whole to be met.

- Examine the materials in relation to these criteria, assigning each metric a point value. Rate the criterion as "Meets" or "Does Note Meet" based on the number of points assigned. The more points the materials receive on the alignment Criteria, the better they are aligned.

- Record and explain the evidence upon which the rating is based.

Proceed to Section 4: Indicators of Quality

- Indicators of Quality are important considerations that will help evaluators better understand the overall quality of instructional materials. These considerations are not criteria for alignment to the CCSS, but they provide valuable information about additional program characteristics. Evaluators may want to add their own indicators to the examples provided.

Directions for Non-Negotiable 1 **Freedom from Obstacles to Focus**		
Criterion	**Evidence- Give specific examples.**	**Rating: (Reviewer only.)**
Non-Negotiable 1: **Freedom from Obstacles to Focus** **Materials must reflect the content architecture of the Standards by not assessing the topics named before the grade level where they first appear in the Standards.** The Standards foster students' progress to algebra by focusing strongly on arithmetic. Consistent with this focus, certain topics from outside of arithmetic appear only in later grades. Thus, to be aligned, materials must reflect the content architecture of the Standards by not assessing the topics named before the grade level where they first appear in the Standards. In this criterion, "topics named" means the topics that are explicitly named in Metric 1A. No other topics should be added to the list in Metric 1A. (Note that other topics in the standards are addressed in criterion NN2.)	**Required Materials** • Common Core State Standards for Mathematics (www.corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf) • From the materials being evaluated: teacher guides and all assessment components	**Rating this Criterion:** Non-Negotiable 1 is rated as Meets or Does Not Meet. To rate Non-Negotiable 1, begin by rating Metric 1A. Since Metric 1A is the only metric for Non-Negotiable 1, the rating for Non-Negotiable 1 is the same as the rating for Metric 1A. If Metric 1A is rated as Does Not Meet, include evidence of when the named topic(s) is/are assessed. If the metric is rated as Meets, list the grade(s) examined in the evaluation.

Metric NN1A: **Materials re[illegible] the basic architecture of the Standards by not assessing the listed topics before the grade level indicated.** • Probability, including chance, likely outcomes, probability models. (Introduced in the CCSSM in grade 7) • Statistical distributions, including center, variation, clumping, outliers, mean, median, mode, range, quartiles; and statistical association or trends, including two-way tables, bivariate measurement data, scatter plots, trend line, line of best fit, correlation. (Introduced in the CCSSM in grade 6) • Similarity, congruence, or geometric transformations. (Introduced in the CCSSM in grade 8) • Symmetry of shapes, including line/ reflection symmetry, rotational symmetry. (Introduced in the CCSSM in grade 4) **How to Find the Evidence:** Evaluate the table of contents, all chapter tests, all unit tests, and other such assessment components (including rubrics). For context, read Criterion #2 from the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013). NOTE: Grade alignments of other topics are addressed in Non-Negotiable 2, Focus and Coherence.) In this criterion, "topics named" means the topics that are explicitly named in Metric 1A. No other topics should be added to the list in Metric 1A. (Note that other topics in the standards are addressed in criterion NN2.)	**Evidence-** enVisions math 2.0 does not assess any of these topics prior to their introduction by the Common Core.	(Reviewer only.) ✓ **Meets** ____ **Does Not Meet**
Non-Negotiable 1: Materials must reflect the content architecture of the Standards by not assessing the topics named* before the grade level where they first appear in the Standards. **NN 1** If Metric 1A was rated as Meets, then rate Non-Negotiable 1 as Meets. If Metric 1A was rated as Does Not Meet, then rate Non- Negotiable 1 as Does Not Meet. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion.**(Reviewer only.)** **Before moving to Non-Negotiable 2, record the final Meets or Does Not Meet rating in the Evaluation Summary.**		(Reviewer only.) ✓ **Meets** ____ **Does Not Meet** **Strengths/Weaknesses:**

Directions for Non-Negotiable 2

Focus and Coherence

Non-Negotiable 2:

Focus and Coherence

Materials must focus coherently on the Major Work of the grade in a way that is consistent with the progressions in the Standards.

Focus and coherence are the two major evidence-based design principles of the Common Core State Standards for Mathematics (CCSSM, p. 3). Focus is necessary in order to fulfill the ambitious promise the states have made to their students by adopting the Standards: greater achievement at the college and career ready level; greater depth of understanding of mathematics; and a rich classroom environment in which reasoning, sense-making, applications, and a range of mathematical practices flourish. In simpler terms, a mile-wide, inch-deep curriculum translates to less time per topic. Less time means less depth and moving on without many students. Thus, materials must focus coherently on the Major Work of the grade in a way that is consistent with the progressions in the Standards.

Required Materials

- Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf)
- Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)
- Focus by Grade Level for the grade being evaluated (www.achievethecore.org/focus)
- From the materials being evaluated: teacher guides, student texts and workbooks

Rating this Criterion:

Non-Negotiable 2 is rated as Meets or Does Not Meet.

To rate Non-Negotiable 2, first rate metrics 2A–2H. Each of these eight metrics must be rated as Meets in order for Non-Negotiable 2 to be rated as Meets. Rate each metric 2A-2H as Meets or Does Not Meet/Insufficient Evidence. If the evidence examined shows that the Criterion is met, then mark the Criterion Meets. If the evidence examined shows that the Criterion is not met—or if there is insufficient evidence to make a determination—then mark the Criterion as Does Not Meet/Insufficient Evidence. Support all ratings with evidence.

Metric NN2A:
In each grade K–8, students and teachers using the materials as designed devote the large majority of time to the Major Work of the grade.

How to Find the Evidence:

Familiarize yourself with the Major Work of the grade being evaluated (see the Focus by Grade Level documents.)

Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, lessons, homework assignments, and assessments. (Evaluate both student and teacher materials.)

Consider time spent on the Major Work of the grade and judge qualitatively whether students and teachers using the materials as designed will devote the large majority of time to the Major Work of the grade.

For context, read Criterion #1 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013)

Evidence-

Major clusters appear early in the year.
- Clusters are color coded as
Major Clusters = green, Supporting = blue
Additional = yellow
11/15 topics are major clusters
1/15 = topic is a supporting cluster
3/15 are additional clusters

(Reviewer only.)

✓ **Meets**

Does Not Meet/ Insufficient Evidence

Metric NN2B: **Supporting work, where present, enhances focus and coherence simultaneously by also engaging students in the Major Work of the grade.** **How to Find the Evidence:** Familiarize yourself with the Major Work and Supporting Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate chapters and lessons that focus on Supporting Work. NOTE: Example of evaluating this Criterion might include looking at whether materials for K–5 generally treat data displays as an occasion for solving grade-level word problems using the four operations (e.g., see 3.MD.B.3); or whether materials for grade 7 take advantage of opportunities to use probability to support ratios, proportions, and percentages. For context, read Criterion #3 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Supporting work is noted in the table of contents, as well as color coded throughout the teacher's edition.	**(Reviewer only.)** ✓ **Meets** ____ **Does Not Meet/ Insufficient Evidence**
Metric NN2C: **Materials base content progressions on the grade-by-grade progressions in the Standards. Content from previous or future grades does not unduly interfere with or displace on-grade-level content.** **How to Find the Evidence:** Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, and lessons in both student and teacher materials. NOTE: In some cases it may be possible that aligned materials might address some aspects of a topic in a strategic way before or after the grade level in which the topic is central in the Standards' progressions; for example, a curriculum author might purposefully choose to explore adding fractions with unlike denominators in a way appropriate to grade four, recognizing that this work is not really required until the next grade. However, any such purposeful discrepancies in content progressions should enhance the required learning in each grade; not unduly interfere with or displace grade-level content; and be clearly aimed at helping students meet the Standards as written rather than effectively rewriting the progressions in the Standards. And in all cases, note that Non-Negotiable 1 must be met for materials to be aligned. For context, read Criterion #5a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Under to Coherence heading in each topic, teachers are aware of prior knowledge, new on-grade-level content, as well as future applications and standards. Example: TE page 75C-75D	**(Reviewer only.)** ✓ **Meets** ____ **Does Not Meet/ Insufficient Evidence**

Metric NN2D: **Materials give all students extensive work with on-grade-level problems.** **How to Find the Evidence:** Evaluate both student and teacher materials. If the materials provide resources for differentiated learning, consider whether lower-performing students have opportunities to engage with grade-level problems. Also consider whether higher-performing students are given opportunities to learn current grade-level content in greater depth. For context, read Criterion #5b in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** every lesson in envision has: Daily Common Core review, Solve & share, Visual learning bridge, Do You Understand? Show me!, Guided Practice, Reteaching Set. Independent Practice, Math Practices and Problem Solving, and leveled homework and practice. As well as lesson differentiation	(Reviewer only.) ✓ Meets ____Does Not Meet/ Insufficient Evidence
Metric NN2E: **Materials relate on-grade-level concepts explicitly to prior knowledge from earlier grades.** **How to Find the Evidence:** Evaluate both student and teacher materials. NOTE: Examples of evaluating this Criterion might include looking at the way the materials extend basic ideas of place value across the decimal point; or the role that properties of operations play when the materials extend arithmetic beyond whole numbers to fractions, variables, and expressions. More generally, cluster headings in the Standards sometimes signal key moments where reorganizing and extending previous knowledge is important in order to accommodate new knowledge (e.g., see cluster headings that use the phrase "Apply and extend previous understanding"). For context, read Criterion #5c in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** In the Teacher's Edition, each cluster overview contains a Section on Coherence that describes how the new on-grade-level content connects to prior knowledge in an earlier grade and/or prior knowledge earlier in the year. Example: TE 75C-75D	(Reviewer only.) ✓ Meets ____Does Not Meet/ Insufficient Evidence
Metric NN2F: **Review of material from previous grades is clearly identified as such to the teacher, and teacher and students can see what their specific responsibility is for the current year.** **How to Find the Evidence:** Evaluate the table of contents, but do not stop there; also evaluate units, chapters, lessons, homework assignments and assessments. (Evaluate both student and teacher materials.) Identify any content from previous grades and check whether it is identified as such. For context, read Criterion #5a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** - Fluency Practice - Daily Common Core Review - Today's Challenge - Placement Tests	(Reviewer only.) ✓ Meets ____Does Not Meet/ Insufficient Evidence

Metric NN2G: **Materials include learning objectives that are visibly shaped by CCSSM cluster headings.** **How to Find the Evidence:** Select several clusters from the Major Work in the grade being evaluated. Evaluate teacher and student materials in relation to these clusters. For context, read Criterion #6a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** The lesson overview in the TE includes the Domain, Cluster, Content Standard, Mathematical Practices, as well as a lesson objective that is shaped by the CCSSM Cluster.	(Reviewer only.) ✓ Meets ____Does Not Meet/ Insufficient Evidence
Metric NN2H: **Materials include problems and activities that serve to connect two or more clusters in a domain, or two or more domains in a grade, in cases where these connections are natural and important.** **How to Find the Evidence:** In the grade being evaluated, choose two or more clusters or two or more domains for which connections are natural and important. Evaluate the units, chapters, and lessons that deal with the chosen topics, looking for problems and activities that serve to connect the chosen clusters or domains. NOTE: An example of evaluating this Criterion might include looking at whether problems in grade 4 sometimes or often involve students applying their developing computation skills (detailed in domain NBT) in the context of solving word problems (detailed in domain OA). For context, read Criterion #6b in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Topic 4: Subtraction Facts to 20: use strategies focuses on developing operation properties + relationships (1.OA.B) but also develops subtraction facts (1.OA.C) and includes real world problems using basic facts (1.OA.A).	(Reviewer only.) ✓ Meets ____Does Not Meet/ Insufficient Evidence
Non-Negotiable 2: **Focus and Coherence** **Materials must focus coherently on the Major Work of the grade in a way that is consistent with the progressions in the Standards.** **NN 2** If all Metrics 2A – 2H were rated as Meets, then rate Non-Negotiable 2 as Meets. If one or more Metric was rated Does Not Meet/Insufficient Evidence, then rate Non-Negotiable 2 as Does Not Meet. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)** **Before moving to Alignment Criterion 1, record the final Meets or Does Not Meet rating in the Evaluation Summary.**		(Reviewer only.) ✓ Meets ____Does Not Meet **Strengths/Weaknesses:**

Now continue by evaluating the Alignment Criterion 1 for Rigor and Balance.

Directions for Alignment Criterion 1

Rigor and Balance

Alignment Criterion 1: Rigor and Balance

Materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.

The Standards set expectations for attention to all three aspects of rigor: conceptual understanding, procedural skill and fluency, and applications. Thus, materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.

Required Materials

- Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf)
- Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)
- Focus by Grade Level for the grade being evaluated (achievethecore.org/focus)
- Situation Types for the Operations in Word Problems (achievethecore.org/situation-types)
- From the materials being evaluated: teacher guides, student texts and workbooks

Rating this Criterion:

Alignment Criterion 1 is rated as Meets or Does Not Meet.

To rate Alignment Criterion 1, first rate metrics 1A, 1B, and 1C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). For each metric, guiding questions are provided to aid in gathering evidence.

Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 1 if the materials rate 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as rigor and balance, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.

Metric AC1A:
The materials support the development of students' conceptual understanding of key mathematical concepts, especially where called for in specific content Standards or cluster headings.

How to Find the Evidence:

Select one or more cluster(s) or Standard(s) from the Major Work for the grade being evaluated that relate specifically conceptual understanding to use throughout the questions associated with this metric. NOTE: Some examples of clusters or Standards that call for conceptual understanding include: K.OA.A.1, (1.NBT.B, 1.NBT.C), (2.NBT.A, 2.NBT.B), (3.OA.A.1, 3.OA.A.2), 4.NF.A, (4.NBT.A, 4.NBT.B), 5.NF.B, (5.NBT.A, 5.NBT.B), 6.RP.A, 6.EE.A.3, 7.NS.A, 7.EE.A, 8.EE.B, 8.F.A, 8.G.A

Clusters or Standards grouped by parentheses are closely connected and could be analyzed together.

For context, read Criterion #4a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).

-Choose a cluster/Standard from the Major Work that is aligned to each aspect of rigor and use it to evaluate these metrics. It is most helpful if the same clusters/Standards are chosen for all of the programs being evaluated. (Guidance in choosing clusters/Standards is included in "How to Find the Evidence".)

Use the questions for AC Metric 1A to evaluate Metric 1A. Record evidence for each question and rate Metric 1A.

_✓_ Meets (2)

____ Partially Meets (1)

____ Does Not Meet (0)

Is conceptual understanding attended to thoroughly where the Standards set e[illegible] expectations for understanding or interpreting? Evaluate lessons, chapter/unit assessments and homework assignments, paying attention to work aligned to Standards that explicitly call for understanding or interpreting. NOTE: Examples of evaluating this Criterion might include looking at how well the multi-digit addition and subtraction algorithms are developed and explained on the basis of place value and properties of operations; or how well the multi-digit multiplication and division algorithms are developed and explained on the basis of place value and properties of operations; or how well solving equations is presented and explained as a process of reasoning.	**Evidence-** 1.OA.B understand and apply properties of operations and the relationships between addition & subtraction. * Counting on * doubles * near doubles * make a ten	
Do the materials feature high-quality conceptual problems and conceptual discussion questions? Evaluate lessons, chapter/unit assessments, and homework assignments. NOTE: Example of conceptual problems might include such questions as "Find a number greater than 1/5 and less than 1/4," or "If the divisor does not change and the dividend increases, what happens to the quotient?"	**Evidence-** The TE provides Before, During, & After questions to support best practices and promote discourse.	
Do the materials feature opportunities to identify correspondences across mathematical representations? Evaluate lessons, chapter/unit assessments and homework assignments. NOTE: Examples of evaluating this Criterion might include looking at whether students are supported in identifying correspondences among: the verbal description of a situation, the diagrams that distill its mathematical features, and the equations that model it; or equivalent forms of numbers (e.g., 3 and 6/2) and the number line; or rational number operations and representations of them via models such as the vector model; or the expression that defines a function and the graph that shows the relationship.	**Evidence-** Students are prompted to use pictorial, concrete, and symbolic models for mathematical concepts. (Examples: SE/TE 309, 315, 321, 327, 331)	
Metric AC1B: **The materials are designed so that students attain the fluencies and procedural skills required by the Standards.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Major Work for the grade being evaluated that relate specifically to fluency and procedural skill to use throughout the questions associated with this metric. NOTE: Some examples of Standards that call for procedural skill and fluency include: K.OA.A.5, 1.OA.C.6, 2.OA.B.2, 2.NBT.B.5, 3.OA.C.7, 3.NBT.A.2, 4.NBT.B.4, 5.NBT.B.5, 6.NS.B.2, and 6.NS.B.3, 6.EE.A, 7.NS.A, 7.EE.A.1,7.EE.B.4a, 8.EE.C.7, 8.EE.C.8b For context, read Criterion #4b in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).		**Use the questions for Metric 1B to evaluate Metric 1 B. Record evidence for each question and rate Metric 1B.** **(Reviewer only.)** ✓ **Meets (2)** **Partially Meets (1)** **Does Not Meet (0)**

Is progress toward fluency and procedural skill interwoven with students' developing conceptual understanding of the operations in question? Evaluate lessons, chapter/unit assessments, daily routines, and homework assignments for evidence that the development of fluency and procedural skill is supported by conceptual understanding.	**Evidence-** Practice for fluency is found in Topic 1 and topic 2.	
Are purely procedural problems and exercises present that include cases in which opportunistic strategies are valuable and generic cases that require efficient algorithms present? Evaluate lessons, chapter/unit assessments, daily routines, and homework assignments. NOTE: Examples of problems in which opportunistic strategies are valuable might include the sum 698 + 240 or the system x + y = 1, 2x + 2y = 3. Examples of generic cases that require efficient algorithms might include the sum 8767+2286 or the system 6y + x = x + 3, – x = 1 + 2y.	**Evidence-** Opportunities throughout for students to use strategies that make sense to them, if even if they are non-traditional.	
Do the materials in grades K–6 provide repeated practice toward attainment of fluency Standards? Evaluate lessons, daily routines, and homework assignments for evidence of repeated practice toward attainment of the following K–6 Standards that set an explicit expectation of fluent (accurate and reasonably fast) computation: K.OA.A.5, 1.OA.C.6, 2.OA.B.2, 2.NBT.B.5, 3.OA.C.7, 3.NBT.A.2, 4.NBT.B.4, 5.NBT.B.5, 6.NS.B.2, 6.NS.B.3.	**Evidence-** fluency practice activities, fluency practice/assessment, games, intervention, and "My Fluency Progess" form.	
Metric AC1C: **The materials are designed so that teachers and students spend sufficient time working with engaging applications, without losing focus on the Major Work of each grade.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Major Work for the grade being evaluated that relate specifically application to use throughout the questions associated with this metric. NOTE: Some examples of clusters or Standards that call for application include: K.OA.A.2, 1.OA.A, 2.OA.A, 3.OA.A.3, 3.OA.D.8, 4.OA.A.3, 4.NF.B.3d, 4.NF.B.4c, 5.NF.B.6, 5.NF.B.7c, 6.RP.A.3, 6.NS.A.1, 6.EE.B.7, 6.EE.C.9, 7.RP.A, 7.NS.A.3, 7.EE.B.3, 8.EE.C.8c, 8.F.B For context, read Criterion #4c in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Each lesson begins with "Solve and Share" where students make connections to prior knowledge and determine their own method for solving the problem.	**Use the questions for Metric 1C to evaluate Metric 1C. Record evidence for each question and rate Metric 1C.** **(Reviewer only.)** ✓ **Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Are there are single- and multi-step contextual problems, including non-routine problems, that develop the mathematics of the grade, afford opportunities for practice, and engage students in problem solving? Do the problems attend thoroughly to those places in the content Standards where expectations for multi-step and real-world problems are explicit? Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** Lessons 5-6, students make sense of word problems. (TE/SE p. 329-334)	

Do application problems particularly stress applying the Major Work of the grade? Evaluate lessons, chapter/unit assessments, and homework assignments. NOTE: Examples of evaluating this Criterion might include looking at: how well, by the end of grade 2, students using the materials as designed can represent and solve a full range of one-step addition and subtraction word problems; or how well, by the end of grade 3, students using the materials as designed can represent and solve a full range of one-step multiplication and division word problems; or how well these basic situation types for each operation are carried coherently across the grades, (e.g., with fractions and algebraic expressions); or, in all grades, whether the problems connect concepts, Standards, and domains in ways that are natural and important. For a list of situation types for one-step addition, subtraction, multiplication, and division problems, see Situation Types for the Operations in Word Problems	**Evidence-** Solve & Share: start of each lesson, apply prior knowledge Visual Learning Bridge: real-world problems, follow-up to Solve & Share, reinforce operation meanings.	
Does modeling build slowly across K–8, with applications that are relatively simple in earlier grades and when students are encountering new content? In grades 6–8, do the problems begin to provide opportunities for students to make their own assumptions or simplifications in order to model a situation mathematically? Read Standard for Mathematical Practice 4, Model with Mathematics. Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** Students model math problems with concrete objects & manipulatives -colored counters -number lines -cubes -graphs -models -pictures -symbols	

Alignment Criterion 1: Rigor and Balance

Materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.

AC1 Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 out of 6 points, the Criterion has not been met. Check the final rating.
Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)**

Before moving to Alignment Criterion 2, record the final Meets or Does Not Meet rating in the Evaluation Summary.

(Reviewer only.)

✓ **Meets**

____ **Does Not Meet**

Strengths/Weaknesses:

Directions for Alignment Criterion 2

Standards for Mathematical Practice

Alignment Criterion 2: Standards for Mathematical Practice

Materials must demonstrate authentic connections between content Standards and practice Standards.

The Standards require that designers of instructional materials connect the mathematical practices to mathematical content in instruction. Thus, materials must demonstrate authentic connections between content Standards and practice Standards.

Required Materials:

- Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf)
- Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)
- Focus by Grade Level for the grade being evaluated (www.achievethecore.org/focus)
- From the materials being evaluated: teacher guides, student texts and workbooks

Rating this Criterion

Alignment Criterion 2 is rated as Meets or Does Not Meet.

To rate Alignment Criterion 2, first rate metrics 2A, 2B, and 2C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). For each metric, guiding questions are provided to aid in gathering evidence.

Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 2 if the materials earn 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as mathematical practices, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.

Metric AC2A:
Materials address the practice Standards in such a way as to enrich the Major Work of the grade; practices strengthen the focus on Major Work instead of detracting from it, in both teacher and student materials.

How to Find the Evidence:

Familiarize yourself with the Major Work of the grade being evaluated (see the Focus by Grade Level documents.)

Evaluate teacher and student materials for evidence that the mathematical practices support and connect to the focus of the grade.

NOTE: Examples of evaluating this Criterion might include looking at whether, in grades K–5, students using the materials are supported to look for and express regularity in repeated reasoning about the addition table, the multiplication table, the properties of operations, the relationship between addition and subtraction or multiplication and division, and the place value system; or whether, in grades 6–8, students using the materials are supported to look for and express regularity in repeated reasoning about proportional relationships and linear functions.

For context, read Criterion #8 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013).

Evidence-

A Comprehensive Math Practices and Problem Solving lesson in every topic is completly devoted to and gives special focus to one of the eight math practices.

lessons: 1-9, 2-10, 3-10, 4-9, 5-7, 6-5, 7-7, 8-6, 9-6, 10-9, 11-7, 12-5, 13-4, 14-9, 15-4

(Reviewer only.)

✓ **Meets (2)**

____ **Partially Meets (1)**

____ **Does Not Meet (0)**

Metric AC2B: **Materials att to the full meaning of each practice Standard.** **How to Find the Evidence:** For context, read Criterion #7 and Criterion #9 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).		**Use the questions for Metric 2B to evaluate Metric 2B. Record evidence for each qu n and rate Metric 2B.** **(Reviewer only.)** ✓ **Meets (2)** **Partially Meets (1)** **Does Not Meet (0)**
Over the course of any given year of instruction, is each mathematical practice Standard meaningfully present in the form of assignments, activities, or problems that stimulate students to develop the habits of mind described in the practice Standard? Evaluate lessons, chapter/ unit assessments, and homework assignments for evidence of each mathematical practice being meaningfully present in instruction.	**Evidence-** There are special lessons in each topic that focuses on each of the eight Math Practices.	
Do the materials treat the practice Standards as developing across grades or grade bands? Are the practice Standards in early grades appropriately simple? Do they display an arc of growing sophistication across the grades?	**Evidence-** Math Practices are throughout all daily lessons & in Math Practices and Problem Solving lessons.	
Are there teacher-directed materials that explain the role of the practice Standards in the classroom and in students' mathematical development? Are alignments to practice Standards accurate?	**Evidence-** TE includes - Math Practices - Problem Solving Guide · recording sheet - Math Practices rubric	
Metric AC2C: **Materials support the Standards' emphasis on mathematical reasoning.** **How to Find the Evidence:** For context, read Criterion #10 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).		**Use the questions for Metric 2C to evaluate Metric 2C. Record evidence for each question and rate Metric 2C.** **(Reviewer only.)** ✓ **Meets (2)** **Partially Meets (1)** **Does Not Meet (0)**
Do the materials support students in constructing viable arguments and critiquing the arguments of others concerning grade-level mathematics that is detailed in the content Standards? Read Standard for Mathematical Practice 3. Evaluate teacher and student materials to ensure that students are given opportunities to reason with grade-level mathematics.	**Evidence-** Student demostrate MP. 3 throughout lessons and topics connected directly to grade-level content. (TE: 21, 57, 52, 86, 60)	
Do the materials support students in producing not only answers and solutions, but also, in a grade-appropriate way, arguments, explanations, diagrams, mathematical models, etc., especially in the Major Work of the grade? Familiarize yourself with the Major Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate teacher and student materials, to understand the types of work students are expected to produce.	**Evidence-** Grade 1 Topic 10 students are encouraged to represent their thinking with concrete & abstract models throughout the unit. (TE 541A-541F)	

Do materials explicitly attend to the specialized language of mathematics? Is the language of argument, problem solving, and mathematical explanations taught rather than assumed? Evaluate teacher and student materials, paying attention to how mathematical language is taught. NOTE: Examples of evaluating this Criterion might include looking at whether students are supported in: basing arguments on definitions; using the method of providing a counterexample; or recognizing that examples alone do not establish a general statement.	**Evidence-** - Vocabulary cards - Vocabulary review - glossary - online vocab. games	

Alignment Criterion 2:
Standards for Mathematical Practice

Materials must demonstrate authentic connections between content Standards and practice Standards.

AC2 Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 out of 6 points, the Criterion has not been met. Check the final rating.
Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion.
(Reviewer only.)

Before moving to Alignment Criterion 3, record the final Meets or Does Not Meet rating in the Evaluation Summary.

(Reviewer only.)

✓ Meets

____Does Not Meet

Strengths/Weaknesses:

Alignment Criterion 3:
Access to the Standards for All Students

Materials must provide supports for English Language Learners and other special populations.

Because Standards are for all students, alignment requires thoughtful support to ensure all students are able to meet the Standards. Thus, aligned materials must provide supports for English Language Learners and other special populations.

Required Materials:

- Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf)
- Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)
- From the materials being evaluated: teacher guides, student texts and workbooks

Rating this Criterion:
Alignment Criterion 3 is rated as Meets or Does Not Meet.

To rate Alignment Criterion 3, first rate metrics 3A, 3B, and 3C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points).

Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 3 if the materials earn 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as support for special population, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.

Metric AC3A: **Support for [illegible]lish Language Learners and other special populations is thoughtful and helps those students meet the same Standards as all other students. The language in which problems are posed is carefully considered.** **How to Find the Evidence:** Evaluate teacher and student materials, paying attention to supports offered for special populations.	**Evidence-** -Daily ELL instruction support for every lesson -Visual Learning Animation Plus - Sound + motion Visual Learning Bridge - Visual models Pictures, ELL Consultants	Reviewer only.) ✓ Meets (2) ____Partially Meets (1) ____Does Not Meet (0)
Metric AC3B: **Materials provide appropriate level and type of scaffolding, differentiation, intervention, and support for a broad range of learners with gradual removal of supports, when needed, to allow students to demonstrate their mathematical understanding independently.** **How to Find the Evidence:** Evaluate teacher and student materials, paying attention to whether materials provide differentiation that will lead all learners to engage with on-grade-level content.	**Evidence-** Every lesson can be broken up for beginning, intermediate, and advanced students. -Assignments, practice, and homework can be leveled as needed.	Reviewer only.) ✓ Meets (2) ____Partially Meets (1) ____Does Not Meet (0)
Metric AC3C: **Design of lessons recommends and facilitates a mix of instructional approaches for a variety of learners such as using multiple representations (e.g., including models, using a range of questions, checking for understanding, flexible grouping, pair-share).** **How to Find the Evidence:** Evaluate teacher materials, noting instructional approaches suggested for whole class and differentiated lessons and activities.	**Evidence-** -Digital math tools -Online games -Leveled homework + practice -Leveled assignments -math diagnostic intervention system -Online practice	Reviewer only.) ✓ Meets (2) ____Partially Meets (1) ____Does Not Meet (0)

Alignment Criterion 3: **Access to the Standards for All Students** **Materials must provide supports for English Language Learners and other special populations.** **AC3** Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 points, the Criterion has not been met. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion.**(Reviewer only.)** **Move to the Evaluation Summary and record the final Meets or Does Not Meet rating .**	**(Reviewer only.)** ✓ **Meets** ____ **Does Not Meet** **Strengths/Weaknesses:**

Once an evaluation for alignment to the Shifts and major features of the CCSS has been conducted using Sections 1-3, it's important to evaluate for overall quality and best practices. A starting list of Indicators of Quality are suggested below. States, districts and others evaluating instructional materials are encouraged to add to this list to ensure materials reflect local contexts. For background information on some of the Indicators of Quality in this section, refer to pp.18–21 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).

Indicators of Quality	**Evidence- Give specific examples.**	**Rating: (Reviewers only.)**
1. Lessons are thoughtfully structured and support the teacher in leading the class through the learning paths at hand, with active participation by all students in their own learning and in the learning of their classmates.	**Evidence-** two key steps to the core instructional model: ① Problem Based learning ② Visual learning	**(Reviewer only.)** _____ **Yes** _____ **No**
2. The underlying design of the materials includes both problems and exercises. (In solving problems, students learn new mathematics, whereas in working exercises, students apply what they have already learned to build mastery.) Each problem or exercise has a purpose. **NOTE: This Criterion does not require that the problems and exercises be labeled as such.**	**Evidence-** step 1 is problem based learning step 2 visual learning Bridge	**(Reviewer only.)** _____ **Yes** _____ **No**

3. Design of assignments is not haphazard: exercises are given in intentional sequences in order to strengthen students' mathematical understanding.	**Evidence-** Independent Practice, Practice Buddy Online, leveled homework and practice	**(Reviewer only.)** ✓ **Yes** ____ **No**
4. There are separate teacher materials that support and reward teacher study including, but not limited to: discussion of the mathematics of the units and the mathematical point of each lesson as it relates to the organizing concepts of the unit, discussion on student ways of thinking and anticipating a variety of students responses, guidance on lesson flow, guidance on questions that prompt students thinking, and discussion of desired mathematical behaviors being elicited among students.	**Evidence-** Professional development videos for each topic, extensive teaching notes, print & digital resources to assess	**(Reviewer only.)** ✓ **Yes** ____ **No**
5. Manipulatives suggested in the materials are faithful representations of the mathematical objects they represent and are connected to written methods.	**Evidence-** individual manipulative kits, teacher demonstration kits, center kits, and online virtual manipulatives	**(Reviewer only.)** ✓ **Yes** ____ **No**
6. Materials include a variety of curriculum-embedded assessments. Examples include pre-, formative, summative, and self-assessment resources.	**Evidence-** - Diagnostic assessment - start of the year - start of the topic - Formative assessment - During + end of lesson - Summative Assessment - end of topic	**(Reviewer only.)** ✓ **Yes** ____ **No**
7. Assessments contain aligned rubrics, answer keys, and scoring guidelines that provide sufficient guidance for interpreting student performance.	**Evidence-** - online self scoring assessments - math practices Proficiency rubric - scoring guides and student examples	**(Reviewer only.)** ✓ **Yes** ____ **No**
8. Materials assess student proficiency using methods that are accessible and unbiased, including the use of course-level language in student prompts.	**Evidence-** - Selected response - constructed response - technology enhanced items - Preformance tasks	**(Reviewer only.)** ✓ **Yes** ____ **No**

9. Materials are carefully evaluated by qualified individuals, whose names are listed, in an effort to ensure freedom from mathematical errors and course-level appropriateness.	**Evidence-** Yes, authors are listed	**(Reviewer only.)** ✓ **Yes** ____ **No**
10. The visual design supports students in engaging thoughtfully with the subject. Navigation through the text is clear.	**Evidence-** Visual design supports the two key steps in the core model and is engaging to young learners	**(Reviewer only.)** ✓ **Yes** ____ **No**
11. The materials engage parents in appropriate ways. For example, homework assignments in elementary grades, consist of routine problems, practice with getting answers, and fluency-building exercises that parents can easily support.	**Evidence-** - Homework & practice includes examples for parents & students - Another Look Homework Videos - parents can view student assignments online.	**(Reviewer only.)** ✓ **Yes** ____ **No**

Reviewer IMET Evaluation Summary **Title/Level:** _____

Publisher: _____ **Copyright:** _____ **ISBN:** _____

Reviewer ID # _____ **Date Review Completed:** _____

Non-Negotiable Criteria- Each Non-Negotiable must be met in order for the Non-Negotiable Alignment Criteria to be met overall.

Non-Negotiable 1: Freedom from Obstacles to Focus	Non- Negotiable 2: Focus and Coherence
✓ Meets _____ Does Not Meet	✓ Meets _____ Does Not Meet

Non-Negotiable Overall:

_____ **Meets** _____ **Does Not Meet**

Alignment Criteria- Each Alignment Criterion must be met with a sufficient number of points in order for Alignment Criteria to be labeled as "Meets" overall. The more points the materials receive on the Alignment Criteria, the better they are aligned.

Alignment Criterion 1: Rigor and Balance	Alignment Criterion 2: Standards of Mathematical Practice	Alignment Criterion 3: Access to Standards for All Learners
Points: 6 of 6 possible. (Materials must receive at least 5 of 6 points to align.) ✓ Meets _____ Does Not Meet	Points: 6 of 6 possible. (Materials must receive at least 5 of 6 points to align.) ✓ Meets _____ Does Not Meet	Points: 6 of 6 possible. (Materials must receive at least 5 of 6 points to align.) ✓ Meets _____ Does Not Meet

Alignment Criteria Overall:

✓ **Meets** _____ **Does Not Meet**

If the materials meet both Non-Negotiables and relevant Alignment Criterion, they are aligned to the Shifts and major features of the Core Standards. **Do the materials meet every Non-Negotiable and Alignment Criterion?** ✓ **Yes** _____ **No**

What are the specific areas of strength and weakness based on this evaluation? Publishers or others modifying or developing assessments can use this information to make improvements and/or to remedy gaps in the alignment of assessment materials.

2015-16 Mathematics Interim Review Recommendation & Summary

Publisher Name:	Pearson Education
Title:	EnVision Math 2.0
ISBN #	9780328847600
Grade Level(s) or Course:	2
Reviewer ID:	KC + TB

RECOMMENDED AS:

X **Core Mathematics Program-** a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials. Substantial evidence clearly supports the designation of this program as Core.

_____ **Other Mathematics Program-** a program that substantially, but partially, meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for supplemental materials. Substantial evidence clearly supports the designation of this program as Other.

_____ **Component Mathematics Program-** a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs. Substantial evidence clearly supports the designation of this program as Component.

_____ **Intervention Program-** a program designed and intended to target and support students' specific needs. Substantial evidence clearly supports the designation of this program as Intervention.

_____ **Does not meet criteria** for recommendation as a Curricular Material or Online Resource for Mathematics.

EVIDENCE SUMMARY:

FOCUS- The program reflects the CCSS materials for 2nd grade without assessing topics that aren't supposed to be addressed. The majority of time is spent on the major work of the grade.
No evidence of content that "unduly" inteferes with grade-level content

COHERENCE-
The program supports students understanding of key mathematical concepts and progresses in a logical and coherent manner. The material is designed to meet the fluencies and procedural skills required by the standards.

RIGOR-
In the Teacher's Edition, each cluster has a section called "Rigor" which includes information about conceptual understanding.

CONCEPTUAL UNDERSTANDING-
Students use pictorial, concrete and symbolic models to develop math understanding and solve problems. Various strategies are taught to help students understand and apply a concept.

MATHEMATICAL PRACTICES-
Besides the CCSSM clusters, the 8 standards for Mathematical Practice are used and integrated into the curriculum. Engagement of the mathematical practices enables learners to develop understanding.

ACCESSIBILITY OF STANDARDS TO ALL STUDENTS-
There is daily ELL instruction support. Every lesson can be broken up for beginning, intemediate and advanced students. Digital math tools, on-line games, leveled homework and practice, math diagnostic & intervention systems.

OTHER:

2015-16 Interim Mathematics Review

Mathematics Evaluation Tool Grades K-8

Publisher: Pearson Education

Title of Material: enVision Math 2.0 Grade 2

Author: R.I. Charles et al.

ISBN #: 9780328847600 **Copyright** 2016

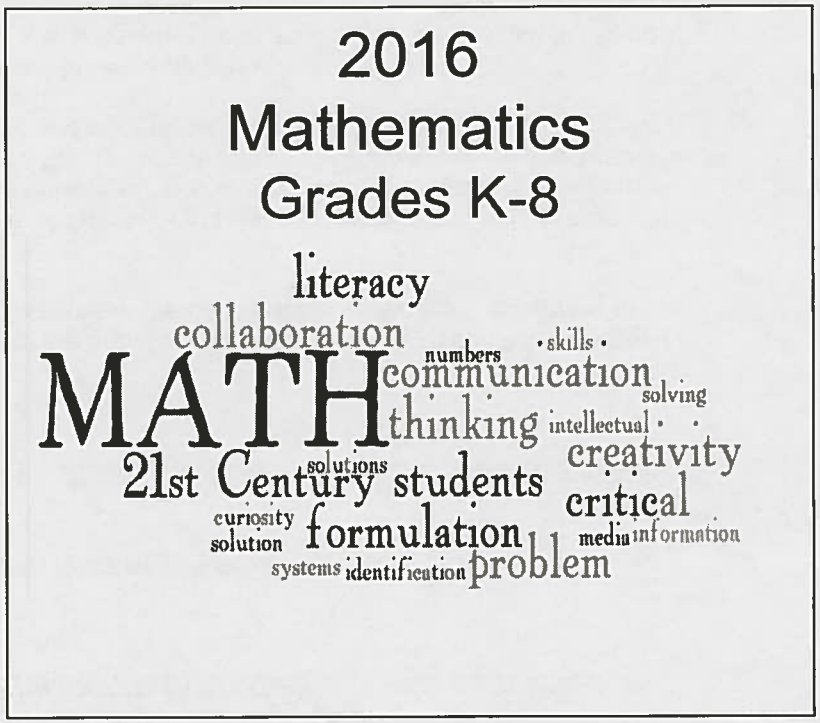
Reviewer ID: _____

Core Mathematics Program- a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Core.

Other Mathematics Program- a program that substantially, but partially, meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Other.

Component Mathematics Program- a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs.
Substantial evidence clearly supports the designation of this program as Component.

Intervention Program- a program designed and intended to target and support students' specific needs.
Substantial evidence clearly supports the designation of this program as Intervention.



- Evaluation Form adapted from Instructional Materials Evaluation Toolkit (IMET).

The IMET was developed by Student Achievement Partners. Educators may use or adapt. http://creativecommons.org/licenses/by/3.0/ Download this tool at http://achievethecore.org/IMET

Instructional Materials Evaluation Tool

Mathematics, Grades K-8

What Are the Purposes of the IMET?

This Math IMET is designed to help educators determine whether instructional materials are aligned to the Shifts and major features of the Common Core State Standards (CCSS). The substantial instructional Shifts (http://www.corestandards.org/other-resources/key-shifts-inmathematics/) at the heart of the Common Core State Standards are:

- **Focus** strongly where the Standards focus
- **Coherence**: Think across grades and link to major topics within the grade
- **Rigor**: In major topics, pursue conceptual understanding, procedural skill and fluency, and application with equal intensity.

The IMET draws directly from the following documents:

- Common Core State Standards for Mathematics (www.corestandards.org/Math)
- Publishers' Criteria for the Common Core State Standards in Mathematics grade K-8 (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)

When to use the IMET

1. Purchasing materials: Many factors go into local purchasing decisions. Alignment to the Standards is a critical factor to consider. This tool is designed to evaluate alignment of instructional materials to the Shifts and the major features of the CCSS. It also provides suggestions of additional indicators to consider in the materials evaluation and purchasing process.

2. Evaluating materials currently in use: The IMET can be used to analyze the degree of alignment of existing materials and help to highlight specific, concrete flaws in alignment. Even where materials and tools currently in use fail to meet one or more of these criteria, the pattern of failure is likely to be informative. States and districts can use the evaluation to create a thoughtful plan to modify or combine existing resources in such a way that students' actual learning experiences approach the focus, coherence, and rigor of the Standards.

3. Developing programs: Those developing new programs can use this tool as guidance for creating aligned curricula.
Please note this tool was designed for evaluating comprehensive curricula (including any supplemental or ancillary materials), but it was not designed for the evaluation of standalone supplemental materials.

Who Uses the IMET?

Evaluating instructional materials requires both subject-matter and pedagogical expertise. Evaluators should be well versed in the Standards (www.corestandards.org/Math) for all grades in which materials are being evaluated. This includes understanding the Major Work of the grade (www.achievethecore/focus), the Supporting and Additional work, how the content fits into the progressions in the Standards (www.achievethecore.org/progressions), and the expectations of the Standards with respect to conceptual understanding, procedural skill and fluency, and application. Evaluators also should be familiar with the substantial instructional Shifts (http:// www.corestandards.org/other-resources/key-shifts-in-mathematics/) of Focus, Coherence and Rigor that are listed above.

Getting Started

Prior to Evaluation

Assemble all of the materials necessary for the evaluation. It is essential for evaluators to have materials for all grades covered by the program, as some criteria cannot be rated without having access to each grade. In addition, each evaluator should have a reference copy of the Common Core State Standards for Mathematics (CCSSM) and the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013).

Instructional Materials Evaluation Tool
Mathematics, Grades K-8

What Are the Purposes of the IMET?
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Getting Started
Prior to Evaluation

Assemble all of the materials necessary for the evaluation. It is essential for evaluators to have materials for all grades covered by the program, as some criteria cannot be rated without having access to each grade. In addition, each evaluator should have a reference copy of the Common Core State Standards for Mathematics (CCSSM) and the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013).

Before conducting the evaluation itself, it is important to develop a protocol for the evaluation process. The protocol should include having evaluators study the Publishers' Criteria and the IMET. It will also be helpful for evaluators to get a sense of each program overall before beginning the process. At a minimum, this would include reading the front matter of the text, looking at the table of contents and paging through multiple chapters.

Sections 1-3 below should be completed to produce a comprehensive picture of the strengths and weaknesses of the materials under evaluation. Information about areas in need of improvement or supplementation should be shared with internal and external stakeholders.

Navigating the Tool

Begin with Section 1: Non-Negotiable Alignment Criteria

- The Non-Negotiable Alignment Criteria must each be met in full for materials to be considered aligned to the Shifts and the major features of the Common Core State Standards. Each Non-Negotiable Alignment Criterion has one or more metrics associated with it; every one of these metrics must be met in order for the criterion as a whole to be met.

- Examine the relevant materials and use evidence to rate the materials against each criterion and its associated metric(s).

- Record and explain the evidence upon which the rating is based.

Continue to Section 2: Alignment Criteria

- The Alignment Criteria must each be met for materials to be considered aligned to the Shifts and the major features of the Common Core State Standards. Each Alignment Criterion has one or more metric associated with it; a specific number of these metrics must be met or partially met in order for the criterion as a whole to be met.

- Examine the materials in relation to these criteria, assigning each metric a point value. Rate the criterion as "Meets" or "Does Note Meet" based on the number of points assigned. The more points the materials receive on the alignment Criteria, the better they are aligned.

Record and explain the evidence upon which the rating is based.

Proceed to Section 4: Indicators of Quality

- Indicators of Quality are important considerations that will help evaluators better understand the overall quality of instructional materials. These considerations are not criteria for alignment to the CCSS, but they provide valuable information about additional program characteristics. Evaluators may want to add their own indicators to the examples provided.

Directions for Non-Negotiable 1

Freedom from Obstacles to Focus

Criterion	Evidence- Give specific examples.	Rating: (Reviewer only.)
Non-Negotiable 1: **Freedom from Obstacles to Focus** **Materials must reflect the content architecture of the Standards by not assessing the topics named before the grade level where they first appear in the Standards.** The Standards foster students' progress to algebra by focusing strongly on arithmetic. Consistent with this focus, certain topics from outside of arithmetic appear only in later grades. Thus, to be aligned, materials must reflect the content architecture of the Standards by not assessing the topics named before the grade level where they first appear in the Standards. In this criterion, "topics named" means the topics that are explicitly named in Metric 1A. No other topics should be added to the list in Metric 1A. (Note that other topics in the standards are addressed in criterion NN2.)	**Required Materials** • Common Core State Standards for Mathematics (www.corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf) • From the materials being evaluated: teacher guides and all assessment components	**Rating this Criterion**: Non-Negotiable 1 is rated as Meets or Does Not Meet. To rate Non-Negotiable 1, begin by rating Metric 1A. Since Metric 1A is the only metric for Non-Negotiable 1, the rating for Non-Negotiable 1 is the same as the rating for Metric 1A. If Metric 1A is rated as Does Not Meet, include evidence of when the named topic(s) is/are assessed. If the metric is rated as Meets, list the grade(s) examined in the evaluation.

Metric NN1A: **Materials reflect the basic architecture of the Standards by not assessing the listed topics before the grade level indicated.** • Probability, including chance, likely outcomes, probability models. (Introduced in the CCSSM in grade 7) • Statistical distributions, including center, variation, clumping, outliers, mean, median, mode, range, quartiles; and statistical association or trends, including two-way tables, bivariate measurement data, scatter plots, trend line, line of best fit, correlation. (Introduced in the CCSSM in grade 6) • Similarity, congruence, or geometric transformations. (Introduced in the CCSSM in grade 8) • Symmetry of shapes, including line/ reflection symmetry, rotational symmetry. (Introduced in the CCSSM in grade 4) **How to Find the Evidence:** Evaluate the table of contents, all chapter tests, all unit tests, and other such assessment components (including rubrics). For context, read Criterion #2 from the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013). NOTE: Grade alignments of other topics are addressed in Non-Negotiable 2, Focus and Coherence.) In this criterion, "topics named" means the topics that are explicitly named in Metric 1A. No other topics should be added to the list in Metric 1A. (Note that other topics in the standards are addressed in criterion NN2.)	**Evidence-** All major clusters are addressed and assessed in appropriate grade levels. Any additional skills or lessons, are identified as supplementary, and not assessed above grade level.	**(Reviewer only.)** **__X__Meets** **____Does Not Meet**
Non-Negotiable 1: Materials must reflect the content architecture of the Standards by not assessing the topics named* before the grade level where they first appear in the Standards. **NN 1** If Metric 1A was rated as Meets, then rate Non-Negotiable 1 as Meets. If Metric 1A was rated as Does Not Meet, then rate Non- Negotiable 1 as Does Not Meet. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion.**(Reviewer only.)** **Before moving to Non-Negotiable 2, record the final Meets or Does Not Meet rating in the Evaluation Summary.**		**(Reviewer only.)** **_X_ Meets** **____Does Not Meet** **Strengths/Weaknesses:** All grade level standards are clearly identified. Assessments align to each of the lessons taught, but do not exceed the grade level skills.

Directions for Non-Negotiable 2

Focus and Coherence

Non-Negotiable 2:

Focus and Coherence

Materials must focus coherently on the Major Work of the grade in a way that is consistent with the progressions in the Standards.

Focus and coherence are the two major evidence-based design principles of the Common Core State Standards for Mathematics (CCSSM, p. 3). Focus is necessary in order to fulfill the ambitious promise the states have made to their students by adopting the Standards: greater achievement at the college and career ready level; greater depth of understanding of mathematics; and a rich classroom environment in which reasoning, sense-making, applications, and a range of mathematical practices flourish. In simpler terms, a mile-wide, inch-deep curriculum translates to less time per topic. Less time means less depth and moving on without many students. Thus, materials must focus coherently on the Major Work of the grade in a way that is consistent with the progressions in the Standards.

Required Materials

- Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf)
- Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)
- Focus by Grade Level for the grade being evaluated (www.achievethecore.org/focus)
- From the materials being evaluated: teacher guides, student texts and workbooks

Rating this Criterion:

Non-Negotiable 2 is rated as Meets or Does Not Meet.

To rate Non-Negotiable 2, first rate metrics 2A–2H. Each of these eight metrics must be rated as Meets in order for Non-Negotiable 2 to be rated as Meets. Rate each metric 2A-2H as Meets or Does Not Meet/Insufficient Evidence. If the evidence examined shows that the Criterion is met, then mark the Criterion Meets. If the evidence examined shows that the Criterion is not met—or if there is insufficient evidence to make a determination—then mark the Criterion as Does Not Meet/Insufficient Evidence. Support all ratings with evidence.

Metric NN2A:

In each grade K–8, students and teachers using the materials as designed devote the large majority of time to the Major Work of the grade.

How to Find the Evidence:

Familiarize yourself with the Major Work of the grade being evaluated (see the Focus by Grade Level documents.)

Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, lessons, homework assignments, and assessments. (Evaluate both student and teacher materials.)

Consider time spent on the Major Work of the grade and judge qualitatively whether students and teachers using the materials as designed will devote the large majority of time to the Major Work of the grade.

For context, read Criterion #1 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013)

Evidence-

All major clusters, supporting clusters, and additional clusters are clearly identified, with approximately 80% of work in major clusters. All supporting and additional clusters work to build deeper conceptual understanding of the skills at grade level.

(Reviewer only.)

__X__Meets

____Does Not Meet/

Insufficient Evidence

Metric NN2B: **Supporting work, where present, enhances focus and coherence simultaneously by also engaging students in the Major Work of the grade.** **How to Find the Evidence:** Familiarize yourself with the Major Work and Supporting Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate chapters and lessons that focus on Supporting Work. NOTE: Example of evaluating this Criterion might include looking at whether materials for K–5 generally treat data displays as an occasion for solving grade-level word problems using the four operations (e.g., see 3.MD.B.3); or whether materials for grade 7 take advantage of opportunities to use probability to support ratios, proportions, and percentages. For context, read Criterion #3 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** **All supporting work develops concepts within the major work of the grade, and is clearly marked as such with descriptions of the connections made.**	(Reviewer only.) **_X__Meets** **____Does Not Meet/** **Insufficient Evidence**
Metric NN2C: **Materials base content progressions on the grade-by-grade progressions in the Standards. Content from previous or future grades does not unduly interfere with or displace on-grade-level content.** **How to Find the Evidence:** Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, and lessons in both student and teacher materials. NOTE: In some cases it may be possible that aligned materials might address some aspects of a topic in a strategic way before or after the grade level in which the topic is central in the Standards' progressions; for example, a curriculum author might purposefully choose to explore adding fractions with unlike denominators in a way appropriate to grade four, recognizing that this work is not really required until the next grade. However, any such purposeful discrepancies in content progressions should enhance the required learning in each grade; not unduly interfere with or displace grade-level content; and be clearly aimed at helping students meet the Standards as written rather than effectively rewriting the progressions in the Standards. And in all cases, note that Non-Negotiable 1 must be met for materials to be aligned. For context, read Criterion #5a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** **Teacher materials specifically list the content standards from previous grades which will support the learning of the skill being taught in the "Look Back" section. Standards for upcoming grades are also listed with descriptions of how the Grade 2 standard will connect to future content in "Look Ahead" section.**	(Reviewer only.) **__X__Meets** **____Does Not Meet/** **Insufficient Evidence**

Metric NN2D: **Materials gi[illegible]l students extensive work with on-grade-level problems.** **How to Find the Evidence:** Evaluate both student and teacher materials. If the materials provide resources for differentiated learning, consider whether lower-performing students have opportunities to engage with grade-level problems. Also consider whether higher-performing students are given opportunities to learn current grade-level content in greater depth. For context, read Criterion #5b in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Student workbook[illegible]ive individual practice and the teacher has access to online videos, worksheets, textbook problems, problem solving, reading mats, and daily review questions. All of these materials provide extension and remediation opportunities.	**(Reviewer only.)** __X__ **Meets** ____ **Does Not Meet/** **Insufficient Evidence**
Metric NN2E: **Materials relate on-grade-level concepts explicitly to prior knowledge from earlier grades.** **How to Find the Evidence:** Evaluate both student and teacher materials. NOTE: Examples of evaluating this Criterion might include looking at the way the materials extend basic ideas of place value across the decimal point; or the role that properties of operations play when the materials extend arithmetic beyond whole numbers to fractions, variables, and expressions. More generally, cluster headings in the Standards sometimes signal key moments where reorganizing and extending previous knowledge is important in order to accommodate new knowledge (e.g., see cluster headings that use the phrase "Apply and extend previous understanding"). For context, read Criterion #5c in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** All concepts are linked to previous grade concepts and skills. For example, pg. 1C shows how the first topic in the book (addition and subtraction) uses the terms "put together" and "take from", which ties to the language they used in 1st grade in the introduction of this concept.	**(Reviewer only.)** __X__ **Meets** ____ **Does Not Meet/** **Insufficient Evidence**
Metric NN2F: **Review of material from previous grades is clearly identified as such to the teacher, and teacher and students can see what their specific responsibility is for the current year.** **How to Find the Evidence:** Evaluate the table of contents, but do not stop there; also evaluate units, chapters, lessons, homework assignments and assessments. (Evaluate both student and teacher materials.) Identify any content from previous grades and check whether it is identified as such. For context, read Criterion #5a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** In the student workbook, at the beginning of each topic, students are asked to review in the "Review What You Know" section. This aligns with the teacher manual descriptions of previous and upcoming grade level connections.	**(Reviewer only.)** __X__ **Meets** ____ **Does Not Meet/** **Insufficient Evidence**

Metric NN2G: **Materials include learning objectives that are visibly shaped by CCSSM cluster headings.** **How to Find the Evidence:** Select several clusters from the Major Work in the grade being evaluated. Evaluate teacher and student materials in relation to these clusters. For context, read Criterion #6a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Each lesson is labeled with the CCSS, and pages in the teacher manual show how the lesson meets the standards and explains how to evaluate the work.	(Reviewer only.) __X__Meets ____Does Not Meet/ Insufficient Evidence
Metric NN2H: **Materials include problems and activities that serve to connect two or more clusters in a domain, or two or more domains in a grade, in cases where these connections are natural and important.** **How to Find the Evidence:** In the grade being evaluated, choose two or more clusters or two or more domains for which connections are natural and important. Evaluate the units, chapters, and lessons that deal with the chosen topics, looking for problems and activities that serve to connect the chosen clusters or domains. NOTE: An example of evaluating this Criterion might include looking at whether problems in grade 4 sometimes or often involve students applying their developing computation skills (detailed in domain NBT) in the context of solving word problems (detailed in domain OA). For context, read Criterion #6b in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Concepts are aligned throughout the curriculum, and when appropriate, are connected to one another.	(Reviewer only.) __X__Meets (but weak) ____Does Not Meet/ Insufficient Evidence
Non-Negotiable 2: **Focus and Coherence** **Materials must focus coherently on the Major Work of the grade in a way that is consistent with the progressions in the Standards.** NN 2 If all Metrics 2A – 2H were rated as Meets, then rate Non-Negotiable 2 as Meets. If one or more Metric was rated Does Not Meet/Insufficient Evidence, then rate Non-Negotiable 2 as Does Not Meet. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)** **Before moving to Alignment Criterion 1, record the final Meets or Does Not Meet rating in the Evaluation Summary.**		(Reviewer only.) __X__Meets ____Does Not Meet **Strengths/Weaknesses:**

Now continue by evaluating the Alignment Criterion 1 for Rigor and Balance.

Directions for Alignment Criterion 1

Rigor and Balance

Alignment Criterion 1: Rigor and Balance **Materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.** The Standards set expectations for attention to all three aspects of rigor: conceptual understanding, procedural skill and fluency, and applications. Thus, materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.	**Required Materials** • Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf) • Focus by Grade Level for the grade being evaluated (achievethecore.org/focus) • Situation Types for the Operations in Word Problems (achievethecore.org/situation-types) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion:** Alignment Criterion 1 is rated as Meets or Does Not Meet. To rate Alignment Criterion 1, first rate metrics 1A, 1B, and 1C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). For each metric, guiding questions are provided to aid in gathering evidence. Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 1 if the materials rate 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as rigor and balance, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.
Metric AC1A: **The materials support the development of students' conceptual understanding of key mathematical concepts, especially where called for in specific content Standards or cluster headings.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Major Work for the grade being evaluated that relate specifically conceptual understanding to use throughout the questions associated with this metric. NOTE: Some examples of clusters or Standards that call for conceptual understanding include: K.OA.A.1, (1.NBT.B, 1.NBT.C), (2.NBT.A, 2.NBT.B), (3.OA.A.1, 3.OA.A.2), 4.NF.A, (4.NBT.A, 4.NBT.B), 5.NF.B, (5.NBT.A, 5.NBT.B), 6.RP.A, 6.EE.A.3, 7.NS.A, 7.EE.A, 8.EE.B, 8.F.A, 8.G.A Clusters or Standards grouped by parentheses are closely connected and could be analyzed together. For context, read Criterion #4a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	-Choose a cluster/Standard from the Major Work that is aligned to each aspect of rigor and use it to evaluate these metrics. It is most helpful if the same clusters/Standards are chosen for all of the programs being evaluated. (Guidance in choosing clusters/Standards is included in "How to Find the Evidence".)	**Use the questions for AC Metric 1A to evaluate Metric 1A. Record evidence for each question and rate Metric 1A.** **__X__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**

Is conceptual understanding attended to thoroughly where the Standards set ex[illegible] expectations for understanding or interpreting? Evaluate lessons, chapter/unit assessments and homework assignments, paying attention to work aligned to Standards that explicitly call for understanding or interpreting. NOTE: Examples of evaluating this Criterion might include looking at how well the multi-digit addition and subtraction algorithms are developed and explained on the basis of place value and properties of operations; or how well the multi-digit multiplication and division algorithms are developed and explained on the basis of place value and properties of operations; or how well solving equations is presented and explained as a process of reasoning.	**Evidence-** The lessons build c[illegible]arious strategies and models to develop conceptual understanding. For example, for addition students begin with making 10s, cube links, decomposing, compensation, visual models, partial sums, and reasoning problems. These begin the foundation for understanding the concept of addition and subtraction algorithms in future grades. Strong focus on place value throughout curriculum.	
Do the materials feature high-quality conceptual problems and conceptual discussion questions? Evaluate lessons, chapter/unit assessments, and homework assignments. NOTE: Example of conceptual problems might include such questions as "Find a number greater than 1/5 and less than 1/4," or "If the divisor does not change and the dividend increases, what happens to the quotient?"	**Evidence-** The "Make Sense" and "reasoning" problems give students the opportunity to apply their practice standards. Additionally, the reading mats, interactive math stories, and enrichment worksheets add depth as well. On assessments, students are given the opportunity to "show what they know" using a variety of strategies and models.	
Do the materials feature opportunities to identify correspondences across mathematical representations? Evaluate lessons, chapter/unit assessments and homework assignments. NOTE: Examples of evaluating this Criterion might include looking at whether students are supported in identifying correspondences among: the verbal description of a situation, the diagrams that distill its mathematical features, and the equations that model it; or equivalent forms of numbers (e.g., 3 and 6/2) and the number line; or rational number operations and representations of them via models such as the vector model; or the expression that defines a function and the graph that shows the relationship.	**Evidence-** There are visual models used throughout the text such as hundreds boards, blocks, number lines, and some algorithms. These models evolve as the complexity increases throughout the text. For example, students move from enactive (unifix cubes) to iconic (bar models, number line) to symbolic (number sentences and eventually algorithms).	

Metric AC1B: **The materials are designed so that students attain the fluencies and procedural skills required by the Standards.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Major Work for the grade being evaluated that relate specifically to fluency and procedural skill to use throughout the questions associated with this metric. NOTE: Some examples of Standards that call for procedural skill and fluency include: K.OA.A.5, 1.OA.C.6, 2.OA.B.2, 2.NBT.B.5, 3.OA.C.7, 3.NBT.A.2, 4.NBT.B.4, 5.NBT.B.5, 6.NS.B.2, and 6.NS.B.3, 6.EE.A, 7.NS.A, 7.EE.A.1,7.EE.B.4a, 8.EE.C.7, 8.EE.C.8b For context, read Criterion #4b in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).		**Use the questions for Metric 1B to evaluate Metric 1 B. Record evidence for each question and rate Metric 1B.** **(Reviewer only.)** **__X__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Is progress toward fluency and procedural skill interwoven with students' developing conceptual understanding of the operations in question? Evaluate lessons, chapter/unit assessments, daily routines, and homework assignments for evidence that the development of fluency and procedural skill is supported by conceptual understanding.	**Evidence-** Daily review problems, fluency fact practice sheets, and warm-ups are available each day.	
Are purely procedural problems and exercises present that include cases in which opportunistic strategies are valuable and generic cases that require efficient algorithms present? Evaluate lessons, chapter/unit assessments, daily routines, and homework assignments. NOTE: Examples of problems in which opportunistic strategies are valuable might include the sum 698 + 240 or the system x + y = 1, 2x + 2y = 3. Examples of generic cases that require efficient algorithms might include the sum 8767+2286 or the system 6y + x = x + 3, – x = 1 + 2y.	**Evidence-** The first few problems of each lesson are mostly procedural with additional problems pushing to conceptual understanding, application, and problem solving.	
Do the materials in grades K–6 provide repeated practice toward attainment of fluency Standards? Evaluate lessons, daily routines, and homework assignments for evidence of repeated practice toward attainment of the following K–6 Standards that set an explicit expectation of fluent (accurate and reasonably fast) computation: K.OA.A.5, 1.OA.C.6, 2.OA.B.2, 2.NBT.B.5, 3.OA.C.7, 3.NBT.A.2, 4.NBT.B.4, 5.NBT.B.5, 6.NS.B.2, 6.NS.B.3.	**Evidence-** As addition and subtract is developed, students are encouraged to see patterns which increase mental fluency.	

Metric AC1C: **The materials are designed so that teachers and students spend sufficient time working with engaging applications, without losing focus on the Major Work of each grade.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Major Work for the grade being evaluated that relate specifically application to use throughout the questions associated with this metric. NOTE: Some examples of clusters or Standards that call for application include: K.OA.A.2, 1.OA.A, 2.OA.A, 3.OA.A.3, 3.OA.D.8, 4.OA.A.3, 4.NF.B.3d, 4.NF.B.4c, 5.NF.B.6, 5.NF.B.7c, 6.RP.A.3, 6.NS.A.1, 6.EE.B.7, 6.EE.C.9, 7.RP.A, 7.NS.A.3, 7.EE.B.3, 8.EE.C.8c, 8.F.B For context, read Criterion #4c in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** The artwork and colorful pages engage the students, but do not interfere with their focus. There are a lot of problems, which may overwhelm a student. Teachers need to be given the ability to utilize the leveled problems on each assignment. The teacher's manual specifies which problems are intervention, on level, and advanced. This way, students do not have to complete all problems on the page. The daily lesson structure is predictable. This can be both a pro and a con. Familiarity with the structure, allows students to focus on the math. However, this repeated structure may become monotonous over the school year or over the years a student is in school.	**Use the questions for Metric 1C to evaluate Metric 1C. Record evidence for each question and rate Metric 1C.** **(Reviewer only.)** **_X_ Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Are there are single- and multi-step contextual problems, including non-routine problems, that develop the mathematics of the grade, afford opportunities for practice, and engage students in problem solving? Do the problems attend thoroughly to those places in the content Standards where expectations for multi-step and real-world problems are explicit? Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** In each lesson, students are given the opportunity to apply what they know in problem solving contexts. Most lessons offer at least one multi-step problem. There are also additional resources such as the "Math and Science" activities which ask students to apply their learning.	
Do application problems particularly stress applying the Major Work of the grade? Evaluate lessons, chapter/unit assessments, and homework assignments. NOTE: Examples of evaluating this Criterion might include looking at: how well, by the end of grade 2, students using the materials as designed can represent and solve a full range of one-step addition and subtraction word problems; or how well, by the end of grade 3, students using the materials as designed can represent and solve a full range of one-step multiplication and division word problems; or how well these basic situation types for each operation are carried coherently across the grades, (e.g., with fractions and algebraic expressions); or, in all grades, whether the problems connect concepts, Standards, and domains in ways that are natural and important. For a list of situation types for one-step addition, subtraction, multiplication, and division problems, see Situation Types for the Operations in Word Problems	**Evidence-** The majority of lessons and activities focus on major work of Grade 2. The lessons are paced throughout the year, so that students are exposed to the foundational skills of the grade, at the beginning.	

Does modeling build slowly across K–8, with applications that are relatively simple in earlier grades and when students are encountering new content? In grades 6–8, do the problems begin to provide opportunities for students to make their own assumptions or simplifications in order to model a situation mathematically? Read Standard for Mathematical Practice 4, Model with Mathematics. Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** The modeling is consistent throughout the book, and into the following grades. This includes the lesson structure, additional resources, and language of math.	

Alignment Criterion 1: Rigor and Balance

Materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.

AC1 Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 out of 6 points, the Criterion has not been met. Check the final rating.
Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)**

Before moving to Alignment Criterion 2, record the final Meets or Does Not Meet rating in the Evaluation Summary.

(Reviewer only.)

__X__Meets

____Does Not Meet

Strengths/Weaknesses:

Directions for Alignment Criterion 2

Standards for Mathematical Practice

Alignment Criterion 2: Standards for Mathematical Practice

Materials must demonstrate authentic connections between content Standards and practice Standards.

The Standards require that designers of instructional materials connect the mathematical practices to mathematical content in instruction. Thus, materials must demonstrate authentic connections between content Standards and practice Standards.

Required Materials:

- Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf)
- Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)
- Focus by Grade Level for the grade being evaluated (www.achievethecore.org/focus)
- From the materials being evaluated: teacher guides, student texts and workbooks

Rating this Criterion

Alignment Criterion 2 is rated as Meets or Does Not Meet.

To rate Alignment Criterion 2, first rate metrics 2A, 2B, and 2C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). For each metric, guiding questions are provided to aid in gathering evidence.

Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 2 if the materials earn 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as mathematical practices, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.

Metric AC2A: **Materials address the practice Standards in such a way as to enrich the Major Work of the grade; practices strengthen the focus on Major Work instead of detracting from it, in both teacher and student materials.** **How to Find the Evidence:** Familiarize yourself with the Major Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate teacher and student materials for evidence that the mathematical practices support and connect to the focus of the grade. NOTE: Examples of evaluating this Criterion might include looking at whether, in grades K–5, students using the materials are supported to look for and express regularity in repeated reasoning about the addition table, the multiplication table, the properties of operations, the relationship between addition and subtraction or multiplication and division, and the place value system; or whether, in grades 6–8, students using the materials are supported to look for and express regularity in repeated reasoning about proportional relationships and linear functions. For context, read Criterion #8 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013).	**Evidence-** Math Practice Standards are clearly noted in various problems such as "Reasoning" and "Make Sense" throughout the text. Specific tasks have been designed to give students opportunities to develop these standards while learning specific skills from grade level work.	(Reviewer only.) **_X_ Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Metric AC2B: **Materials attend to the full meaning of each practice Standard.** **How to Find the Evidence:** For context, read Criterion #7 and Criterion #9 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).		**Use the questions for Metric 2B to evaluate Metric 2B. Record evidence for each question and rate Metric 2B.** (Reviewer only.) **_X_ Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Over the course of any given year of instruction, is each mathematical practice Standard meaningfully present in the form of assignments, activities, or problems that stimulate students to develop the habits of mind described in the practice Standard? Evaluate lessons, chapter/ unit assessments, and homework assignments for evidence of each mathematical practice being meaningfully present in instruction.	**Evidence-** Problems are specifically designed for the purpose of assessing and practicing these standards.	
Do the materials treat the practice Standards as developing across grades or grade bands? Are the practice Standards in early grades appropriately simple? Do they display an arc of growing sophistication across the grades?	**Evidence-** These standards are found in every grade level of materials reviewed.	

Are there teacher-directed materials that explain the role of the practice Standards in the classroom and in students' mathematical development? Are alignments to practice Standards accurate?	**Evidence-** The teacher's guide explains the role of the practice standards and how to engage students in the discussion.	
Metric AC2C: **Materials support the Standards' emphasis on mathematical reasoning.** **How to Find the Evidence:** For context, read Criterion #10 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).		**Use the questions for Metric 2C to evaluate Metric 2C. Record evidence for each question and rate Metric 2C.** **(Reviewer only.)** **__X__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Do the materials support students in constructing viable arguments and critiquing the arguments of others concerning grade-level mathematics that is detailed in the content Standards? Read Standard for Mathematical Practice 3. Evaluate teacher and student materials to ensure that students are given opportunities to reason with grade-level mathematics.	**Evidence-** Class problems and individual problems ask students to reason and justify. These problems are answered in writing, and would need the teacher to elicit conversation from the class based on these problems.	
Do the materials support students in producing not only answers and solutions, but also, in a grade-appropriate way, arguments, explanations, diagrams, mathematical models, etc., especially in the Major Work of the grade? Familiarize yourself with the Major Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate teacher and student materials, to understand the types of work students are expected to produce.	**Evidence-** In 2nd grade, some models are provided on the student workbook pages to help students at a developmentally appropriate level, but mathematical thinking is required to complete them.	
Do materials explicitly attend to the specialized language of mathematics? Is the language of argument, problem solving, and mathematical explanations taught rather than assumed? Evaluate teacher and student materials, paying attention to how mathematical language is taught. NOTE: Examples of evaluating this Criterion might include looking at whether students are supported in: basing arguments on definitions; using the method of providing a counterexample; or recognizing that examples alone do not establish a general statement.	**Evidence-** Language used matches the language used in CCSS, in standardized assessments, and in mathematical discussions. For example, the models are named "open number line" and "bar model". Teachers would want to supplement this language with words such as "iterate" and "partition".	

Alignment Criterion 2:
Standards for Mathematical Practice

Materials must demonstrate authentic connections between content Standards and practice Standards.

AC2 Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 out of 6 points, the Criterion has not been met. Check the final rating.
Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion.
(Reviewer only.)

Before moving to Alignment Criterion 3, record the final Meets or Does Not Meet rating in the Evaluation Summary.

(Reviewer only.)

__X__Meets

____Does Not Meet

Strengths/Weaknesses:

Alignment Criterion 3:
Access to the Standards for All Students

Materials must provide supports for English Language Learners and other special populations.

Because Standards are for all students, alignment requires thoughtful support to ensure all students are able to meet the Standards. Thus, aligned materials must provide supports for English Language Learners and other special populations.

Required Materials:

- Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf)
- Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)
- From the materials being evaluated: teacher guides, student texts and workbooks

Rating this Criterion:
Alignment Criterion 3 is rated as Meets or Does Not Meet.

To rate Alignment Criterion 3, first rate metrics 3A, 3B, and 3C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points).

Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 3 if the materials earn 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as support for special population, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.

Metric AC3A:
Support for English Language Learners and other special populations is thoughtful and helps those students meet the same Standards as all other students. The language in which problems are posed is carefully considered.

How to Find the Evidence:
Evaluate teacher and student materials, paying attention to supports offered for special populations.

Evidence-
Specific vocabulary introduction with visuals and modeling is apparent in each unit. ELL and differentiated lessons and small group activities are available within each topic.

Reviewer only.)

__X__Meets (2)

____Partially Meets (1)

____Does Not Meet (0)

Metric AC3B: **Materials pr[illegible]e appropriate level and type of scaffolding, differentiation, intervention, and support for a broad range of learners with gradual removal of supports, when needed, to allow students to demonstrate their mathematical understanding independently.** **How to Find the Evidence:** Evaluate teacher and student materials, paying attention to whether materials provide differentiation that will lead all learners to engage with on-grade-level content.	**Evidence-** Each lesson engag[illegible]students in a level of productive struggle prior to "instructing" on a skill. Review, remediation, and extension activities are available for each topic. Each assignment is also leveled, so that teachers can use discretion to assign a student at their instructional level. Intervention activities are listed as a reaction to students performing at lower levels on formative assessment.	**Reviewer only.)** **__X__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Metric AC3C: **Design of lessons recommends and facilitates a mix of instructional approaches for a variety of learners such as using multiple representations (e.g., including models, using a range of questions, checking for understanding, flexible grouping, pair-share).** **How to Find the Evidence:** Evaluate teacher materials, noting instructional approaches suggested for whole class and differentiated lessons and activities.	**Evidence-** There are videos, instructional texts, activities with manipulatives, problem solving, application of skills with reading mats, games, and math/science connection activities.	**Reviewer only.)** **__X__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Alignment Criterion 3: **Access to the Standards for All Students** **Materials must provide supports for English Language Learners and other special populations.** AC3 Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 points, the Criterion has not been met. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion.**(Reviewer only.)** **Move to the Evaluation Summary and record the final Meets or Does Not Meet rating .**		**(Reviewer only.)** **__X__Meets** **____Does Not Meet** **Strengths/Weaknesses:** There are many resources available for a teacher to choose from. This allows teachers to spend more or less time on a skill based on the needs of their students. At first, teachers will need to take time to learn and master the multitude of resources to know where to find each of the pieces.

Once an evaluation for alignment to the Shifts and major features of the CCSS has been conducted using Sections 1-3, it's important to evaluate for overall quality and best practices. A starting list of Indicators of Quality are suggested below. States, districts and others evaluating instructional materials are encouraged to add to this list to ensure materials reflect local contexts. For background information on some of the Indicators of Quality in this section, refer to pp.18–21 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).

Indicators of Quality	Evidence- Give specific examples.	Rating: (Reviewers only.)
1. Lessons are thoughtfully structured and support the teacher in leading the class through the learning paths at hand, with active participation by all students in their own learning and in the learning of their classmates.	**Evidence-** Active participation is required to develop concepts. Teacher may need to keep engagement in mind as they plan the lessons in order to avoid monotony.	**(Reviewer only.)** **__X__ Yes** **_____ No**
2. The underlying design of the materials includes both problems and exercises. (In solving problems, students learn new mathematics, whereas in working exercises, students apply what they have already learned to build mastery.) Each problem or exercise has a purpose. **NOTE: This Criterion does not require that the problems and exercises be labeled as such.**	**Evidence-** There are multiple applications for skills as listed previously.	**(Reviewer only.)** **__X__ Yes** **_____ No**
3. Design of assignments is not haphazard: exercises are given in intentional sequences in order to strengthen students' mathematical understanding.	**Evidence-** Formative assessment after each lesson, also helps teachers identify students who need intervention. Intervention activities are available based on specific needs of students. Summative assessment at the end of each topic is graded using a scoring rubric.	**(Reviewer only.)** **__X__ Yes** **_____ No**
4. There are separate teacher materials that support and **reward teacher study including, but not limited to: discussion of the mathematics of the units and the mathematical point of each lesson as it relates to the organizing concepts of the unit, discussion on student ways of thinking and anticipating a variety of students responses, guidance on lesson flow, guidance on questions that prompt students thinking, and discussion of desired mathematical behaviors being elicited among students.**	**Evidence-** Teacher guide is full of ideas to help students with concepts. There are examples of student thinking and reteach/extensions for most concepts.	**(Reviewer only.)** **__X__ Yes** **_____ No**
5. Manipulatives suggested in the materials are faithful representations of the mathematical objects they represent and are connected to written methods.	**Evidence-** At Grade 2, the students are encouraged to use many authentic tools which are then connected to the text.	**(Reviewer only.)** **__X__ Yes** **_____ No**

6. Materials include a variety of curriculum-embedded assessments. Examples include pre-, formative, summative, and self-assessment resources.	**Evidence-** Each lesson, topic, and chapter has assessment built in. There is also a diagnostic assessment to give prior to instruction, at the beginning of the year.	**(Reviewer only.)** **__X__ Yes** **_____ No**
7. Assessments contain aligned rubrics, answer keys, and scoring guidelines that provide sufficient guidance for interpreting student performance.	**Evidence-** There are scoring guides with descriptors of points possible and how they are earned. There are also digital tools for self-graded assessment.	**(Reviewer only.)** **__X__ Yes** **_____ No**
8. Materials assess student proficiency using methods that are accessible and unbiased, including the use of course-level language in student prompts.	**Evidence-** All questions connect back to the language and models used in the initial lesson.	**(Reviewer only.)** **__X__ Yes** **_____ No**
9. Materials are carefully evaluated by qualified individuals, whose names are listed, in an effort to ensure freedom from mathematical errors and course-level appropriateness.	**Evidence-** There are multiple professors and teachers listed. Specifically some authors who are engaged in current research.	**(Reviewer only.)** **__X__ Yes** **_____ No**
10. The visual design supports students in engaging thoughtfully with the subject. Navigation through the text is clear.	**Evidence-** The text can be a bit busy to the eye, but is consistent throughout. Once a teacher or student is used to the format, it should be easier to navigate.	**(Reviewer only.)** **__X__ Yes** **_____ No**
11. The materials engage parents in appropriate ways. For example, homework assignments in elementary grades, consist of routine problems, practice with getting answers, and fluency-building exercises that parents can easily support.	**Evidence-** There are online lesson videos, "reteach" sections on homework, and letters to send home at the beginning of each topic.	**(Reviewer only.)** **__X__ Yes** **_____ No**

Reviewer IMET Evaluation Summary **Title/Level:** enVision Math 2.0

Publisher: Pearson Education **Copyright:** 2016 **ISBN:** 9780328847600

Reviewer ID # KC & TB **Date Review Completed:** March 8, 2016

Non-Negotiable Criteria- Each Non-Negotiable must be met in order for the Non-Negotiable Alignment Criteria to be met overall.

Non-Negotiable 1: Freedom from Obstacles to Focus	Non- Negotiable 2: Focus and Coherence
X Meets	X Meets
_____ Does Not Meet	_____ Does Not Meet

Non-Negotiable Overall:

X Meets _____ Does Not Meet

Alignment Criteria- Each Alignment Criterion must be met with a sufficient number of points in order for Alignment Criteria to be labeled as "Meets" overall. The more points the materials receive on the Alignment Criteria, the better they are aligned.

Alignment Criterion 1: Rigor and Balance	Alignment Criterion 2: Standards of Mathematical Practice	Alignment Criterion 3: Access to Standards for All Learners
Points: 6 of 6 possible. (Materials must receive at least 5 of 6 points to align.)	Points: 6 of 6 possible. (Materials must receive at least 5 of 6 points to align.)	Points: 6 of 6 possible. (Materials must receive at least 5 of 6 points to align.)
X Meets	X Meets	X Meets
_____ Does Not Meet	_____ Does Not Meet	_____ Does Not Meet

Alignment Criteria Overall:

X Meets _____ Does Not Meet

If the materials meet both Non-Negotiables and relevant Alignment Criterion, they are aligned to the Shifts and major features of the Core Standards. **Do the materials meet every Non-Negotiable and Alignment Criterion? __X__ Yes _____ No**

What are the specific areas of strength and weakness based on this evaluation?

This curriculum is very clearly aligned with the Common Core Content Standards as well as the Mathematical Practice Standards. There is a clear scope and sequence within the grade level, as well as throughout the K-6 program. It is well organized with a variety of materials (hands on manipulatives, posters, reading mats, etc.) The online component is flexible for teachers to be able to rearrange and omit lessons when appropriate. All activities and lessons keep differentiation and learner needs in perspective.

The lesson structure is consistent throughout K-6. This is a strength and a weakness. Teachers and students may feel the lessons are monotonous, and engagement may decline as students see the same structure daily for years. Teachers must be given autonomy to be able to supplement and change the daily lesson structure when needed. There are many different resources, and teachers would benefit from a professional development by the publisher to become familiar with all components available.

2015-16 Mathematics Interim Review Recommendation & Summary

Publisher Name:	Pearson
Title:	enVision 2.0 Grade 3
ISBN #	978 032 884 7617
Grade Level(s) or Course:	3rd
Reviewer ID:	KC & PL

RECOMMENDED AS:

__X__ **Core Mathematics Program-** a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials. Substantial evidence clearly supports the designation of this program as Core.

_____ **Other Mathematics Program-** a program that substantially, but partially, meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for supplemental materials. Substantial evidence clearly supports the designation of this program as Other.

_____ **Component Mathematics Program-** a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs. Substantial evidence clearly supports the designation of this program as Component.

_____ **Intervention Program-** a program designed and intended to target and support students' specific needs. Substantial evidence clearly supports the designation of this program as Intervention.

_____ **Does not meet criteria** for recommendation as a Curricular Material or Online Resource for Mathematics.

EVIDENCE SUMMARY:

FOCUS- NN1/NN2

Major works of the grade are clearly identified. Any additional works are also easily identifiable and can be omitted for time or taught.

COHERENCE- NN2

Each grade level builds on previous grade, and builds towards upcoming grades. There is consistency in structure and language. Teacher edition lists previous/upcoming connected standards.

RIGOR- AC1

Students are pushed to understand, model, apply, and explain standards using a variety of models and strategies.

CONCEPTUAL UNDERSTANDING- AC1

Students are developing concepts using enactive, iconic, and symbolic models and strategies.

MATHEMATICAL PRACTICES- AC2

All mathematical practices are taught and applied through intentional problems and tasks. They are also clearly identified throughout the text. Teachers need to engage students in discussion, as many of these problems are written answers.

ACCESSIBILITY OF STANDARDS TO ALL STUDENTS- AC3

Differentiated activities and lessons are shown in teacher edition for each skill. Student worksheets are differentiated within the same problemset. Teachers can choose which level to assign.

OTHER:

Materials are very comprehensive. The structure is easy to follow, but may be seen as a bit overwhelming. The repetitive nature may become monotonous for teachers and students, and will require teacher creativity to ensure continued student engagement.

2[illegible]5-16 Interim Mathematics Review

Mathematics Evaluation Tool Grades K-8

Publisher: Pearson Education

Title of Material: enVision 2.0 Grade 3

Author: R. I. Charles et al.

ISBN #: 9780328847617 **Copyright** 2016

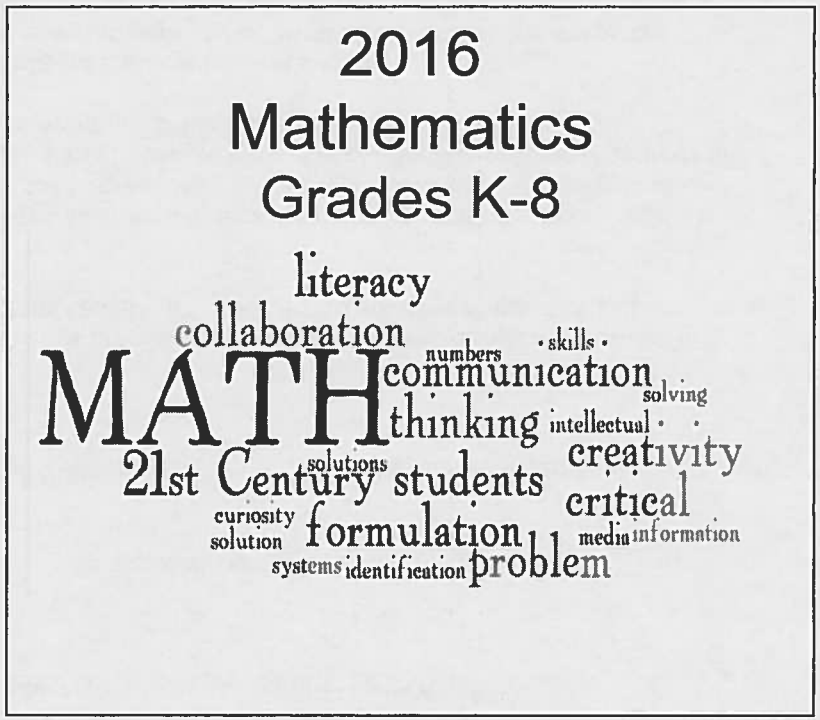
Reviewer ID: KC + PL

Core Mathematics Program- a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Core.

Other Mathematics Program- a program that substantially, but partially, meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Other.

Component Mathematics Program- a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs.
Substantial evidence clearly supports the designation of this program as Component.

Intervention Program- a program designed and intended to target and support students' specific needs.
Substantial evidence clearly supports the designation of this program as Intervention.



- Evaluation Form adapted from Instructional Materials Evaluation Toolkit (IMET).

The IMET was developed by Student Achievement Partners. Educators may use or adapt. http://creativecommons.org/licenses/by/3.0/ Download this tool at http://achievethecore.org/IMET

Directions for Non-Negotiable 2

Focus and Coherence

Non-Negotiable 2: **Focus and Coherence** **Materials must focus coherently on the Major Work of the grade in a way that is consistent with the progressions in the Standards.** Focus and coherence are the two major evidence-based design principles of the Common Core State Standards for Mathematics (CCSSM, p. 3). Focus is necessary in order to fulfill the ambitious promise the states have made to their students by adopting the Standards: greater achievement at the college and career ready level; greater depth of understanding of mathematics; and a rich classroom environment in which reasoning, sense-making, applications, and a range of mathematical practices flourish. In simpler terms, a mile-wide, inch-deep curriculum translates to less time per topic. Less time means less depth and moving on without many students. Thus, materials must focus coherently on the Major Work of the grade in a way that is consistent with the progressions in the Standards.	**Required Materials** • Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf) • Focus by Grade Level for the grade being evaluated (www.achievethecore.org/focus) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion:** Non-Negotiable 2 is rated as Meets or Does Not Meet. To rate Non-Negotiable 2, first rate metrics 2A–2H. Each of these eight metrics must be rated as Meets in order for Non-Negotiable 2 to be rated as Meets. Rate each metric 2A-2H as Meets or Does Not Meet/Insufficient Evidence. If the evidence examined shows that the Criterion is met, then mark the Criterion Meets. If the evidence examined shows that the Criterion is not met—or if there is insufficient evidence to make a determination—then mark the Criterion as Does Not Meet/Insufficient Evidence. Support all ratings with evidence.
Metric NN2A: **In each grade K–8, students and teachers using the materials as designed devote the large majority of time to the Major Work of the grade.** **How to Find the Evidence:** Familiarize yourself with the Major Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, lessons, homework assignments, and assessments. (Evaluate both student and teacher materials.) Consider time spent on the Major Work of the grade and judge qualitatively whether students and teachers using the materials as designed will devote the large majority of time to the Major Work of the grade. For context, read Criterion #1 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013)	**Evidence-** The majority of materials cover major works of the grade. There are additional topics, and spiral review available.	**(Reviewer only.)** X **Meets** ____ **Does Not Meet/ Insufficient Evidence**

Metric NN2B **Supporting Work, where present, enhances focus and coherence simultaneously by also engaging students in the Major Work of the grade.** **How to Find the Evidence:** Familiarize yourself with the Major Work and Supporting Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate chapters and lessons that focus on Supporting Work. NOTE: Example of evaluating this Criterion might include looking at whether materials for K–5 generally treat data displays as an occasion for solving grade-level word problems using the four operations (e.g., see 3.MD.B.3); or whether materials for grade 7 take advantage of opportunities to use probability to support ratios, proportions, and percentages. For context, read Criterion #3 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** The supportive topics allow students to connect back to the major works. Many of these skills create flexibility and fluency with mental math strategies, application problems, and multiple opportunities for practice.	(Reviewer only.) X Meets ____Does Not Meet/ Insufficient Evidence
Metric NN2C: **Materials base content progressions on the grade-by-grade progressions in the Standards. Content from previous or future grades does not unduly interfere with or displace on-grade-level content.** **How to Find the Evidence:** Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, and lessons in both student and teacher materials. NOTE: In some cases it may be possible that aligned materials might address some aspects of a topic in a strategic way before or after the grade level in which the topic is central in the Standards' progressions; for example, a curriculum author might purposefully choose to explore adding fractions with unlike denominators in a way appropriate to grade four, recognizing that this work is not really required until the next grade. However, any such purposeful discrepancies in content progressions should enhance the required learning in each grade; not unduly interfere with or displace grade-level content; and be clearly aimed at helping students meet the Standards as written rather than effectively rewriting the progressions in the Standards. And in all cases, note that Non-Negotiable 1 must be met for materials to be aligned. For context, read Criterion #5a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Any time previous grade material is brought up, it is as review or to formatively assess skills which are the foundation for the upcoming lesson. Topic 9-6 is introducing standard algorithm for subtraction of multi-digit numbers, but this strategy is not required on the assessment. Standard algorithm for addition also introduced and practiced.	(Reviewer only.) X Meets ____Does Not Meet/ Insufficient Evidence

Metric NN2D: **Materials give all students extensive work with on-grade-level problems.** **How to Find the Evidence:** Evaluate both student and teacher materials. If the materials provide resources for differentiated learning, consider whether lower-performing students have opportunities to engage with grade-level problems. Also consider whether higher-performing students are given opportunities to learn current grade-level content in greater depth. For context, read Criterion #5b in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** There are guided practice, independent practice, and problem solving problems in each topic. There are also Problem Based Learning prompts, games, leveled worksheets, daily spiral review, and reading mats.	(Reviewer only.) X Meets ____Does Not Meet/ Insufficient Evidence
Metric NN2E: **Materials relate on-grade-level concepts explicitly to prior knowledge from earlier grades.** **How to Find the Evidence:** Evaluate both student and teacher materials. NOTE: Examples of evaluating this Criterion might include looking at the way the materials extend basic ideas of place value across the decimal point; or the role that properties of operations play when the materials extend arithmetic beyond whole numbers to fractions, variables, and expressions. More generally, cluster headings in the Standards sometimes signal key moments where reorganizing and extending previous knowledge is important in order to accommodate new knowledge (e.g., see cluster headings that use the phrase "Apply and extend previous understanding"). For context, read Criterion #5c in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Yes, all concepts are linked to previous grade's knowledge.	(Reviewer only.) X Meets ____Does Not Meet/ Insufficient Evidence
Metric NN2F: **Review of material from previous grades is clearly identified as such to the teacher, and teacher and students can see what their specific responsibility is for the current year.** **How to Find the Evidence:** Evaluate the table of contents, but do not stop there; also evaluate units, chapters, lessons, homework assignments and assessments. (Evaluate both student and teacher materials.) Identify any content from previous grades and check whether it is identified as such. For context, read Criterion #5a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** The review skills are clearly identified in the teacher text, and are labeled as "Review What You Know" in student text. Also in the teacher text is a glimpse at upcoming grade work, and how the skill being taught connects.	(Reviewer only.) X Meets ____Does Not Meet/ Insufficient Evidence

Metric NN2G **Materials include learning objectives that are visibly shaped by CCSSM cluster headings.** **How to Find the Evidence:** Select several clusters from the Major Work in the grade being evaluated. Evaluate teacher and student materials in relation to these clusters. For context, read Criterion #6a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Yes, each lesson is clearly identified with the CCSS. Each unit is based on a CCSS cluster heading.	(Reviewer only.) X Meets ____Does Not Meet/ Insufficient Evidence
Metric NN2H: **Materials include problems and activities that serve to connect two or more clusters in a domain, or two or more domains in a grade, in cases where these connections are natural and important.** **How to Find the Evidence:** In the grade being evaluated, choose two or more clusters or two or more domains for which connections are natural and important. Evaluate the units, chapters, and lessons that deal with the chosen topics, looking for problems and activities that serve to connect the chosen clusters or domains. NOTE: An example of evaluating this Criterion might include looking at whether problems in grade 4 sometimes or often involve students applying their developing computation skills (detailed in domain NBT) in the context of solving word problems (detailed in domain OA). For context, read Criterion #6b in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** When applicable, connections between clusters are clearly marked and explained in the teacher materials.	(Reviewer only.) X Meets ____Does Not Meet/ Insufficient Evidence
Non-Negotiable 2: **Focus and Coherence** **Materials must focus coherently on the Major Work of the grade in a way that is consistent with the progressions in the Standards.** **NN 2** If all Metrics 2A – 2H were rated as Meets, then rate Non-Negotiable 2 as Meets. If one or more Metric was rated Does Not Meet/Insufficient Evidence, then rate Non-Negotiable 2 as Does Not Meet. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)** **Before moving to Alignment Criterion 1, record the final Meets or Does Not Meet rating in the Evaluation Summary.**		(Reviewer only.) X Meets ____Does Not Meet **Strengths/Weaknesses:** Easy to follow materials for teacher + student. Could become monotonous, and reduce student + teacher engagement

Now continue by evaluating the Alignment Criterion 1 for Rigor and Balance.

Directions for Alignment Criterion 1

Rigor and Balance

Alignment Criterion 1: Rigor and Balance

Materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.

The Standards set expectations for attention to all three aspects of rigor: conceptual understanding, procedural skill and fluency, and applications. Thus, materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.

Required Materials

- Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf)
- Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)
- Focus by Grade Level for the grade being evaluated (achievethecore.org/focus)
- Situation Types for the Operations in Word Problems (achievethecore.org/situation-types)
- From the materials being evaluated: teacher guides, student texts and workbooks

Rating this Criterion:

Alignment Criterion 1 is rated as Meets or Does Not Meet.

To rate Alignment Criterion 1, first rate metrics 1A, 1B, and 1C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). For each metric, guiding questions are provided to aid in gathering evidence.
Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 1 if the materials rate 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as rigor and balance, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.

Metric AC1A:
The materials support the development of students' conceptual understanding of key mathematical concepts, especially where called for in specific content Standards or cluster headings.

How to Find the Evidence:

Select one or more cluster(s) or Standard(s) from the Major Work for the grade being evaluated that relate specifically conceptual understanding to use throughout the questions associated with this metric. NOTE: Some examples of clusters or Standards that call for conceptual understanding include: K.OA.A.1, (1.NBT.B, 1.NBT.C), (2.NBT.A, 2.NBT.B), (3.OA.A.1, 3.OA.A.2), 4.NF.A, (4.NBT.A, 4.NBT.B), 5.NF.B, (5.NBT.A, 5.NBT.B), 6.RP.A, 6.EE.A.3, 7.NS.A, 7.EE.A, 8.EE.B, 8.F.A, 8.G.A

Clusters or Standards grouped by parentheses are closely connected and could be analyzed together.

For context, read Criterion #4a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).

-Choose a cluster/Standard from the Major Work that is aligned to each aspect of rigor and use it to evaluate these metrics. It is most helpful if the same clusters/Standards are chosen for all of the programs being evaluated. (Guidance in choosing clusters/Standards is included in "How to Find the Evidence".)

Use the questions for AC Metric 1A to evaluate Metric 1A. Record evidence for each question and rate Metric 1A.

_X_ **Meets (2)**

____ **Partially Meets (1)**

____ **Does Not Meet (0)**

Is conceptual understanding attended to thoroughly where the Standards set explicit expectations for understanding or interpreting? Evaluate lessons, chapter/unit assessments and homework assignments, paying attention to work aligned to Standards that explicitly call for understanding or interpreting. NOTE: Examples of evaluating this Criterion might include looking at how well the multi-digit addition and subtraction algorithms are developed and explained on the basis of place value and properties of operations; or how well the multi-digit multiplication and division algorithms are developed and explained on the basis of place value and properties of operations; or how well solving equations is presented and explained as a process of reasoning.	**Evidence-** Yes, in 3rd grade the lessons go from enactive to iconic, and eventually reach writing number sentences. For example, in multiplication students begin with repeated addition, arrays, area model, and then to number sentences.	
Do the materials feature high-quality conceptual problems and conceptual discussion questions? Evaluate lessons, chapter/unit assessments, and homework assignments. NOTE: Example of conceptual problems might include such questions as "Find a number greater than 1/5 and less than 1/4," or "If the divisor does not change and the dividend increases, what happens to the quotient?"	**Evidence-** Yes, each lesson gives procedural practice, and then extends into application, problem solving, and reasoning.	
Do the materials feature opportunities to identify correspondences across mathematical representations? Evaluate lessons, chapter/unit assessments and homework assignments. NOTE: Examples of evaluating this Criterion might include looking at whether students are supported in identifying correspondences among: the verbal description of a situation, the diagrams that distill its mathematical features, and the equations that model it; or equivalent forms of numbers (e.g., 3 and 6/2) and the number line; or rational number operations and representations of them via models such as the vector model; or the expression that defines a function and the graph that shows the relationship.	**Evidence-** Yes, the visual models are used throughout the text, and evolve as the complexity increases. For example: groups with manipulatives → arrays → area model → #sentences repeated addition	
Metric AC1B: **The materials are designed so that students attain the fluencies and procedural skills required by the Standards.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Major Work for the grade being evaluated that relate specifically to fluency and procedural skill to use throughout the questions associated with this metric. NOTE: Some examples of Standards that call for procedural skill and fluency include: K.OA.A.5, 1.OA.C.6, 2.OA.B.2, 2.NBT.B.5, 3.OA.C.7, 3.NBT.A.2, 4.NBT.B.4, 5.NBT.B.5, 6.NS.B.2, and 6.NS.B.3, 6.EE.A, 7.NS.A, 7.EE.A.1,7.EE.B.4a, 8.EE.C.7, 8.EE.C.8b For context, read Criterion #4b in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).		**Use the questions for Metric 1B to evaluate Metric 1 B. Record evidence for each question and rate Metric 1B.** **(Reviewer only.)** **X Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**

Is progress toward fluency and procedural skill interwoven with students' developing conceptual understanding of the operations in question? Evaluate lessons, chapter/unit assessments, daily routines, and homework assignments for evidence that the development of fluency and procedural skill is supported by conceptual understanding.	**Evidence-** Yes, daily review, fluency fact practice sheets and warm-ups are available each day.	
Are purely procedural problems and exercises present that include cases in which opportunistic strategies are valuable and generic cases that require efficient algorithms present? Evaluate lessons, chapter/unit assessments, daily routines, and homework assignments. NOTE: Examples of problems in which opportunistic strategies are valuable might include the sum 698 + 240 or the system x + y = 1, 2x + 2y = 3. Examples of generic cases that require efficient algorithms might include the sum 8767+2286 or the system 6y + x = x + 3, – x = 1 + 2y.	**Evidence-** Yes. The first few problems are mostly procedural with additional problems pushing to conceptual understanding, application, and problem solving	
Do the materials in grades K–6 provide repeated practice toward attainment of fluency Standards? Evaluate lessons, daily routines, and homework assignments for evidence of repeated practice toward attainment of the following K–6 Standards that set an explicit expectation of fluent (accurate and reasonably fast) computation: K.OA.A.5, 1.OA.C.6, 2.OA.B.2, 2.NBT.B.5, 3.OA.C.7, 3.NBT.A.2, 4.NBT.B.4, 5.NBT.B.5, 6.NS.B.2, 6.NS.B.3.	**Evidence-** Yes. As operations are developed, students are encouraged to see patterns which increase mental fluency.	
Metric AC1C: **The materials are designed so that teachers and students spend sufficient time working with engaging applications, without losing focus on the Major Work of each grade.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Major Work for the grade being evaluated that relate specifically application to use throughout the questions associated with this metric. NOTE: Some examples of clusters or Standards that call for application include: K.OA.A.2, 1.OA.A, 2.OA.A, 3.OA.A.3, 3.OA.D.8, 4.OA.A.3, 4.NF.B.3d, 4.NF.B.4c, 5.NF.B.6, 5.NF.B.7c, 6.RP.A.3, 6.NS.A.1, 6.EE.B.7, 6.EE.C.9, 7.RP.A, 7.NS.A.3, 7.EE.B.3, 8.EE.C.8c, 8.F.B For context, read Criterion #4c in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** There are a lot of problems, which may overwhelm a student. However, in the teacher edition, problems are identified by level, for differentiated instruction. This allows the teacher to choose which pieces are completed.	**Use the questions for Metric 1C to evaluate Metric 1C. Record evidence for each question and rate Metric 1C.** **(Reviewer only.)** X **Meets (2)** ____ **Partially Meets (1)** ____ **Does Not Meet (0)**
Are there are single- and multi-step contextual problems, including non-routine problems, that develop the mathematics of the grade, afford opportunities for practice, and engage students in problem solving? Do the problems attend thoroughly to those places in the content Standards where expectations for multi-step and real-world problems are explicit? Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** Yes. In each lesson, students are given the opportunity to apply what they know. Most lessons offer at least one multi-step problem.	

Do application problems particularly stress applying the Major Work of the grade? Evaluate lessons, chapter/unit assessments, and homework assignments. NOTE: Examples of evaluating this Criterion might include looking at: how well, by the end of grade 2, students using the materials as designed can represent and solve a full range of one-step addition and subtraction word problems; or how well, by the end of grade 3, students using the materials as designed can represent and solve a full range of one-step multiplication and division word problems; or how well these basic situation types for each operation are carried coherently across the grades, (e.g., with fractions and algebraic expressions); or, in all grades, whether the problems connect concepts, Standards, and domains in ways that are natural and important. For a list of situation types for one-step addition, subtraction, multiplication, and division problems, see Situation Types for the Operations in Word Problems	**Evidence-** Yes. In all lessons identified as "major work", the application problems are supportive of student learning.	
Does modeling build slowly across K–8, with applications that are relatively simple in earlier grades and when students are encountering new content? In grades 6–8, do the problems begin to provide opportunities for students to make their own assumptions or simplifications in order to model a situation mathematically? Read Standard for Mathematical Practice 4, Model with Mathematics. Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** The modeling is consistent ~~throughout~~ throughout the book, and continues into future grades.	

Alignment Criterion 1: Rigor and Balance

Materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.

AC1 Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 out of 6 points, the Criterion has not been met. Check the final rating.
Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)**

Before moving to Alignment Criterion 2, record the final Meets or Does Not Meet rating in the Evaluation Summary.

(Reviewer only.)

X **Meets**

____ **Does Not Meet**

Strengths/Weaknesses:

Directions for Alignment Criterion 2

Standards for Mathematical Practice

Alignment Criterion 2: Standards for Mathematical Practice

Materials must demonstrate authentic connections between content Standards and practice Standards.

The Standards require that designers of instructional materials connect the mathematical practices to mathematical content in instruction. Thus, materials must demonstrate authentic connections between content Standards and practice Standards.

Required Materials:

- Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf)
- Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)
- Focus by Grade Level for the grade being evaluated (www.achievethecore.org/focus)
- From the materials being evaluated: teacher guides, student texts and workbooks

Rating this Criterion

Alignment Criterion 2 is rated as Meets or Does Not Meet.

To rate Alignment Criterion 2, first rate metrics 2A, 2B, and 2C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). For each metric, guiding questions are provided to aid in gathering evidence.

Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 2 if the materials earn 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as mathematical practices, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.

Metric AC2A:
Materials address the practice Standards in such a way as to enrich the Major Work of the grade; practices strengthen the focus on Major Work instead of detracting from it, in both teacher and student materials.

How to Find the Evidence:

Familiarize yourself with the Major Work of the grade being evaluated (see the Focus by Grade Level documents.)

Evaluate teacher and student materials for evidence that the mathematical practices support and connect to the focus of the grade.

NOTE: Examples of evaluating this Criterion might include looking at whether, in grades K–5, students using the materials are supported to look for and express regularity in repeated reasoning about the addition table, the multiplication table, the properties of operations, the relationship between addition and subtraction or multiplication and division, and the place value system; or whether, in grades 6–8, students using the materials are supported to look for and express regularity in repeated reasoning about proportional relationships and linear functions.

For context, read Criterion #8 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013).

Evidence-

Math Practice Standards are clearly noted in various problems throughout the text. Specific tasks have been designed to give students opportunities to develop these standards, while learning specific skills from grade level work.

(Reviewer only.)

X **Meets (2)**

____ **Partially Meets (1)**

____ **Does Not Meet (0)**

Metric AC2B **Materials attend to the full meaning of each practice Standard.** **How to Find the Evidence:** For context, read Criterion #7 and Criterion #9 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).		**Use the questions for Metric 2B to evaluate Metric 2B. Record evidence for each question and rate Metric 2B.** **(Reviewer only.)** **X Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Over the course of any given year of instruction, is each mathematical practice Standard meaningfully present in the form of assignments, activities, or problems that stimulate students to develop the habits of mind described in the practice Standard? Evaluate lessons, chapter/ unit assessments, and homework assignments for evidence of each mathematical practice being meaningfully present in instruction.	**Evidence-** Yes. Problems are specifically designed for this purpose.	
Do the materials treat the practice Standards as developing across grades or grade bands? Are the practice Standards in early grades appropriately simple? Do they display an arc of growing sophistication across the grades?	**Evidence-** Yes. These standards are found in every grade level.	
Are there teacher-directed materials that explain the role of the practice Standards in the classroom and in students' mathematical development? Are alignments to practice Standards accurate?	**Evidence-** Yes. The teacher's guide explains the role of the standards, and how to engage students in discussion.	
Metric AC2C: **Materials support the Standards' emphasis on mathematical reasoning.** **How to Find the Evidence:** For context, read Criterion #10 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).		**Use the questions for Metric 2C to evaluate Metric 2C. Record evidence for each question and rate Metric 2C.** **(Reviewer only.)** **X Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Do the materials support students in constructing viable arguments and critiquing the arguments of others concerning grade-level mathematics that is detailed in the content Standards? Read Standard for Mathematical Practice 3. Evaluate teacher and student materials to ensure that students are given opportunities to reason with grade-level mathematics.	**Evidence-** Yes. Class problems and independent problems ask students to reason and justify. Teacher would need to elicit class discussion from written work.	
Do the materials support students in producing not only answers and solutions, but also, in a grade-appropriate way, arguments, explanations, diagrams, mathematical models, etc., especially in the Major Work of the grade? Familiarize yourself with the Major Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate teacher and student materials, to understand the types of work students are expected to produce.	**Evidence-** Yes. For 3rd graders models were easily accessible. The level of thinking was developmentally appropriate, but students need to push themselves to answer them.	

Do materials explicitly attend to the specialized language of mathematics? Is the language of argument, problem solving, and mathematical explanations taught rather than assumed? Evaluate teacher and student materials, paying attention to how mathematical language is taught. NOTE: Examples of evaluating this Criterion might include looking at whether students are supported in: basing arguments on definitions; using the method of providing a counterexample; or recognizing that examples alone do not establish a general statement.	**Evidence-** Yes. Language used matches the language of CCSS and standardized testing. For example, models are named "bar model" and "area model."	

Alignment Criterion 2:
Standards for Mathematical Practice

Materials must demonstrate authentic connections between content Standards and practice Standards.

AC2 Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 out of 6 points, the Criterion has not been met. Check the final rating.
Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion.
(Reviewer only.)

Before moving to Alignment Criterion 3, record the final Meets or Does Not Meet rating in the Evaluation Summary.

(Reviewer only.)

X **Meets**

____ **Does Not Meet**

Strengths/Weaknesses:
Clearly labeled and explained in detail for teacher.

Standards are practiced mostly in writing, and teacher would need to engage class in conversation.

Alignment Criterion 3:
Access to the Standards for All Students

Materials must provide supports for English Language Learners and other special populations.

Because Standards are for all students, alignment requires thoughtful support to ensure all students are able to meet the Standards. Thus, aligned materials must provide supports for English Language Learners and other special populations.

Required Materials:

- Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf)
- Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)
- From the materials being evaluated: teacher guides, student texts and workbooks

Rating this Criterion:
Alignment Criterion 3 is rated as Meets or Does Not Meet.

To rate Alignment Criterion 3, first rate metrics 3A, 3B, and 3C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points).

Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 3 if the materials earn 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as support for special population, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.

Metric AC3A **Support for English Language Learners and other special populations is thoughtful and helps those students meet the same Standards as all other students. The language in which problems are posed is carefully considered.** **How to Find the Evidence:** Evaluate teacher and student materials, paying attention to supports offered for special populations.	**Evidence-** Specific vocabulary introduction with visuals and modeling in each unit. ELL & differentiated instruction are available for each topic.	**Reviewer only.)** X **Meets (2)** ____**Partially Meets (1)** ____**Does Not Meet (0)**
Metric AC3B: **Materials provide appropriate level and type of scaffolding, differentiation, intervention, and support for a broad range of learners with gradual removal of supports, when needed, to allow students to demonstrate their mathematical understanding independently.** **How to Find the Evidence:** Evaluate teacher and student materials, paying attention to whether materials provide differentiation that will lead all learners to engage with on-grade-level content.	**Evidence-** Yes, each lesson engages students in a level of productive struggle prior to instructing on a skill. Review, remediation, and extension activities are all available. Each assignment is leveled to give options for students on the same worksheet.	**Reviewer only.)** X **Meets (2)** ____**Partially Meets (1)** ____**Does Not Meet (0)** Intervention activities also.
Metric AC3C: **Design of lessons recommends and facilitates a mix of instructional approaches for a variety of learners such as using multiple representations (e.g., including models, using a range of questions, checking for understanding, flexible grouping, pair-share).** **How to Find the Evidence:** Evaluate teacher materials, noting instructional approaches suggested for whole class and differentiated lessons and activities.	**Evidence-** There are videos, instructional texts, activities with manipulatives, problem solving, application of skills with reading mats and games.	**Reviewer only.)** X **Meets (2)** ____**Partially Meets (1)** ____**Does Not Meet (0)**

Alignment Criterion 3: **Access to the Standards for All Students** **Materials must provide supports for English Language Learners and other special populations.** **AC3** Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 points, the Criterion has not been met. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion.**(Reviewer only.)** **Move to the Evaluation Summary and record the final Meets or Does Not Meet rating .**	**(Reviewer only.)** X **Meets** ____ **Does Not Meet** **Strengths/Weaknesses:** Easy to find resources to help all students. Differentiation on same worksheet Language focused on Spanish without other language options.

Once an evaluation for alignment to the Shifts and major features of the CCSS has been conducted using Sections 1-3, it's important to evaluate for overall quality and best practices. A starting list of Indicators of Quality are suggested below. States, districts and others evaluating instructional materials are encouraged to add to this list to ensure materials reflect local contexts. For background information on some of the Indicators of Quality in this section, refer to pp.18–21 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).

Indicators of Quality	**Evidence- Give specific examples.**	**Rating: (Reviewers only.)**
1. Lessons are thoughtfully structured and support the teacher in leading the class through the learning paths at hand, with active participation by all students in their own learning and in the learning of their classmates.	**Evidence-** Yes. Active participation is required to develop concepts. Student engagement may decline as they are exposed to the same lesson structure every day.	**(Reviewer only.)** _X_ **Yes** _____ **No**
2. The underlying design of the materials includes both problems and exercises. (In solving problems, students learn new mathematics, whereas in working exercises, students apply what they have already learned to build mastery.) Each problem or exercise has a purpose. **NOTE: This Criterion does not require that the problems and exercises be labeled as such.**	**Evidence-** Yes. There are multiple applications for skills.	**(Reviewer only.)** _X_ **Yes** _____ **No**

3. Design of assignments is not haphazard: exercises are given in intentional sequences in order to strengthen students' mathematical understanding.	**Evidence-** Formative assessment at the end of each lesson. Summative assessment at the end of each topic.	**(Reviewer only.)** X **Yes** _____ **No**
4. There are separate teacher materials that support and reward teacher study including, but not limited to: discussion of the mathematics of the units and the mathematical point of each lesson as it relates to the organizing concepts of the unit, discussion on student ways of thinking and anticipating a variety of students responses, guidance on lesson flow, guidance on questions that prompt students thinking, and discussion of desired mathematical behaviors being elicited among students.	**Evidence-** Teacher guide is full of ideas to help students with the concepts. There are examples of student thinking and reteach/extensions for most concepts.	**(Reviewer only.)** X **Yes** _____ **No**
5. Manipulatives suggested in the materials are faithful representations of the mathematical objects they represent and are connected to written methods.	**Evidence-** Students are encouraged to use many authentic tools to move from enactive to iconic and connect to the text.	**(Reviewer only.)** X **Yes** _____ **No**
6. Materials include a variety of curriculum-embedded assessments. Examples include pre-, formative, summative, and self-assessment resources.	**Evidence-** Yes. Each lesson topic and cluster has assessment built in. There's also diagnostic assessment to give prior to instruction.	**(Reviewer only.)** X **Yes** _____ **No**
7. Assessments contain aligned rubrics, answer keys, and scoring guidelines that provide sufficient guidance for interpreting student performance.	**Evidence-** There are scoring guides with descriptors of points possible, and how they are earned. There are also digital assessments which are graded for the teacher.	**(Reviewer only.)** X **Yes** _____ **No**
8. Materials assess student proficiency using methods that are accessible and unbiased, including the use of course-level language in student prompts.	**Evidence-** All questions connect back to language and models used to form the essential understandings.	**(Reviewer only.)** X **Yes** _____ **No**

9. Materials are carefully evaluated by qualified individuals, whose names are listed, in an effort to ensure freedom from mathematical errors and course-level appropriateness.	**Evidence-** There are multiple professors and teachers listed. Specifically some authors engaged in current research.	**(Reviewer only.)** X **Yes** ____ **No**
10. The visual design supports students in engaging thoughtfully with the subject. Navigation through the text is clear.	**Evidence-** The text can be a bit busy to the eye. However, it is consistent throughout. So, once a teacher/student is used to the format, it should be easier.	**(Reviewer only.)** X **Yes** ____ **No**
11. The materials engage parents in appropriate ways. For example, homework assignments in elementary grades, consist of routine problems, practice with getting answers, and fluency-building exercises that parents can easily support.	**Evidence-** There are online videos of lessons, "reteach" sections on homework, and letters to send home.	**(Reviewer only.)** X **Yes** ____ **No**

Reviewer IMET Evaluation Summary **Title/Lev** enVision 2.0. Grade 3

Publisher: Pearson **Copyright:** 2016 **ISBN:** 9780328847617

Reviewer ID # _____ **Date Review Completed:** 3/7/16

Non-Negotiable Criteria- Each Non-Negotiable must be met in order for the Non-Negotiable Alignment Criteria to be met overall.

Non-Negotiable 1: Freedom from Obstacles to Focus	Non- Negotiable 2: Focus and Coherence
X Meets _____ Does Not Meet	X Meets _____ Does Not Meet

Non-Negotiable Overall:

X **Meets** _____ **Does Not Meet**

Alignment Criteria- Each Alignment Criterion must be met with a sufficient number of points in order for Alignment Criteria to be labeled as "Meets" overall. The more points the materials receive on the Alignment Criteria, the better they are aligned.

Alignment Criterion 1: Rigor and Balance	Alignment Criterion 2: Standards of Mathematical Practice	Alignment Criterion 3: Access to Standards for All Learners
Points: 6 of 6 possible. (Materials must receive at least 5 of 6 points to align.) X Meets _____ Does Not Meet	Points: 6 of 6 possible. (Materials must receive at least 5 of 6 points to align.) X Meets _____ Does Not Meet	Points: 6 of 6 possible. (Materials must receive at least 5 of 6 points to align.) X Meets _____ Does Not Meet

Alignment Criteria Overall:

X **Meets** _____ **Does Not Meet**

If the materials meet both Non-Negotiables and relevant Alignment Criterion, they are aligned to the Shifts and major features of the Core Standards. **Do the materials meet every Non-Negotiable and Alignment Criterion? _____ Yes _____ No**

What are the specific areas of strength and weakness based on this evaluation? Publishers or others modifying or developing assessments can use this information to make improvements and/or to remedy gaps in the alignment of assessment materials.

2015-16 Mathematics Interim Review Recommendation & Summary

Publisher Name:	Pearson Education Inc.
Title:	enVision Math 2.0 Grade 4
ISBN #	9780328847624
Grade Level(s) or Course:	4
Reviewer ID:	CB, MH

RECOMMENDED AS:

__X__ **Core Mathematics Program-** a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials. Substantial evidence clearly supports the designation of this program as Core.

_____ **Other Mathematics Program-** a program that substantially, but partially, meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for supplemental materials. Substantial evidence clearly supports the designation of this program as Other.

_____ **Component Mathematics Program-** a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs. Substantial evidence clearly supports the designation of this program as Component.

_____ **Intervention Program-** a program designed and intended to target and support students' specific needs. Substantial evidence clearly supports the designation of this program as Intervention.

_____ **Does not meet criteria** for recommendation as a Curricular Material or Online Resource for Mathematics.

EVIDENCE SUMMARY:

FOCUS- Superbly covers all grade level standards, and does not cover or assess standards not addressed in grade Level.

COHERENCE- Includes appropriate review of early grade and continues to build on grade level standard. This is true for all topics. Particularly good at helping make connections across the clusters and domains.

RIGOR- Materials are of high level quality addressing conceptual understanding. They provide many opportunities for student discussion, and identifying correspondence using mathematical representations to reinforce concepts.

CONCEPTUAL UNDERSTANDING- Provides many various models to reinforce concepts being taught. Uses place value and Number sense to explain operations in this grade level.

MATHEMATICAL PRACTICES- The series starts with explicit instruction on each math practice. M.P. are embedded in each lesson. Excellent!

ACCESSIBILITY OF STANDARDS TO ALL STUDENTS- Support for ELL is provided in each lesson. There is also activities for on-grade level and above-level in each lesson. They support a broad range of learners in each lesson.

OTHER:

There are many opportunities for problem-solving and student discussion in each topic. This series is 100% aligned to the standards for this grade.

2015-16 Interim Mathematics Review

Mathematics Evaluation Tool Grades K-8

Publisher: Pearson Education Inc.

Title of Material: enVision math 2.0 Grade 4

Author: RJ Charles, et al

ISBN #: 9780328847624 **Copyright** 2016

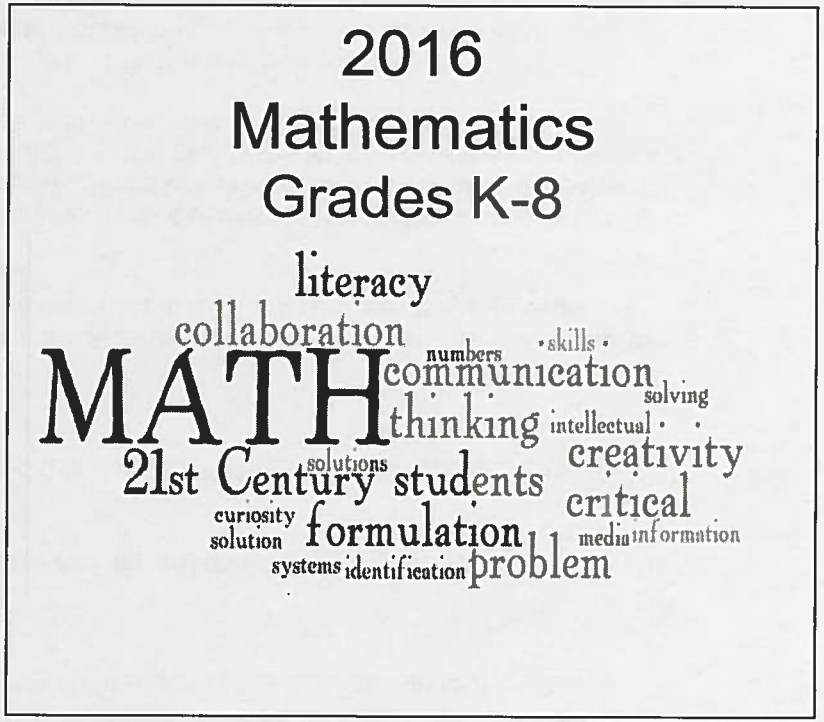
Reviewer ID: CB, MH

Core Mathematics Program- a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Core.

Other Mathematics Program- a program that substantially, but partially, meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Other.

Component Mathematics Program- a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs.
Substantial evidence clearly supports the designation of this program as Component.

Intervention Program- a program designed and intended to target and support students' specific needs.
Substantial evidence clearly supports the designation of this program as Intervention.



- Evaluation Form adapted from Instructional Materials Evaluation Toolkit (IMET).

The IMET was developed by Student Achievement Partners. Educators may use or adapt. http://creativecommons.org/licenses/by/3.0/ Download this tool at http://achievethecore.org/IMET

Instructional Materials Evaluation Tool
Mathematics, Grades K-8

What Are the Purposes of the IMET?
This Math IMET is designed to help educators determine whether instructional materials are aligned to the Shifts and major features of the Common Core State Standards (CCSS). The substantial instructional Shifts (http://www.corestandards.org/other-resources/key-shifts-inmathematics/) at the heart of the Common Core State Standards are:
- **Focus** strongly where the Standards focus
- **Coherence**: Think across grades and link to major topics within the grade
- **Rigor**: In major topics, pursue conceptual understanding, procedural skill and fluency, and application with equal intensity.

The IMET draws directly from the following documents:
- Common Core State Standards for Mathematics (www.corestandards.org/Math)
- Publishers' Criteria for the Common Core State Standards in Mathematics grade K-8 (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)

When to use the IMET
1. Purchasing materials: Many factors go into local purchasing decisions. Alignment to the Standards is a critical factor to consider. This tool is designed to evaluate alignment of instructional materials to the Shifts and the major features of the CCSS. It also provides suggestions of additional indicators to consider in the materials evaluation and purchasing process.

2. Evaluating materials currently in use: The IMET can be used to analyze the degree of alignment of existing materials and help to highlight specific, concrete flaws in alignment. Even where materials and tools currently in use fail to meet one or more of these criteria, the pattern of failure is likely to be informative. States and districts can use the evaluation to create a thoughtful plan to modify or combine existing resources in such a way that students' actual learning experiences approach the focus, coherence, and rigor of the Standards.

3. Developing programs: Those developing new programs can use this tool as guidance for creating aligned curricula.
Please note this tool was designed for evaluating comprehensive curricula (including any supplemental or ancillary materials), but it was not designed for the evaluation of standalone supplemental materials.

Who Uses the IMET?
Evaluating instructional materials requires both subject-matter and pedagogical expertise. Evaluators should be well versed in the Standards (www.corestandards.org/Math) for all grades in which materials are being evaluated. This includes understanding the Major Work of the grade (www.achievethecore/focus), the Supporting and Additional work, how the content fits into the progressions in the Standards (www.achievethecore.org/progressions), and the expectations of the Standards with respect to conceptual understanding, procedural skill and fluency, and application. Evaluators also should be familiar with the substantial instructional Shifts (http:// www.corestandards.org/other-resources/key-shifts-in-mathematics/) of Focus, Coherence and Rigor that are listed above.

Getting Started
Prior to Evaluation

Assemble all of the materials necessary for the evaluation. It is essential for evaluators to have materials for all grades covered by the program, as some criteria cannot be rated without having access to each grade. In addition, each evaluator should have a reference copy of the Common Core State Standards for Mathematics (CCSSM) and the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013).

Before conducting the evaluation itself, it is important to develop a protocol for the evaluation process. The protocol should include having evaluators study the Publishers' Criteria and the IMET. It will also be helpful for evaluators to get a sense of each program overall before beginning the process. At a minimum, this would include reading the front matter of the text, looking at the table of contents and paging through multiple chapters.

Sections 1-3 below should be completed to produce a comprehensive picture of the strengths and weaknesses of the materials under evaluation. Information about areas in need of improvement or supplementation should be shared with internal and external stakeholders.

Navigating the Tool

Begin with Section 1: Non-Negotiable Alignment Criteria

- The Non-Negotiable Alignment Criteria must each be met in full for materials to be considered aligned to the Shifts and the major features of the Common Core State Standards. Each Non-Negotiable Alignment Criterion has one or more metrics associated with it; every one of these metrics must be met in order for the criterion as a whole to be met.

- Examine the relevant materials and use evidence to rate the materials against each criterion and its associated metric(s).

- Record and explain the evidence upon which the rating is based.

Continue to Section 2: Alignment Criteria

- The Alignment Criteria must each be met for materials to be considered aligned to the Shifts and the major features of the Common Core State Standards. Each Alignment Criterion has one or more metric associated with it; a specific number of these metrics must be met or partially met in order for the criterion as a whole to be met.

- Examine the materials in relation to these criteria, assigning each metric a point value. Rate the criterion as "Meets" or "Does Note Meet" based on the number of points assigned. The more points the materials receive on the alignment Criteria, the better they are aligned.

- Record and explain the evidence upon which the rating is based.

Proceed to Section 4: Indicators of Quality

- Indicators of Quality are important considerations that will help evaluators better understand the overall quality of instructional materials. These considerations are not criteria for alignment to the CCSS, but they provide valuable information about additional program characteristics. Evaluators may want to add their own indicators to the examples provided.

Directions for Non-Negotiable 1

Freedom from Obstacles to Focus

Criterion	Evidence- Give specific examples.	Rating: (Reviewer only.)
Non-Negotiable 1: **Freedom from Obstacles to Focus** **Materials must reflect the content architecture of the Standards by not assessing the topics named before the grade level where they first appear in the Standards.** The Standards foster students' progress to algebra by focusing strongly on arithmetic. Consistent with this focus, certain topics from outside of arithmetic appear only in later grades. Thus, to be aligned, materials must reflect the content architecture of the Standards by not assessing the topics named before the grade level where they first appear in the Standards. In this criterion, "topics named" means the topics that are explicitly named in Metric 1A. No other topics should be added to the list in Metric 1A. (Note that other topics in the standards are addressed in criterion NN2.)	**Required Materials** • Common Core State Standards for Mathematics (www.corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf) • From the materials being evaluated: teacher guides and all assessment components	**Rating this Criterion:** Non-Negotiable 1 is rated as Meets or Does Not Meet. To rate Non-Negotiable 1, begin by rating Metric 1A. Since Metric 1A is the only metric for Non-Negotiable 1, the rating for Non-Negotiable 1 is the same as the rating for Metric 1A. If Metric 1A is rated as Does Not Meet, include evidence of when the named topic(s) is/are assessed. If the metric is rated as Meets, list the grade(s) examined in the evaluation.

Metric NN1A:
Materials reflect the basic architecture of the Standards by not assessing the listed topics before the grade level indicated.

- Probability, including chance, likely outcomes, probability models. (Introduced in the CCSSM in grade 7)
- Statistical distributions, including center, variation, clumping, outliers, mean, median, mode, range, quartiles; and statistical association or trends, including two-way tables, bivariate measurement data, scatter plots, trend line, line of best fit, correlation. (Introduced in the CCSSM in grade 6)
- Similarity, congruence, or geometric transformations. (Introduced in the CCSSM in grade 8)
- Symmetry of shapes, including line/ reflection symmetry, rotational symmetry. (Introduced in the CCSSM in grade 4)

How to Find the Evidence:

Evaluate the table of contents, all chapter tests, all unit tests, and other such assessment components (including rubrics).

For context, read Criterion #2 from the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013). NOTE: Grade alignments of other topics are addressed in Non-Negotiable 2, Focus and Coherence.)

In this criterion, "topics named" means the topics that are explicitly named in Metric 1A. No other topics should be added to the list in Metric 1A. (Note that other topics in the standards are addressed in criterion NN2.)

Evidence-

No sign of items to the left. Checked each assessment for items. See "Wheel".

Does have a unit of symmetry to cover 4th grade standard.

(Reviewer only.)

X **Meets**

____ **Does Not Meet**

Non-Negotiable 1: Materials must reflect the content architecture of the Standards by not assessing the topics named* before the grade level where they first appear in the Standards.

NN 1 If Metric 1A was rated as Meets, then rate Non-Negotiable 1 as Meets. If Metric 1A was rated as Does Not Meet, then rate Non- Negotiable 1 as Does Not Meet. Check the final rating.

Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion.**(Reviewer only.)**

Before moving to Non-Negotiable 2, record the final Meets or Does Not Meet rating in the Evaluation Summary.

(Reviewer only.)

X **Meets**

____ **Does Not Meet**

Strengths/Weaknesses:

Directions for Non-Negotiable 2

Focus and Coherence

Non-Negotiable 2:

Focus and Coherence

Materials must focus coherently on the Major Work of the grade in a way that is consistent with the progressions in the Standards.

Focus and coherence are the two major evidence-based design principles of the Common Core State Standards for Mathematics (CCSSM, p. 3). Focus is necessary in order to fulfill the ambitious promise the states have made to their students by adopting the Standards: greater achievement at the college and career ready level; greater depth of understanding of mathematics; and a rich classroom environment in which reasoning, sense-making, applications, and a range of mathematical practices flourish. In simpler terms, a mile-wide, inch-deep curriculum translates to less time per topic. Less time means less depth and moving on without many students. Thus, materials must focus coherently on the Major Work of the grade in a way that is consistent with the progressions in the Standards.

Required Materials

- Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf)
- Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)
- Focus by Grade Level for the grade being evaluated (www.achievethecore.org/focus)
- From the materials being evaluated: teacher guides, student texts and workbooks

Rating this Criterion:

Non-Negotiable 2 is rated as Meets or Does Not Meet.

To rate Non-Negotiable 2, first rate metrics 2A–2H. Each of these eight metrics must be rated as Meets in order for Non-Negotiable 2 to be rated as Meets. Rate each metric 2A-2H as Meets or Does Not Meet/Insufficient Evidence. If the evidence examined shows that the Criterion is met, then mark the Criterion Meets. If the evidence examined shows that the Criterion is not met—or if there is insufficient evidence to make a determination—then mark the Criterion as Does Not Meet/Insufficient Evidence. Support all ratings with evidence.

Metric NN2A:
In each grade K–8, students and teachers using the materials as designed devote the large majority of time to the Major Work of the grade.

How to Find the Evidence:

Familiarize yourself with the Major Work of the grade being evaluated (see the Focus by Grade Level documents.)

Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, lessons, homework assignments, and assessments. (Evaluate both student and teacher materials.)

Consider time spent on the Major Work of the grade and judge qualitatively whether students and teachers using the materials as designed will devote the large majority of time to the Major Work of the grade.

For context, read Criterion #1 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013)

Evidence-

All the major works are covered, not only by lessons, but also by using math practices, problem solving and strategies. Well represented in all areas. Wheel, Table of Contents. Major clusters first supporting clusters at end. SE too!

(Reviewer only.)

X **Meets**

____ **Does Not Meet/**

Insufficient Evidence

Metric NN2B: **Supporting Work, where present, enhances focus and coherence simultaneously by also engaging students in the Major Work of the grade.** **How to Find the Evidence:** Familiarize yourself with the Major Work and Supporting Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate chapters and lessons that focus on Supporting Work. NOTE: Example of evaluating this Criterion might include looking at whether materials for K–5 generally treat data displays as an occasion for solving grade-level word problems using the four operations (e.g., see 3.MD.B.3); or whether materials for grade 7 take advantage of opportunities to use probability to support ratios, proportions, and percentages. For context, read Criterion #3 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Big Ideas p 110-111 TE Overview Look Ahead - ex. Topic 1 pg 1D Topic 13 671 D - provided for all topics Topic 7 p365A/B */divide relationship. Supported factors/multiples. All labeled & color coded.	(Reviewer only.) ✓ Meets ____Does Not Meet/ Insufficient Evidence
Metric NN2C: **Materials base content progressions on the grade-by-grade progressions in the Standards. Content from previous or future grades does not unduly interfere with or displace on-grade-level content.** **How to Find the Evidence:** Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, and lessons in both student and teacher materials. NOTE: In some cases it may be possible that aligned materials might address some aspects of a topic in a strategic way before or after the grade level in which the topic is central in the Standards' progressions; for example, a curriculum author might purposefully choose to explore adding fractions with unlike denominators in a way appropriate to grade four, recognizing that this work is not really required until the next grade. However, any such purposeful discrepancies in content progressions should enhance the required learning in each grade; not unduly interfere with or displace grade-level content; and be clearly aimed at helping students meet the Standards as written rather than effectively rewriting the progressions in the Standards. And in all cases, note that Non-Negotiable 1 must be met for materials to be aligned. For context, read Criterion #5a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** "Review What You Know" - hwk. "Big Ideas" Look back - shows examples of previous grade. "Look Ahead" next grade for each new topic. Topic 1 20/200 practice problems were review. ☺ Topic 2 - common core review right on standards	(Reviewer only.) ✓ Meets ____Does Not Meet/ Insufficient Evidence

Metric NN2D: **Materials gi[illegible]ll students extensive work with on-grade-level problems.** **How to Find the Evidence:** Evaluate both student and teacher materials. If the materials provide resources for differentiated learning, consider whether lower-performing students have opportunities to engage with grade-level problems. Also consider whether higher-performing students are given opportunities to learn current grade-level content in greater depth. For context, read Criterion #5b in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Every Les[illegible] has a re-teach, on-level, and advance lesson or activity. Intervention booklet has 4-6 scope focuses on strategies not alt. problems. Teacher resources- games to reinforce skills. Math Sc for high kids	(Reviewer only.) X Meets ____Does Not Meet/ Insufficient Evidence
Metric NN2E: **Materials relate on-grade-level concepts explicitly to prior knowledge from earlier grades.** **How to Find the Evidence:** Evaluate both student and teacher materials. NOTE: Examples of evaluating this Criterion might include looking at the way the materials extend basic ideas of place value across the decimal point; or the role that properties of operations play when the materials extend arithmetic beyond whole numbers to fractions, variables, and expressions. More generally, cluster headings in the Standards sometimes signal key moments where reorganizing and extending previous knowledge is important in order to accommodate new knowledge (e.g., see cluster headings that use the phrase "Apply and extend previous understanding"). For context, read Criterion #5c in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Yes. Look Back pg 43C - for every topic SE - 178-179 arrays from previous grade. Look Back Tape b refers to 3rd grade unit bars SE 327, 328, 334, 340 These are examples. Found in every topic.	(Reviewer only.) X Meets ____Does Not Meet/ Insufficient Evidence
Metric NN2F: **Review of material from previous grades is clearly identified as such to the teacher, and teacher and students can see what their specific responsibility is for the current year.** **How to Find the Evidence:** Evaluate the table of contents, but do not stop there; also evaluate units, chapters, lessons, homework assignments and assessments. (Evaluate both student and teacher materials.) Identify any content from previous grades and check whether it is identified as such. For context, read Criterion #5a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Every cluster has "Look Back" to show previous grade, & "Look Ahead" to where it still is going. TE pg 365C - earlier in gr 4 TE Topic 13 671C TE 765C Topic 15 Review what you know. SE p2, 44, 168 before each new topic	(Reviewer only.) X Meets ____Does Not Meet/ Insufficient Evidence

Metric NN2G: **Materials include learning objectives that are visibly shaped by CCSSM cluster headings.** **How to Find the Evidence:** Select several clusters from the Major Work in the grade being evaluated. Evaluate teacher and student materials in relation to these clusters. For context, read Criterion #6a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** 7/16 Topic headings were exact language TEFS. Learning objectives & essential understanding stated for each Lesson. Both TE & SE.	(Reviewer only.) X Meets ____Does Not Meet/ Insufficient Evidence
Metric NN2H: **Materials include problems and activities that serve to connect two or more clusters in a domain, or two or more domains in a grade, in cases where these connections are natural and important.** **How to Find the Evidence:** In the grade being evaluated, choose two or more clusters or two or more domains for which connections are natural and important. Evaluate the units, chapters, and lessons that deal with the chosen topics, looking for problems and activities that serve to connect the chosen clusters or domains. NOTE: An example of evaluating this Criterion might include looking at whether problems in grade 4 sometimes or often involve students applying their developing computation skills (detailed in domain NBT) in the context of solving word problems (detailed in domain OA). For context, read Criterion #6b in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Problem Solving ties together related clusters and also Math Practices in all topics in TE and SE. Examples Pg 40A - Common multiples to fractions 4NF SE 398 examples TE pg 249 - Lesson 5.4 and 5.6	(Reviewer only.) X Meets ____Does Not Meet/ Insufficient Evidence
Non-Negotiable 2: **Focus and Coherence** **Materials must focus coherently on the Major Work of the grade in a way that is consistent with the progressions in the Standards.** **NN 2** If all Metrics 2A – 2H were rated as Meets, then rate Non-Negotiable 2 as Meets. If one or more Metric was rated Does Not Meet/Insufficient Evidence, then rate Non-Negotiable 2 as Does Not Meet. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)** **Before moving to Alignment Criterion 1, record the final Meets or Does Not Meet rating in the Evaluation Summary.**		(Reviewer only.) X Meets ____Does Not Meet **Strengths/Weaknesses:**

Now continue by evaluating the Alignment Criterion 1 for Rigor and Balance.

Directions for Alignment Criterion 1

Rigor and Balance

Alignment Criterion 1: Rigor and Balance **Materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.** The Standards set expectations for attention to all three aspects of rigor: conceptual understanding, procedural skill and fluency, and applications. Thus, materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.	**Required Materials** • Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf) • Focus by Grade Level for the grade being evaluated (achievethecore.org/focus) • Situation Types for the Operations in Word Problems (achievethecore.org/situation-types) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion:** Alignment Criterion 1 is rated as Meets or Does Not Meet. To rate Alignment Criterion 1, first rate metrics 1A, 1B, and 1C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). For each metric, guiding questions are provided to aid in gathering evidence. Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 1 if the materials rate 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as rigor and balance, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.
Metric AC1A: **The materials support the development of students' conceptual understanding of key mathematical concepts, especially where called for in specific content Standards or cluster headings.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Major Work for the grade being evaluated that relate specifically conceptual understanding to use throughout the questions associated with this metric. NOTE: Some examples of clusters or Standards that call for conceptual understanding include: K.OA.A.1, (1.NBT.B, 1.NBT.C), (2.NBT.A, 2.NBT.B), (3.OA.A.1, 3.OA.A.2), 4.NF.A, (4.NBT.A, 4.NBT.B), 5.NF.B, (5.NBT.A, 5.NBT.B), 6.RP.A, 6.EE.A.3, 7.NS.A, 7.EE.A, 8.EE.B, 8.F.A, 8.G.A Clusters or Standards grouped by parentheses are closely connected and could be analyzed together. For context, read Criterion #4a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	-Choose a cluster/Standard from the Major Work that is aligned to each aspect of rigor and use it to evaluate these metrics. It is most helpful if the same clusters/Standards are chosen for all of the programs being evaluated. (Guidance in choosing clusters/Standards is included in "How to Find the Evidence".)	**Use the questions for AC Metric 1A to evaluate Metric 1A. Record evidence for each question and rate Metric 1A.** X **Meets (2)** ____**Partially Meets (1)** ____**Does Not Meet (0)**

Is conceptual understanding attended to thoroughly where the Standards set explicit expectations for understanding or interpreting? Evaluate lessons, chapter/unit assessments and homework assignments, paying attention to work aligned to Standards that explicitly call for understanding or interpreting. NOTE: Examples of evaluating this Criterion might include looking at how well the multi-digit addition and subtraction algorithms are developed and explained on the basis of place value and properties of operations; or how well the multi-digit multiplication and division algorithms are developed and explained on the basis of place value and properties of operations; or how well solving equations is presented and explained as a process of reasoning.	**Evidence-** Provides plenty of practice & opportunities in all lessons ass. & hwk. for students. Example. TE 436, 325E Lessons, 2.2, 3.2. 103-104 looking for mistakes in	Student work.
Do the materials feature high-quality conceptual problems and conceptual discussion questions? Evaluate lessons, chapter/unit assessments, and homework assignments. NOTE: Example of conceptual problems might include such questions as "Find a number greater than 1/5 and less than 1/4," or "If the divisor does not change and the dividend increases, what happens to the quotient?"	**Evidence-** Almost every lesson provides P.S. opportunities. Solve & share problems for all topics Ex Lesson 4-3, 4-4 "Listen and look for P182 5E	
Do the materials feature opportunities to identify correspondences across mathematical representations? Evaluate lessons, chapter/unit assessments and homework assignments. NOTE: Examples of evaluating this Criterion might include looking at whether students are supported in identifying correspondences among: the verbal description of a situation, the diagrams that distill its mathematical features, and the equations that model it; or equivalent forms of numbers (e.g., 3 and 6/2) and the number line; or rational number operations and representations of them via models such as the vector model; or the expression that defines a function and the graph that shows the relationship.	**Evidence-** Publisher uses transitions to visual learning. Uses many models and ties them all together very well.	
Metric AC1B: **The materials are designed so that students attain the fluencies and procedural skills required by the Standards.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Major Work for the grade being evaluated that relate specifically to fluency and procedural skill to use throughout the questions associated with this metric. NOTE: Some examples of Standards that call for procedural skill and fluency include: K.OA.A.5, 1.OA.C.6, 2.OA.B.2, 2.NBT.B.5, 3.OA.C.7, 3.NBT.A.2, 4.NBT.B.4, 5.NBT.B.5, 6.NS.B.2, and 6.NS.B.3, 6.EE.A, 7.NS.A, 7.EE.A.1,7.EE.B.4a, 8.EE.C.7, 8.EE.C.8b For context, read Criterion #4b in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).		**Use the questions for Metric 1B to evaluate Metric 1 B. Record evidence for each question and rate Metric 1B.** **(Reviewer only.)** **X Meets (2)** **____ Partially Meets (1)** **____ Does Not Meet (0)**

Is progress toward fluency and procedural skill interwoven with students' devel conceptual understanding of the operations in question? Evaluate lessons, chapter/unit assessments, daily routines, and homework assignments for evidence that the development of fluency and procedural skill is supported by conceptual understanding.	**Evidence-** Topics 2-6 all have fluency SE 237 practice at the end of each unit also.	
Are purely procedural problems and exercises present that include cases in which opportunistic strategies are valuable and generic cases that require efficient algorithms present? Evaluate lessons, chapter/unit assessments, daily routines, and homework assignments. NOTE: Examples of problems in which opportunistic strategies are valuable might include the sum 698 + 240 or the system x + y = 1, 2x + 2y = 3. Examples of generic cases that require efficient algorithms might include the sum 8767+2286 or the system 6y + x = x + 3, – x = 1 + 2y.	**Evidence-** Topic 3 165-166 At each 43E, 325E, 1E, Lesson topic on procedural skills and fluency.	
Do the materials in grades K–6 provide repeated practice toward attainment of fluency Standards? Evaluate lessons, daily routines, and homework assignments for evidence of repeated practice toward attainment of the following K–6 Standards that set an explicit expectation of fluent (accurate and reasonably fast) computation: K.OA.A.5, 1.OA.C.6, 2.OA.B.2, 2.NBT.B.5, 3.OA.C.7, 3.NBT.A.2, 4.NBT.B.4, 5.NBT.B.5, 6.NS.B.2, 6.NS.B.3.	**Evidence-** Daily routines, hwk and assessments include practice. ex. SE 857, 43K-M RTI Diagnosis A-F	
Metric AC1C: **The materials are designed so that teachers and students spend sufficient time working with engaging applications, without losing focus on the Major Work of each grade.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Major Work for the grade being evaluated that relate specifically application to use throughout the questions associated with this metric. NOTE: Some examples of clusters or Standards that call for application include: K.OA.A.2, 1.OA.A, 2.OA.A, 3.OA.A.3, 3.OA.D.8, 4.OA.A.3, 4.NF.B.3d, 4.NF.B.4c, 5.NF.B.6, 5.NF.B.7c, 6.RP.A.3, 6.NS.A.1, 6.EE.B.7, 6.EE.C.9, 7.RP.A, 7.NS.A.3, 7.EE.B.3, 8.EE.C.8c, 8.F.B For context, read Criterion #4c in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** 4.NF.B.3d – exp. TE 475-476 Topic 9 4.NF.B.4c - Topic 10 55a 560 TE 4.NF.B.6 Topic 12 661-662 TE examples	**Use the questions for Metric 1C to evaluate Metric 1C. Record evidence for each question and rate Metric 1C.** **(Reviewer only.)** X **Meets (2)** **Partially Meets (1)** **Does Not Meet (0)**
Are there are single- and multi-step contextual problems, including non-routine problems, that develop the mathematics of the grade, afford opportunities for practice, and engage students in problem solving? Do the problems attend thoroughly to those places in the content Standards where expectations for multi-step and real-world problems are explicit? Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** ex. SE, 651, 653, 654 Every topic has a tie-in to math practices. Strong problem solving.	

Do application problems particularly stress applying the Major Work of the grade? Evaluate lessons, chapter/unit assessments, and homework assignments. NOTE: Examples of evaluating this Criterion might include looking at: how well, by the end of grade 2, students using the materials as designed can represent and solve a full range of one-step addition and subtraction word problems; or how well, by the end of grade 3, students using the materials as designed can represent and solve a full range of one-step multiplication and division word problems; or how well these basic situation types for each operation are carried coherently across the grades, (e.g., with fractions and algebraic expressions); or, in all grades, whether the problems connect concepts, Standards, and domains in ways that are natural and important. For a list of situation types for one-step addition, subtraction, multiplication, and division problems, see Situation Types for the Operations in Word Problems	**Evidence-** End of year assessment. This Series is very strong in this area!	
Does modeling build slowly across K–8, with applications that are relatively simple in earlier grades and when students are encountering new content? In grades 6–8, do the problems begin to provide opportunities for students to make their own assumptions or simplifications in order to model a situation mathematically? Read Standard for Mathematical Practice 4, Model with Mathematics. Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** Bar diagrams to arrays Modeling is included in all areas and think too. In all lessons where applicable	

Alignment Criterion 1: Rigor and Balance

Materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.

AC1 Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 out of 6 points, the Criterion has not been met. Check the final rating.
Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)**

Before moving to Alignment Criterion 2, record the final Meets or Does Not Meet rating in the Evaluation Summary.

(Reviewer only.)

X **Meets**

____ **Does Not Meet**

Strengths/Weaknesses:

Directions for Alignment Criterion 2

Standards for Mathematical Practice

Alignment Criterion 2: Standards for Mathematical Practice

Materials must demonstrate authentic connections between content Standards and practice Standards.

The Standards require that designers of instructional materials connect the mathematical practices to mathematical content in instruction. Thus, materials must demonstrate authentic connections between content Standards and practice Standards.

Required Materials:

- Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf)
- Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)
- Focus by Grade Level for the grade being evaluated (www.achievethecore.org/focus)
- From the materials being evaluated: teacher guides, student texts and workbooks

Rating this Criterion

Alignment Criterion 2 is rated as Meets or Does Not Meet.

To rate Alignment Criterion 2, first rate metrics 2A, 2B, and 2C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). For each metric, guiding questions are provided to aid in gathering evidence.

Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 2 if the materials earn 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as mathematical practices, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.

Metric AC2A:

Materials address the practice Standards in such a way as to enrich the Major Work of the grade; practices strengthen the focus on Major Work instead of detracting from it, in both teacher and student materials.

How to Find the Evidence:

Familiarize yourself with the Major Work of the grade being evaluated (see the Focus by Grade Level documents.)

Evaluate teacher and student materials for evidence that the mathematical practices support and connect to the focus of the grade.

NOTE: Examples of evaluating this Criterion might include looking at whether, in grades K–5, students using the materials are supported to look for and express regularity in repeated reasoning about the addition table, the multiplication table, the properties of operations, the relationship between addition and subtraction or multiplication and division, and the place value system; or whether, in grades 6–8, students using the materials are supported to look for and express regularity in repeated reasoning about proportional relationships and linear functions.

For context, read Criterion #8 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013).

Evidence-

~~Math~~ Practices are written right with objectives for each lesson as well as lessons just on the math practices Ex.

Lesson 2-6
4-11
6-5
Topic 5

(Reviewer only.)

X **Meets (2)**

____ **Partially Meets (1)**

____ **Does Not Meet (0)**

Metric AC2B: **Materials attend to the full meaning of each practice Standard.** **How to Find the Evidence:** For context, read Criterion #7 and Criterion #9 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).		**Use the questions for Metric 2B to evaluate Metric 2B. Record evidence for each question and rate Metric 2B.** **(Reviewer only.)** **X Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Over the course of any given year of instruction, is each mathematical practice Standard meaningfully present in the form of assignments, activities, or problems that stimulate students to develop the habits of mind described in the practice Standard? Evaluate lessons, chapter/ unit assessments, and homework assignments for evidence of each mathematical practice being meaningfully present in instruction.	**Evidence-** Topic 2 & 3 all but practice #6 Topic 5 all but #5 Across all topics and clusters	
Do the materials treat the practice Standards as developing across grades or grade bands? Are the practice Standards in early grades appropriately simple? Do they display an arc of growing sophistication across the grades?	**Evidence-** Animations, posters. Yes at least #1 5 grades. Language was appropriate for grade level.	
Are there teacher-directed materials that explain the role of the practice Standards in the classroom and in students' mathematical development? Are alignments to practice Standards accurate?	**Evidence-** F21 "F" pages in T.E. There are posters also!	
Metric AC2C: **Materials support the Standards' emphasis on mathematical reasoning.** **How to Find the Evidence:** For context, read Criterion #10 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).		**Use the questions for Metric 2C to evaluate Metric 2C. Record evidence for each question and rate Metric 2C.** **(Reviewer only.)** **X Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Do the materials support students in constructing viable arguments and critiquing the arguments of others concerning grade-level mathematics that is detailed in the content Standards? Read Standard for Mathematical Practice 3. Evaluate teacher and student materials to ensure that students are given opportunities to reason with grade-level mathematics.	**Evidence-** MP3 Ex - animations Yf: TE pages. Lessons 1.5, 5.7. 11.4 Provides tools manipulatives and easy to understand for students & parents.	
Do the materials support students in producing not only answers and solutions, but also, in a grade-appropriate way, arguments, explanations, diagrams, mathematical models, etc., especially in the Major Work of the grade? Familiarize yourself with the Major Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate teacher and student materials, to understand the types of work students are expected to produce.	**Evidence-** Ex. SE pages 29, 53, 81, 119, 278. TDSS & TnK 407F, 815F Lesson 16.6 "Convince Me" items for each topic. Home School connections 6	

Do materials explicitly attend to the specialized language of mathematics? I[illegible] language of argument, problem solving, and mathematical explanations taught rather than assumed? Evaluate teacher and student materials, paying attention to how mathematical language is taught. NOTE: Examples of evaluating this Criterion might include looking at whether students are supported in: basing arguments on definitions; using the method of providing a counterexample; or recognizing that examples alone do not establish a general statement.	**Evidence-** exp. SE Thinking Habits pg 86, 160 Share & Discuss 43H, 325H Toss & Talk TE program overviews for each cluster/topic with cards for Vocab. Explicit in TE/SE.	

Alignment Criterion 2:
Standards for Mathematical Practice

Materials must demonstrate authentic connections between content Standards and practice Standards.

AC2 Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 out of 6 points, the Criterion has not been met. Check the final rating.
Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion.
(Reviewer only.)

Before moving to Alignment Criterion 3, record the final Meets or Does Not Meet rating in the Evaluation Summary.

(Reviewer only.)

X **Meets**

____ **Does Not Meet**

Strengths/Weaknesses:

Alignment Criterion 3:
Access to the Standards for All Students

Materials must provide supports for English Language Learners and other special populations.

Because Standards are for all students, alignment requires thoughtful support to ensure all students are able to meet the Standards. Thus, aligned materials must provide supports for English Language Learners and other special populations.

Required Materials:

- Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf)
- Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)
- From the materials being evaluated: teacher guides, student texts and workbooks

Rating this Criterion:
Alignment Criterion 3 is rated as Meets or Does Not Meet.

To rate Alignment Criterion 3, first rate metrics 3A, 3B, and 3C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points).

Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 3 if the materials earn 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as support for special population, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.

Metric AC3A: **Support for English Language Learners and other special populations is thoughtful and helps those students meet the same Standards as all other students. The language in which problems are posed is carefully considered.** **How to Find the Evidence:** Evaluate teacher and student materials, paying attention to supports offered for special populations.	**Evidence-** ELL tool kit adds to rather than replace, Section for each topic - Visual learning bridges and animation.	**Reviewer only.)** X Meets (2) ____Partially Meets (1) ____Does Not Meet (0)
Metric AC3B: **Materials provide appropriate level and type of scaffolding, differentiation, intervention, and support for a broad range of learners with gradual removal of supports, when needed, to allow students to demonstrate their mathematical understanding independently.** **How to Find the Evidence:** Evaluate teacher and student materials, paying attention to whether materials provide differentiation that will lead all learners to engage with on-grade-level content.	**Evidence-** Begin/adv English proficiency ~~Lite 362A for MPTS ESTS~~. All lessons have ideas, worksheets, games. Clearly labeled as re-teach, on-level and above level.	**Reviewer only.)** X Meets (2) ____Partially Meets (1) ____Does Not Meet (0)
Metric AC3C: **Design of lessons recommends and facilitates a mix of instructional approaches for a variety of learners such as using multiple representations (e.g., including models, using a range of questions, checking for understanding, flexible grouping, pair-share).** **How to Find the Evidence:** Evaluate teacher materials, noting instructional approaches suggested for whole class and differentiated lessons and activities.	**Evidence-** Uses lots of different models, questions, checking and grouping. Has centers for all levels.	**Reviewer only.)** X Meets (2) ____Partially Meets (1) ____Does Not Meet (0)

Alignment Criterion 3: **Access to the Standards for All Students** **Materials must provide supports for English Language Learners and other special populations.** **AC3** Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 points, the Criterion has not been met. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion.**(Reviewer only.)** **Move to the Evaluation Summary and record the final Meets or Does Not Meet rating .**	**(Reviewer only.)** X **Meets** ____ **Does Not Meet** **Strengths/Weaknesses:**

Once an evaluation for alignment to the Shifts and major features of the CCSS has been conducted using Sections 1-3, it's important to evaluate for overall quality and best practices. A starting list of Indicators of Quality are suggested below. States, districts and others evaluating instructional materials are encouraged to add to this list to ensure materials reflect local contexts. For background information on some of the Indicators of Quality in this section, refer to pp.18–21 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).

Indicators of Quality	**Evidence- Give specific examples.**	**Rating: (Reviewers only.)**
1. Lessons are thoughtfully structured and support the teacher in leading the class through the learning paths at hand, with active participation by all students in their own learning and in the learning of their classmates.	**Evidence-** Discuss and share Section 3 each lesson. Presents student solutions "Essential Understanding" for each lesson in TE.	**(Reviewer only.)** ____ **Yes** ____ **No**
2. The underlying design of the materials includes both problems and exercises. (In solving problems, students learn new mathematics, whereas in working exercises, students apply what they have already learned to build mastery.) Each problem or exercise has a purpose. **NOTE: This Criterion does not require that the problems and exercises be labeled as such.**	**Evidence-** Solve & share TE345 Independent practice 347-348 HW 349-350 Daily Common Core Review 351A These are incorporated throughout.	**(Reviewer only.)** X **Yes** ____ **No**

3. Design of assignments is not haphazard: exercises are given in intentional sequences in order to strengthen students' mathematical understanding.	**Evidence-** Topics are introduced, lessons build & assignments match progress Ex. lesson 4.1 multiply ±10 4.2 models 4.3 estimate 4.4 compatible numbers 4.5 arrays partial product 4.6 * distributive 4.7 partial product 2 digit etc.	**(Reviewer only.)** X Yes ____ No
4. There are separate teacher materials that support and reward teacher study including, but not limited to: discussion of the mathematics of the units and the mathematical point of each lesson as it relates to the organizing concepts of the unit, discussion on student ways of thinking and anticipating a variety of students responses, guidance on lesson flow, guidance on questions that prompt students thinking, and discussion of desired mathematical behaviors being elicited among students.	**Evidence-** Background for each topic's lesson objective, essential understanding for each lesson in TE. PD on line for each topic, good for teachers & parents. Today's Challenge in TE.	**(Reviewer only.)** X Yes ____ No
5. Manipulatives suggested in the materials are faithful representations of the mathematical objects they represent and are connected to written methods.	**Evidence-** Bars for fractions instead of circles. Manipulatives and materials listed and provided for each lesson.	**(Reviewer only.)** X Yes ____ No
6. Materials include a variety of curriculum-embedded assessments. Examples include pre-, formative, summative, and self-assessment resources.	**Evidence-** Topic assessments Quick-check 73, 74 97-98 TE Performance assessments with rubrics - Diagnostic test booklet	**(Reviewer only.)** X Yes ____ No
7. Assessments contain aligned rubrics, answer keys, and scoring guidelines that provide sufficient guidance for interpreting student performance.	**Evidence-** Aligned rubrics for each topic assessment with scoring guidelines. Diagnostic test booklet #Assess? have different Assess Sourcebook mid-lesson Final pgs. of each topic	**(Reviewer only.)** X Yes ____ No
8. Materials assess student proficiency using methods that are accessible and unbiased, including the use of course-level language in student prompts.	**Evidence-** Language is consistent and on grade level. Good use of vocab	**(Reviewer only.)** X Yes ____ No

9. Materials are carefully evaluated by qualified individuals, whose names are listed, in an effort to ensure freedom from mathematical errors and course-level appropriateness.	**Evidence-** See title pg. Only one ~~No~~ Public school – elem. teachers listed. But program seems to follow math CCSS,	**(Reviewer only.)** X **Yes** ____ **No**
10. The visual design supports students in engaging thoughtfully with the subject. Navigation through the text is clear.	**Evidence-** SE 205 ex. Easy to follow; both on-line TE & SE. Hwk also easy for parents.	**(Reviewer only.)** X **Yes** ____ **No**
11. The materials engage parents in appropriate ways. For example, homework assignments in elementary grades, consist of routine problems, practice with getting answers, and fluency-building exercises that parents can easily support.	**Evidence-** On-line resources also for parents. HomeSchool Topic 4 Hwk 4-5, 211, 205. Each Hwk has "Another Look" that provides models and examples of how skills were taught. Homeschool connections also provide great information.	**(Reviewer only.)** Y **Yes** ____ **No**

Reviewer IMET Evaluation Summary **Title/Level:** Grade 4

Publisher: Pearson Education Inc. **Copyright:** 2016 **ISBN:** 9780328847624

Reviewer ID # CB, MH **Date Review Completed:** 3/7/16

Non-Negotiable Criteria- Each Non-Negotiable must be met in order for the Non-Negotiable Alignment Criteria to be met overall.

Non-Negotiable 1: Freedom from Obstacles to Focus	Non- Negotiable 2: Focus and Coherence
X Meets	X Meets
_____ Does Not Meet	_____ Does Not Meet

Non-Negotiable Overall:

X **Meets** _____ **Does Not Meet**

Alignment Criteria- Each Alignment Criterion must be met with a sufficient number of points in order for Alignment Criteria to be labeled as "Meets" overall. The more points the materials receive on the Alignment Criteria, the better they are aligned.

Alignment Criterion 1: Rigor and Balance	Alignment Criterion 2: Standards of Mathematical Practice	Alignment Criterion 3: Access to Standards for All Learners
Points: 6 of 6 possible. (Materials must receive at least 5 of 6 points to align.)	Points: 6 of 6 possible. (Materials must receive at least 5 of 6 points to align.)	Points: 6 of 6 possible. (Materials must receive at least 5 of 6 points to align.)
X Meets	X Meets	X Meets
_____ Does Not Meet	_____ Does Not Meet	_____ Does Not Meet

Alignment Criteria Overall:

X **Meets** _____ **Does Not Meet**

If the materials meet both Non-Negotiables and relevant Alignment Criterion, they are aligned to the Shifts and major features of the Core Standards. **the materials meet every Non-Negotiable and Alignment Criterion?** X **Yes** ____ **No**

What are the specific areas of strength and weakness based on this evaluation? Publishers or others modifying or developing assessments can use this information to make improvements and/or to remedy gaps in the alignment of assessment materials.

Strengths

- Alignment of Standards
- Teaching & Implementing of M.P.
- Ease of use due organization of materials.
- Progression of development of topics
- Problem Solving
- Presentation in SE is Kid friendly
- ELL - beg. inter. advance good
- On-line PD for parents- explains, gives hwk.
- Background Knowledge for teachers well done.
- Parent Connection on each homework
- Wheel- color coding

Weakness

- maybe more activities- movement built in to lessons

2015-16 Mathematics Interim Review Recommendation & Summary

Publisher Name:	Pearson Education Inc
Title:	enVision math 2.0 Grade 5
ISBN #	9780 3288 47631
Grade Level(s) or Course:	Grade 5
Reviewer ID:	CB MH

RECOMMENDED AS:

_✓_ **Core Mathematics Program-** a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials. Substantial evidence clearly supports the designation of this program as Core.

_____ **Other Mathematics Program-** a program that substantially, but partially, meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for supplemental materials. Substantial evidence clearly supports the designation of this program as Other.

_____ **Component Mathematics Program-** a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs. Substantial evidence clearly supports the designation of this program as Component.

_____ **Intervention Program-** a program designed and intended to target and support students' specific needs. Substantial evidence clearly supports the designation of this program as Intervention.

_____ **Does not meet criteria** for recommendation as a Curricular Material or Online Resource for Mathematics.

EVIDENCE SUMMARY:

FOCUS- Superbly covers all grade level standards and does not cover or assess standards not addressed in grade level.

COHERENCE- Includes appropriate review of early grade and continues to build on grade level standards. This is true for all topics. Particularly good at helping make connections across clusters and domains.

RIGOR-
Materials are of high level quality addressing conceptual understandings. They provide many opportunities for student discussion and identifying correspondence using mathematics representations to reinforce concepts.

CONCEPTUAL UNDERSTANDING-
Provides various models to reinforce concepts being taught. Uses place value and number sense to explain operations in this grade level.

MATHEMATICAL PRACTICES-
This series starts with explicit instruction on each math practice, then they are embedded into each lesson as well as end of topic lessons. Excellent.

ACCESSIBILITY OF STANDARDS TO ALL STUDENTS-
Support for ELL is provided in each lesson. There is also activities for on grade level and above grade level in each lesson. They support a broad range of learners in each lesson.

OTHER:

There are many opportunities for problem solving and student discussion in each topic. This series is 100% aligned to the standards of this grade.

2015-16 Interim Mathematics Review

Mathematics Evaluation Tool Grades K-8

Publisher: Pearson Education Inc.

Title of Material: EnVisions math 2.0 Gr. 5

Author: R I Charles et al

ISBN #: 978 032 884 7631 **Copyright** 2016

Reviewer ID: CB M+I

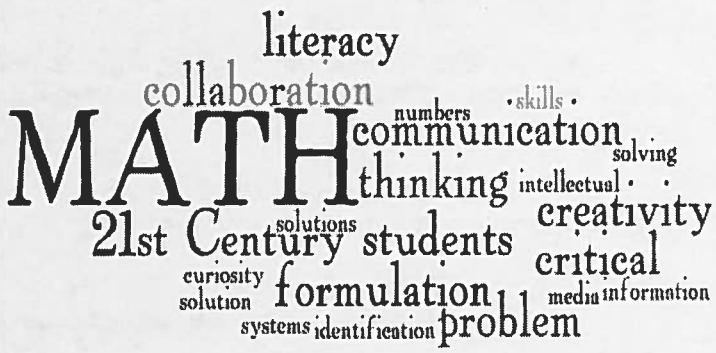
Core Mathematics Program- a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Core.

Other Mathematics Program- a program that substantially, but partially, meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Other.

Component Mathematics Program- a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs.
Substantial evidence clearly supports the designation of this program as Component.

Intervention Program- a program designed and intended to target and support students' specific needs.
Substantial evidence clearly supports the designation of this program as Intervention.

2016
Mathematics
Grades K-8



- Evaluation Form adapted from Instructional Materials Evaluation Toolkit (IMET).

The IMET was developed by Student Achievement Partners. Educators may use or adapt. http://creativecommons.org/licenses/by/3.0/ Download this tool at http://achievethecore.org/IMET

Instructional Materials Evaluation Tool
Mathematics, Grades K-8

What Are the Purposes of the IMET?
This Math IMET is designed to help educators determine whether instructional materials are aligned to the Shifts and major features of the Common Core State Standards (CCSS). The substantial instructional Shifts (http://www.corestandards.org/other-resources/key-shifts-inmathematics/) at the heart of the Common Core State Standards are:
- **Focus** strongly where the Standards focus
- **Coherence**: Think across grades and link to major topics within the grade
- **Rigor**: In major topics, pursue conceptual understanding, procedural skill and fluency, and application with equal intensity.

The IMET draws directly from the following documents:
- Common Core State Standards for Mathematics (www.corestandards.org/Math)
- Publishers' Criteria for the Common Core State Standards in Mathematics grade K-8 (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)

When to use the IMET
1. Purchasing materials: Many factors go into local purchasing decisions. Alignment to the Standards is a critical factor to consider. This tool is designed to evaluate alignment of instructional materials to the Shifts and the major features of the CCSS. It also provides suggestions of additional indicators to consider in the materials evaluation and purchasing process.

2. Evaluating materials currently in use: The IMET can be used to analyze the degree of alignment of existing materials and help to highlight specific, concrete flaws in alignment. Even where materials and tools currently in use fail to meet one or more of these criteria, the pattern of failure is likely to be informative. States and districts can use the evaluation to create a thoughtful plan to modify or combine existing resources in such a way that students' actual learning experiences approach the focus, coherence, and rigor of the Standards.

3. Developing programs: Those developing new programs can use this tool as guidance for creating aligned curricula.
Please note this tool was designed for evaluating comprehensive curricula (including any supplemental or ancillary materials), but it was not designed for the evaluation of standalone supplemental materials.

Who Uses the IMET?
Evaluating instructional materials requires both subject-matter and pedagogical expertise. Evaluators should be well versed in the Standards (www.corestandards.org/Math) for all grades in which materials are being evaluated. This includes understanding the Major Work of the grade (www.achievethecore/focus), the Supporting and Additional work, how the content fits into the progressions in the Standards (www.achievethecore.org/progressions), and the expectations of the Standards with respect to conceptual understanding, procedural skill and fluency, and application. Evaluators also should be familiar with the substantial instructional Shifts (http:// www.corestandards.org/other-resources/key-shifts-in-mathematics/) of Focus, Coherence and Rigor that are listed above.

Getting Started
Prior to Evaluation

Assemble all of the materials necessary for the evaluation. It is essential for evaluators to have materials for all grades covered by the program, as some criteria cannot be rated without having access to each grade. In addition, each evaluator should have a reference copy of the Common Core State Standards for Mathematics (CCSSM) and the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013).

Before conducting the evaluation itself, it is important to develop a protocol for the evaluation process. The protocol should include having evaluators study the Publishers' Criteria and the IMET. It will also be helpful for evaluators to get a sense of each program overall before beginning the process. At a minimum, this would include reading the front matter of the text, looking at the table of contents and paging through multiple chapters.

Sections 1-3 below should be completed to produce a comprehensive picture of the strengths and weaknesses of the materials under evaluation. Information about areas in need of improvement or supplementation should be shared with internal and external stakeholders.

Navigating the Tool

Begin with Section 1: Non-Negotiable Alignment Criteria

- The Non-Negotiable Alignment Criteria must each be met in full for materials to be considered aligned to the Shifts and the major features of the Common Core State Standards. Each Non-Negotiable Alignment Criterion has one or more metrics associated with it; every one of these metrics must be met in order for the criterion as a whole to be met.

- Examine the relevant materials and use evidence to rate the materials against each criterion and its associated metric(s).

- Record and explain the evidence upon which the rating is based.

Continue to Section 2: Alignment Criteria

- The Alignment Criteria must each be met for materials to be considered aligned to the Shifts and the major features of the Common Core State Standards. Each Alignment Criterion has one or more metric associated with it; a specific number of these metrics must be met or partially met in order for the criterion as a whole to be met.

- Examine the materials in relation to these criteria, assigning each metric a point value. Rate the criterion as "Meets" or "Does Note Meet" based on the number of points assigned. The more points the materials receive on the alignment Criteria, the better they are aligned.

- Record and explain the evidence upon which the rating is based.

Proceed to Section 4: Indicators of Quality

- Indicators of Quality are important considerations that will help evaluators better understand the overall quality of instructional materials. These considerations are not criteria for alignment to the CCSS, but they provide valuable information about additional program characteristics. Evaluators may want to add their own indicators to the examples provided.

Directions for Non-Negotiable 1

Freedom from Obstacles to Focus

Criterion	Evidence- Give specific examples.	Rating: (Reviewer only.)
Non-Negotiable 1: **Freedom from Obstacles to Focus** **Materials must reflect the content architecture of the Standards by not assessing the topics named before the grade level where they first appear in the Standards.** The Standards foster students' progress to algebra by focusing strongly on arithmetic. Consistent with this focus, certain topics from outside of arithmetic appear only in later grades. Thus, to be aligned, materials must reflect the content architecture of the Standards by not assessing the topics named before the grade level where they first appear in the Standards. In this criterion, "topics named" means the topics that are explicitly named in Metric 1A. No other topics should be added to the list in Metric 1A. (Note that other topics in the standards are addressed in criterion NN2.)	**Required Materials** • Common Core State Standards for Mathematics (www.corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf) • From the materials being evaluated: teacher guides and all assessment components	**Rating this Criterion:** Non-Negotiable 1 is rated as Meets or Does Not Meet. To rate Non-Negotiable 1, begin by rating Metric 1A. Since Metric 1A is the only metric for Non-Negotiable 1, the rating for Non-Negotiable 1 is the same as the rating for Metric 1A. If Metric 1A is rated as Does Not Meet, include evidence of when the named topic(s) is/are assessed. If the metric is rated as Meets, list the grade(s) examined in the evaluation.

Metric NN1A: **Materials reflect the basic architecture of the Standards by not assessing the listed topics before the grade level indicated.** • Probability, including chance, likely outcomes, probability models. (Introduced in the CCSSM in grade 7) • Statistical distributions, including center, variation, clumping, outliers, mean, median, mode, range, quartiles; and statistical association or trends, including two-way tables, bivariate measurement data, scatter plots, trend line, line of best fit, correlation. (Introduced in the CCSSM in grade 6) • Similarity, congruence, or geometric transformations. (Introduced in the CCSSM in grade 8) • Symmetry of shapes, including line/ reflection symmetry, rotational symmetry. (Introduced in the CCSSM in grade 4) **How to Find the Evidence:** Evaluate the table of contents, all chapter tests, all unit tests, and other such assessment components (including rubrics). For context, read Criterion #2 from the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013). NOTE: Grade alignments of other topics are addressed in Non-Negotiable 2, Focus and Coherence.) In this criterion, "topics named" means the topics that are explicitly named in Metric 1A. No other topics should be added to the list in Metric 1A. (Note that other topics in the standards are addressed in criterion NN2.)	**Evidence-** No sign of items to the left. Checked each assessment for items. See "wheel" graphic.	(Reviewer only.) ✓ Meets ____Does Not Meet
Non-Negotiable 1: Materials must reflect the content architecture of the Standards by not assessing the topics named* before the grade level where they first appear in the Standards. **NN 1** If Metric 1A was rated as Meets, then rate Non-Negotiable 1 as Meets. If Metric 1A was rated as Does Not Meet, then rate Non- Negotiable 1 as Does Not Meet. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion.**(Reviewer only.)** **Before moving to Non-Negotiable 2, record the final Meets or Does Not Meet rating in the Evaluation Summary.**		(Reviewer only.) ✓ Meets ____Does Not Meet **Strengths/Weaknesses:**

Directions for Non-Negotiable 2

Focus and Coherence

Non-Negotiable 2:

Focus and Coherence

Materials must focus coherently on the Major Work of the grade in a way that is consistent with the progressions in the Standards.

Focus and coherence are the two major evidence-based design principles of the Common Core State Standards for Mathematics (CCSSM, p. 3). Focus is necessary in order to fulfill the ambitious promise the states have made to their students by adopting the Standards: greater achievement at the college and career ready level; greater depth of understanding of mathematics; and a rich classroom environment in which reasoning, sense-making, applications, and a range of mathematical practices flourish. In simpler terms, a mile-wide, inch-deep curriculum translates to less time per topic. Less time means less depth and moving on without many students. Thus, materials must focus coherently on the Major Work of the grade in a way that is consistent with the progressions in the Standards.

Required Materials

- Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf)
- Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)
- Focus by Grade Level for the grade being evaluated (www.achievethecore.org/focus)
- From the materials being evaluated: teacher guides, student texts and workbooks

Rating this Criterion:

Non-Negotiable 2 is rated as Meets or Does Not Meet.

To rate Non-Negotiable 2, first rate metrics 2A–2H. Each of these eight metrics must be rated as Meets in order for Non-Negotiable 2 to be rated as Meets. Rate each metric 2A-2H as Meets or Does Not Meet/Insufficient Evidence. If the evidence examined shows that the Criterion is met, then mark the Criterion Meets. If the evidence examined shows that the Criterion is not met—or if there is insufficient evidence to make a determination—then mark the Criterion as Does Not Meet/Insufficient Evidence. Support all ratings with evidence.

Metric NN2A:

In each grade K–8, students and teachers using the materials as designed devote the large majority of time to the Major Work of the grade.

How to Find the Evidence:

Familiarize yourself with the Major Work of the grade being evaluated (see the Focus by Grade Level documents.)

Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, lessons, homework assignments, and assessments. (Evaluate both student and teacher materials.)

Consider time spent on the Major Work of the grade and judge qualitatively whether students and teachers using the materials as designed will devote the large majority of time to the Major Work of the grade.

For context, read Criterion #1 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013)

Evidence-

Ctd Graphics make it easy to see the Major Work of the grade by the color coding and the "wheel". Table of Contents and the "wheel" show the majority of the lessons are the Major Work of the grade. Placing Major Work clusters first and labeling them as such and putting Supporting clusters at the end of the year reinforces that. Standard notation labels as well.

(Reviewer only.)

✓ **Meets**

Does Not Meet/ Insufficient Evidence

Metric NN2B: **Supporting Work, where present, enhances focus and coherence simultaneously by also engaging students in the Major Work of the grade.** **How to Find the Evidence:** Familiarize yourself with the Major Work and Supporting Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate chapters and lessons that focus on Supporting Work. NOTE: Example of evaluating this Criterion might include looking at whether materials for K–5 generally treat data displays as an occasion for solving grade-level word problems using the four operations (e.g., see 3.MD.B.3); or whether materials for grade 7 take advantage of opportunities to use probability to support ratios, proportions, and percentages. For context, read Criterion #3 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Supporting works has word problems, in fact ALL lessons incorporate math practices and word problems. Encourages more than one way to solve. "Big Ideas" TE Program overview.	(Reviewer only.) ✓ Meets ____ Does Not Meet/ Insufficient Evidence
Metric NN2C: **Materials base content progressions on the grade-by-grade progressions in the Standards. Content from previous or future grades does not unduly interfere with or displace on-grade-level content.** **How to Find the Evidence:** Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, and lessons in both student and teacher materials. NOTE: In some cases it may be possible that aligned materials might address some aspects of a topic in a strategic way before or after the grade level in which the topic is central in the Standards' progressions; for example, a curriculum author might purposefully choose to explore adding fractions with unlike denominators in a way appropriate to grade four, recognizing that this work is not really required until the next grade. However, any such purposeful discrepancies in content progressions should enhance the required learning in each grade; not unduly interfere with or displace grade-level content; and be clearly aimed at helping students meet the Standards as written rather than effectively rewriting the progressions in the Standards. And in all cases, note that Non-Negotiable 1 must be met for materials to be aligned. For context, read Criterion #5a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** This does a great job of simple review of a few problems from previous grade level, but focuses on current grade level standard. Each new topic starts with "Review what you know". See Topic 1 - exponents does quick review of x10 as place value. See also: Topic 2 / Topic 11 right on grade level standards.	(Reviewer only.) ✓ Meets ____ Does Not Meet/ Insufficient Evidence

Metric NN2D: **Materials gi[illegible]l students extensive work with on-grade-level problems.** **How to Find the Evidence:** Evaluate both student and teacher materials. If the materials provide resources for differentiated learning, consider whether lower-performing students have opportunities to engage with grade-level problems. Also consider whether higher-performing students are given opportunities to learn current grade-level content in greater depth. For context, read Criterion #5b in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Every lesson has a re-teach, on-level and advance lesson or activity. Intervention booklet has 4-6 slope and focuses on strategies not alternative strategies. Teacher resources games to reinforce skills. Math/Sci for high kids	(Reviewer only.) ✓ Meets ____Does Not Meet/ Insufficient Evidence
Metric NN2E: **Materials relate on-grade-level concepts explicitly to prior knowledge from earlier grades.** **How to Find the Evidence:** Evaluate both student and teacher materials. NOTE: Examples of evaluating this Criterion might include looking at the way the materials extend basic ideas of place value across the decimal point; or the role that properties of operations play when the materials extend arithmetic beyond whole numbers to fractions, variables, and expressions. More generally, cluster headings in the Standards sometimes signal key moments where reorganizing and extending previous knowledge is important in order to accommodate new knowledge (e.g., see cluster headings that use the phrase "Apply and extend previous understanding"). For context, read Criterion #5c in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Place value across the decimal point in Topic one is clearly explained with diagrams to show how the 1/10 smaller pattern continues. See also - Topic 4 - Factors & Multiples relates to Gr 4 equivalent fractions and +/- fractions TE pg 455C SE 458, 459, 465	(Reviewer only.) ✓ Meets ____Does Not Meet/ Insufficient Evidence
Metric NN2F: **Review of material from previous grades is clearly identified as such to the teacher, and teacher and students can see what their specific responsibility is for the current year.** **How to Find the Evidence:** Evaluate the table of contents, but do not stop there; also evaluate units, chapters, lessons, homework assignments and assessments. (Evaluate both student and teacher materials.) Identify any content from previous grades and check whether it is identified as such. For context, read Criterion #5a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Every cluster has a "Look Back" to show previous grade. See TE 455C 1C-D Also, content coherence section of the Table of Contents Also "Review What You Know" before beginning each topic See SE pg 2, SE 524	(Reviewer only.) ✓ Meets ____Does Not Meet/ Insufficient Evidence

Metric NN2G: **Materials include learning objectives that are visibly shaped by CCSSM cluster headings.** **How to Find the Evidence:** Select several clusters from the Major Work in the grade being evaluated. Evaluate teacher and student materials in relation to these clusters. For context, read Criterion #6a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** At the start of each topic the standard number is given and the objective & essential understanding is stated. TE pg. 4551-J 10/16 Topic headings use exact wording of standards.	(Reviewer only.) ✓ Meets ____ Does Not Meet/ Insufficient Evidence
Metric NN2H: **Materials include problems and activities that serve to connect two or more clusters in a domain, or two or more domains in a grade, in cases where these connections are natural and important.** **How to Find the Evidence:** In the grade being evaluated, choose two or more clusters or two or more domains for which connections are natural and important. Evaluate the units, chapters, and lessons that deal with the chosen topics, looking for problems and activities that serve to connect the chosen clusters or domains. NOTE: An example of evaluating this Criterion might include looking at whether problems in grade 4 sometimes or often involve students applying their developing computation skills (detailed in domain NBT) in the context of solving word problems (detailed in domain OA). For context, read Criterion #6b in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Problem solving ties together related clusters and also Math Practices in all topics in TE and SE, See- TE 8091 - Lesson 15-3	(Reviewer only.) ✓ Meets ____ Does Not Meet/ Insufficient Evidence
Non-Negotiable 2: **Focus and Coherence** **Materials must focus coherently on the Major Work of the grade in a way that is consistent with the progressions in the Standards.** **NN 2** If all Metrics 2A – 2H were rated as Meets, then rate Non-Negotiable 2 as Meets. If one or more Metric was rated Does Not Meet/Insufficient Evidence, then rate Non-Negotiable 2 as Does Not Meet. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)** **Before moving to Alignment Criterion 1, record the final Meets or Does Not Meet rating in the Evaluation Summary.**		(Reviewer only.) ✓ Meets ____ Does Not Meet **Strengths/Weaknesses:**

Now continue by evaluating the Alignment Criterion 1 for Rigor and Balance.

Directions for Alignment Criterion 1

Rigor and Balance

Alignment Criterion 1: Rigor and Balance **Materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.** The Standards set expectations for attention to all three aspects of rigor: conceptual understanding, procedural skill and fluency, and applications. Thus, materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.	**Required Materials** • Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf) • Focus by Grade Level for the grade being evaluated (achievethecore.org/focus) • Situation Types for the Operations in Word Problems (achievethecore.org/situation-types) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion:** Alignment Criterion 1 is rated as Meets or Does Not Meet. To rate Alignment Criterion 1, first rate metrics 1A, 1B, and 1C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). For each metric, guiding questions are provided to aid in gathering evidence. Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 1 if the materials rate 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as rigor and balance, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.
Metric AC1A: **The materials support the development of students' conceptual understanding of key mathematical concepts, especially where called for in specific content Standards or cluster headings.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Major Work for the grade being evaluated that relate specifically conceptual understanding to use throughout the questions associated with this metric. NOTE: Some examples of clusters or Standards that call for conceptual understanding include: K.OA.A.1, (1.NBT.B, 1.NBT.C), (2.NBT.A, 2.NBT.B), (3.OA.A.1, 3.OA.A.2), 4.NF.A, (4.NBT.A, 4.NBT.B), 5.NF.B, (5.NBT.A, 5.NBT.B), 6.RP.A, 6.EE.A.3, 7.NS.A, 7.EE.A, 8.EE.B, 8.F.A, 8.G.A Clusters or Standards grouped by parentheses are closely connected and could be analyzed together. For context, read Criterion #4a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	-Choose a cluster/Standard from the Major Work that is aligned to each aspect of rigor and use it to evaluate these metrics. It is most helpful if the same clusters/Standards are chosen for all of the programs being evaluated. (Guidance in choosing clusters/Standards is included in "How to Find the Evidence".)	**Use the questions for AC Metric 1A to evaluate Metric 1A. Record evidence for each question and rate Metric 1A.** ✓ **Meets (2)** **Partially Meets (1)** **Does Not Meet (0)**

Is conceptual understanding attended to thoroughly where the Standards set explicit expectations for understanding or interpreting? Evaluate lessons, chapter/unit assessments and homework assignments, paying attention to work aligned to Standards that explicitly call for understanding or interpreting. NOTE: Examples of evaluating this Criterion might include looking at how well the multi-digit addition and subtraction algorithms are developed and explained on the basis of place value and properties of operations; or how well the multi-digit multiplication and division algorithms are developed and explained on the basis of place value and properties of operations; or how well solving equations is presented and explained as a process of reasoning.	**Evidence-** Place value is modeled and used throughout this series. Homework includes "Another look" which uses models & explains concept further. SE 461 462. For further example of thorough development of expressions See Std edition pgs 458- rep + & associative property.	
Do the materials feature high-quality conceptual problems and conceptual discussion questions? Evaluate lessons, chapter/unit assessments, and homework assignments. NOTE: Example of conceptual problems might include such questions as "Find a number greater than 1/5 and less than 1/4," or "If the divisor does not change and the dividend increases, what happens to the quotient?"	**Evidence-** yes, the high-quality conceptual problems are on-going & incorporates Math Practices to assure great rigor. For example, See Solve & Share problems in each lesson.	
Do the materials feature opportunities to identify correspondences across mathematical representations? Evaluate lessons, chapter/unit assessments and homework assignments. NOTE: Examples of evaluating this Criterion might include looking at whether students are supported in identifying correspondences among: the verbal description of a situation, the diagrams that distill its mathematical features, and the equations that model it; or equivalent forms of numbers (e.g., 3 and 6/2) and the number line; or rational number operations and representations of them via models such as the vector model; or the expression that defines a function and the graph that shows the relationship.	**Evidence-** Students are constantly being encouraged to explain, provide models, and to justify and solve problems. See SE 478- 480.	
Metric AC1B: **The materials are designed so that students attain the fluencies and procedural skills required by the Standards.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Major Work for the grade being evaluated that relate specifically to fluency and procedural skill to use throughout the questions associated with this metric. NOTE: Some examples of Standards that call for procedural skill and fluency include: K.OA.A.5, 1.OA.C.6, 2.OA.B.2, 2.NBT.B.5, 3.OA.C.7, 3.NBT.A.2, 4.NBT.B.4, 5.NBT.B.5, 6.NS.B.2, and 6.NS.B.3, 6.EE.A, 7.NS.A, 7.EE.A.1,7.EE.B.4a, 8.EE.C.7, 8.EE.C.8b For context, read Criterion #4b in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	i	**Use the questions for Metric 1B to evaluate Metric 1 B. Record evidence for each question and rate Metric 1B.** **(Reviewer only.)** ✓ **Meets (2)** **Partially Meets (1)** **Does Not Meet (0)**

Is progress toward fluency and procedural skill interwoven with students' develo conceptual understanding of the operations in question? Evaluate lessons, chapter/unit assessments, daily routines, and homework assignments for evidence that the development of fluency and procedural skill is supported by conceptual understanding.	**Evidence-** Fluency practice is built into most topics. Plenty of practice is provided in all lessons See SE 575, 687, 723	
Are purely procedural problems and exercises present that include cases in which opportunistic strategies are valuable and generic cases that require efficient algorithms present? Evaluate lessons, chapter/unit assessments, daily routines, and homework assignments. NOTE: Examples of problems in which opportunistic strategies are valuable might include the sum 698 + 240 or the system x + y = 1, 2x + 2y = 3. Examples of generic cases that require efficient algorithms might include the sum 8767+2286 or the system 6y + x = x + 3, – x = 1 + 2y.	**Evidence-** Yes, program utilizes a great mixture of procedural problems ~~and~~ using algorithms and problem solving on All homework. SE pg 39-40, 87-88,	
Do the materials in grades K–6 provide repeated practice toward attainment of fluency Standards? Evaluate lessons, daily routines, and homework assignments for evidence of repeated practice toward attainment of the following K–6 Standards that set an explicit expectation of fluent (accurate and reasonably fast) computation: K.OA.A.5, 1.OA.C.6, 2.OA.B.2, 2.NBT.B.5, 3.OA.C.7, 3.NBT.A.2, 4.NBT.B.4, 5.NBT.B.5, 6.NS.B.2, 6.NS.B.3.	**Evidence-** ~~Almost every~~ lesson ~~provides~~ ~~problem solving~~ opportunities Daily routines, homework, and assessments include practice. Fluency practice at the end of each unit.	Each topic averages almost 50 pages w/ fluency exercises throughout.
Metric AC1C: **The materials are designed so that teachers and students spend sufficient time working with engaging applications, without losing focus on the Major Work of each grade.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Major Work for the grade being evaluated that relate specifically application to use throughout the questions associated with this metric. NOTE: Some examples of clusters or Standards that call for application include: K.OA.A.2, 1.OA.A, 2.OA.A, 3.OA.A.3, 3.OA.D.8, 4.OA.A.3, 4.NF.B.3d, 4.NF.B.4c, 5.NF.B.6, 5.NF.B.7c, 6.RP.A.3, 6.NS.A.1, 6.EE.B.7, 6.EE.C.9, 7.RP.A, 7.NS.A.3, 7.EE.B.3, 8.EE.C.8c, 8.F.B For context, read Criterion #4c in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** NF B6 - 8.1 8.2 8.7 8.9 Great practice and word problems and application in each lesson. NF B7c real world application - See lessons- 9-3, 9-4, 9-5, 9-6, 9-7, 9-3 starts with real world application.	**Use the questions for Metric 1C to evaluate Metric 1C. Record evidence for each question and rate Metric 1C.** **(Reviewer only.)** ✓ **Meets (2)** **Partially Meets (1)** **Does Not Meet (0)**
Are there are single- and multi-step contextual problems, including non-routine problems, that develop the mathematics of the grade, afford opportunities for practice, and engage students in problem solving? Do the problems attend thoroughly to those places in the content Standards where expectations for multi-step and real-world problems are explicit? Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** See Solve and Share in each lesson. SE 143, 113, 177	

Do application problems particularly stress applying the Major Work of the grade? Evaluate lessons, chapter/unit assessments, and homework assignments. NOTE: Examples of evaluating this Criterion might include looking at: how well, by the end of grade 2, students using the materials as designed can represent and solve a full range of one-step addition and subtraction word problems; or how well, by the end of grade 3, students using the materials as designed can represent and solve a full range of one-step multiplication and division word problems; or how well these basic situation types for each operation are carried coherently across the grades, (e.g., with fractions and algebraic expressions); or, in all grades, whether the problems connect concepts, Standards, and domains in ways that are natural and important. For a list of situation types for one-step addition, subtraction, multiplication, and division problems, see Situation Types for the Operations in Word Problems	**Evidence-** This series has examples of this in each lesson. It also has a section of "Analyze Student Work" TE 457, 463, 469 See also End of year assessment	
Does modeling build slowly across K–8, with applications that are relatively simple in earlier grades and when students are encountering new content? In grades 6–8, do the problems begin to provide opportunities for students to make their own assumptions or simplifications in order to model a situation mathematically? Read Standard for Mathematical Practice 4, Model with Mathematics. Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** Modeling moves from bar diagrams to arrays throughout the grade level.	

Alignment Criterion 1: Rigor and Balance

Materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.

AC1 Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 out of 6 points, the Criterion has not been met. Check the final rating.
Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)**

Before moving to Alignment Criterion 2, record the final Meets or Does Not Meet rating in the Evaluation Summary.

(Reviewer only.)

✓ **Meets**

____ **Does Not Meet**

Strengths/Weaknesses:

Directions for Alignment Criterion 2

Standards for Mathematical Practice

Alignment Criterion 2: Standards for Mathematical Practice

Materials must demonstrate authentic connections between content Standards and practice Standards.

The Standards require that designers of instructional materials connect the mathematical practices to mathematical content in instruction. Thus, materials must demonstrate authentic connections between content Standards and practice Standards.

Required Materials:

- Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf)
- Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)
- Focus by Grade Level for the grade being evaluated (www.achievethecore.org/focus)
- From the materials being evaluated: teacher guides, student texts and workbooks

Rating this Criterion

Alignment Criterion 2 is rated as Meets or Does Not Meet.

To rate Alignment Criterion 2, first rate metrics 2A, 2B, and 2C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). For each metric, guiding questions are provided to aid in gathering evidence.

Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 2 if the materials earn 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as mathematical practices, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.

Metric AC2A:

Materials address the practice Standards in such a way as to enrich the Major Work of the grade; practices strengthen the focus on Major Work instead of detracting from it, in both teacher and student materials.

How to Find the Evidence:

Familiarize yourself with the Major Work of the grade being evaluated (see the Focus by Grade Level documents.)

Evaluate teacher and student materials for evidence that the mathematical practices support and connect to the focus of the grade.

NOTE: Examples of evaluating this Criterion might include looking at whether, in grades K–5, students using the materials are supported to look for and express regularity in repeated reasoning about the addition table, the multiplication table, the properties of operations, the relationship between addition and subtraction or multiplication and division, and the place value system; or whether, in grades 6–8, students using the materials are supported to look for and express regularity in repeated reasoning about proportional relationships and linear functions.

For context, read Criterion #8 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013).

Evidence-

Mathematical practices are listed right with the objective each day. Some lessons are focused on particular practices. daily Solve & Shares incorporate practices.

TE 281, 239, 257

Lesson 5-6?

(Reviewer only.)

✓ **Meets (2)**

____ **Partially Meets (1)**

____ **Does Not Meet (0)**

Metric AC2B: **Materials attend to the full meaning of each practice Standard.** **How to Find the Evidence:** For context, read Criterion #7 and Criterion #9 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).		**Use the questions for Metric 2B to evaluate Metric 2B. Record evidence for each question and rate Metric 2B.** **(Reviewer only.)** ✓ **Meets (2)** **Partially Meets (1)** **Does Not Meet (0)**
Over the course of any given year of instruction, is each mathematical practice Standard meaningfully present in the form of assignments, activities, or problems that stimulate students to develop the habits of mind described in the practice Standard? Evaluate lessons, chapter/ unit assessments, and homework assignments for evidence of each mathematical practice being meaningfully present in instruction.	**Evidence-** Math practices are meaningful presented in all topics. For example, topic 10 - Volume includes all practices. SE lesson 4-10 last lesson of ela unit.	
Do the materials treat the practice Standards as developing across grades or grade bands? Are the practice Standards in early grades appropriately simple? Do they display an arc of growing sophistication across the grades?	**Evidence-** You can see MP progressions from grade 4-5.	
Are there teacher-directed materials that explain the role of the practice Standards in the classroom and in students' mathematical development? Are alignments to practice Standards accurate?	**Evidence-** il "F" pages in TE.	
Metric AC2C: **Materials support the Standards' emphasis on mathematical reasoning.** **How to Find the Evidence:** For context, read Criterion #10 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).		**Use the questions for Metric 2C to evaluate Metric 2C. Record evidence for each question and rate Metric 2C.** **(Reviewer only.)** ✓ **Meets (2)** **Partially Meets (1)** **Does Not Meet (0)**
Do the materials support students in constructing viable arguments and critiquing the arguments of others concerning grade-level mathematics that is detailed in the content Standards? Read Standard for Mathematical Practice 3. Evaluate teacher and student materials to ensure that students are given opportunities to reason with grade-level mathematics.	**Evidence-** Daily examples of student solutions in Solve & Share section. TE 533, 539 551	
Do the materials support students in producing not only answers and solutions, but also, in a grade-appropriate way, arguments, explanations, diagrams, mathematical models, etc., especially in the Major Work of the grade? Familiarize yourself with the Major Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate teacher and student materials, to understand the types of work students are expected to produce.	**Evidence-** Daily examples of student solutions in Solve & Share section TE 533, 539, 551. Toss & Talk games. There is also a topic Assessment and a performance assessment for each topic.	

Do materials explicitly attend to the specialized language of mathematics? Is language of argument, problem solving, and mathematical explanations taught rather than assumed? Evaluate teacher and student materials, paying attention to how mathematical language is taught. NOTE: Examples of evaluating this Criterion might include looking at whether students are supported in: basing arguments on definitions; using the method of providing a counterexample; or recognizing that examples alone do not establish a general statement.	**Evidence-** See - TE program overview pg 68-69 Toss and Talk Topic 7- pg 367H Topic 15- pg 809 H Vocabulary cards in SE.	
Alignment Criterion 2: **Standards for Mathematical Practice** **Materials must demonstrate authentic connections between content Standards and practice Standards.** **AC2** Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 out of 6 points, the Criterion has not been met. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)** **Before moving to Alignment Criterion 3, record the final Meets or Does Not Meet rating in the Evaluation Summary.**		**(Reviewer only.)** **✓ Meets** **____ Does Not Meet** **Strengths/Weaknesses:**
Alignment Criterion 3: **Access to the Standards for All Students** **Materials must provide supports for English Language Learners and other special populations.** Because Standards are for all students, alignment requires thoughtful support to ensure all students are able to meet the Standards. Thus, aligned materials must provide supports for English Language Learners and other special populations.	**Required Materials:** • Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion:** Alignment Criterion 3 is rated as Meets or Does Not Meet. To rate Alignment Criterion 3, first rate metrics 3A, 3B, and 3C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 3 if the materials earn 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as support for special population, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.

Metric AC3A: **Support for English Language Learners and other special populations is thoughtful and helps those students meet the same Standards as all other students. The language in which problems are posed is carefully considered.** **How to Find the Evidence:** Evaluate teacher and student materials, paying attention to supports offered for special populations.	**Evidence-** Each lesson has support for ELL specifically stated. Also provides reteach lessons as needed. TE 455 I J	Reviewer only.) ✓ Meets (2) ____ Partially Meets (1) ____ Does Not Meet (0)
Metric AC3B: **Materials provide appropriate level and type of scaffolding, differentiation, intervention, and support for a broad range of learners with gradual removal of supports, when needed, to allow students to demonstrate their mathematical understanding independently.** **How to Find the Evidence:** Evaluate teacher and student materials, paying attention to whether materials provide differentiation that will lead all learners to engage with on-grade-level content.	**Evidence-** Begin/int/adv ELL strategies are provided. TE 527A All lessons have ideas, work-sheets & games. Clearly labeled as re-teach, on-level and above level.	Reviewer only.) ✓ Meets (2) ____ Partially Meets (1) ____ Does Not Meet (0)
Metric AC3C: **Design of lessons recommends and facilitates a mix of instructional approaches for a variety of learners such as using multiple representations (e.g., including models, using a range of questions, checking for understanding, flexible grouping, pair-share).** **How to Find the Evidence:** Evaluate teacher materials, noting instructional approaches suggested for whole class and differentiated lessons and activities.	**Evidence-** Uses lots of different models, questions, checking and grouping. Has centers for all levels.	Reviewer only.) ✓ Meets (2) ____ Partially Meets (1) ____ Does Not Meet (0)

Alignment Criterion 3: Access to the Standards for All Students **Materials must provide supports for English Language Learners and other special populations.** AC3 Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 points, the Criterion has not been met. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion.**(Reviewer only.)** **Move to the Evaluation Summary and record the final Meets or Does Not Meet rating .**	**(Reviewer only.)** ✓ **Meets** ____ **Does Not Meet** **Strengths/Weaknesses:**

Once an evaluation for alignment to the Shifts and major features of the CCSS has been conducted using Sections 1-3, it's important to evaluate for overall quality and best practices. A starting list of Indicators of Quality are suggested below. States, districts and others evaluating instructional materials are encouraged to add to this list to ensure materials reflect local contexts. For background information on some of the Indicators of Quality in this section, refer to pp.18–21 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).

Indicators of Quality	Evidence- Give specific examples.	Rating: (Reviewers only.)
1. Lessons are thoughtfully structured and support the teacher in leading the class through the learning paths at hand, with active participation by all students in their own learning and in the learning of their classmates.	Evidence- Support and background given for each lesson. Lists "essential understandings" for each lesson. Discuss & share sections of each lesson includes student presentations TE 113, 115	**(Reviewer only.)** ✓ **Yes** ____ **No**
2. The underlying design of the materials includes both problems and exercises. (In solving problems, students learn new mathematics, whereas in working exercises, students apply what they have already learned to build mastery.) Each problem or exercise has a purpose. **NOTE: This Criterion does not require that the problems and exercises be labeled as such.**	Evidence- See Solve and share problems in all lessons and topics For example - TE pg 113, 165 SE pg 123, 153, 154, 156 also Vocabulary 241	**(Reviewer only.)** ✓ **Yes** ____ **No**

3. Design of assignments is not haphazard: exercises are given in intentional sequences in order to strengthen students' mathematical understanding.	Evidence- Example for SEE topic 5 - 5-1 use patterns to divide 5-2 estimate quotients 5-3 use models 5-4 partial quotients 5-5 ÷ by 10 5-6 - estimate for first digit 5-7 algorithm	(Reviewer only.) ___✓___ Yes ___ No
4. There are separate teacher materials that support and reward teacher study including, but not limited to: discussion of the mathematics of the units and the mathematical point of each lesson as it relates to the organizing concepts of the unit, discussion on student ways of thinking and anticipating a variety of students responses, guidance on lesson flow, guidance on questions that prompt students thinking, and discussion of desired mathematical behaviors being elicited among students.	Evidence- All topics for logical sequence. On-line PD helpful for teachers and parents. Today's Challenge booklet. Teacher edition program overview. Each topic has conceptual understanding. See TE 1 G	(Reviewer only.) ___✓___ Yes ___ No
5. Manipulatives suggested in the materials are faithful representations of the mathematical objects they represent and are connected to written methods.	Evidence- Place value value blocks, charts, number lines, grids, fraction bars, are examples used throughout.	(Reviewer only.) ___✓___ Yes ___ No
6. Materials include a variety of curriculum-embedded assessments. Examples include pre-, formative, summative, and self-assessment resources.	Evidence- Diagnostic test booklet, Topics include both topic assessments & performance assessments. Quick checks marked in each lesson. On-line quick checks. Topic 3 - pgs. 151-152 Topic 5 - pgs. 283 284	(Reviewer only.) ___✓___ Yes ___ No
7. Assessments contain aligned rubrics, answer keys, and scoring guidelines that provide sufficient guidance for interpreting student performance.	Evidence- Aligned rubrics for all assessments for example TE 52-54A, 160A	(Reviewer only.) ___✓___ Yes ___ No
8. Materials assess student proficiency using methods that are accessible and unbiased, including the use of course-level language in student prompts.	Evidence- Language is consistent & on grade level. Good use of vocabulary ELL ~~Es~~ Support is leveled to Beg/Int/Adv. See 09 - TE 527A	(Reviewer only.) ___✓___ Yes ___ No

9. Materials are carefully evaluated by qualified individuals, whose names are listed, in an effort to ensure freedom from mathematical errors and course-level appropriateness.	Evidence- See title page. Only one public elementary school teachers listed. But program follows Math CCSS.	(Reviewer only.) ✓ Yes ____ No
10. The visual design supports students in engaging thoughtfully with the subject. Navigation through the text is clear.	Evidence- Easy to follow both on-line and print edition. Hwk selections seem easy for parents. Student friendly edition. See SE 72, 75, 165-177	(Reviewer only.) ✓ Yes ____ No
11. The materials engage parents in appropriate ways. For example, homework assignments in elementary grades, consist of routine problems, practice with getting answers, and fluency-building exercises that parents can easily support.	Evidence- ~~Off-line~~ Each Homework has "another Look" that provides models & examples for parents. On-line resources available also for parents. "Home-School Connections" for each subject. SE 255, 181	(Reviewer only.) ✓ Yes ____ No

Reviewer IMET Evaluation Summary **Title/Level:** enVision Math 2.0 Grade 5

Publisher: Pearson Educ **Copyright:** 2016 **ISBN:** 9780 3288 47631

Reviewer ID # M. H. C. B. **Date Review Completed:** 3/8/16

Non-Negotiable Criteria- Each Non-Negotiable must be met in order for the Non-Negotiable Alignment Criteria to be met overall.

Non-Negotiable 1: Freedom from Obstacles to Focus	Non- Negotiable 2: Focus and Coherence
✓ Meets	✓ Meets
_____ Does Not Meet	_____ Does Not Meet

Non-Negotiable Overall:

✓ **Meets** _____ **Does Not Meet**

Alignment Criteria- Each Alignment Criterion must be met with a sufficient number of points in order for Alignment Criteria to be labeled as "Meets" overall. The more points the materials receive on the Alignment Criteria, the better they are aligned.

Alignment Criterion 1: Rigor and Balance	Alignment Criterion 2: Standards of Mathematical Practice	Alignment Criterion 3: Access to Standards for All Learners
Points: 6 of 6 possible. (Materials must receive at least 5 of 6 points to align.)	Points: 6 of 6 possible. (Materials must receive at least 5 of 6 points to align.)	Points: 6 of 6 possible. (Materials must receive at least 5 of 6 points to align.)
✓ Meets	✓ Meets	✓ Meets
_____ Does Not Meet	_____ Does Not Meet	_____ Does Not Meet

Alignment Criteria Overall:

✓ **Meets** _____ **Does Not Meet**

If the materials meet both Non-Negotiables and relevant Alignment Criterion, they are aligned to the Shifts and major features of the Core Standards. **the materials meet every Non-Negotiable and Alignment Criterion?** ✓ **Yes** ____ **No**

What are the specific areas of strength and weakness based on this evaluation? Publishers or others modifying or developing assessments can use this information to make improvements and/or to remedy gaps in the alignment of assessment materials.

Strengths

- Alignment of Standards
- Teaching & implementation of Math Practices
- Ease of use due to organization of materials.
- Progression of development of topics
- Problem Solving
- Presentation in SE is kid friendly.
- ELL beg/int/adv is good
- on-line PD for parents explains HW
- Background knowledge thorough & well done for teachers.
- Parent connection & explanation on HW.
- "Wheel" and color-coding

Weakness

- May be more activities - movement is lacking in lessons

2015-16 Mathematics Interim Review Recommendation & Summary

Publisher Name:	Pearson Education, Inc.
Title:	enVision Math 2.0 Grade 6
ISBN #	R1 Charles, et. al. 9780328847648
Grade Level(s) or Course:	Grade 6
Reviewer ID:	SLL & CJS

RECOMMENDED AS:

__X__ **Core Mathematics Program-** a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials. Substantial evidence clearly supports the designation of this program as Core.

_____ **Other Mathematics Program-** a program that substantially, but partially, meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for supplemental materials. Substantial evidence clearly supports the designation of this program as Other.

_____ **Component Mathematics Program-** a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs. Substantial evidence clearly supports the designation of this program as Component.

_____ **Intervention Program-** a program designed and intended to target and support students' specific needs. Substantial evidence clearly supports the designation of this program as Intervention.

_____ **Does not meet criteria** for recommendation as a Curricular Material or Online Resource for Mathematics.

EVIDENCE SUMMARY:

FOCUS- It does not assess any topics outside of Grade 6 Curriculum. Majority of content is focused on the major concepts of 6th Grade.

COHERENCE- Majority of content is focused on the major concepts of 6th Grade. Any review or extension is clearly articulated.

RIGOR- Conceptual understanding, constructing of arguments, generalizations and modeling is present throughout.

CONCEPTUAL UNDERSTANDING-
Conceptual understanding is used to support the understanding of 6th gr. concepts. Fluency practice is ~~[illegible]~~ built in when appropriate.

MATHEMATICAL PRACTICES-
Practice standards are clearly addressed in each lesson.

ACCESSIBILITY OF STANDARDS TO ALL STUDENTS-
Each lesson has an "Assess & Differentiate" section. Materials include an ELL Tool Kit.

OTHER:

2[illegible]-16 Interim Mathematics Review

Mathematics Evaluation Tool Grades K-8

Publisher: Pearson Education, Inc.

Title of Material: envision Math 2.0 Grade 6

Author: RI Charles, et. al.

ISBN #: 9780328847648 **Copyright** 2016

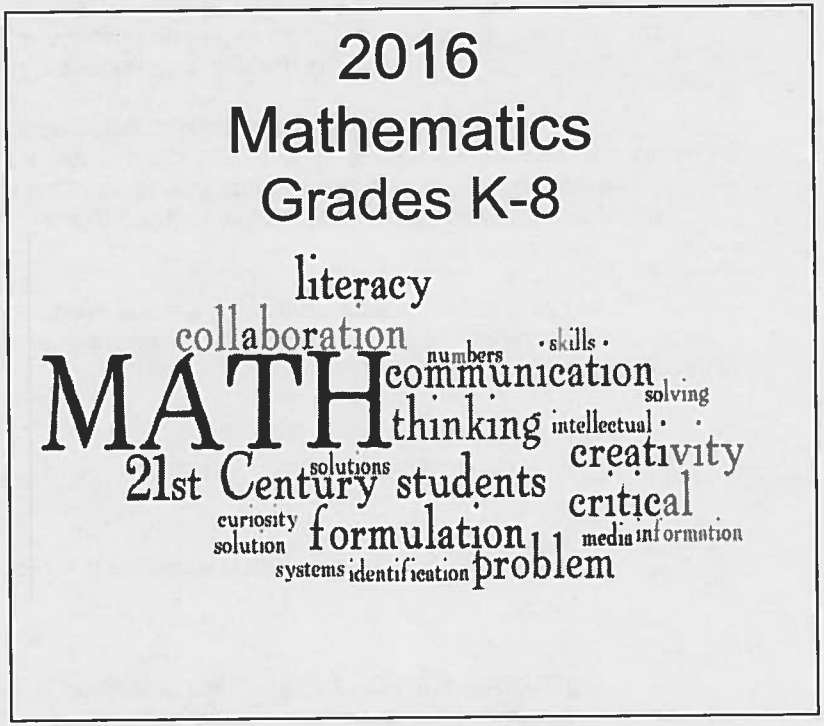
Reviewer ID: CJS SLL

Core Mathematics Program- a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Core.

Other Mathematics Program- a program that substantially, but partially, meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Other.

Component Mathematics Program- a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs.
Substantial evidence clearly supports the designation of this program as Component.

Intervention Program- a program designed and intended to target and support students' specific needs.
Substantial evidence clearly supports the designation of this program as Intervention.



- Evaluation Form adapted from Instructional Materials Evaluation Toolkit (IMET).

The IMET was developed by Student Achievement Partners. Educators may use or adapt. http://creativecommons.org/licenses/by/3.0/ Download this tool at http://achievethecore.org/IMET

Instructional Materials Evaluation Tool
Mathematics, Grades K-8

What Are the Purposes of the IMET?
This Math IMET is designed to help educators determine whether instructional materials are aligned to the Shifts and major features of the Common Core State Standards (CCSS). The substantial instructional Shifts (http://www.corestandards.org/other-resources/key-shifts-inmathematics/) at the heart of the Common Core State Standards are:
- **Focus** strongly where the Standards focus
- **Coherence**: Think across grades and link to major topics within the grade
- **Rigor**: In major topics, pursue conceptual understanding, procedural skill and fluency, and application with equal intensity.

The IMET draws directly from the following documents:
- Common Core State Standards for Mathematics (www.corestandards.org/Math)
- Publishers' Criteria for the Common Core State Standards in Mathematics grade K-8 (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)

When to use the IMET
1. Purchasing materials: Many factors go into local purchasing decisions. Alignment to the Standards is a critical factor to consider. This tool is designed to evaluate alignment of instructional materials to the Shifts and the major features of the CCSS. It also provides suggestions of additional indicators to consider in the materials evaluation and purchasing process.

2. Evaluating materials currently in use: The IMET can be used to analyze the degree of alignment of existing materials and help to highlight specific, concrete flaws in alignment. Even where materials and tools currently in use fail to meet one or more of these criteria, the pattern of failure is likely to be informative. States and districts can use the evaluation to create a thoughtful plan to modify or combine existing resources in such a way that students' actual learning experiences approach the focus, coherence, and rigor of the Standards.

3. Developing programs: Those developing new programs can use this tool as guidance for creating aligned curricula.
Please note this tool was designed for evaluating comprehensive curricula (including any supplemental or ancillary materials), but it was not designed for the evaluation of standalone supplemental materials.

Who Uses the IMET?
Evaluating instructional materials requires both subject-matter and pedagogical expertise. Evaluators should be well versed in the Standards (www.corestandards.org/Math) for all grades in which materials are being evaluated. This includes understanding the Major Work of the grade (www.achievethecore/focus), the Supporting and Additional work, how the content fits into the progressions in the Standards (www.achievethecore.org/progressions), and the expectations of the Standards with respect to conceptual understanding, procedural skill and fluency, and application. Evaluators also should be familiar with the substantial instructional Shifts (http:// www.corestandards.org/other-resources/key-shifts-in-mathematics/) of Focus, Coherence and Rigor that are listed above.

Getting Started
Prior to Evaluation

Assemble all of the materials necessary for the evaluation. It is essential for evaluators to have materials for all grades covered by the program, as some criteria cannot be rated without having access to each grade. In addition, each evaluator should have a reference copy of the Common Core State Standards for Mathematics (CCSSM) and the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013).

Instructional Materials Evaluation Tool
Mathematics, Grades K-8

What Are the Purposes of the IMET?
This Math IMET is designed to help educators determine whether instructional materials are aligned to the Shifts and major features of the Common Core State Standards (CCSS). The substantial instructional Shifts (http://www.corestandards.org/other-resources/key-shifts-inmathematics/) at the heart of the Common Core State Standards are:
- **Focus** strongly where the Standards focus
- **Coherence**: Think across grades and link to major topics within the grade
- **Rigor**: In major topics, pursue conceptual understanding, procedural skill and fluency, and application with equal intensity.

The IMET draws directly from the following documents:
- Common Core State Standards for Mathematics (www.corestandards.org/Math)
- Publishers' Criteria for the Common Core State Standards in Mathematics grade K-8 (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)

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2. Evaluating materials currently in use: The IMET can be used to analyze the degree of alignment of existing materials and help to highlight specific, concrete flaws in alignment. Even where materials and tools currently in use fail to meet one or more of these criteria, the pattern of failure is likely to be informative. States and districts can use the evaluation to create a thoughtful plan to modify or combine existing resources in such a way that students' actual learning experiences approach the focus, coherence, and rigor of the Standards.

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Getting Started
Prior to Evaluation

Assemble all of the materials necessary for the evaluation. It is essential for evaluators to have materials for all grades covered by the program, as some criteria cannot be rated without having access to each grade. In addition, each evaluator should have a reference copy of the Common Core State Standards for Mathematics (CCSSM) and the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013).

Before conducting the evaluation itself, it is important to develop a protocol for the evaluation process. The protocol should include having evaluators study the Publishers' Criteria and the IMET. It will also be helpful for evaluators to get a sense of each program overall before beginning the process. At a minimum, this would include reading the front matter of the text, looking at the table of contents and paging through multiple chapters.

Sections 1-3 below should be completed to produce a comprehensive picture of the strengths and weaknesses of the materials under evaluation. Information about areas in need of improvement or supplementation should be shared with internal and external stakeholders.

Navigating the Tool

Begin with Section 1: Non-Negotiable Alignment Criteria

- The Non-Negotiable Alignment Criteria must each be met in full for materials to be considered aligned to the Shifts and the major features of the Common Core State Standards. Each Non-Negotiable Alignment Criterion has one or more metrics associated with it; every one of these metrics must be met in order for the criterion as a whole to be met.

- Examine the relevant materials and use evidence to rate the materials against each criterion and its associated metric(s).

- Record and explain the evidence upon which the rating is based.

Continue to Section 2: Alignment Criteria

- The Alignment Criteria must each be met for materials to be considered aligned to the Shifts and the major features of the Common Core State Standards. Each Alignment Criterion has one or more metric associated with it; a specific number of these metrics must be met or partially met in order for the criterion as a whole to be met.

- Examine the materials in relation to these criteria, assigning each metric a point value. Rate the criterion as "Meets" or "Does Note Meet" based on the number of points assigned. The more points the materials receive on the alignment Criteria, the better they are aligned.

- Record and explain the evidence upon which the rating is based.

Proceed to Section 4: Indicators of Quality

- Indicators of Quality are important considerations that will help evaluators better understand the overall quality of instructional materials. These considerations are not criteria for alignment to the CCSS, but they provide valuable information about additional program characteristics. Evaluators may want to add their own indicators to the examples provided.

Directions for Non-Negotiable 1

Freedom from Obstacles to Focus

Criterion	Evidence- Give specific examples.	Rating: (Reviewer only.)
Non-Negotiable 1: **Freedom from Obstacles to Focus** **Materials must reflect the content architecture of the Standards by not assessing the topics named before the grade level where they first appear in the Standards.** The Standards foster students' progress to algebra by focusing strongly on arithmetic. Consistent with this focus, certain topics from outside of arithmetic appear only in later grades. Thus, to be aligned, materials must reflect the content architecture of the Standards by not assessing the topics named before the grade level where they first appear in the Standards. In this criterion, "topics named" means the topics that are explicitly named in Metric 1A. No other topics should be added to the list in Metric 1A. (Note that other topics in the standards are addressed in criterion NN2.)	**Required Materials** • Common Core State Standards for Mathematics (www.corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf) • From the materials being evaluated: teacher guides and all assessment components	**Rating this Criterion:** Non-Negotiable 1 is rated as Meets or Does Not Meet. To rate Non-Negotiable 1, begin by rating Metric 1A. Since Metric 1A is the only metric for Non-Negotiable 1, the rating for Non-Negotiable 1 is the same as the rating for Metric 1A. If Metric 1A is rated as Does Not Meet, include evidence of when the named topic(s) is/are assessed. If the metric is rated as Meets, list the grade(s) examined in the evaluation.

Metric NN1A **Materials reflect the basic architecture of the Standards by not assessing the listed topics before the grade level indicated.** • Probability, including chance, likely outcomes, probability models. (Introduced in the CCSSM in grade 7) • Statistical distributions, including center, variation, clumping, outliers, mean, median, mode, range, quartiles; and statistical association or trends, including two-way tables, bivariate measurement data, scatter plots, trend line, line of best fit, correlation. (Introduced in the CCSSM in grade 6) • Similarity, congruence, or geometric transformations. (Introduced in the CCSSM in grade 8) • Symmetry of shapes, including line/ reflection symmetry, rotational symmetry. (Introduced in the CCSSM in grade 4) **How to Find the Evidence:** Evaluate the table of contents, all chapter tests, all unit tests, and other such assessment components (including rubrics). For context, read Criterion #2 from the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013). NOTE: Grade alignments of other topics are addressed in Non-Negotiable 2, Focus and Coherence.) In this criterion, "topics named" means the topics that are explicitly named in Metric 1A. No other topics should be added to the list in Metric 1A. (Note that other topics in the standards are addressed in criterion NN2.)	**Evidence-** None of the topics outside of grade 6 are assessed.	**(Reviewer only.)** **__X__Meets** **____Does Not Meet**
Non-Negotiable 1: Materials must reflect the content architecture of the Standards by not assessing the topics named* before the grade level where they first appear in the Standards. **NN 1** If Metric 1A was rated as Meets, then rate Non-Negotiable 1 as Meets. If Metric 1A was rated as Does Not Meet, then rate Non- Negotiable 1 as Does Not Meet. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion.**(Reviewer only.)** **Before moving to Non-Negotiable 2, record the final Meets or Does Not Meet rating in the Evaluation Summary.**		**(Reviewer only.)** **__X__Meets** **____Does Not Meet** **Strengths/Weaknesses:**

Directions for Non-Negotiable 2

Focus and Coherence

Non-Negotiable 2:
Focus and Coherence

Materials must focus coherently on the Major Work of the grade in a way that is consistent with the progressions in the Standards.

Focus and coherence are the two major evidence-based design principles of the Common Core State Standards for Mathematics (CCSSM, p. 3). Focus is necessary in order to fulfill the ambitious promise the states have made to their students by adopting the Standards: greater achievement at the college and career ready level; greater depth of understanding of mathematics; and a rich classroom environment in which reasoning, sense-making, applications, and a range of mathematical practices flourish. In simpler terms, a mile-wide, inch-deep curriculum translates to less time per topic. Less time means less depth and moving on without many students. Thus, materials must focus coherently on the Major Work of the grade in a way that is consistent with the progressions in the Standards.

Required Materials

- Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf)
- Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)
- Focus by Grade Level for the grade being evaluated (www.achievethecore.org/focus)
- From the materials being evaluated: teacher guides, student texts and workbooks

Rating this Criterion:

Non-Negotiable 2 is rated as Meets or Does Not Meet.

To rate Non-Negotiable 2, first rate metrics 2A–2H. Each of these eight metrics must be rated as Meets in order for Non-Negotiable 2 to be rated as Meets. Rate each metric 2A-2H as Meets or Does Not Meet/Insufficient Evidence. If the evidence examined shows that the Criterion is met, then mark the Criterion Meets. If the evidence examined shows that the Criterion is not met—or if there is insufficient evidence to make a determination—then mark the Criterion as Does Not Meet/Insufficient Evidence. Support all ratings with evidence.

Metric NN2A:
In each grade K–8, students and teachers using the materials as designed devote the large majority of time to the Major Work of the grade.

How to Find the Evidence:

Familiarize yourself with the Major Work of the grade being evaluated (see the Focus by Grade Level documents.)

Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, lessons, homework assignments, and assessments. (Evaluate both student and teacher materials.)

Consider time spent on the Major Work of the grade and judge qualitatively whether students and teachers using the materials as designed will devote the large majority of time to the Major Work of the grade.

For context, read Criterion #1 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013)

Evidence-

9 out of 16 topics are focused on content in the major clusters. 5 out of 16 topics are focused on additional clusters with 5 of the lessons that also incorporate work from the major clusters, and 2 topics are focused on supporting clusters.

(Reviewer only.)

__X__Meets

____Does Not Meet/

Insufficient Evidence

Metric NN2B: **Supporting Work, where present, enhances focus and coherence simultaneously by also engaging students in the Major Work of the grade.** **How to Find the Evidence:** Familiarize yourself with the Major Work and Supporting Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate chapters and lessons that focus on Supporting Work. NOTE: Example of evaluating this Criterion might include looking at whether materials for K–5 generally treat data displays as an occasion for solving grade-level word problems using the four operations (e.g., see 3.MD.B.3); or whether materials for grade 7 take advantage of opportunities to use probability to support ratios, proportions, and percentages. For context, read Criterion #3 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** The supporting work appears to enhance the major clusters. 6.EE.A apply and extend previous understandings of arithmetic to algebraic expressions is a major cluster and incorporated through the additional cluster 6.NS.B. Ex. (6-4, 6-5, 6-6, 7-8, 7-9)	**(Reviewer only.)** **__X__Meets** **____Does Not Meet/** **Insufficient Evidence**
Metric NN2C: **Materials base content progressions on the grade-by-grade progressions in the Standards. Content from previous or future grades does not unduly interfere with or displace on-grade-level content.** **How to Find the Evidence:** Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, and lessons in both student and teacher materials. NOTE: In some cases it may be possible that aligned materials might address some aspects of a topic in a strategic way before or after the grade level in which the topic is central in the Standards' progressions; for example, a curriculum author might purposefully choose to explore adding fractions with unlike denominators in a way appropriate to grade four, recognizing that this work is not really required until the next grade. However, any such purposeful discrepancies in content progressions should enhance the required learning in each grade; not unduly interfere with or displace grade-level content; and be clearly aimed at helping students meet the Standards as written rather than effectively rewriting the progressions in the Standards. And in all cases, note that Non-Negotiable 1 must be met for materials to be aligned. For context, read Criterion #5a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** No evidence of lessons outside of the 6th grade content. There are 5 lessons titled "Step Up to Grade 7" that teachers could use at the end of the school year to prep for grade 7 content. They are clearly marked and do not interfere with on grade level content.	**(Reviewer only.)** **__X__Meets** **____Does Not Meet/** **Insufficient Evidence**

Metric NN2D: **Materials give all students extensive work with on-grade-level problems.** **How to Find the Evidence:** Evaluate both student and teacher materials. If the materials provide resources for differentiated learning, consider whether lower-performing students have opportunities to engage with grade-level problems. Also consider whether higher-performing students are given opportunities to learn current grade-level content in greater depth. For context, read Criterion #5b in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** All 16 chapters are focused on 6th grade standards and provide many different types of problems and interactions with grade level content. Each lesson has an intervention, an on level, and an advanced activity that could be used for differentiation. Additionally, materials suggest how to level each assignment for intervention, on level and advanced learners.	**(Reviewer only.)** **__X__Meets** **____Does Not Meet/** **Insufficient Evidence**
Metric NN2E: **Materials relate on-grade-level concepts explicitly to prior knowledge from earlier grades.** **How to Find the Evidence:** Evaluate both student and teacher materials. NOTE: Examples of evaluating this Criterion might include looking at the way the materials extend basic ideas of place value across the decimal point; or the role that properties of operations play when the materials extend arithmetic beyond whole numbers to fractions, variables, and expressions. More generally, cluster headings in the Standards sometimes signal key moments where reorganizing and extending previous knowledge is important in order to accommodate new knowledge (e.g., see cluster headings that use the phrase "Apply and extend previous understanding"). R For context, read Criterion #5c in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** There is an opportunity to assess students on prior knowledge in the Math Diagnosis and Intervention System. There is a small portion called "Review What You Know" in some lessons. At the top of the TE, in Step 1, there is a reference to Coherence connecting prior knowledge to new ideas.	**(Reviewer only.)** **__X__Meets** **____Does Not Meet/** **Insufficient Evidence**
Metric NN2F: **Review of material from previous grades is clearly identified as such to the teacher, and teacher and students can see what their specific responsibility is for the current year.** **How to Find the Evidence:** Evaluate the table of contents, but do not stop there; also evaluate units, chapters, lessons, homework assignments and assessments. (Evaluate both student and teacher materials.) Identify any content from previous grades and check whether it is identified as such. For context, read Criterion #5a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Review of previous grade material is minimal. The focus is on grade level material. The intervention activities seem to back up into 5th grade ideas.	**(Reviewer only.)** **__X__Meets** **____Does Not Meet/** **Insufficient Evidence**

Metric NN2 **Materials include learning objectives that are visibly shaped by CCSSM cluster headings.** **How to Find the Evidence:** Select several clusters from the Major Work in the grade being evaluated. Evaluate teacher and student materials in relation to these clusters. For context, read Criterion #6a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Learning objectives are clearly stated in each lesson for both the teacher and the student. "I can" statements are included in every lesson on the student pages along with the actual content standards and Mathematical Practices.	**(Reviewer only.)** **__X_Meets** **____Does Not Meet/** **Insufficient Evidence**
Metric NN2H: **Materials include problems and activities that serve to connect two or more clusters in a domain, or two or more domains in a grade, in cases where these connections are natural and important.** **How to Find the Evidence:** In the grade being evaluated, choose two or more clusters or two or more domains for which connections are natural and important. Evaluate the units, chapters, and lessons that deal with the chosen topics, looking for problems and activities that serve to connect the chosen clusters or domains. NOTE: An example of evaluating this Criterion might include looking at whether problems in grade 4 sometimes or often involve students applying their developing computation skills (detailed in domain NBT) in the context of solving word problems (detailed in domain OA). For context, read Criterion #6b in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** The supporting work appears to enhance the major clusters. 6.EE.A apply and extend previous understandings of arithmetic to algebraic expressions is a major cluster and incorporated through the additional cluster 6.NS.B. Ex. (6-4, 6-5, 6-6, 7-8, 7-9)	**(Reviewer only.)** **__X__Meets** **____Does Not Meet/** **Insufficient Evidence**
Non-Negotiable 2: **Focus and Coherence** **Materials must focus coherently on the Major Work of the grade in a way that is consistent with the progressions in the Standards.** **NN 2** If all Metrics 2A – 2H were rated as Meets, then rate Non-Negotiable 2 as Meets. If one or more Metric was rated Does Not Meet/Insufficient Evidence, then rate Non-Negotiable 2 as Does Not Meet. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)** **Before moving to Alignment Criterion 1, record the final Meets or Does Not Meet rating in the Evaluation Summary.**		**(Reviewer only.)** **__X__Meets** **____Does Not Meet** **Strengths/Weaknesses:**

Now continue by evaluating the Alignment Criterion 1 for Rigor and Balance.

Directions for Alignment Criterion 1

Rigor and Balance

Alignment Criterion 1: Rigor and Balance **Materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.** The Standards set expectations for attention to all three aspects of rigor: conceptual understanding, procedural skill and fluency, and applications. Thus, materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.	**Required Materials** • Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf) • Focus by Grade Level for the grade being evaluated (achievethecore.org/focus) • Situation Types for the Operations in Word Problems (achievethecore.org/situation-types) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion:** Alignment Criterion 1 is rated as Meets or Does Not Meet. To rate Alignment Criterion 1, first rate metrics 1A, 1B, and 1C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). For each metric, guiding questions are provided to aid in gathering evidence. Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 1 if the materials rate 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as rigor and balance, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.
Metric AC1A: **The materials support the development of students' conceptual understanding of key mathematical concepts, especially where called for in specific content Standards or cluster headings.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Major Work for the grade being evaluated that relate specifically conceptual understanding to use throughout the questions associated with this metric. NOTE: Some examples of clusters or Standards that call for conceptual understanding include: K.OA.A.1, (1.NBT.B, 1.NBT.C), (2.NBT.A, 2.NBT.B), (3.OA.A.1, 3.OA.A.2), 4.NF.A, (4.NBT.A, 4.NBT.B), 5.NF.B, (5.NBT.A, 5.NBT.B), 6.RP.A, 6.EE.A.3, 7.NS.A, 7.EE.A, 8.EE.B, 8.F.A, 8.G.A Clusters or Standards grouped by parentheses are closely connected and could be analyzed together. For context, read Criterion #4a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	-Choose a cluster/Standard from the Major Work that is aligned to each aspect of rigor and use it to evaluate these metrics. It is most helpful if the same clusters/Standards are chosen for all of the programs being evaluated. (Guidance in choosing clusters/Standards is included in "How to Find the Evidence".)	**Use the questions for AC Metric 1A to evaluate Metric 1A. Record evidence for each question and rate Metric 1A.** **__2__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**

Is conceptual understanding attended to thoroughly where the Standards set explicit expectations for understanding or interpreting? Evaluate lessons, chapter/unit assessments and homework assignments, paying attention to work aligned to Standards that explicitly call for understanding or interpreting. NOTE: Examples of evaluating this Criterion might include looking at how well the multi-digit addition and subtraction algorithms are developed and explained on the basis of place value and properties of operations; or how well the multi-digit multiplication and division algorithms are developed and explained on the basis of place value and properties of operations; or how well solving equations is presented and explained as a process of reasoning.	**Evidence-** Topic 1 – 6.EE.A Students use bar models, concrete examples, number line to relate to algebraic expressions. Topic 9, 10, and 11 – 6.RP.A Students use bar models, coordinate grid, number line, and real world examples to relate to the more abstract representations of ratios.	
Do the materials feature high-quality conceptual problems and conceptual discussion questions? Evaluate lessons, chapter/unit assessments, and homework assignments. NOTE: Example of conceptual problems might include such questions as "Find a number greater than 1/5 and less than 1/4," or "If the divisor does not change and the dividend increases, what happens to the quotient?"	**Evidence-** Students are asked to explain their conceptual understanding of the topics. They are asked to construct arguments, look for relationships, generalize, explain number sense, and model their thinking.	
Do the materials feature opportunities to identify correspondences across mathematical representations? Evaluate lessons, chapter/unit assessments and homework assignments. NOTE: Examples of evaluating this Criterion might include looking at whether students are supported in identifying correspondences among: the verbal description of a situation, the diagrams that distill its mathematical features, and the equations that model it; or equivalent forms of numbers (e.g., 3 and 6/2) and the number line; or rational number operations and representations of them via models such as the vector model; or the expression that defines a function and the graph that shows the relationship.	**Evidence-** Topic 1 – 6.EE.A Students use bar models, concrete examples, number line to relate to algebraic expressions. Topic 9, 10, and 11 – 6.RP.A Students use bar models, coordinate grid, number line, and real world examples to relate to the more abstract representations of ratios. Students are asked to explain their conceptual understanding of the topics. They are asked to construct arguments, critique reasoning of others, look for relationships, generalize, explain number sense, and model their thinking.	

Metric AC1B **The materials are designed so that students attain the fluencies and procedural skills required by the Standards.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Major Work for the grade being evaluated that relate specifically to fluency and procedural skill to use throughout the questions associated with this metric. NOTE: Some examples of Standards that call for procedural skill and fluency include: K.OA.A.5, 1.OA.C.6, 2.OA.B.2, 2.NBT.B.5, 3.OA.C.7, 3.NBT.A.2, 4.NBT.B.4, 5.NBT.B.5, 6.NS.B.2, and 6.NS.B.3, 6.EE.A, 7.NS.A, 7.EE.A.1,7.EE.B.4a, 8.EE.C.7, 8.EE.C.8b For context, read Criterion #4b in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).		**Use the questions for Metric 1B to evaluate Metric 1 B. Record evidence for each question and rate Metric 1B.** **(Reviewer only.)** **__2__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Is progress toward fluency and procedural skill interwoven with students' developing conceptual understanding of the operations in question? Evaluate lessons, chapter/unit assessments, daily routines, and homework assignments for evidence that the development of fluency and procedural skill is supported by conceptual understanding.	**Evidence-** Fluency practice activities are built into each topic. There is an on-line Practice Buddy that allows students extra work/practice with the concepts being taught.	
Are purely procedural problems and exercises present that include cases in which opportunistic strategies are valuable and generic cases that require efficient algorithms present? Evaluate lessons, chapter/unit assessments, daily routines, and homework assignments. NOTE: Examples of problems in which opportunistic strategies are valuable might include the sum 698 + 240 or the system x + y = 1, 2x + 2y = 3. Examples of generic cases that require efficient algorithms might include the sum 8767+2286 or the system 6y + x = x + 3, – x = 1 + 2y.	**Evidence-** Most every lesson has a combination of both bare and contextual problems.	
Do the materials in grades K–6 provide repeated practice toward attainment of fluency Standards? Evaluate lessons, daily routines, and homework assignments for evidence of repeated practice toward attainment of the following K–6 Standards that set an explicit expectation of fluent (accurate and reasonably fast) computation: K.OA.A.5, 1.OA.C.6, 2.OA.B.2, 2.NBT.B.5, 3.OA.C.7, 3.NBT.A.2, 4.NBT.B.4, 5.NBT.B.5, 6.NS.B.2, 6.NS.B.3.	**Evidence-** Fluency practice activities are built into each topic. There is an on-line Practice Buddy that allows students extra work/practice with the concepts being taught.	

Metric AC1 **The materials are designed so that teachers and students spend sufficient time working with engaging applications, without losing focus on the Major Work of each grade.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Major Work for the grade being evaluated that relate specifically application to use throughout the questions associated with this metric. NOTE: Some examples of clusters or Standards that call for application include: K.OA.A.2, 1.OA.A, 2.OA.A, 3.OA.A.3, 3.OA.D.8, 4.OA.A.3, 4.NF.B.3d, 4.NF.B.4c, 5.NF.B.6, 5.NF.B.7c, 6.RP.A.3, 6.NS.A.1, 6.EE.B.7, 6.EE.C.9, 7.RP.A, 7.NS.A.3, 7.EE.B.3, 8.EE.C.8c, 8.F.B For context, read Criterion #4c in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** There is always an on-line challenge for the day as well as problem based learning opportunities built into each topic. Lessons offer both bare problems and application problems of the concept being worked on.	**Use the questions for Metric 1C t… luate Metric 1C. Record evidence for each que…on and rate Metric 1C.** **(Reviewer only.)** **__2__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Are there are single- and multi-step contextual problems, including non-routine problems, that develop the mathematics of the grade, afford opportunities for practice, and engage students in problem solving? Do the problems attend thoroughly to those places in the content Standards where expectations for multi-step and real-world problems are explicit? Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** There is always an on-line challenge for the day as well as problem based learning opportunities built into each topic. Lessons offer both bare problems and application problems of the concept being worked on.	
Do application problems particularly stress applying the Major Work of the grade? Evaluate lessons, chapter/unit assessments, and homework assignments. NOTE: Examples of evaluating this Criterion might include looking at: how well, by the end of grade 2, students using the materials as designed can represent and solve a full range of one-step addition and subtraction word problems; or how well, by the end of grade 3, students using the materials as designed can represent and solve a full range of one-step multiplication and division word problems; or how well these basic situation types for each operation are carried coherently across the grades, (e.g., with fractions and algebraic expressions); or, in all grades, whether the problems connect concepts, Standards, and domains in ways that are natural and important. For a list of situation types for one-step addition, subtraction, multiplication, and division problems, see Situation Types for the Operations in Word Problems	**Evidence-** Everything seems to be focused on grade 6 standards.	
Does modeling build slowly across K–8, with applications that are relatively simple in earlier grades and when students are encountering new content? In grades 6–8, do the problems begin to provide opportunities for students to make their own assumptions or simplifications in order to model a situation mathematically? Read Standard for Mathematical Practice 4, Model with Mathematics. Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** Students use bar models, coordinate grid, number line, and real world examples. Students are asked to explain their conceptual understanding of the topics. They are asked to construct arguments, critique reasoning of others, look for relationships, generalize, explain number sense, and model their thinking.	

Alignment Criterion 1: Rigor and Balance

Materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.

AC1 Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 out of 6 points, the Criterion has not been met. Check the final rating.
Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)**

Before moving to Alignment Criterion 2, record the final Meets or Does Not Meet rating in the Evaluation Summary.

(Reviewer only.)

_X__Meets

____Does Not Meet

Strengths/Weaknesses:

Directions for Alignment Criterion 2

Standards for Mathematical Practice

Alignment Criterion 2: Standards for Mathematical Practice

Materials must demonstrate authentic connections between content Standards and practice Standards.

The Standards require that designers of instructional materials connect the mathematical practices to mathematical content in instruction. Thus, materials must demonstrate authentic connections between content Standards and practice Standards.

Required Materials:

- Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf)
- Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)
- Focus by Grade Level for the grade being evaluated (www.achievethecore.org/focus)
- From the materials being evaluated: teacher guides, student texts and workbooks

Rating this Criterion

Alignment Criterion 2 is rated as Meets or Does Not Meet.

To rate Alignment Criterion 2, first rate metrics 2A, 2B, and 2C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). For each metric, guiding questions are provided to aid in gathering evidence.

Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 2 if the materials earn 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as mathematical practices, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.

Metric AC2. **Materials address the practice Standards in such a way as to enrich the Major Work of the grade; practices strengthen the focus on Major Work instead of detracting from it, in both teacher and student materials.** **How to Find the Evidence:** Familiarize yourself with the Major Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate teacher and student materials for evidence that the mathematical practices support and connect to the focus of the grade. NOTE: Examples of evaluating this Criterion might include looking at whether, in grades K–5, students using the materials are supported to look for and express regularity in repeated reasoning about the addition table, the multiplication table, the properties of operations, the relationship between addition and subtraction or multiplication and division, and the place value system; or whether, in grades 6–8, students using the materials are supported to look for and express regularity in repeated reasoning about proportional relationships and linear functions. For context, read Criterion #8 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013).	**Evidence-** Practice Standards are clearly addressed throughout every lesson both to the teacher and to the student. There is a Math Practices and Problem Solving handbook in which the practices are explained to students with examples.	**(Reviewer only.)** **__2__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Metric AC2B: **Materials attend to the full meaning of each practice Standard.** **How to Find the Evidence:** For context, read Criterion #7 and Criterion #9 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).		**Use the questions for Metric 2B to evaluate Metric 2B. Record evidence for each question and rate Metric 2B.** **(Reviewer only.)** **__2__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Over the course of any given year of instruction, is each mathematical practice Standard meaningfully present in the form of assignments, activities, or problems that stimulate students to develop the habits of mind described in the practice Standard? Evaluate lessons, chapter/ unit assessments, and homework assignments for evidence of each mathematical practice being meaningfully present in instruction.	**Evidence-** In the TE, it lists the Mathematical Practice(s) that goes with each lesson. Each topic has a Math Practices correlation page that lists examples of where each of the 8 practices are addressed.	
Do the materials treat the practice Standards as developing across grades or grade bands? Are the practice Standards in early grades appropriately simple? Do they display an arc of growing sophistication across the grades?	**Evidence-** We only have evidence of 6th grade.	

Are there teach ected materials that explain the role of the practice Standards in the classroom and in students' mathematical development? Are alignments to practice Standards accurate?	**Evidence-** In the teacher's edition program overview, there is a section dedicated to the math practices and resources for teachers and students.	
Metric AC2C: **Materials support the Standards' emphasis on mathematical reasoning.** **How to Find the Evidence:** For context, read Criterion #10 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).		**Use the questions for Metric 2C to evaluate Metric 2C. Record evidence for each question and rate Metric 2C.** **(Reviewer only.)** **__2__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Do the materials support students in constructing viable arguments and critiquing the arguments of others concerning grade-level mathematics that is detailed in the content Standards? Read Standard for Mathematical Practice 3. Evaluate teacher and student materials to ensure that students are given opportunities to reason with grade-level mathematics.	**Evidence-** Throughout the program, there is evidence of students being asked to share and discuss solutions, explain their reasoning, etc.	
Do the materials support students in producing not only answers and solutions, but also, in a grade-appropriate way, arguments, explanations, diagrams, mathematical models, etc., especially in the Major Work of the grade? Familiarize yourself with the Major Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate teacher and student materials, to understand the types of work students are expected to produce.	**Evidence-** Throughout the program, there is evidence of students being asked to share and discuss solutions, explain their reasoning, etc.	
Do materials explicitly attend to the specialized language of mathematics? Is the language of argument, problem solving, and mathematical explanations taught rather than assumed? Evaluate teacher and student materials, paying attention to how mathematical language is taught. NOTE: Examples of evaluating this Criterion might include looking at whether students are supported in: basing arguments on definitions; using the method of providing a counterexample; or recognizing that examples alone do not establish a general statement.	**Evidence-** Each topic contains a language of math section for the teacher. The program includes vocabulary cards, vocabulary activities, vocabulary review, glossary as well as on-line tools including an animated glossary and on-line vocabulary game. In the TE, every lesson has a list of vocabulary words that will be the focus of that lesson.	

Alignment Criterion 2:
Standards for Mathematical Practice

Materials must demonstrate authentic connections between content Standards and practice Standards.

AC2 Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 out of 6 points, the Criterion has not been met. Check the final rating.
Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion.
(Reviewer only.)

Before moving to Alignment Criterion 3, record the final Meets or Does Not Meet rating in the Evaluation Summary.

(Reviewer only.)

__X__Meets

____Does Not Meet

Strengths/Weaknesses:

Alignment Criterion 3:
Access to the Standards for All Students

Materials must provide supports for English Language Learners and other special populations.

Because Standards are for all students, alignment requires thoughtful support to ensure all students are able to meet the Standards. Thus, aligned materials must provide supports for English Language Learners and other special populations.

Required Materials:

- Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf)
- Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)
- From the materials being evaluated: teacher guides, student texts and workbooks

Rating this Criterion:
Alignment Criterion 3 is rated as Meets or Does Not Meet.

To rate Alignment Criterion 3, first rate metrics 3A, 3B, and 3C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points).

Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 3 if the materials earn 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as support for special population, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.

Metric AC3A:
Support for English Language Learners and other special populations is thoughtful and helps those students meet the same Standards as all other students. The language in which problems are posed is carefully considered.

How to Find the Evidence:
Evaluate teacher and student materials, paying attention to supports offered for special populations.

Evidence-

There is an ELL Tool Kit which includes professional development articles for the teacher and graphic organizers to be used throughout the year. There is also an ELL section in the TE within each lesson. There is differentiation in the ELL section beginning, intermediate, and advanced within each lesson.

Reviewer only.)

__2__Meets (2)

____Partially Meets (1)

____Does Not Meet (0)

Metric AC3B: **Materials provide appropriate level and type of scaffolding, differentiation, intervention, and support for a broad range of learners with gradual removal of supports, when needed, to allow students to demonstrate their mathematical understanding independently.** **How to Find the Evidence:** Evaluate teacher and student materials, paying attention to whether materials provide differentiation that will lead all learners to engage with on-grade-level content.	**Evidence-** Each lesson has an "Assess and Differentiate" section providing intervention, on level and advanced opportunities. There are suggestions on how to level each assignment and activity center suggestions for each lesson.	**Reviewer only.)** **__2__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Metric AC3C: **Design of lessons recommends and facilitates a mix of instructional approaches for a variety of learners such as using multiple representations (e.g., including models, using a range of questions, checking for understanding, flexible grouping, pair-share).** **How to Find the Evidence:** Evaluate teacher materials, noting instructional approaches suggested for whole class and differentiated lessons and activities.	**Evidence-** Each lesson has an "Assess and Differentiate" section providing intervention, on level and advanced opportunities. There are suggestions on how to level each assignment and activity center suggestions for each lesson. Evidence of whole group sharing. Models are used throughout to support learning.	**Reviewer only.)** **__2__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Alignment Criterion 3: **Access to the Standards for All Students** **Materials must provide supports for English Language Learners and other special populations.** **AC3** Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 points, the Criterion has not been met. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion.**(Reviewer only.)** **Move to the Evaluation Summary and record the final Meets or Does Not Meet rating .**		**(Reviewer only.)** **__X__Meets** **____Does Not Meet** **Strengths/Weaknesses:**

Once an evaluation for alignment to the Shifts and major features of the CCSS has been conducted using Sections 1-3, it's important to evaluate for overall quality and best practices. A starting list of Indicators of Quality are suggested below. States, districts and others evaluating instructional materials are encouraged to add to this list to ensure materials reflect local contexts. For background information on some of the Indicators of Quality in this section, refer to pp.18–21 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).

Indicator of Quality	Evidence- Give specific examples.	Rating: (Reviewers only.)
1. Lessons are thoughtfully structured and support the teacher in leading the class through the learning paths at hand, with active participation by all students in their own learning and in the learning of their classmates.	**Evidence-** Both at the beginning and end of each lesson, students are discussing the mathematics. Each lesson is structured as 1. develop problem based learning 2. develop visual learning 3. assess and differentiate	**(Reviewer only.)** **___X___ Yes** **_____ No**
2. The underlying design of the materials includes both problems and exercises. (In solving problems, students learn new mathematics, whereas in working exercises, students apply what they have already learned to build mastery.) Each problem or exercise has a purpose. **NOTE: This Criterion does not require that the problems and exercises be labeled as such.**	**Evidence-** There is evidence of both problems and exercises within most lessons.	**(Reviewer only.)** **___X___ Yes** **_____ No**
3. Design of assignments is not haphazard: exercises are given in intentional sequences in order to strengthen students' mathematical understanding.	**Evidence-** The assignments are arranged from practice to application. Students are often asked to engage in higher order thinking or explanations of ideas.	**(Reviewer only.)** **___X___ Yes** **_____ No**
4. There are separate teacher materials that support and reward teacher study including, but not limited to: discussion of the mathematics of the units and the mathematical point of each lesson as it relates to the organizing concepts of the unit, discussion on student ways of thinking and anticipating a variety of students responses, guidance on lesson flow, guidance on questions that prompt students thinking, and discussion of desired mathematical behaviors being elicited among students.	**Evidence-** They have digital resources including PD videos, topic overview videos, and listen and look for lesson videos. (pg. F3 in TE volume 2)	**(Reviewer only.)** **___X___ Yes** **_____ No**
5. Manipulatives suggested in the materials are faithful representations of the mathematical objects they represent and are connected to written methods.	**Evidence-** The manipulatives included were base 10 blocks, fraction bars, a balance arm, 1" foam cubes, dice.	**(Reviewer only.)** **___X___ Yes** **_____ No**

6. Materials include a variety of curriculum-embedded assessments. Examples include pre-, formative, summative, and self-assessment resources.	**Evidence-** Each day the lesson suggests to the teacher in Step 3 how to assess using the "quick check" to prescribe differentiated instruction. Included in the materials, there is a Math Diagnosis and Intervention System. It also has suggestions in the margins of the TE that provide guidance in formative assessments and responses. There is an on-line assessment/math tools for students. Each topic has a performance assessment with a scoring guide.	**(Reviewer only.)** **___X___ Yes** **_____ No**
7. Assessments contain aligned rubrics, answer keys, and scoring guidelines that provide sufficient guidance for interpreting student performance.	**Evidence-** Yes, see pages 469-470 for an example. Every student page has an answer key and every question asked in the student materials has answer keys in the TE.	**(Reviewer only.)** **___X___ Yes** **_____ No**
8. Materials assess student proficiency using methods that are accessible and unbiased, including the use of course-level language in student prompts.	**Evidence-** Assessments use the same models and language used in the practice.	**(Reviewer only.)** **___X___ Yes** **_____ No**
9. Materials are carefully evaluated by qualified individuals, whose names are listed, in an effort to ensure freedom from mathematical errors and course-level appropriateness.	**Evidence-** In the front of the TE, the authors are listed.	**(Reviewer only.)** **____X__ Yes** **_____ No**
10. The visual design supports students in engaging thoughtfully with the subject. Navigation through the text is clear.	**Evidence-** It seems very systematic and easy to follow for both teachers and students.	**(Reviewer only.)** **___X___ Yes** **_____ No**
11. The materials engage parents in appropriate ways. For example, homework assignments in elementary grades, consist of routine problems, practice with getting answers, and fluency-building exercises that parents can easily support.	**Evidence-** There is homework for every lesson along with on-line tools to support learning. There is a home-school connection page at the beginning of each topic to give to families as an overview of the content.	**(Reviewer only.)** **___X___ Yes** **_____ No**

Reviewer IMET Evaluation Summary Title/Level: enVisionmath2.0 grade 6

Publisher: Pearson Education Inc. Copyright: 2016 ISBN: 9780328847648

Reviewer ID # SLL and CJS Date Review Completed: 2/13/16

Non-Negotiable Criteria- Each Non-Negotiable must be met in order for the Non-Negotiable Alignment Criteria to be met overall.

Non-Negotiable 1: Freedom from Obstacles to Focus	Non- Negotiable 2: Focus and Coherence
___X___ Meets _____ Does Not Meet	__X___ Meets _____ Does Not Meet

Non-Negotiable Overall:

___X__ Meets _____ Does Not Meet

Alignment Criteria- Each Alignment Criterion must be met with a sufficient number of points in order for Alignment Criteria to be labeled as "Meets" overall. The more points the materials receive on the Alignment Criteria, the better they are aligned.

Alignment Criterion 1: Rigor and Balance	Alignment Criterion 2: Standards of Mathematical Practice	Alignment Criterion 3: Access to Standards for All Learners
Points: __6___ of 6 possible. (Materials must receive at least 5 of 6 points to align.) ___X___ Meets _____ Does Not Meet	Points: __6___ of 6 possible. (Materials must receive at least 5 of 6 points to align.) ___X___ Meets _____ Does Not Meet	Points: __6___ of 6 possible. (Materials must receive at least 5 of 6 points to align.) ___X___ Meets _____ Does Not Meet

Alignment Criteria Overall:

__X___ Meets _____ Does Not Meet

If the materials meet both Non-Negotiables and relevant Alignment Criterion, they are aligned to the Shifts and major features of the Core Standards. **Do the materials meet every Non-Negotiable and Alignment Criterion? __X___ Yes _____ No**

What are the specific areas of strength and weakness based on this evaluation? Publishers or others modifying or developing assessments can use this information to make improvements and/or to remedy gaps in the alignment of assessment materials.

2015-16 Mathematics Interim Review Recommendation & Summary

Publisher Name:	Pearson Education
Title:	Digits Grade 6
ISBN #	9780133314601
Grade Level(s) or Course:	Grade 6
Reviewer ID:	MM PW

RECOMMENDED AS:

__X__ **Core Mathematics Program-** a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials. Substantial evidence clearly supports the designation of this program as Core.

_____ **Other Mathematics Program-** a program that substantially, but partially, meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for supplemental materials. Substantial evidence clearly supports the designation of this program as Other.

_____ **Component Mathematics Program-** a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs. Substantial evidence clearly supports the designation of this program as Component.

_____ **Intervention Program-** a program designed and intended to target and support students' specific needs. Substantial evidence clearly supports the designation of this program as Intervention.

_____ **Does not meet criteria** for recommendation as a Curricular Material or Online Resource for Mathematics.

EVIDENCE SUMMARY:

FOCUS- All grade 6 standards are met in this curriculum.

COHERENCE- 70% of grade 6 focuses on the major work. Supporting work integrate and supports work from core clusters.

RIGOR- Students develop fluency and procedural skills as they develop conceptual understanding

CONCEPTUAL UNDERSTANDING- Conceptual understanding is attended to throughout. Materials include a variety of problem types that foster conceptual discussions

MATHEMATICAL PRACTICES- MPs are addressed throughout. Program Overview documents shows MP/CCSS progressions and correlations.

ACCESSIBILITY OF STANDARDS TO ALL STUDENTS- multilingual handbook available. Online translation tools. Program Overview discusses differentiation in instruction and possible intervention.

OTHER:

Primarily an Internet-based, online instruction. Must have (minimally) a computer and projector/Smartboard.

Strengths: Engaging; ease of differentiation; access to support

Hard copies of HW available for students w/ limited access to technology outside

2015-16 Interim Mathematics Review

Mathematics Evaluation Tool Grades K-8

Publisher: Pearson Education

Title of Material: DIGITS Grade 6

Author: Fennell et.al

ISBN #: 9780133314601 **Copyright** 2015

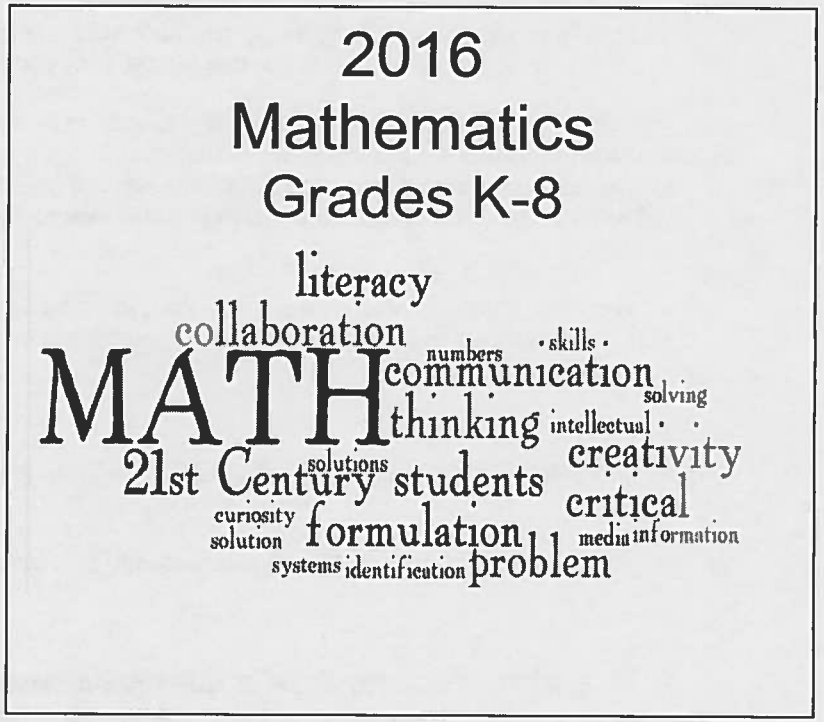
Reviewer ID: MMPLW

Core Mathematics Program- a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Core.

Other Mathematics Program- a program that substantially, but partially, meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Other.

Component Mathematics Program- a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs.
Substantial evidence clearly supports the designation of this program as Component.

Intervention Program- a program designed and intended to target and support students' specific needs.
Substantial evidence clearly supports the designation of this program as Intervention.



- Evaluation Form adapted from Instructional Materials Evaluation Toolkit (IMET).

The IMET was developed by Student Achievement Partners. Educators may use or adapt. http://creativecommons.org/licenses/by/3.0/ Download this tool at http://achievethecore.org/IMET

Instructional Materials Evaluation Tool

Mathematics, Grades K-8

What Are the Purposes of the IMET?

This Math IMET is designed to help educators determine whether instructional materials are aligned to the Shifts and major features of the Common Core State Standards (CCSS). The substantial instructional Shifts (http://www.corestandards.org/other-resources/key-shifts-inmathematics/) at the heart of the Common Core State Standards are:

- **Focus** strongly where the Standards focus
- **Coherence**: Think across grades and link to major topics within the grade
- **Rigor**: In major topics, pursue conceptual understanding, procedural skill and fluency, and application with equal intensity.

The IMET draws directly from the following documents:

- Common Core State Standards for Mathematics (www.corestandards.org/Math)
- Publishers' Criteria for the Common Core State Standards in Mathematics grade K-8 (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)

When to use the IMET

1. Purchasing materials: Many factors go into local purchasing decisions. Alignment to the Standards is a critical factor to consider. This tool is designed to evaluate alignment of instructional materials to the Shifts and the major features of the CCSS. It also provides suggestions of additional indicators to consider in the materials evaluation and purchasing process.

2. Evaluating materials currently in use: The IMET can be used to analyze the degree of alignment of existing materials and help to highlight specific, concrete flaws in alignment. Even where materials and tools currently in use fail to meet one or more of these criteria, the pattern of failure is likely to be informative. States and districts can use the evaluation to create a thoughtful plan to modify or combine existing resources in such a way that students' actual learning experiences approach the focus, coherence, and rigor of the Standards.

3. Developing programs: Those developing new programs can use this tool as guidance for creating aligned curricula.
Please note this tool was designed for evaluating comprehensive curricula (including any supplemental or ancillary materials), but it was not designed for the evaluation of standalone supplemental materials.

Who Uses the IMET?

Evaluating instructional materials requires both subject-matter and pedagogical expertise. Evaluators should be well versed in the Standards (www.corestandards.org/Math) for all grades in which materials are being evaluated. This includes understanding the Major Work of the grade (www.achievethecore/focus), the Supporting and Additional work, how the content fits into the progressions in the Standards (www.achievethecore.org/progressions), and the expectations of the Standards with respect to conceptual understanding, procedural skill and fluency, and application. Evaluators also should be familiar with the substantial instructional Shifts (http:// www.corestandards.org/other-resources/key-shifts-in-mathematics/) of Focus, Coherence and Rigor that are listed above.

Getting Started

Prior to Evaluation

Assemble all of the materials necessary for the evaluation. It is essential for evaluators to have materials for all grades covered by the program, as some criteria cannot be rated without having access to each grade. In addition, each evaluator should have a reference copy of the Common Core State Standards for Mathematics (CCSSM) and the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013).

2015-16 Interim Mathematics Review

Mathematics Evaluation Tool Grades K-8

Publisher: Pearson Education

Title of Material: Digits Grade 6

Author: Fennell et. al

ISBN #: 9780133314601 **Copyright** 2015

Reviewer ID: PLW MM

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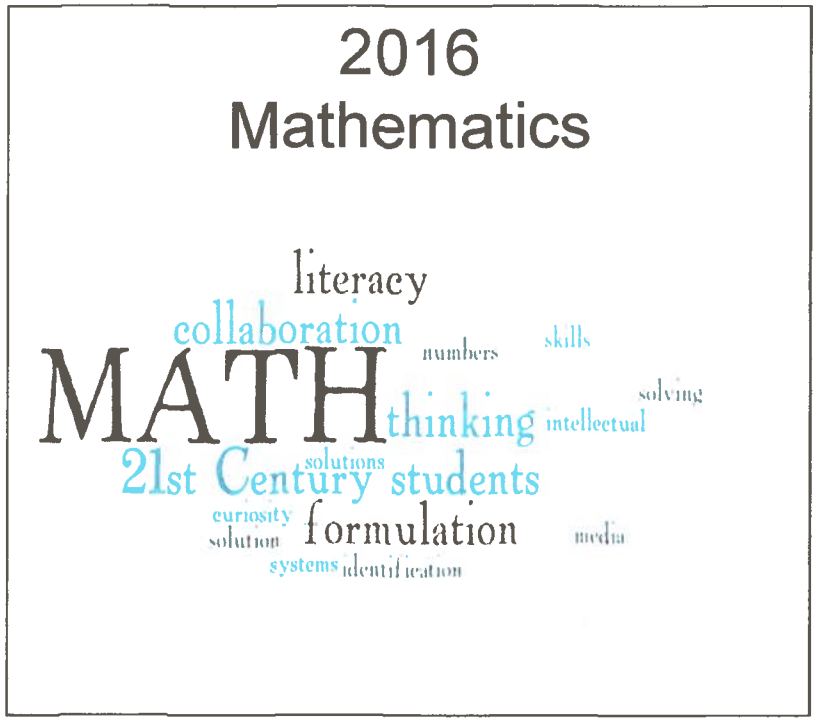
Substantial evidence clearly supports the designation of this program as Other.

Component Mathematics Program- a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs.
Substantial evidence clearly supports the designation of this program as Component.

Intervention Program- a program designed and intended to target and support students' specific needs.
Substantial evidence clearly supports the designation of this program as Intervention.



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Instructional Materials Evaluation Tool
Mathematics, Grades K-8

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- **Focus** strongly where the Standards focus
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2. Evaluating materials currently in use: The IMET can be used to analyze the degree of alignment of existing materials and help to highlight specific, concrete flaws in alignment. Even where materials and tools currently in use fail to meet one or more of these criteria, the pattern of failure is likely to be informative. States and districts can use the evaluation to create a thoughtful plan to modify or combine existing resources in such a way that students' actual learning experiences approach the focus, coherence, and rigor of the Standards.

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Evaluating instructional materials requires both subject-matter and pedagogical expertise. Evaluators should be well versed in the Standards (www.corestandards.org/Math) for all grades in which materials are being evaluated. This includes understanding the Major Work of the grade (www.achievethecore/focus), the Supporting and Additional work, how the content fits into the progressions in the Standards (www.achievethecore.org/progressions), and the expectations of the Standards with respect to conceptual understanding, procedural skill and fluency, and application. Evaluators also should be familiar with the substantial instructional Shifts (http:// www.corestandards.org/other-resources/key-shifts-in-mathematics/) of Focus, Coherence and Rigor that are listed above.

Getting Started
Prior to Evaluation

Assemble all of the materials necessary for the evaluation. It is essential for evaluators to have materials for all grades covered by the program, as some criteria cannot be rated without having access to each grade. In addition, each evaluator should have a reference copy of the Common Core State Standards for Mathematics (CCSSM) and the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013).

Before conducting the evaluation itself, it is important to develop a protocol for the evaluation process. The protocol should include having evaluators study the Publishers' Criteria and the IMET. It will also be helpful for evaluators to get a sense of each program overall before beginning the process. At a minimum, this would include reading the front matter of the text, looking at the table of contents and paging through multiple chapters.

Sections 1-3 below should be completed to produce a comprehensive picture of the strengths and weaknesses of the materials under evaluation. Information about areas in need of improvement or supplementation should be shared with internal and external stakeholders.

Navigating the Tool

Begin with Section 1: Non-Negotiable Alignment Criteria

- The Non-Negotiable Alignment Criteria must each be met in full for materials to be considered aligned to the Shifts and the major features of the Common Core State Standards. Each Non-Negotiable Alignment Criterion has one or more metrics associated with it; every one of these metrics must be met in order for the criterion as a whole to be met.

- Examine the relevant materials and use evidence to rate the materials against each criterion and its associated metric(s).

- Record and explain the evidence upon which the rating is based.

Continue to Section 2: Alignment Criteria

- The Alignment Criteria must each be met for materials to be considered aligned to the Shifts and the major features of the Common Core State Standards. Each Alignment Criterion has one or more metric associated with it; a specific number of these metrics must be met or partially met in order for the criterion as a whole to be met.

- Examine the materials in relation to these criteria, assigning each metric a point value. Rate the criterion as "Meets" or "Does Note Meet" based on the number of points assigned. The more points the materials receive on the alignment Criteria, the better they are aligned.

Record and explain the evidence upon which the rating is based.

Proceed to Section 4: Indicators of Quality

- Indicators of Quality are important considerations that will help evaluators better understand the overall quality of instructional materials. These considerations are not criteria for alignment to the CCSS, but they provide valuable information about additional program characteristics. Evaluators may want to add their own indicators to the examples provided.

Directions for Non-Negotiable 1

Freedom from Obstacles to Focus

Criterion	Evidence- Give specific examples.	Rating: (Reviewer only.)
Non-Negotiable 1: **Freedom from Obstacles to Focus** **Materials must reflect the content architecture of the Standards by not assessing the topics named before the grade level where they first appear in the Standards.** The Standards foster students' progress to algebra by focusing strongly on arithmetic. Consistent with this focus, certain topics from outside of arithmetic appear only in later grades. Thus, to be aligned, materials must reflect the content architecture of the Standards by not assessing the topics named before the grade level where they first appear in the Standards. In this criterion, "topics named" means the topics that are explicitly named in Metric 1A. No other topics should be added to the list in Metric 1A. (Note that other topics in the standards are addressed in criterion NN2.)	**Required Materials** • Common Core State Standards for Mathematics (www.corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf) • From the materials being evaluated: teacher guides and all assessment components	**Rating this Criterion**: Non-Negotiable 1 is rated as Meets or Does Not Meet. To rate Non-Negotiable 1, begin by rating Metric 1A. Since Metric 1A is the only metric for Non-Negotiable 1, the rating for Non-Negotiable 1 is the same as the rating for Metric 1A. If Metric 1A is rated as Does Not Meet, include evidence of when the named topic(s) is/are assessed. If the metric is rated as Meets, list the grade(s) examined in the evaluation.

Metric NN1A: **Materials reflect the basic architecture of the Standards by not assessing the listed topics before the grade level indicated.** • Probability, including chance, likely outcomes, probability models. (Introduced in the CCSSM in grade 7) • Statistical distributions, including center, variation, clumping, outliers, mean, median, mode, range, quartiles; and statistical association or trends, including two-way tables, bivariate measurement data, scatter plots, trend line, line of best fit, correlation. (Introduced in the CCSSM in grade 6) • Similarity, congruence, or geometric transformations. (Introduced in the CCSSM in grade 8) • Symmetry of shapes, including line/ reflection symmetry, rotational symmetry. (Introduced in the CCSSM in grade 4) **How to Find the Evidence:** Evaluate the table of contents, all chapter tests, all unit tests, and other such assessment components (including rubrics). For context, read Criterion #2 from the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013). NOTE: Grade alignments of other topics are addressed in Non-Negotiable 2, Focus and Coherence.) In this criterion, "topics named" means the topics that are explicitly named in Metric 1A. No other topics should be added to the list in Metric 1A. (Note that other topics in the standards are addressed in criterion NN2.)	**Evidence-** **All of the grade 6 standards are met in this curriculum.** **Digits Grade 6 Unit 15** **Statistics** ***Distributions, Measures of Central tendency, bivariate deviation.**	**(Reviewer only.)** **__X__Meets** **____Does Not Meet**
Non-Negotiable 1: Materials must reflect the content architecture of the Standards by not assessing the topics named* before the grade level where they first appear in the Standards. **NN 1** If Metric 1A was rated as Meets, then rate Non-Negotiable 1 as Meets. If Metric 1A was rated as Does Not Meet, then rate Non- Negotiable 1 as Does Not Meet. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion.**(Reviewer only.)** **No topics assessed before grade level introduction.** **Before moving to Non-Negotiable 2, record the final Meets or Does Not Meet rating in the Evaluation Summary.**		**(Reviewer only.)** **_X___Meets** **____Does Not Meet** **Strengths/Weaknesses:**

Directions for Non-Negotiable 2

Focus and Coherence

Non-Negotiable 2: **Focus and Coherence** **Materials must focus coherently on the Major Work of the grade in a way that is consistent with the progressions in the Standards.** Focus and coherence are the two major evidence-based design principles of the Common Core State Standards for Mathematics (CCSSM, p. 3). Focus is necessary in order to fulfill the ambitious promise the states have made to their students by adopting the Standards: greater achievement at the college and career ready level; greater depth of understanding of mathematics; and a rich classroom environment in which reasoning, sense-making, applications, and a range of mathematical practices flourish. In simpler terms, a mile-wide, inch-deep curriculum translates to less time per topic. Less time means less depth and moving on without many students. Thus, materials must focus coherently on the Major Work of the grade in a way that is consistent with the progressions in the Standards.	**Required Materials** • Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf) • Focus by Grade Level for the grade being evaluated (www.achievethecore.org/focus) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion:** Non-Negotiable 2 is rated as Meets or Does Not Meet. To rate Non-Negotiable 2, first rate metrics 2A–2H. Each of these eight metrics must be rated as Meets in order for Non-Negotiable 2 to be rated as Meets. Rate each metric 2A-2H as Meets or Does Not Meet/Insufficient Evidence. If the evidence examined shows that the Criterion is met, then mark the Criterion Meets. If the evidence examined shows that the Criterion is not met—or if there is insufficient evidence to make a determination—then mark the Criterion as Does Not Meet/Insufficient Evidence. Support all ratings with evidence.
Metric NN2A: **In each grade K–8, students and teachers using the materials as designed devote the large majority of time to the Major Work of the grade.** **How to Find the Evidence:** Familiarize yourself with the Major Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, lessons, homework assignments, and assessments. (Evaluate both student and teacher materials.) Consider time spent on the Major Work of the grade and judge qualitatively whether students and teachers using the materials as designed will devote the large majority of time to the Major Work of the grade. For context, read Criterion #1 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013)	**Evidence-** **70% of curriculum focuses on Major Work. Program Overview p 34-37** **Major Work Examples: Ratios and Proportional Reasoning, Expressions and Equations, Number System Topic 6- Dividing Fractions**	**(Reviewer only.)** **_X___Meets** **____Does Not Meet/** **Insufficient Evidence**

Metric NN2B: **Supporting work, where present, enhances focus and coherence simultaneously by also engaging students in the Major Work of the grade.** **How to Find the Evidence:** Familiarize yourself with the Major Work and Supporting Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate chapters and lessons that focus on Supporting Work. NOTE: Example of evaluating this Criterion might include looking at whether materials for K–5 generally treat data displays as an occasion for solving grade-level word problems using the four operations (e.g., see 3.MD.B.3); or whether materials for grade 7 take advantage of opportunities to use probability to support ratios, proportions, and percentages. For context, read Criterion #3 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** **Supporting work enhances focus and coherence of Major work throughout the program.** **Ex: Ratios to develop one step equations. Ratios to tie to area problems.** **Topic 7 – Fluency with decimals supports unit price (Lesson 11-2)**	**(Reviewer only.)** **__X__Meets** **____Does Not Meet/ Insufficient Evidence**
Metric NN2C: **Materials base content progressions on the grade-by-grade progressions in the Standards. Content from previous or future grades does not unduly interfere with or displace on-grade-level content.** **How to Find the Evidence:** Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, and lessons in both student and teacher materials. NOTE: In some cases it may be possible that aligned materials might address some aspects of a topic in a strategic way before or after the grade level in which the topic is central in the Standards' progressions; for example, a curriculum author might purposefully choose to explore adding fractions with unlike denominators in a way appropriate to grade four, recognizing that this work is not really required until the next grade. However, any such purposeful discrepancies in content progressions should enhance the required learning in each grade; not unduly interfere with or displace grade-level content; and be clearly aimed at helping students meet the Standards as written rather than effectively rewriting the progressions in the Standards. And in all cases, note that Non-Negotiable 1 must be met for materials to be aligned. For context, read Criterion #5a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Scope and sequence of the curriculum matches the progression of grade 6 standards. Grade 6 (Number System) Topic 8 – Integers intro. Topic 9- Rational Numbers intro. Grade 7 progresses to number operations.	**(Reviewer only.)** **__X__Meets** **____Does Not Meet/ Insufficient Evidence**

Metric NN2D: **Materials gi[illegible]l students extensive work with on-grade-level problems.** **How to Find the Evidence:** Evaluate both student and teacher materials. If the materials provide resources for differentiated learning, consider whether lower-performing students have opportunities to engage with grade-level problems. Also consider whether higher-performing students are given opportunities to learn current grade-level content in greater depth. For context, read Criterion #5b in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Extensive work throughout the program. Program utilizes online, whole group, teacher led launch. Readiness Assessment leads to differentiation. Intervention/Got It Homework/Kind of Got It Homework (Leveled support) Grade level examples: Lesson 11-1 Launch. Time to "work it out" in student companion book.	**(Reviewer only.)** **_X___Meets** **____Does Not Meet/** **Insufficient Evidence**
Metric NN2E: **Materials relate on-grade-level concepts explicitly to prior knowledge from earlier grades.** **How to Find the Evidence:** Evaluate both student and teacher materials. NOTE: Examples of evaluating this Criterion might include looking at the way the materials extend basic ideas of place value across the decimal point; or the role that properties of operations play when the materials extend arithmetic beyond whole numbers to fractions, variables, and expressions. More generally, cluster headings in the Standards sometimes signal key moments where reorganizing and extending previous knowledge is important in order to accommodate new knowledge (e.g., see cluster headings that use the phrase "Apply and extend previous understanding"). For context, read Criterion #5c in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Connections build concepts from previous grades throughout. Examples: Grade 6 Volume 2 Reviews decomposition of irregular polygons into regular polygons for area problems. Fact families to analyze one-step equations.	**(Reviewer only.)** **__X__Meets** **____Does Not Meet/** **Insufficient Evidence**
Metric NN2F: **Review of material from previous grades is clearly identified as such to the teacher, and teacher and students can see what their specific responsibility is for the current year.** **How to Find the Evidence:** Evaluate the table of contents, but do not stop there; also evaluate units, chapters, lessons, homework assignments and assessments. (Evaluate both student and teacher materials.) Identify any content from previous grades and check whether it is identified as such. For context, read Criterion #5a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Intervention Lessons provide students with a review of previous skills. Examples of intervention: Cluster 5- Dividing by 2 digit numbers Cluster 1- Place Value Current year goals outlined in student companion book. CC standards and vocabulary for each lesson.	**(Reviewer only.)** **_X___Meets** **____Does Not Meet/** **Insufficient Evidence**

Metric NN2G: **Materials include learning objectives that are visibly shaped by CCSSM cluster headings.** **How to Find the Evidence:** Select several clusters from the Major Work in the grade being evaluated. Evaluate teacher and student materials in relation to these clusters. For context, read Criterion #6a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** **No explicit learning objective stated but teacher resources provide essential questions, standards, and key words. Student companion books have standards listed for each lesson. Standards also included in pop up window when launching lesson and clicking "info".**	(Reviewer only.) __X__Meets ____Does Not Meet/ Insufficient Evidence
Metric NN2H: **Materials include problems and activities that serve to connect two or more clusters in a domain, or two or more domains in a grade, in cases where these connections are natural and important.** **How to Find the Evidence:** In the grade being evaluated, choose two or more clusters or two or more domains for which connections are natural and important. Evaluate the units, chapters, and lessons that deal with the chosen topics, looking for problems and activities that serve to connect the chosen clusters or domains. NOTE: An example of evaluating this Criterion might include looking at whether problems in grade 4 sometimes or often involve students applying their developing computation skills (detailed in domain NBT) in the context of solving word problems (detailed in domain OA). For context, read Criterion #6b in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** **Many problems and activities are connected in 2 or more clusters.** **Example: Grade 6 (page 86-87)** **Solving equations extends arithmetic to algebraic.**	(Reviewer only.) X_Meets ____Does Not Meet/ Insufficient Evidence
Non-Negotiable 2: **Focus and Coherence** **Materials must focus coherently on the Major Work of the grade in a way that is consistent with the progressions in the Standards.** **NN 2** If all Metrics 2A – 2H were rated as Meets, then rate Non-Negotiable 2 as Meets. If one or more Metric was rated Does Not Meet/Insufficient Evidence, then rate Non-Negotiable 2 as Does Not Meet. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)** **Before moving to Alignment Criterion 1, record the final Meets or Does Not Meet rating in the Evaluation Summary.**		(Reviewer only.) __X__Meets ____Does Not Meet **Strengths/Weaknesses:**

Now continue by evaluating the Alignment Criterion 1 for Rigor and Balance.

Directions for Alignment Criterion 1

Rigor and Balance

Alignment Criterion 1: Rigor and Balance

Materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.

The Standards set expectations for attention to all three aspects of rigor: conceptual understanding, procedural skill and fluency, and applications. Thus, materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.

Required Materials

- Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf)
- Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)
- Focus by Grade Level for the grade being evaluated (achievethecore.org/focus)
- Situation Types for the Operations in Word Problems (achievethecore.org/situation-types)
- From the materials being evaluated: teacher guides, student texts and workbooks

Rating this Criterion:

Alignment Criterion 1 is rated as Meets or Does Not Meet.

To rate Alignment Criterion 1, first rate metrics 1A, 1B, and 1C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). For each metric, guiding questions are provided to aid in gathering evidence.

Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 1 if the materials rate 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as rigor and balance, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.

Metric AC1A:

The materials support the development of students' conceptual understanding of key mathematical concepts, especially where called for in specific content Standards or cluster headings.

How to Find the Evidence:

Select one or more cluster(s) or Standard(s) from the Major Work for the grade being evaluated that relate specifically conceptual understanding to use throughout the questions associated with this metric. NOTE: Some examples of clusters or Standards that call for conceptual understanding include: K.OA.A.1, (1.NBT.B, 1.NBT.C), (2.NBT.A, 2.NBT.B), (3.OA.A.1, 3.OA.A.2), 4.NF.A, (4.NBT.A, 4.NBT.B), 5.NF.B, (5.NBT.A, 5.NBT.B), 6.RP.A, 6.EE.A.3, 7.NS.A, 7.EE.A, 8.EE.B, 8.F.A, 8.G.A

Clusters or Standards grouped by parentheses are closely connected and could be analyzed together.

For context, read Criterion #4a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).

-Choose a cluster/Standard from the Major Work that is aligned to each aspect of rigor and use it to evaluate these metrics. It is most helpful if the same clusters/Standards are chosen for all of the programs being evaluated. (Guidance in choosing clusters/Standards is included in "How to Find the Evidence".)

Use the questions for AC Metric 1A to evaluate Metric 1A. Record evidence for each question and rate Metric 1A.

__X__Meets (2)

____Partially Meets (1)

____Does Not Meet (0)

Is conceptual understanding attended to thoroughly where the Standards set e[illegible] expectations for understanding or interpreting? Evaluate lessons, chapter/unit assessments and homework assignments, paying attention to work aligned to Standards that explicitly call for understanding or interpreting. NOTE: Examples of evaluating this Criterion might include looking at how well the multi-digit addition and subtraction algorithms are developed and explained on the basis of place value and properties of operations; or how well the multi-digit multiplication and division algorithms are developed and explained on the basis of place value and properties of operations; or how well solving equations is presented and explained as a process of reasoning.	**Evidence-** Conceptual unders[illegible]ding is attended throughout the program. Each lesson has "close and check" where students discuss the "focus questions." Conceptual understanding example: 10-6 Problem Solving Part 1	
Do the materials feature high-quality conceptual problems and conceptual discussion questions? Evaluate lessons, chapter/unit assessments, and homework assignments. NOTE: Example of conceptual problems might include such questions as "Find a number greater than 1/5 and less than 1/4," or "If the divisor does not change and the dividend increases, what happens to the quotient?"	**Evidence-** Materials include a variety of problem types to foster conceptual discussions. "Think About" process, Writing, and Error Analysis. Problems offer "Answer choices" for discussion.	
Do the materials feature opportunities to identify correspondences across mathematical representations? Evaluate lessons, chapter/unit assessments and homework assignments. NOTE: Examples of evaluating this Criterion might include looking at whether students are supported in identifying correspondences among: the verbal description of a situation, the diagrams that distill its mathematical features, and the equations that model it; or equivalent forms of numbers (e.g., 3 and 6/2) and the number line; or rational number operations and representations of them via models such as the vector model; or the expression that defines a function and the graph that shows the relationship.	**Evidence-** Online lessons include utilization of diagrams/pictures/drag and drops/number lines to foster correspondence of representations. 10-1 Ratios Part 1	
Metric AC1B: **The materials are designed so that students attain the fluencies and procedural skills required by the Standards.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Major Work for the grade being evaluated that relate specifically to fluency and procedural skill to use throughout the questions associated with this metric. NOTE: Some examples of Standards that call for procedural skill and fluency include: K.OA.A.5, 1.OA.C.6, 2.OA.B.2, 2.NBT.B.5, 3.OA.C.7, 3.NBT.A.2, 4.NBT.B.4, 5.NBT.B.5, 6.NS.B.2, and 6.NS.B.3, 6.EE.A, 7.NS.A, 7.EE.A.1,7.EE.B.4a, 8.EE.C.7, 8.EE.C.8b For context, read Criterion #4b in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).		**Use the questions for Metric 1B to evaluate Metric 1 B. Record evidence for each question and rate Metric 1B.** **(Reviewer only.)** **__X__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**

Is progress toward fluency and procedural skill interwoven with students' develo[illegible]conceptual understanding of the operations in question? Evaluate lessons, chapter/unit assessments, daily routines, and homework assignments for evidence that the development of fluency and procedural skill is supported by conceptual understanding.	**Evidence-** Students develop fl[illegible]cy and procedural skills as they develop conceptual understanding. Example: Topic 2- Practice using properties of operations to work one step questions. Topic 7 Lesson 1 6.NS.B.3	
Are purely procedural problems and exercises present that include cases in which opportunistic strategies are valuable and generic cases that require efficient algorithms present? Evaluate lessons, chapter/unit assessments, daily routines, and homework assignments. NOTE: Examples of problems in which opportunistic strategies are valuable might include the sum 698 + 240 or the system x + y = 1, 2x + 2y = 3. Examples of generic cases that require efficient algorithms might include the sum 8767+2286 or the system 6y + x = x + 3, – x = 1 + 2y.	**Evidence-** Most lessons begin with development of concept behind the basic algorithm and then extend. Example: Grade 6 reviews fluency and division (page 220-221) to division of decimals (page 227-228)	
Do the materials in grades K–6 provide repeated practice toward attainment of fluency Standards? Evaluate lessons, daily routines, and homework assignments for evidence of repeated practice toward attainment of the following K–6 Standards that set an explicit expectation of fluent (accurate and reasonably fast) computation: K.OA.A.5, 1.OA.C.6, 2.OA.B.2, 2.NBT.B.5, 3.OA.C.7, 3.NBT.A.2, 4.NBT.B.4, 5.NBT.B.5, 6.NS.B.2, 6.NS.B.3.	**Evidence-** **Repeated practice of number operations. Progression from whole numbers, to decimals, to fractions.**	
Metric AC1C: **The materials are designed so that teachers and students spend sufficient time working with engaging applications, without losing focus on the Major Work of each grade.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Major Work for the grade being evaluated that relate specifically application to use throughout the questions associated with this metric. NOTE: Some examples of clusters or Standards that call for application include: K.OA.A.2, 1.OA.A, 2.OA.A, 3.OA.A.3, 3.OA.D.8, 4.OA.A.3, 4.NF.B.3d, 4.NF.B.4c, 5.NF.B.6, 5.NF.B.7c, 6.RP.A.3, 6.NS.A.1, 6.EE.B.7, 6.EE.C.9, 7.RP.A, 7.NS.A.3, 7.EE.B.3, 8.EE.C.8c, 8.F.B For context, read Criterion #4c in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Each unit provides Enrichment projects which are highly engaging for all students. Reinforce major work, topic learned and practiced. These projects often involve: research, planning, design, reflection and revision, and compare.	**Use the questions for Metric 1C to evaluate Metric 1C. Record evidence for each question and rate Metric 1C.** **(Reviewer only.)** **___Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Are there are single- and multi-step contextual problems, including non-routine problems, that develop the mathematics of the grade, afford opportunities for practice, and engage students in problem solving? Do the problems attend thoroughly to those places in the content Standards where expectations for multi-step and real-world problems are explicit? Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** Yes, contextual problems have a variety of basic/one step equations to multi-step tasks. Example: Algorithmic problems 282 # 1-5 Process reflection #6-8 Analysis of better methods (later problems)	

Do application problems particularly stress applying the Major Work of the grade? Eval[illegible]essons, chapter/unit assessments, and homework assignments. NOTE: Examples of evaluating this Criterion might include looking at: how well, by the end of grade 2, students using the materials as designed can represent and solve a full range of one-step addition and subtraction word problems; or how well, by the end of grade 3, students using the materials as designed can represent and solve a full range of one-step multiplication and division word problems; or how well these basic situation types for each operation are carried coherently across the grades, (e.g., with fractions and algebraic expressions); or, in all grades, whether the problems connect concepts, Standards, and domains in ways that are natural and important. For a list of situation types for one-step addition, subtraction, multiplication, and division problems, see Situation Types for the Operations in Word Problems	**Evidence-** Each topic ends wi[illegible] problem solving lesson where students apply context understanding. Application of multiplication of fractions. Moves from model algorithms to error analysis, to challenge, to real world problems. Student Companion book pages 158-160	
Does modeling build slowly across K–8, with applications that are relatively simple in earlier grades and when students are encountering new content? In grades 6–8, do the problems begin to provide opportunities for students to make their own assumptions or simplifications in order to model a situation mathematically? Read Standard for Mathematical Practice 4, Model with Mathematics. Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** Modeling used throughout curriculum. Videos available to model online tools. 10-6 Problem 1	

Alignment Criterion 1: Rigor and Balance

Materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.

(Reviewer only.)

__X__Meets

____Does Not Meet

Strengths/Weaknesses:

AC1 Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 out of 6 points, the Criterion has not been met. Check the final rating.
Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)**

Before moving to Alignment Criterion 2, record the final Meets or Does Not Meet rating in the Evaluation Summary.

Directions for Alignment Criterion 2

Standards for Mathematical Practice

Alignment Criterion 2: Standards for Mathematical Practice

Materials must demonstrate authentic connections between content Standards and practice Standards.

The Standards require that designers of instructional materials connect the mathematical practices to mathematical content in instruction. Thus, materials must demonstrate authentic connections between content Standards and practice Standards.

Required Materials:

- Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf)
- Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)
- Focus by Grade Level for the grade being evaluated (www.achievethecore.org/focus)
- From the materials being evaluated: teacher guides, student texts and workbooks

Rating this Criterion

Alignment Criterion 2 is rated as Meets or Does Not Meet.

To rate Alignment Criterion 2, first rate metrics 2A, 2B, and 2C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). For each metric, guiding questions are provided to aid in gathering evidence.

Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 2 if the materials earn 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as mathematical practices, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.

Metric AC2A:

Materials address the practice Standards in such a way as to enrich the Major Work of the grade; practices strengthen the focus on Major Work instead of detracting from it, in both teacher and student materials.

How to Find the Evidence:

Familiarize yourself with the Major Work of the grade being evaluated (see the Focus by Grade Level documents.)

Evaluate teacher and student materials for evidence that the mathematical practices support and connect to the focus of the grade.

NOTE: Examples of evaluating this Criterion might include looking at whether, in grades K–5, students using the materials are supported to look for and express regularity in repeated reasoning about the addition table, the multiplication table, the properties of operations, the relationship between addition and subtraction or multiplication and division, and the place value system; or whether, in grades 6–8, students using the materials are supported to look for and express regularity in repeated reasoning about proportional relationships and linear functions.

For context, read Criterion #8 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013).

Evidence-

Launch: p. 327 provides ties to practice standards.

MP 1HW allows checking of answers. Context problems offer answer choices. Problems offer "work time."

MP 2Reason abstractly (Essential Questions are provided. Example: Launch, Student companion page 87. Reflection and Focus questions, page 90 "Close and Check"

MP 3Class discussions could provide opportunities to justify and critique peer answers. Inquiry through problem solving)

MP 5 Use tools appropriately (Tools are provided within the program. Example: algebra tiles, integer counters, area models.)

(Reviewer only.)

___X_Meets (2)

____Partially Meets (1)

____Does Not Meet (0)

Metric AC2B: **Materials attend to the full meaning of each practice Standard.** **How to Find the Evidence:** For context, read Criterion #7 and Criterion #9 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).		**Use the questions for Metric 2B to evaluate Metric 2B. Record evidence for each question and rate Metric 2B.** **(Reviewer only.)** **____Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Over the course of any given year of instruction, is each mathematical practice Standard meaningfully present in the form of assignments, activities, or problems that stimulate students to develop the habits of mind described in the practice Standard? Evaluate lessons, chapter/ unit assessments, and homework assignments for evidence of each mathematical practice being meaningfully present in instruction.	**Evidence-** **Each MP is attended to throughout the program. Instruction, lessons, assignments, and homework, "Got It". Explain, Reflect and analyze** **Page 104-106**	
Do the materials treat the practice Standards as developing across grades or grade bands? Are the practice Standards in early grades appropriately simple? Do they display an arc of growing sophistication across the grades?	**Evidence-** **Program overview document shows MP/CCSS progressions and correlations. Page 130-131**	
Are there teacher-directed materials that explain the role of the practice Standards in the classroom and in students' mathematical development? Are alignments to practice Standards accurate?	**Evidence-** **Teacher guide page 130-131 provides rubric for assessing MP. Also CCSS page 14-29.**	
Metric AC2C: **Materials support the Standards' emphasis on mathematical reasoning.** **How to Find the Evidence:** For context, read Criterion #10 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).		**Use the questions for Metric 2C to evaluate Metric 2C. Record evidence for each question and rate Metric 2C.** **(Reviewer only.)** **__X__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Do the materials support students in constructing viable arguments and critiquing the arguments of others concerning grade-level mathematics that is detailed in the content Standards? Read Standard for Mathematical Practice 3. Evaluate teacher and student materials to ensure that students are given opportunities to reason with grade-level mathematics.	**Evidence-** **Online lessons include questions requiring: explain, find the error, foster critique of arguments.** **Example: 6.EE.A.2 Lesson 1-1**	
Do the materials support students in producing not only answers and solutions, but also, in a grade-appropriate way, arguments, explanations, diagrams, mathematical models, etc., especially in the Major Work of the grade? Familiarize yourself with the Major Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate teacher and student materials, to understand the types of work students are expected to produce.	**Evidence-** **Launch activities support student discussion of modeled explanations. Page 330-33 model and application**	

Do materials explicitly attend to the specialized language of mathematics? Is language of argument, problem solving, and mathematical explanations taught rather than assumed? Evaluate teacher and student materials, paying attention to how mathematical language is taught. NOTE: Examples of evaluating this Criterion might include looking at whether students are supported in: basing arguments on definitions; using the method of providing a counterexample; or recognizing that examples alone do not establish a general statement.	**Evidence-** **Program overview pa 18-120 list "key math terms"** **Student companion book pg. xiv-xxx correlates.** **Each lesson has key concept that defines vocabulary verbally and visually.**	
Alignment Criterion 2: **Standards for Mathematical Practice** **Materials must demonstrate authentic connections between content Standards and practice Standards.** **AC2** Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 out of 6 points, the Criterion has not been met. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)** **Before moving to Alignment Criterion 3, record the final Meets or Does Not Meet rating in the Evaluation Summary.**		**(Reviewer only.)** **__X__Meets** **____Does Not Meet** **Strengths/Weaknesses:**
Alignment Criterion 3: **Access to the Standards for All Students** **Materials must provide supports for English Language Learners and other special populations.** Because Standards are for all students, alignment requires thoughtful support to ensure all students are able to meet the Standards. Thus, aligned materials must provide supports for English Language Learners and other special populations.	**Required Materials:** • Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion:** Alignment Criterion 3 is rated as Meets or Does Not Meet. To rate Alignment Criterion 3, first rate metrics 3A, 3B, and 3C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 3 if the materials earn 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as support for special population, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.

Metric AC3A: **Support for English Language Learners and other special populations is thoughtful and helps those students meet the same Standards as all other students. The language in which problems are posed is carefully considered.** **How to Find the Evidence:** Evaluate teacher and student materials, paying attention to supports offered for special populations.	**Evidence-** Multilingual handbook Example: "Cambodian Glossary." Online tools provide Spanish translation. Program overview page 145-154 discusses how to modify instruction for ELL students.	**Reviewer only.)** **__X__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Metric AC3B: **Materials provide appropriate level and type of scaffolding, differentiation, intervention, and support for a broad range of learners with gradual removal of supports, when needed, to allow students to demonstrate their mathematical understanding independently.** **How to Find the Evidence:** Evaluate teacher and student materials, paying attention to whether materials provide differentiation that will lead all learners to engage with on-grade-level content.	**Evidence-** Readiness Assessment to help differentiate at beginning of the lesson. Guides teacher to leveled homework or intervention track. Icons to read aloud for students. Visuals available throughout the curriculum.	**Reviewer only.)** **___X_Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Metric AC3C: **Design of lessons recommends and facilitates a mix of instructional approaches for a variety of learners such as using multiple representations (e.g., including models, using a range of questions, checking for understanding, flexible grouping, pair-share).** **How to Find the Evidence:** Evaluate teacher materials, noting instructional approaches suggested for whole class and differentiated lessons and activities.	**Evidence-** Lessons are designed to implement a variety of instructional strategies. (videos, math tools, drag and drops, models) *No explicit evidence of pair-share/group work	**Reviewer only.)** **____Meets (2)** **__X Partially Meets (1)** **____Does Not Meet (0)**

Alignment Criterion 3: Access to the Standards for All Students **Materials must provide supports for English Language Learners and other special populations.** **AC3** Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 points, the Criterion has not been met. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion.**(Reviewer only.)** **Move to the Evaluation Summary and record the final Meets or Does Not Meet rating .**	**(Reviewer only.)** **X____Meets** **____Does Not Meet** **Strengths/Weaknesses:**

Once an evaluation for alignment to the Shifts and major features of the CCSS has been conducted using Sections 1-3, it's important to evaluate for overall quality and best practices. A starting list of Indicators of Quality are suggested below. States, districts and others evaluating instructional materials are encouraged to add to this list to ensure materials reflect local contexts. For background information on some of the Indicators of Quality in this section, refer to pp.18–21 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).

Indicators of Quality	Evidence- Give specific examples.	Rating: (Reviewers only.)
1. Lessons are thoughtfully structured and support the teacher in leading the class through the learning paths at hand, with active participation by all students in their own learning and in the learning of their classmates.	**Evidence-** **Pacing guide page 94-96, 106-108, 118-120** **Teacher in class notes help guide discussion questions for online Launch lesson. Vocabulary, Close and check, leveled homework.**	**(Reviewer only.)** **__X____ Yes** **_____ No**
2. The underlying design of the materials includes both problems and exercises. (In solving problems, students learn new mathematics, whereas in working exercises, students apply what they have already learned to build mastery.) Each problem or exercise has a purpose. **NOTE: This Criterion does not require that the problems and exercises be labeled as such.**	**Evidence-** **Lesson protocol sets up exercises done whole group.** **Homework involves both algorithmic and application.** **Homework allows support with alternative explanations.**	**(Reviewer only.)** **___X___ Yes** **_____ No**

3. Design of assignments is not haphazard: exercises are given in intentional sequences in order to strengthen students' mathematical understanding.	Evidence- Units build from basic to complex within each topic. Hit major work clusters and then transition to supporting work clusters. Major works can be applied throughout the curriculum.	(Reviewer only.) __X____ Yes _____ No
4. There are separate teacher materials that support and reward teacher study including, but not limited to: discussion of the mathematics of the units and the mathematical point of each lesson as it relates to the organizing concepts of the unit, discussion on student ways of thinking and anticipating a variety of students responses, guidance on lesson flow, guidance on questions that prompt students thinking, and discussion of desired mathematical behaviors being elicited among students.	Evidence- Program overview guide, Online teacher resources such as answer keys, lesson notes. Data Analysis for formative assessments. Scripted in class teacher notes.	(Reviewer only.) ____X__ Yes _____ No
5. Manipulatives suggested in the materials are faithful representations of the mathematical objects they represent and are connected to written methods.	Evidence- Online manipulative tools include area models, number lines, 2D and 3D geo. Shapes, place value blocks, algebra tiles etc.)	(Reviewer only.) _____X_ Yes _____ No
6. Materials include a variety of curriculum-embedded assessments. Examples include pre-, formative, summative, and self-assessment resources.	Evidence- Readiness Assessment (pre) Got It questions and progress monitoring (formative) End of Topic Assessment, Mixed review (summative) Enrich projects (performance task)	(Reviewer only.) ___X___ Yes _____ No
7. Assessments contain aligned rubrics, answer keys, and scoring guidelines that provide sufficient guidance for interpreting student performance.	Evidence- Teacher resources (online) Answer keys "Math Dashboard" provides rubrics.	(Reviewer only.) __X____ Yes _____ No
8. Materials assess student proficiency using methods that are accessible and unbiased, including the use of course-level language in student prompts.	Evidence- Assessment tools throughout for determining student proficiency. Language of math is consistent. Data graphed to allow was of student proficiency. "Close and Check" lesson 1-1 "Mixed Review" Lesson 1-1	(Reviewer only.) __X____ Yes _____ No

9. Materials are carefully evaluated by qualified individuals, whose names are listed, in an effort to ensure freedom from mathematical errors and course-level appropriateness.	**Evidence-** **Authors and advisors listed in the overview.**	**(Reviewer only.)** **___X___ Yes** **_____ No**
10. The visual design supports students in engaging thoughtfully with the subject. Navigation through the text is clear.	**Evidence-** **Online tools are highly engaging (videos and visual models). Hard copy text is plain but with clear graphics.**	**(Reviewer only.)** **___X___ Yes** **_____ No**
11. The materials engage parents in appropriate ways. For example, homework assignments in elementary grades, consist of routine problems, practice with getting answers, and fluency-building exercises that parents can easily support.	**Evidence-** **Homework may be completed online or at home which allows parents involvement. Student companion forms can be complete cooperatively.** **Parent letter home,** "Student Access to Online Curriculum Programs "provides initial exposure of program.	**(Reviewer only.)** **___X___ Yes** **_____ No**

Reviewer IMET Evaluation Summary **Title/Level: _Pearson Digits Grade 6**

Publisher: __Pearson_____ Copyright: __2015_____ ISBN:9780133314601

Reviewer ID # __PLW MM_ Date Review Completed:__3-8-2016

Non-Negotiable Criteria- Each Non-Negotiable must be met in order for the Non-Negotiable Alignment Criteria to be met overall.

Non-Negotiable 1: Freedom from Obstacles to Focus	Non- Negotiable 2: Focus and Coherence
___X____ Meets _____ Does Not Meet	__X___ Meets _____ Does Not Meet

Non-Negotiable Overall:

___X__ Meets _____ Does Not Meet

Alignment Criteria- Each Alignment Criterion must be met with a sufficient number of points in order for Alignment Criteria to be labeled as "Meets" overall. The more points the materials receive on the Alignment Criteria, the better they are aligned.

Alignment Criterion 1: Rigor and Balance	Alignment Criterion 2: Standards of Mathematical Practice	Alignment Criterion 3: Access to Standards for All Learners
Points: _6____ of 6 possible. (Materials must receive at least 5 of 6 points to align.) _____X__ Meets _____ Does Not Meet	Points: ___6__ of 6 possible. (Materials must receive at least 5 of 6 points to align.) ____X___ Meets _____ Does Not Meet	Points: _5____ of 6 possible. (Materials must receive at least 5 of 6 points to align.) _X_____ Meets _____ Does Not Meet

Alignment Criteria Overall:

___X__ Meets _____ Does Not Meet

If the materials meet both Non-Negotiables and relevant Alignment Criterion, they are aligned to the Shifts and major features of the Core Standards. **the materials meet every Non-Negotiable and Alignment Criterion? __X___ Yes _____ No**

What are the specific areas of strength and weakness based on this evaluation? Publishers or others modifying or developing assessments can use this information to make improvements and/or to remedy gaps in the alignment of assessment materials.

Strengths:
Highly engaging
Technology integration
Differentiation
Access to ELL support

Weakness:
No explicit instruction for group/peer work

*Hard copies of HW available for students without online access.

2015-16 Mathematics Interim Review Recommendation & Summary

Publisher Name:	Pearson Education, Inc.
Title:	Pearson "digits" Grade 7 Accelerated
ISBN #	9780133314717-9
Grade Level(s) or Course:	7th Grade Accelerated
Reviewer ID:	DH P. H.

RECOMMENDED AS:

__X__ **Core Mathematics Program-** a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials. Substantial evidence clearly supports the designation of this program as Core.

_____ **Other Mathematics Program-** a program that substantially, but partially, meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for supplemental materials. Substantial evidence clearly supports the designation of this program as Other.

_____ **Component Mathematics Program-** a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs. Substantial evidence clearly supports the designation of this program as Component.

_____ **Intervention Program-** a program designed and intended to target and support students' specific needs. Substantial evidence clearly supports the designation of this program as Intervention.

_____ **Does not meet criteria** for recommendation as a Curricular Material or Online Resource for Mathematics.

EVIDENCE SUMMARY:

FOCUS- The focus was the CCSSM for 7th grade Accelerated, including major 7th and 8th grade Standards.

COHERENCE- The topics are aligned to the CCSSM standards and are coherant across the mathematical domains and within a domain.

RIGOR- materials reflect procedural skills, flvency, Conceptual understanding and application of 7th and 8th grade Standards.

CONCEPTUAL UNDERSTANDING- conceptual and procedural understanding are apparent across the curriculum. in the launch problems, real world applications and in enrichment projects.

MATHEMATICAL PRACTICES- The mathematical practices are repeatedly covered in the topics and lessons throughout the program online-

ACCESSIBILITY OF STANDARDS TO ALL STUDENTS- Accessible to low performing, ELL, ESL students. The lessons challenge students to think critically and practice the concepts in different ways.

OTHER: If the Ebook isn't available, the teachers manual isn't enough to be successful with the program. Could be frustrating to students without computer skills.

2015-16 Interim Mathematics Review

Mathematics Evaluation Tool Grades K-8

Publisher: Pearson Education, Inc.

Title of Material: Pearson digits Grade 7 Accelerated

Author: Fennell et al

ISBN #: 9780133314717 **Copyright** 2015

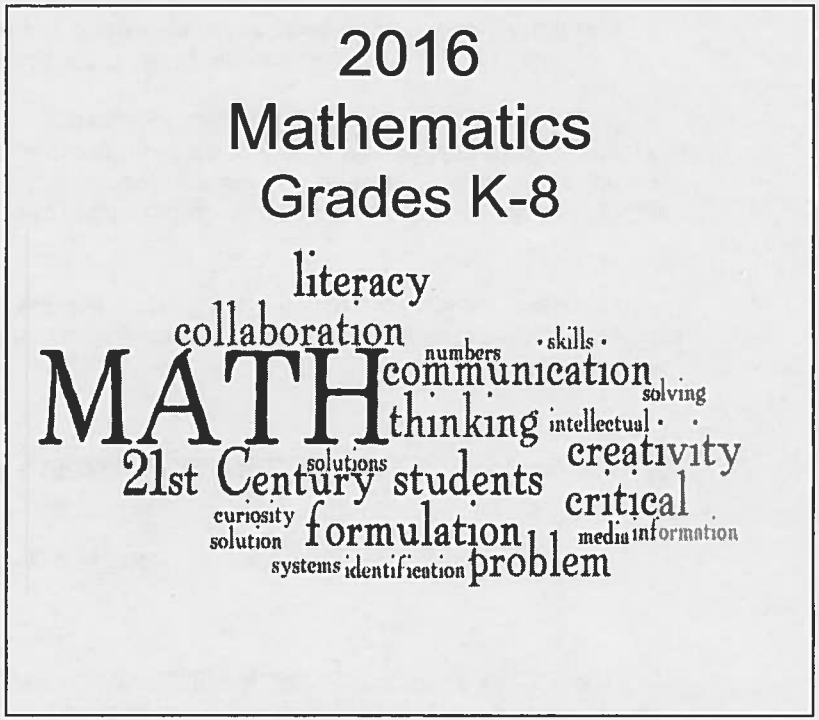
Reviewer ID: P. H and D. H

Core Mathematics Program- a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Core.

Other Mathematics Program- a program that substantially, but partially, meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Other.

Component Mathematics Program- a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs.
Substantial evidence clearly supports the designation of this program as Component.

Intervention Program- a program designed and intended to target and support students' specific needs.
Substantial evidence clearly supports the designation of this program as Intervention.



- Evaluation Form adapted from Instructional Materials Evaluation Toolkit (IMET).

The IMET was developed by Student Achievement Partners. Educators may use or adapt. http://creativecommons.org/licenses/by/3.0/ Download this tool at http://achievethecore.org/IMET

Instructional Materials Evaluation Tool

Mathematics, Grades K-8

What Are the Purposes of the IMET?

This Math IMET is designed to help educators determine whether instructional materials are aligned to the Shifts and major features of the Common Core State Standards (CCSS). The substantial instructional Shifts (http://www.corestandards.org/other-resources/key-shifts-inmathematics/) at the heart of the Common Core State Standards are:

- **Focus** strongly where the Standards focus
- **Coherence**: Think across grades and link to major topics within the grade
- **Rigor**: In major topics, pursue conceptual understanding, procedural skill and fluency, and application with equal intensity.

The IMET draws directly from the following documents:

- Common Core State Standards for Mathematics (www.corestandards.org/Math)
- Publishers' Criteria for the Common Core State Standards in Mathematics grade K-8 (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)

When to use the IMET

1. Purchasing materials: Many factors go into local purchasing decisions. Alignment to the Standards is a critical factor to consider. This tool is designed to evaluate alignment of instructional materials to the Shifts and the major features of the CCSS. It also provides suggestions of additional indicators to consider in the materials evaluation and purchasing process.

2. Evaluating materials currently in use: The IMET can be used to analyze the degree of alignment of existing materials and help to highlight specific, concrete flaws in alignment. Even where materials and tools currently in use fail to meet one or more of these criteria, the pattern of failure is likely to be informative. States and districts can use the evaluation to create a thoughtful plan to modify or combine existing resources in such a way that students' actual learning experiences approach the focus, coherence, and rigor of the Standards.

3. Developing programs: Those developing new programs can use this tool as guidance for creating aligned curricula.
Please note this tool was designed for evaluating comprehensive curricula (including any supplemental or ancillary materials), but it was not designed for the evaluation of standalone supplemental materials.

Who Uses the IMET?

Evaluating instructional materials requires both subject-matter and pedagogical expertise. Evaluators should be well versed in the Standards (www.corestandards.org/Math) for all grades in which materials are being evaluated. This includes understanding the Major Work of the grade (www.achievethecore/focus), the Supporting and Additional work, how the content fits into the progressions in the Standards (www.achievethecore.org/progressions), and the expectations of the Standards with respect to conceptual understanding, procedural skill and fluency, and application. Evaluators also should be familiar with the substantial instructional Shifts (http:// www.corestandards.org/other-resources/key-shifts-in-mathematics/) of Focus, Coherence and Rigor that are listed above.

Getting Started

Prior to Evaluation

Assemble all of the materials necessary for the evaluation. It is essential for evaluators to have materials for all grades covered by the program, as some criteria cannot be rated without having access to each grade. In addition, each evaluator should have a reference copy of the Common Core State Standards for Mathematics (CCSSM) and the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013).

2015-16 Interim Mathematics Review

Mathematics Evaluation Tool Grades K-8

Publisher: Pearson Education. Inc.

Title of Material: Pearson Digits Grade 7 Accelerated

Author: Fennell et al

ISBN #: 9780133314717 **Copyright** 2015

Reviewer ID: _____

Core Mathematics Program- a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Core.

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Substantial evidence clearly supports the designation of this program as Other.

Component Mathematics Program- a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs.
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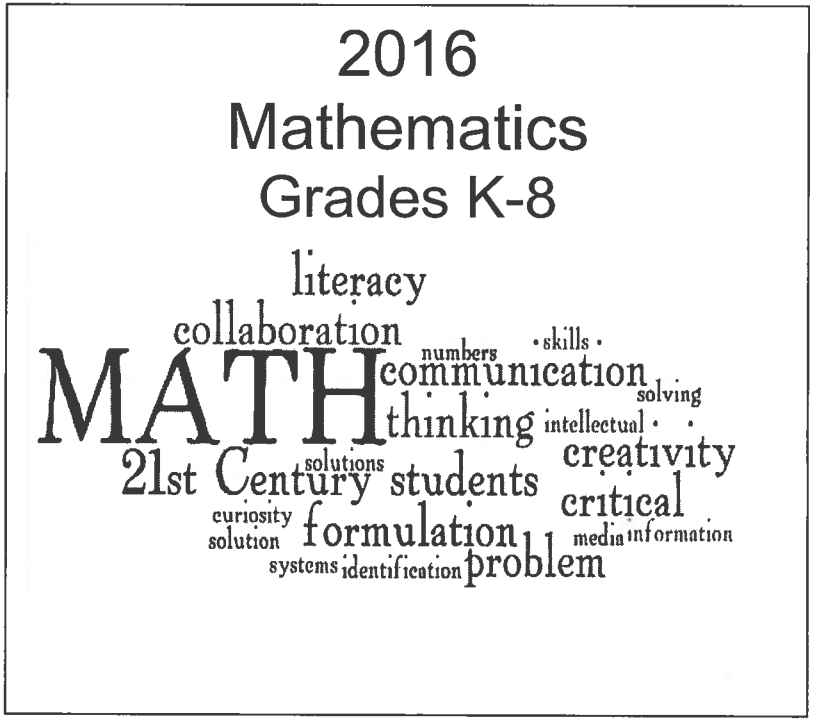
Intervention Program- a program designed and intended to target and support students' specific needs.
Substantial evidence clearly supports the designation of this program as Intervention.



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Instructional Materials Evaluation Tool
Mathematics, Grades K-8

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- **Focus** strongly where the Standards focus
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Getting Started
Prior to Evaluation

Assemble all of the materials necessary for the evaluation. It is essential for evaluators to have materials for all grades covered by the program, as some criteria cannot be rated without having access to each grade. In addition, each evaluator should have a reference copy of the Common Core State Standards for Mathematics (CCSSM) and the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013).

Before conducting the evaluation itself, it is important to develop a protocol for the evaluation process. The protocol should include having evaluators study the Publishers' Criteria and the IMET. It will also be helpful for evaluators to get a sense of each program overall before beginning the process. At a minimum, this would include reading the front matter of the text, looking at the table of contents and paging through multiple chapters.

Sections 1-3 below should be completed to produce a comprehensive picture of the strengths and weaknesses of the materials under evaluation. Information about areas in need of improvement or supplementation should be shared with internal and external stakeholders.

Navigating the Tool

Begin with Section 1: Non-Negotiable Alignment Criteria

- The Non-Negotiable Alignment Criteria must each be met in full for materials to be considered aligned to the Shifts and the major features of the Common Core State Standards. Each Non-Negotiable Alignment Criterion has one or more metrics associated with it; every one of these metrics must be met in order for the criterion as a whole to be met.

- Examine the relevant materials and use evidence to rate the materials against each criterion and its associated metric(s).

- Record and explain the evidence upon which the rating is based.

Continue to Section 2: Alignment Criteria

- The Alignment Criteria must each be met for materials to be considered aligned to the Shifts and the major features of the Common Core State Standards. Each Alignment Criterion has one or more metric associated with it; a specific number of these metrics must be met or partially met in order for the criterion as a whole to be met.

- Examine the materials in relation to these criteria, assigning each metric a point value. Rate the criterion as "Meets" or "Does Note Meet" based on the number of points assigned. The more points the materials receive on the alignment Criteria, the better they are aligned.

- Record and explain the evidence upon which the rating is based.

Proceed to Section 4: Indicators of Quality

- Indicators of Quality are important considerations that will help evaluators better understand the overall quality of instructional materials. These considerations are not criteria for alignment to the CCSS, but they provide valuable information about additional program characteristics. Evaluators may want to add their own indicators to the examples provided.

Directions for Non-Negotiable 1 **Freedom from Obstacles to Focus**		
Criterion	**Evidence- Give specific examples.**	**Rating: (Reviewer only.)**
Non-Negotiable 1: **Freedom from Obstacles to Focus** **Materials must reflect the content architecture of the Standards by not assessing the topics named before the grade level where they first appear in the Standards.** The Standards foster students' progress to algebra by focusing strongly on arithmetic. Consistent with this focus, certain topics from outside of arithmetic appear only in later grades. Thus, to be aligned, materials must reflect the content architecture of the Standards by not assessing the topics named before the grade level where they first appear in the Standards. In this criterion, "topics named" means the topics that are explicitly named in Metric 1A. No other topics should be added to the list in Metric 1A. (Note that other topics in the standards are addressed in criterion NN2.)	**Required Materials** • Common Core State Standards for Mathematics (www.corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf) • From the materials being evaluated: teacher guides and all assessment components	**Rating this Criterion:** Non-Negotiable 1 is rated as Meets or Does Not Meet. To rate Non-Negotiable 1, begin by rating Metric 1A. Since Metric 1A is the only metric for Non-Negotiable 1, the rating for Non-Negotiable 1 is the same as the rating for Metric 1A. If Metric 1A is rated as Does Not Meet, include evidence of when the named topic(s) is/are assessed. If the metric is rated as Meets, list the grade(s) examined in the evaluation.

Metric NN1A: **Materials reflect the basic architecture of the Standards by not assessing the listed topics before the grade level indicated.** • Probability, including chance, likely outcomes, probability models. (Introduced in the CCSSM in grade 7) • Statistical distributions, including center, variation, clumping, outliers, mean, median, mode, range, quartiles; and statistical association or trends, including two-way tables, bivariate measurement data, scatter plots, trend line, line of best fit, correlation. (Introduced in the CCSSM in grade 6) • Similarity, congruence, or geometric transformations. (Introduced in the CCSSM in grade 8) • Symmetry of shapes, including line/ reflection symmetry, rotational symmetry. (Introduced in the CCSSM in grade 4) **How to Find the Evidence:** Evaluate the table of contents, all chapter tests, all unit tests, and other such assessment components (including rubrics). For context, read Criterion #2 from the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013). NOTE: Grade alignments of other topics are addressed in Non-Negotiable 2, Focus and Coherence.) In this criterion, "topics named" means the topics that are explicitly named in Metric 1A. No other topics should be added to the list in Metric 1A. (Note that other topics in the standards are addressed in criterion NN2.)	**Evidence-** Meets expectations for materials of Grade 7 Accelerated. Does not assess any of the listed topics before grade level indicated.	(Reviewer only.) X **Meets** ____ **Does Not Meet**
Non-Negotiable 1: Materials must reflect the content architecture of the Standards by not assessing the topics named* before the grade level where they first appear in the Standards. **NN 1** If Metric 1A was rated as Meets, then rate Non-Negotiable 1 as Meets. If Metric 1A was rated as Does Not Meet, then rate Non- Negotiable 1 as Does Not Meet. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion.**(Reviewer only.)** **Before moving to Non-Negotiable 2, record the final Meets or Does Not Meet rating in the Evaluation Summary.**		(Reviewer only.) X **Meets** ____ **Does Not Meet** **Strengths/Weaknesses:**

Directions for Non-Negotiable 2

Focus and Coherence

Non-Negotiable 2:

Focus and Coherence

Materials must focus coherently on the Major Work of the grade in a way that is consistent with the progressions in the Standards.

Focus and coherence are the two major evidence-based design principles of the Common Core State Standards for Mathematics (CCSSM, p. 3). Focus is necessary in order to fulfill the ambitious promise the states have made to their students by adopting the Standards: greater achievement at the college and career ready level; greater depth of understanding of mathematics; and a rich classroom environment in which reasoning, sense-making, applications, and a range of mathematical practices flourish. In simpler terms, a mile-wide, inch-deep curriculum translates to less time per topic. Less time means less depth and moving on without many students. Thus, materials must focus coherently on the Major Work of the grade in a way that is consistent with the progressions in the Standards.

Required Materials

- Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf)
- Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)
- Focus by Grade Level for the grade being evaluated (www.achievethecore.org/focus)
- From the materials being evaluated: teacher guides, student texts and workbooks

Rating this Criterion:

Non-Negotiable 2 is rated as Meets or Does Not Meet.

To rate Non-Negotiable 2, first rate metrics 2A–2H. Each of these eight metrics must be rated as Meets in order for Non-Negotiable 2 to be rated as Meets. Rate each metric 2A-2H as Meets or Does Not Meet/Insufficient Evidence. If the evidence examined shows that the Criterion is met, then mark the Criterion Meets. If the evidence examined shows that the Criterion is not met—or if there is insufficient evidence to make a determination—then mark the Criterion as Does Not Meet/Insufficient Evidence. Support all ratings with evidence.

Metric NN2A:

In each grade K–8, students and teachers using the materials as designed devote the large majority of time to the Major Work of the grade.

How to Find the Evidence:

Familiarize yourself with the Major Work of the grade being evaluated (see the Focus by Grade Level documents.)

Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, lessons, homework assignments, and assessments. (Evaluate both student and teacher materials.)

Consider time spent on the Major Work of the grade and judge qualitatively whether students and teachers using the materials as designed will devote the large majority of time to the Major Work of the grade.

For context, read Criterion #1 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013)

Evidence-

The major works of each grade are a focus throughout the digits Program, Topics 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 12, 14, 23-26 are Evidence of major works.

(Reviewer only.)

X **Meets**

____ **Does Not Meet/ Insufficient Evidence**

Metric NN2B: **Supporting Work, where present, enhances focus and coherence simultaneously by also engaging students in the Major Work of the grade.** **How to Find the Evidence:** Familiarize yourself with the Major Work and Supporting Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate chapters and lessons that focus on Supporting Work. NOTE: Example of evaluating this Criterion might include looking at whether materials for K–5 generally treat data displays as an occasion for solving grade-level word problems using the four operations (e.g., see 3.MD.B.3); or whether materials for grade 7 take advantage of opportunities to use probability to support ratios, proportions, and percentages. For context, read Criterion #3 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Supporting content is connected to major work of grades. Standard 7.SP.C.8 - Supporting Content is taught in lesson 17-6 pg 643, (Volume 2 Homework)	(Reviewer only.) ☒ **Meets** ____ **Does Not Meet/ Insufficient Evidence**
Metric NN2C: **Materials base content progressions on the grade-by-grade progressions in the Standards. Content from previous or future grades does not unduly interfere with or displace on-grade-level content.** **How to Find the Evidence:** Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, and lessons in both student and teacher materials. NOTE: In some cases it may be possible that aligned materials might address some aspects of a topic in a strategic way before or after the grade level in which the topic is central in the Standards' progressions; for example, a curriculum author might purposefully choose to explore adding fractions with unlike denominators in a way appropriate to grade four, recognizing that this work is not really required until the next grade. However, any such purposeful discrepancies in content progressions should enhance the required learning in each grade; not unduly interfere with or displace grade-level content; and be clearly aimed at helping students meet the Standards as written rather than effectively rewriting the progressions in the Standards. And in all cases, note that Non-Negotiable 1 must be met for materials to be aligned. For context, read Criterion #5a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** There are no materials that focus on any topics that have not been introduced. Content from previous grades is only introduced as a progression to current standards. For example: Topics 1, 2, & 4 apply and extend previous content about fractions learned in 6th grade to current understandings about operations w/ fractions.	(Reviewer only.) ☒ **Meets** ____ **Does Not Meet/ Insufficient Evidence**

X

Metric NN2D: **Materials [illegible] all students extensive work with on-grade-level problems.** **How to Find the Evidence:** Evaluate both student and teacher materials. If the materials provide resources for differentiated learning, consider whether lower-performing students have opportunities to engage with grade-level problems. Also consider whether higher-performing students are given opportunities to learn current grade-level content in greater depth. For context, read Criterion #5b in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** All lessons [illegible] re at grade level There are intervention lessons for students that do not understand the material- but does not use previous years standards.	(Reviewer only.) X Meets ____Does Not Meet/ Insufficient Evidence
Metric NN2E: **Materials relate on-grade-level concepts explicitly to prior knowledge from earlier grades.** **How to Find the Evidence:** Evaluate both student and teacher materials. NOTE: Examples of evaluating this Criterion might include looking at the way the materials extend basic ideas of place value across the decimal point; or the role that properties of operations play when the materials extend arithmetic beyond whole numbers to fractions, variables, and expressions. More generally, cluster headings in the Standards sometimes signal key moments where reorganizing and extending previous knowledge is important in order to accommodate new knowledge (e.g., see cluster headings that use the phrase "Apply and extend previous understanding"). For context, read Criterion #5c in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** At the beginning of each unit there is a list of vocabulary words to go over to be successful in the upcoming lesson. Materials build on prior knowledge. Such as rational numbers- add and subtract builds on previous understanding while adding in positive and negative integers in Topic 1, 2 & 3	(Reviewer only.) X Meets ____Does Not Meet/ Insufficient Evidence
Metric NN2F: **Review of material from previous grades is clearly identified as such to the teacher, and teacher and students can see what their specific responsibility is for the current year.** **How to Find the Evidence:** Evaluate the table of contents, but do not stop there; also evaluate units, chapters, lessons, homework assignments and assessments. (Evaluate both student and teacher materials.) Identify any content from previous grades and check whether it is identified as such. For context, read Criterion #5a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Digits offer "Intervention Support" lessons that review previous skills and concepts taught at earlier grades and labeled as such. Intervention Support provided on Ebook.	(Reviewer only.) X Meets ____Does Not Meet/ Insufficient Evidence

Metric NN2G: **Materials include learning objectives that are visibly shaped by CCSSM cluster headings.** **How to Find the Evidence:** Select several clusters from the Major Work in the grade being evaluated. Evaluate teacher and student materials in relation to these clusters. For context, read Criterion #6a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Materials in both student and teacher editions have standards and mathematical practices listed but the learning objectives shaped by these headings was not visible in print. Online Teachers materials does include	(Reviewer only.) X Meets __ Does Not Meet/ Insufficient Evidence
Metric NN2H: **Materials include problems and activities that serve to connect two or more clusters in a domain, or two or more domains in a grade, in cases where these connections are natural and important.** **How to Find the Evidence:** In the grade being evaluated, choose two or more clusters or two or more domains for which connections are natural and important. Evaluate the units, chapters, and lessons that deal with the chosen topics, looking for problems and activities that serve to connect the chosen clusters or domains. NOTE: An example of evaluating this Criterion might include looking at whether problems in grade 4 sometimes or often involve students applying their developing computation skills (detailed in domain NBT) in the context of solving word problems (detailed in domain OA). For context, read Criterion #6b in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Cluster headings and standards are included in student Companion and the standard number as a reference in the homework helper. Program overview guide does list the standards per topic and lesson.	(Reviewer only.) Learning objectives X Meets __ Does Not Meet/ Insufficient Evidence
Non-Negotiable 2: **Focus and Coherence** **Materials must focus coherently on the Major Work of the grade in a way that is consistent with the progressions in the Standards.** **NN 2** If all Metrics 2A – 2H were rated as Meets, then rate Non-Negotiable 2 as Meets. If one or more Metric was rated Does Not Meet/Insufficient Evidence, then rate Non-Negotiable 2 as Does Not Meet. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)** **Before moving to Alignment Criterion 1, record the final Meets or Does Not Meet rating in the Evaluation Summary.**		(Reviewer only.) X Meets __ Does Not Meet **Strengths/Weaknesses:**

Now continue by evaluating the Alignment Criterion 1 for Rigor and Balance.

Directions for Alignment Criterion 1

Rigor and Balance

Alignment Criterion 1: Rigor and Balance **Materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.** The Standards set expectations for attention to all three aspects of rigor: conceptual understanding, procedural skill and fluency, and applications. Thus, materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.	**Required Materials** • Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf) • Focus by Grade Level for the grade being evaluated (achievethecore.org/focus) • Situation Types for the Operations in Word Problems (achievethecore.org/situation-types) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion:** Alignment Criterion 1 is rated as Meets or Does Not Meet. To rate Alignment Criterion 1, first rate metrics 1A, 1B, and 1C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). For each metric, guiding questions are provided to aid in gathering evidence. Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 1 if the materials rate 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as rigor and balance, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.
Metric AC1A: **The materials support the development of students' conceptual understanding of key mathematical concepts, especially where called for in specific content Standards or cluster headings.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Major Work for the grade being evaluated that relate specifically conceptual understanding to use throughout the questions associated with this metric. NOTE: Some examples of clusters or Standards that call for conceptual understanding include: K.OA.A.1, (1.NBT.B, 1.NBT.C), (2.NBT.A, 2.NBT.B), (3.OA.A.1, 3.OA.A.2), 4.NF.A, (4.NBT.A, 4.NBT.B), 5.NF.B, (5.NBT.A, 5.NBT.B), 6.RP.A, 6.EE.A.3, 7.NS.A, 7.EE.A, 8.EE.B, 8.F.A, 8.G.A Clusters or Standards grouped by parentheses are closely connected and could be analyzed together. For context, read Criterion #4a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	-Choose a cluster/Standard from the Major Work that is aligned to each aspect of rigor and use it to evaluate these metrics. It is most helpful if the same clusters/Standards are chosen for all of the programs being evaluated. (Guidance in choosing clusters/Standards is included in "How to Find the Evidence".)	**Use the questions for AC Metric 1A to evaluate Metric 1A. Record evidence for each question and rate Metric 1A.** **X Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**

Is conceptual understanding attended to thoroughly where the Standards set ex[illegible] expectations for understanding or interpreting? Evaluate lessons, chapter/unit assessments and homework assignments, paying attention to work aligned to Standards that explicitly call for understanding or interpreting. NOTE: Examples of evaluating this Criterion might include looking at how well the multi-digit addition and subtraction algorithms are developed and explained on the basis of place value and properties of operations; or how well the multi-digit multiplication and division algorithms are developed and explained on the basis of place value and properties of operations; or how well solving equations is presented and explained as a process of reasoning.	**Evidence-** Yes, the standards are explicitly stated and call for the understanding of key concepts which are listed in each lesson. Example NS.1 lessons 1.1, 1.3	
Do the materials feature high-quality conceptual problems and conceptual discussion questions? Evaluate lessons, chapter/unit assessments, and homework assignments. NOTE: Example of conceptual problems might include such questions as "Find a number greater than 1/5 and less than 1/4," or "If the divisor does not change and the dividend increases, what happens to the quotient?"	**Evidence-** The problems are varied and have conceptual questions as well as open ended, challenge, think about it, reasoning, and correct the error.	Evidence: end of Topic lesson in Student companion, and 10.1 pg. 361 Homework Helper.
Do the materials feature opportunities to identify correspondences across mathematical representations? Evaluate lessons, chapter/unit assessments and homework assignments. NOTE: Examples of evaluating this Criterion might include looking at whether students are supported in identifying correspondences among: the verbal description of a situation, the diagrams that distill its mathematical features, and the equations that model it; or equivalent forms of numbers (e.g., 3 and 6/2) and the number line; or rational number operations and representations of them via models such as the vector model; or the expression that defines a function and the graph that shows the relationship.	**Evidence-** Very few representation in student companion, None in the teachers edition or the homework helper. Online material has few multiple representations.	
Metric AC1B: **The materials are designed so that students attain the fluencies and procedural skills required by the Standards.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Major Work for the grade being evaluated that relate specifically to fluency and procedural skill to use throughout the questions associated with this metric. NOTE: Some examples of Standards that call for procedural skill and fluency include: K.OA.A.5, 1.OA.C.6, 2.OA.B.2, 2.NBT.B.5, 3.OA.C.7, 3.NBT.A.2, 4.NBT.B.4, 5.NBT.B.5, 6.NS.B.2, and 6.NS.B.3, 6.EE.A, 7.NS.A, 7.EE.A.1,7.EE.B.4a, 8.EE.C.7, 8.EE.C.8b For context, read Criterion #4b in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).		**Use the questions for Metric 1B to evaluate Metric 1 B. Record evidence for each question and rate Metric 1B.** **(Reviewer only.)** X **Meets (2)** ____ **Partially Meets (1)** ____ **Does Not Meet (0)**

Is progress toward fluency and procedural skill interwoven with students' dev g conceptual understanding of the operations in question? Evaluate lessons, chapter/unit assessments, daily routines, and homework assignments for evidence that the development of fluency and procedural skill is supported by conceptual understanding.	**Evidence-** Progress mad towards fluency in a topic can be found in several "Problem solving" lessons. In student companion Topic 10 lessons 3-5 build fluency.	
Are purely procedural problems and exercises present that include cases in which opportunistic strategies are valuable and generic cases that require efficient algorithms present? Evaluate lessons, chapter/unit assessments, daily routines, and homework assignments. NOTE: Examples of problems in which opportunistic strategies are valuable might include the sum 698 + 240 or the system x + y = 1, 2x + 2y = 3. Examples of generic cases that require efficient algorithms might include the sum 8767+2286 or the system 6y + x = x + 3, – x = 1 + 2y.	**Evidence-** The example problems in the homework helper are purely procedural. The problems give procedural practice as on pg 368 Topic 10, lesson. 2	
Do the materials in grades K–6 provide repeated practice toward attainment of fluency Standards? Evaluate lessons, daily routines, and homework assignments for evidence of repeated practice toward attainment of the following K–6 Standards that set an explicit expectation of fluent (accurate and reasonably fast) computation: K.OA.A.5, 1.OA.C.6, 2.OA.B.2, 2.NBT.B.5, 3.OA.C.7, 3.NBT.A.2, 4.NBT.B.4, 5.NBT.B.5, 6.NS.B.2, 6.NS.B.3.	**Evidence-** N/A	
Metric AC1C: **The materials are designed so that teachers and students spend sufficient time working with engaging applications, without losing focus on the Major Work of each grade.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Major Work for the grade being evaluated that relate specifically application to use throughout the questions associated with this metric. NOTE: Some examples of clusters or Standards that call for application include: K.OA.A.2, 1.OA.A, 2.OA.A, 3.OA.A.3, 3.OA.D.8, 4.OA.A.3, 4.NF.B.3d, 4.NF.B.4c, 5.NF.B.6, 5.NF.B.7c, 6.RP.A.3, 6.NS.A.1, 6.EE.B.7, 6.EE.C.9, 7.RP.A, 7.NS.A.3, 7.EE.B.3, 8.EE.C.8c, 8.F.B For context, read Criterion #4c in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** There are multi-step and procedual problems included in the book - many different types of problems, from procedual, multi-step, critique, thinking, reasoning and challenge. Example: Topic 10 - Lesson 10.2 In addition, the on-line launch lessons are engaging and provide sufficient time for working with the problem to develop conceptual understanding.	**Use the questions for Metric 1C to evaluate Metric 1C. Record evidence for each question and rate Metric 1C.** **(Reviewer only.)** **X Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Are there are single- and multi-step contextual problems, including non-routine problems, that develop the mathematics of the grade, afford opportunities for practice, and engage students in problem solving? Do the problems attend thoroughly to those places in the content Standards where expectations for multi-step and real-world problems are explicit? Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** The major works of both grade 7 and 8 are the focus on the entire framework of the accelerated 7 assignments there are topic reviews and mixed review homework assignments that review topics from prior lessons.	

Do application problems particularly stress applying the Major Work of the grade? Evaluate lessons, chapter/unit assessments, and homework assignments. NOTE: Examples of evaluating this Criterion might include looking at: how well, by the end of grade 2, students using the materials as designed can represent and solve a full range of one-step addition and subtraction word problems; or how well, by the end of grade 3, students using the materials as designed can represent and solve a full range of one-step multiplication and division word problems; or how well these basic situation types for each operation are carried coherently across the grades, (e.g., with fractions and algebraic expressions); or, in all grades, whether the problems connect concepts, Standards, and domains in ways that are natural and important. For a list of situation types for one-step addition, subtraction, multiplication, and division problems, see Situation Types for the Operations in Word Problems	**Evidence-** Digits focuses on the major works in the curriculum for Accelerated 7. Each problems help build understanding of the major work	
Does modeling build slowly across K–8, with applications that are relatively simple in earlier grades and when students are encountering new content? In grades 6–8, do the problems begin to provide opportunities for students to make their own assumptions or simplifications in order to model a situation mathematically? Read Standard for Mathematical Practice 4, Model with Mathematics. Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** Yes, but there is only online evidence when students can watch the launch or the readiness lesson which applies standards from K-6.	

Alignment Criterion 1: Rigor and Balance

Materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.

(Reviewer only.)

X **Meets**

____ **Does Not Meet**

Strengths/Weaknesses:

AC1 Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 out of 6 points, the Criterion has not been met. Check the final rating.
Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)**

Before moving to Alignment Criterion 2, record the final Meets or Does Not Meet rating in the Evaluation Summary.

Directions for Alignment Criterion 2

Standards for Mathematical Practice

Alignment Criterion 2: Standards for Mathematical Practice

Materials must demonstrate authentic connections between content Standards and practice Standards.

The Standards require that designers of instructional materials connect the mathematical practices to mathematical content in instruction. Thus, materials must demonstrate authentic connections between content Standards and practice Standards.

Required Materials:

- Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf)
- Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)
- Focus by Grade Level for the grade being evaluated (www.achievethecore.org/focus)
- From the materials being evaluated: teacher guides, student texts and workbooks

Rating this Criterion

Alignment Criterion 2 is rated as Meets or Does Not Meet.

To rate Alignment Criterion 2, first rate metrics 2A, 2B, and 2C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). For each metric, guiding questions are provided to aid in gathering evidence.

Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 2 if the materials earn 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as mathematical practices, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.

Metric AC2A:

Materials address the practice Standards in such a way as to enrich the Major Work of the grade; practices strengthen the focus on Major Work instead of detracting from it, in both teacher and student materials.

How to Find the Evidence:

Familiarize yourself with the Major Work of the grade being evaluated (see the Focus by Grade Level documents.)

Evaluate teacher and student materials for evidence that the mathematical practices support and connect to the focus of the grade.

NOTE: Examples of evaluating this Criterion might include looking at whether, in grades K–5, students using the materials are supported to look for and express regularity in repeated reasoning about the addition table, the multiplication table, the properties of operations, the relationship between addition and subtraction or multiplication and division, and the place value system; or whether, in grades 6–8, students using the materials are supported to look for and express regularity in repeated reasoning about proportional relationships and linear functions.

For context, read Criterion #8 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013).

Evidence-

The digits program provides multiple opportunities for students to engage in the standards. The mathematical practices for the major works are labeled and mentioned but are not clearly defined.

(Reviewer only.)

X **Meets (2)**

____ **Partially Meets (1)**

____ **Does Not Meet (0)**

Metric AC2B: **Materials att[illegible]to the full meaning of each practice Standard.** **How to Find the Evidence:** For context, read Criterion #7 and Criterion #9 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).		**Use the questions for Metric 2B to evaluate Metric 2B. Record evidence for each quest[illegible]nd rate Metric 2B.** **(Reviewer only.)** X **Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Over the course of any given year of instruction, is each mathematical practice Standard meaningfully present in the form of assignments, activities, or problems that stimulate students to develop the habits of mind described in the practice Standard? Evaluate lessons, chapter/ unit assessments, and homework assignments for evidence of each mathematical practice being meaningfully present in instruction.	**Evidence-** Each mathematical practice is repeatedly covered in the Topics and Lessons Throughout the program	
Do the materials treat the practice Standards as developing across grades or grade bands? Are the practice Standards in early grades appropriately simple? Do they display an arc of growing sophistication across the grades?	**Evidence-** N/A	
Are there teacher-directed materials that explain the role of the practice Standards in the classroom and in students' mathematical development? Are alignments to practice Standards accurate?	**Evidence-** Math Practices are listed in the program overview guide and Appendix A - only - not listed in online information. No explanation given as to how MP's are used or connected	
Metric AC2C: **Materials support the Standards' emphasis on mathematical reasoning.** **How to Find the Evidence:** For context, read Criterion #10 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).		**Use the questions for Metric 2C to evaluate Metric 2C. Record evidence for each question and rate Metric 2C.** **(Reviewer only.)** X **Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Do the materials support students in constructing viable arguments and critiquing the arguments of others concerning grade-level mathematics that is detailed in the content Standards? Read Standard for Mathematical Practice 3. Evaluate teacher and student materials to ensure that students are given opportunities to reason with grade-level mathematics.	**Evidence-** There are opportunities with some problems for students to explain their thinking. Launch problems allow students to explore ideas, Error Analysis and Reasoning Questions ask students to argue for or against a statement.	
Do the materials support students in producing not only answers and solutions, but also, in a grade-appropriate way, arguments, explanations, diagrams, mathematical models, etc., especially in the Major Work of the grade? Familiarize yourself with the Major Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate teacher and student materials, to understand the types of work students are expected to produce.	**Evidence-** In each lesson group discussions are encouraged and necessary in the launch of the lesson. For example, Topic 18 lesson 4 Out it part 3.	

Do materials explicitly attend to the specialized language of mathematics? The language of argument, problem solving, and mathematical explanations taught rather than assumed? Evaluate teacher and student materials, paying attention to how mathematical language is taught. NOTE: Examples of evaluating this Criterion might include looking at whether students are supported in: basing arguments on definitions; using the method of providing a counterexample; or recognizing that examples alone do not establish a general statement.	**Evidence-** At the beginning of each topic there are vocabulary words and appropriate definitions to be used throughout the lesson. In addition, lessons include a "key concept" review to reinforce and summerize the intent of the lesson.	

Alignment Criterion 2:
Standards for Mathematical Practice

Materials must demonstrate authentic connections between content Standards and practice Standards.

AC2 Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 out of 6 points, the Criterion has not been met. Check the final rating.
Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion.
(Reviewer only.)

Before moving to Alignment Criterion 3, record the final Meets or Does Not Meet rating in the Evaluation Summary.

(Reviewer only.)

X **Meets**

____ **Does Not Meet**

Strengths/Weaknesses:

Alignment Criterion 3:
Access to the Standards for All Students

Materials must provide supports for English Language Learners and other special populations.

Because Standards are for all students, alignment requires thoughtful support to ensure all students are able to meet the Standards. Thus, aligned materials must provide supports for English Language Learners and other special populations.

Required Materials:

- Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf)
- Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)
- From the materials being evaluated: teacher guides, student texts and workbooks

Rating this Criterion:
Alignment Criterion 3 is rated as Meets or Does Not Meet.

To rate Alignment Criterion 3, first rate metrics 3A, 3B, and 3C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points).

Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 3 if the materials earn 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as support for special population, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.

Metric AC3A: **Support for [illegible]ish Language Learners and other special populations is thoughtful and helps those students meet the same Standards as all other students. The language in which problems are posed is carefully considered.** How to Find the Evidence: Evaluate teacher and student materials, paying attention to supports offered for special populations.	**Evidence-** All online - digital presentations have ELL choices with the homework and suggestions for ELL learners. Teacher Preparation Notes includes strategies to target ELL students.	Reviewer only.) X Meets (2) ____Partially Meets (1) ____Does Not Meet (0)
Metric AC3B: **Materials provide appropriate level and type of scaffolding, differentiation, intervention, and support for a broad range of learners with gradual removal of supports, when needed, to allow students to demonstrate their mathematical understanding independently.** How to Find the Evidence: Evaluate teacher and student materials, paying attention to whether materials provide differentiation that will lead all learners to engage with on-grade-level content.	**Evidence-** Digits provides multiple resources with a clear plan on how students can help get the help they need to become successful. Teachers guide has differentiation information ELL is mentioned in Program Guide Intervention lessons are provided	Reviewer only.) X Meets (2) ____Partially Meets (1) ____Does Not Meet (0)
Metric AC3C: **Design of lessons recommends and facilitates a mix of instructional approaches for a variety of learners such as using multiple representations (e.g., including models, using a range of questions, checking for understanding, flexible grouping, pair-share).** How to Find the Evidence: Evaluate teacher materials, noting instructional approaches suggested for whole class and differentiated lessons and activities.	**Evidence-** Lessons are designed to lead students through an interactive experience with the content. The lessons challenge students to think critically and practice the material in different ways. For example, Topic 14 lesson 4.	Reviewer only.) X Meets (2) ____Partially Meets (1) ____Does Not Meet (0)

Alignment Criterion 3: Access to the Standards for All Students **Materials must provide supports for English Language Learners and other special populations.** AC3 Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 points, the Criterion has not been met. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion.**(Reviewer only.)** **Move to the Evaluation Summary and record the final Meets or Does Not Meet rating .**	**(Reviewer only.)** X Meets ____Does Not Meet **Strengths/Weaknesses:**

Once an evaluation for alignment to the Shifts and major features of the CCSS has been conducted using Sections 1-3, it's important to evaluate for overall quality and best practices. A starting list of Indicators of Quality are suggested below. States, districts and others evaluating instructional materials are encouraged to add to this list to ensure materials reflect local contexts. For background information on some of the Indicators of Quality in this section, refer to pp.18–21 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).

Indicators of Quality	Evidence- Give specific examples.	Rating: (Reviewers only.)
1. Lessons are thoughtfully structured and support the teacher in leading the class through the learning paths at hand, with active participation by all students in their own learning and in the learning of their classmates.	**Evidence-** Mostly individual learning. Very little group activities. Occasionally in the teachers notes it tells students to discuss as a class but the directions are not explicit.	**(Reviewer only.)** X Yes ____ No
2. The underlying design of the materials includes both problems and exercises. (In solving problems, students learn new mathematics, whereas in working exercises, students apply what they have already learned to build mastery.) Each problem or exercise has a purpose. **NOTE: This Criterion does not require that the problems and exercises be labeled as such.**	**Evidence-** The lesson structure clearly distinguishes between problems to be worked during the lesson and homework/practice exercises to be used for practicing a concept	**(Reviewer only.)** X Yes ____ No

3. Design of assignments is not haphazard: exercises are given in intentional sequences in order to strengthen students' mathematical understanding.	Evidence- Assignments based on an intentional sequence to advance learning. First students work through "Got It" problems as a class, then work through reflective questions for understanding and on to independent work	(Reviewer only.) X Yes ___ No
4. There are separate teacher materials that support and reward teacher study including, but not limited to: discussion of the mathematics of the units and the mathematical point of each lesson as it relates to the organizing concepts of the unit, discussion on student ways of thinking and anticipating a variety of students responses, guidance on lesson flow, guidance on questions that prompt students thinking, and discussion of desired mathematical behaviors being elicited among students.	Evidence- The teacher materials include ways to discuss or launch the lesson. Including essential questions, guiding questions, error prevention, not referenced to standards or to mathematical practices.	(Reviewer only.) X Yes ___ No
5. Manipulatives suggested in the materials are faithful representations of the mathematical objects they represent and are connected to written methods.	Evidence- All are virtual - online digital learning. The program has 14 digital manipulatives that students can use	(Reviewer only.) X Yes ___ No
6. Materials include a variety of curriculum-embedded assessments. Examples include pre-, formative, summative, and self-assessment resources.	Evidence- All assessments are included in the online program. Each topic contains a variety of pre-tests, exercises student self reflective assessments, end of topic assessments and post tests	(Reviewer only.) X Yes ___ No
7. Assessments contain aligned rubrics, answer keys, and scoring guidelines that provide sufficient guidance for interpreting student performance.	Evidence- Assessments include rubrics with suggested ways to grade answer keys. and ways to interpret strengths and weakness of their work.	(Reviewer only.) X Yes ___ No
8. Materials assess student proficiency using methods that are accessible and unbiased, including the use of course-level language in student prompts.	Evidence- Language for lessons, examples and assessments use grade level language and situations	(Reviewer only.) X Yes ___ No X

9. Materials are carefully evaluated by qualified individuals whose names are listed, in an effort to ensure freedom from mathematical errors and course-level appropriateness.	**Evidence-** Listed in teacher materials.	(Reviewer only.) X Yes ____ No
10. The visual design supports students in engaging thoughtfully with the subject. Navigation through the text is clear.	**Evidence-** Not many graphics - engaging and interactive yet free from distracting images.	(Reviewer only.) X Yes ____ No
11. The materials engage parents in appropriate ways. For example, homework assignments in elementary grades, consist of routine problems, practice with getting answers, and fluency-building exercises that parents can easily support.	**Evidence-** The program does a great job of involving the parents through written letter ideas, and being able to access their homework and activities online at any time.	(Reviewer only.) X Yes ____ No

Reviewer IMET Evaluation Summary **Title/Level:** Pearson digits Grade 7 Accelerated

Publisher: Pearson Education System **Copyright:** 2015 **ISBN:** 9780133314717

Reviewer ID # P.H. and D.H. **Date Review Completed:** 3/8/2015

Non-Negotiable Criteria- Each Non-Negotiable must be met in order for the Non-Negotiable Alignment Criteria to be met overall.

Non-Negotiable 1: Freedom from Obstacles to Focus	Non- Negotiable 2: Focus and Coherence
X Meets	X Meets
_____ Does Not Meet	_____ Does Not Meet

Non-Negotiable Overall:

X **Meets** _____ **Does Not Meet**

Alignment Criteria- Each Alignment Criterion must be met with a sufficient number of points in order for Alignment Criteria to be labeled as "Meets" overall. The more points the materials receive on the Alignment Criteria, the better they are aligned.

Alignment Criterion 1: Rigor and Balance	Alignment Criterion 2: Standards of Mathematical Practice	Alignment Criterion 3: Access to Standards for All Learners
Points: 6 of 6 possible. (Materials must receive at least 5 of 6 points to align.)	Points: 6 of 6 possible. (Materials must receive at least 5 of 6 points to align.)	Points: 6 of 6 possible. (Materials must receive at least 5 of 6 points to align.)
X Meets	X Meets	X Meets
_____ Does Not Meet	_____ Does Not Meet	_____ Does Not Meet

Alignment Criteria Overall:

X **Meets** _____ **Does Not Meet**

X

If the materials meet both Non-Negotiables and relevant Alignment Criterion, they are aligned to the Shifts and major features of the Core Standard **o the materials meet every Non-Negotiable and Alig ent Criterion?** X **Yes** ____ **No**

What are the specific areas of strength and weakness based on this evaluation? Publishers or others modifying or developing assessments can use this information to make improvements and/or to remedy gaps in the alignment of assessment materials.

Strengths

- The major works of both 7th and 8th grade are the entire focus and framework of the accelerated text
- Students have an interactive way of engaging in the standards that could work very well for visual learners. The strong visual design of the program supports those types of learners.
- The program has multiple digital manipulatives for students to use.

Weaknessess

- If the Ebook isnt available, the teachers manual isnt enough to be successful with the program. All assessments, objectives for the lesson, and overview of the lesson is on Ebook only.

2015-16 Mathematics Interim Review Recommendation & Summary

Publisher Name:	Pearson Education, Inc.
Title:	Pearson Digits Grade 7
ISBN #	9780133314618
Grade Level(s) or Course:	7th
Reviewer ID:	HCPLW

RECOMMENDED AS:

__✓__ **Core Mathematics Program-** a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials. Substantial evidence clearly supports the designation of this program as Core.

_____ **Other Mathematics Program-** a program that substantially, but partially, meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for supplemental materials. Substantial evidence clearly supports the designation of this program as Other.

_____ **Component Mathematics Program-** a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs. Substantial evidence clearly supports the designation of this program as Component.

_____ **Intervention Program-** a program designed and intended to target and support students' specific needs. Substantial evidence clearly supports the designation of this program as Intervention.

_____ **Does not meet criteria** for recommendation as a Curricular Material or Online Resource for Mathematics.

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EVIDENCE SUMMARY:

FOCUS- The materials reflect the content architecture of the Standards by not assessing topics before grade 7.

At least 68% of the curriculum focuses on Major Work

COHERENCE- Materials focus coherently on the Major Work of the grade. Cluster headings are provided, as well as CCSS consistently throughout. Lessons provide connections between domains and connect two or more clusters throughout.

RIGOR- Conceptual and procedural understanding is attended to throughout the curriculum. Activities promote engagement and move towards higher understanding.

CONCEPTUAL UNDERSTANDING- Activities and projects promote conceptual discussion among the class. The materials feature opportunities for conceptual understanding through the use of diagrams, pictures, drag-and-drop, number lines, algorithms, charts / graphs, and animations.

MATHEMATICAL PRACTICES- MPs are connected to content standards and practice throughout the curriculum. Program Overview shows MP for grades 6-8 in rubric form and their correlations.

ACCESSIBILITY OF STANDARDS TO ALL STUDENTS- The design of this curriculum is very accomodating to ELL and other diverse students through providing a mix of instructional techniques and approaches. It explicitly describes teaching to diverse learners.

OTHER:

This is an online curriculum. A computer and projector are needed/essential.

Student online access is not required, but is very vital in utilizing the curriculum to its fullest potential.

2[illegible]-16 Interim Mathematics Review

Mathematics Evaluation Tool Grades K-8

Publisher: Pearson Education, Inc.

Title of Material: Pearson Digits Grade 7

Author: Fennell et al.

ISBN #: 9780133314618 **Copyright** 2015

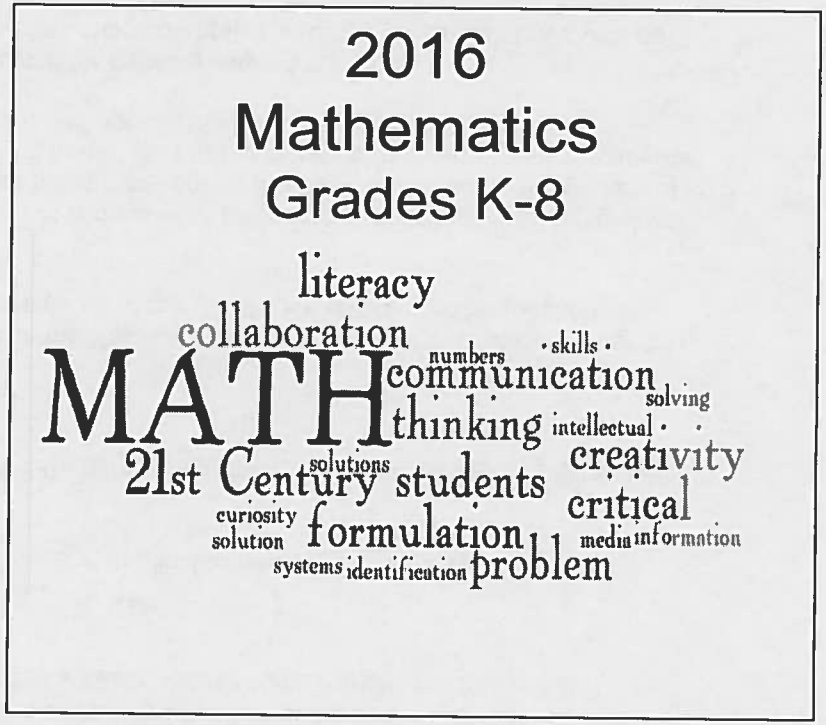
Reviewer ID: HC PJLM

Core Mathematics Program- a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Core.

Other Mathematics Program- a program that substantially, but partially, meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Other.

Component Mathematics Program- a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs.
Substantial evidence clearly supports the designation of this program as Component.

Intervention Program- a program designed and intended to target and support students' specific needs.
Substantial evidence clearly supports the designation of this program as Intervention.



- Evaluation Form adapted from Instructional Materials Evaluation Toolkit (IMET).

The IMET was developed by Student Achievement Partners. Educators may use or adapt. http://creativecommons.org/licenses/by/3.0/ Download this tool at http://achievethecore.org/IMET

Instructional Materials Evaluation Tool

Mathematics, Grades K-8

What Are the Purposes of the IMET?

This Math IMET is designed to help educators determine whether instructional materials are aligned to the Shifts and major features of the Common Core State Standards (CCSS). The substantial instructional Shifts (http://www.corestandards.org/other-resources/key-shifts-inmathematics/) at the heart of the Common Core State Standards are:

- **Focus** strongly where the Standards focus
- **Coherence**: Think across grades and link to major topics within the grade
- **Rigor**: In major topics, pursue conceptual understanding, procedural skill and fluency, and application with equal intensity.

The IMET draws directly from the following documents:

- Common Core State Standards for Mathematics (www.corestandards.org/Math)
- Publishers' Criteria for the Common Core State Standards in Mathematics grade K-8 (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)

When to use the IMET

1. Purchasing materials: Many factors go into local purchasing decisions. Alignment to the Standards is a critical factor to consider. This tool is designed to evaluate alignment of instructional materials to the Shifts and the major features of the CCSS. It also provides suggestions of additional indicators to consider in the materials evaluation and purchasing process.

2. Evaluating materials currently in use: The IMET can be used to analyze the degree of alignment of existing materials and help to highlight specific, concrete flaws in alignment. Even where materials and tools currently in use fail to meet one or more of these criteria, the pattern of failure is likely to be informative. States and districts can use the evaluation to create a thoughtful plan to modify or combine existing resources in such a way that students' actual learning experiences approach the focus, coherence, and rigor of the Standards.

3. Developing programs: Those developing new programs can use this tool as guidance for creating aligned curricula.
Please note this tool was designed for evaluating comprehensive curricula (including any supplemental or ancillary materials), but it was not designed for the evaluation of standalone supplemental materials.

Who Uses the IMET?

Evaluating instructional materials requires both subject-matter and pedagogical expertise. Evaluators should be well versed in the Standards (www.corestandards.org/Math) for all grades in which materials are being evaluated. This includes understanding the Major Work of the grade (www.achievethecore/focus), the Supporting and Additional work, how the content fits into the progressions in the Standards (www.achievethecore.org/progressions), and the expectations of the Standards with respect to conceptual understanding, procedural skill and fluency, and application. Evaluators also should be familiar with the substantial instructional Shifts (http:// www.corestandards.org/other-resources/key-shifts-in-mathematics/) of Focus, Coherence and Rigor that are listed above.

Getting Started

Prior to Evaluation

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2015-16 Interim Mathematics Review

Mathematics Evaluation Tool Grades K-8

Publisher: Pearson Education, Inc.

Title of Material: Pearson Digits Grade 7

Author: Fennell et al.

ISBN #: 9780133314618 **Copyright** 2015

Reviewer ID: HCPLW

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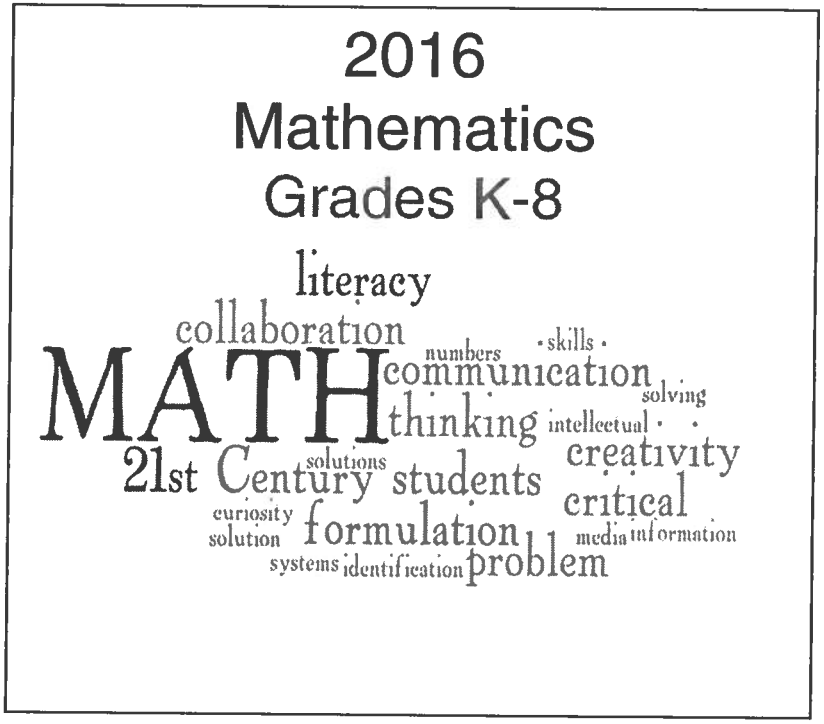

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Getting Started

Prior to Evaluation

Assemble all of the materials necessary for the evaluation. It is essential for evaluators to have materials for all grades covered by the program, as some criteria cannot be rated without having access to each grade. In addition, each evaluator should have a reference copy of the Common Core State Standards for Mathematics (CCSSM) and the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013).

Before conducting the evaluation itself, it is important to develop a protocol for the evaluation process. The protocol should include having evaluators study the Publishers' Criteria and the IMET. It will also be helpful for evaluators to get a sense of each program overall before beginning the process. At a minimum, this would include reading the front matter of the text, looking at the table of contents and paging through multiple chapters.

Sections 1-3 below should be completed to produce a comprehensive picture of the strengths and weaknesses of the materials under evaluation. Information about areas in need of improvement or supplementation should be shared with internal and external stakeholders.

Navigating the Tool

Begin with Section 1: Non-Negotiable Alignment Criteria

- The Non-Negotiable Alignment Criteria must each be met in full for materials to be considered aligned to the Shifts and the major features of the Common Core State Standards. Each Non-Negotiable Alignment Criterion has one or more metrics associated with it; every one of these metrics must be met in order for the criterion as a whole to be met.

- Examine the relevant materials and use evidence to rate the materials against each criterion and its associated metric(s).

- Record and explain the evidence upon which the rating is based.

Continue to Section 2: Alignment Criteria

- The Alignment Criteria must each be met for materials to be considered aligned to the Shifts and the major features of the Common Core State Standards. Each Alignment Criterion has one or more metric associated with it; a specific number of these metrics must be met or partially met in order for the criterion as a whole to be met.

- Examine the materials in relation to these criteria, assigning each metric a point value. Rate the criterion as "Meets" or "Does Note Meet" based on the number of points assigned. The more points the materials receive on the alignment Criteria, the better they are aligned.

Record and explain the evidence upon which the rating is based.

Proceed to Section 4: Indicators of Quality

- Indicators of Quality are important considerations that will help evaluators better understand the overall quality of instructional materials. These considerations are not criteria for alignment to the CCSS, but they provide valuable information about additional program characteristics. Evaluators may want to add their own indicators to the examples provided.

Directions for Non-Negotiable 1

Freedom from Obstacles to Focus

Criterion	Evidence- Give specific examples.	Rating: (Reviewer only.)
Non-Negotiable 1: **Freedom from Obstacles to Focus** **Materials must reflect the content architecture of the Standards by not assessing the topics named before the grade level where they first appear in the Standards.** The Standards foster students' progress to algebra by focusing strongly on arithmetic. Consistent with this focus, certain topics from outside of arithmetic appear only in later grades. Thus, to be aligned, materials must reflect the content architecture of the Standards by not assessing the topics named before the grade level where they first appear in the Standards. In this criterion, "topics named" means the topics that are explicitly named in Metric 1A. No other topics should be added to the list in Metric 1A. (Note that other topics in the standards are addressed in criterion NN2.)	**Required Materials** • Common Core State Standards for Mathematics (www.corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf) • From the materials being evaluated: teacher guides and all assessment components	**Rating this Criterion:** Non-Negotiable 1 is rated as Meets or Does Not Meet. To rate Non-Negotiable 1, begin by rating Metric 1A. Since Metric 1A is the only metric for Non-Negotiable 1, the rating for Non-Negotiable 1 is the same as the rating for Metric 1A. If Metric 1A is rated as Does Not Meet, include evidence of when the named topic(s) is/are assessed. If the metric is rated as Meets, list the grade(s) examined in the evaluation.

Metric NN1A: **Materials reflect the basic architecture of the Standards by not assessing the listed topics before the grade level indicated.** • Probability, including chance, likely outcomes, probability models. (Introduced in the CCSSM in grade 7) • Statistical distributions, including center, variation, clumping, outliers, mean, median, mode, range, quartiles; and statistical association or trends, including two-way tables, bivariate measurement data, scatter plots, trend line, line of best fit, correlation. (Introduced in the CCSSM in grade 6) • Similarity, congruence, or geometric transformations. (Introduced in the CCSSM in grade 8) • Symmetry of shapes, including line/ reflection symmetry, rotational symmetry. (Introduced in the CCSSM in grade 4) **How to Find the Evidence:** Evaluate the table of contents, all chapter tests, all unit tests, and other such assessment components (including rubrics). For context, read Criterion #2 from the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013). NOTE: Grade alignments of other topics are addressed in Non-Negotiable 2, Focus and Coherence.) In this criterion, "topics named" means the topics that are explicitly named in Metric 1A. No other topics should be added to the list in Metric 1A. (Note that other topics in the standards are addressed in criterion NN2.)	**Evidence-** All of the grade 7 standards are met in this curriculum. Everything that is in the assessments is grade 7 standards.	**(Reviewer only.)** **_x___Meets** **____Does Not Meet**
Non-Negotiable 1: Materials must reflect the content architecture of the Standards by not assessing the topics named* before the grade level where they first appear in the Standards. **NN 1** If Metric 1A was rated as Meets, then rate Non-Negotiable 1 as Meets. If Metric 1A was rated as Does Not Meet, then rate Non- Negotiable 1 as Does Not Meet. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion.**(Reviewer only.)** **Before moving to Non-Negotiable 2, record the final Meets or Does Not Meet rating in the Evaluation Summary.**		**(Reviewer only.)** **_x___Meets** **____Does Not Meet** **Strengths/Weaknesses:**

Directions for Non-Negotiable 2

Focus and Coherence

Non-Negotiable 2:
Focus and Coherence

Materials must focus coherently on the Major Work of the grade in a way that is consistent with the progressions in the Standards.

Focus and coherence are the two major evidence-based design principles of the Common Core State Standards for Mathematics (CCSSM, p. 3). Focus is necessary in order to fulfill the ambitious promise the states have made to their students by adopting the Standards: greater achievement at the college and career ready level; greater depth of understanding of mathematics; and a rich classroom environment in which reasoning, sense-making, applications, and a range of mathematical practices flourish. In simpler terms, a mile-wide, inch-deep curriculum translates to less time per topic. Less time means less depth and moving on without many students. Thus, materials must focus coherently on the Major Work of the grade in a way that is consistent with the progressions in the Standards.

Required Materials

- Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf)
- Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)
- Focus by Grade Level for the grade being evaluated (www.achievethecore.org/focus)
- From the materials being evaluated: teacher guides, student texts and workbooks

Rating this Criterion:

Non-Negotiable 2 is rated as Meets or Does Not Meet.

To rate Non-Negotiable 2, first rate metrics 2A–2H. Each of these eight metrics must be rated as Meets in order for Non-Negotiable 2 to be rated as Meets. Rate each metric 2A-2H as Meets or Does Not Meet/Insufficient Evidence. If the evidence examined shows that the Criterion is met, then mark the Criterion Meets. If the evidence examined shows that the Criterion is not met—or if there is insufficient evidence to make a determination—then mark the Criterion as Does Not Meet/Insufficient Evidence. Support all ratings with evidence.

Metric NN2A:
In each grade K–8, students and teachers using the materials as designed devote the large majority of time to the Major Work of the grade.

How to Find the Evidence:

Familiarize yourself with the Major Work of the grade being evaluated (see the Focus by Grade Level documents.)

Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, lessons, homework assignments, and assessments. (Evaluate both student and teacher materials.)

Consider time spent on the Major Work of the grade and judge qualitatively whether students and teachers using the materials as designed will devote the large majority of time to the Major Work of the grade.

For context, read Criterion #1 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013)

Evidence-

Approximately 68% of this curriculum focuses on Major Work standards for Grade 7.

69/101 lessons focus on Major Work Standards for Grade.

(Reviewer only.)

_x___Meets

____Does Not Meet/

Insufficient Evidence

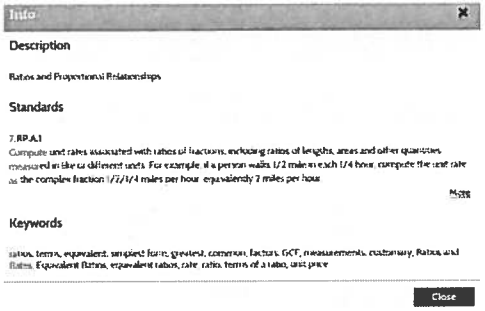
Metric NN2B: **Supporting work, where present, enhances focus and coherence simultaneously by also engaging students in the Major Work of the grade.** **How to Find the Evidence:** Familiarize yourself with the Major Work and Supporting Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate chapters and lessons that focus on Supporting Work. NOTE: Example of evaluating this Criterion might include looking at whether materials for K–5 generally treat data displays as an occasion for solving grade-level word problems using the four operations (e.g., see 3.MD.B.3); or whether materials for grade 7 take advantage of opportunities to use probability to support ratios, proportions, and percentages. For context, read Criterion #3 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** The supporting work enhances the focus and coherence of the Major Work throughout the curriculum. Ex. Geometry supports expressions and equations.	**(Reviewer only.)** **_x___Meets** **____Does Not Meet/** **Insufficient Evidence**
Metric NN2C: **Materials base content progressions on the grade-by-grade progressions in the Standards. Content from previous or future grades does not unduly interfere with or displace on-grade-level content.** **How to Find the Evidence:** Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, and lessons in both student and teacher materials. NOTE: In some cases it may be possible that aligned materials might address some aspects of a topic in a strategic way before or after the grade level in which the topic is central in the Standards' progressions; for example, a curriculum author might purposefully choose to explore adding fractions with unlike denominators in a way appropriate to grade four, recognizing that this work is not really required until the next grade. However, any such purposeful discrepancies in content progressions should enhance the required learning in each grade; not unduly interfere with or displace grade-level content; and be clearly aimed at helping students meet the Standards as written rather than effectively rewriting the progressions in the Standards. And in all cases, note that Non-Negotiable 1 must be met for materials to be aligned. For context, read Criterion #5a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** The scope and sequence of this curriculum matches the progression of the Grade 7 standards. This curriculum is grade appropriate throughout. Grade 6 – Introduces Rational Numbers Grade 7 – Operations with rational numbers. Grade 8 – integers with exponents.	**(Reviewer only.)** **_x___Meets** **____Does Not Meet/** **Insufficient Evidence**

Metric NN2D: **Materials give students extensive work with on-grade-level problems.** **How to Find the Evidence:** Evaluate both student and teacher materials. If the materials provide resources for differentiated learning, consider whether lower-performing students have opportunities to engage with grade-level problems. Also consider whether higher-performing students are given opportunities to learn current grade-level content in greater depth. For context, read Criterion #5b in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Throughout Readiness assessment for differentiation. Intervention lessons are available to low-performing students who may need some additional support. Homework G is for those who've "Got It" Homework K is the intervention homework for those who've "Kind-of Got It"	**(Reviewer only.)** **_x___Meets** **____Does Not Meet/** **Insufficient Evidence**
Metric NN2E: **Materials relate on-grade-level concepts explicitly to prior knowledge from earlier grades.** **How to Find the Evidence:** Evaluate both student and teacher materials. NOTE: Examples of evaluating this Criterion might include looking at the way the materials extend basic ideas of place value across the decimal point; or the role that properties of operations play when the materials extend arithmetic beyond whole numbers to fractions, variables, and expressions. More generally, cluster headings in the Standards sometimes signal key moments where reorganizing and extending previous knowledge is important in order to accommodate new knowledge (e.g., see cluster headings that use the phrase "Apply and extend previous understanding"). For context, read Criterion #5c in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Connections are made to build concepts from previous grades throughout the curriculum. Examples: Topic 2 connect finding proportional relationships and Scale Drawings to finding the area of a rectangle. Fact families used to analyze one step equations. Decompose irregular polygons to regular polygons when finding area.	**(Reviewer only.)** **_x___Meets** **____Does Not Meet/** **Insufficient Evidence**
Metric NN2F: **Review of material from previous grades is clearly identified as such to the teacher, and teacher and students can see what their specific responsibility is for the current year.** **How to Find the Evidence:** Evaluate the table of contents, but do not stop there; also evaluate units, chapters, lessons, homework assignments and assessments. (Evaluate both student and teacher materials.) Identify any content from previous grades and check whether it is identified as such. For context, read Criterion #5a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Intervention lessons provide students with a review of previous grade concepts. Student companion book lists core standards, vocabulary, etc. Vocabulary includes new versus review. Intervention resource reviews previous year skills.	**(Reviewer only.)** **_x___Meets** **____Does Not Meet/** **Insufficient Evidence**

Metric NN2G:
Materials include learning objectives that are visibly shaped by CCSSM cluster headings.

How to Find the Evidence:
Select several clusters from the Major Work in the grade being evaluated. Evaluate teacher and student materials in relation to these clusters.
For context, read Criterion #6a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).

Evidence-
Throughout
Each editable lesson contains objectives and essential questions. Each lesson also contains info containing the essential question and the standards covered in the lesson.



(Reviewer only.)

_x___Meets

____Does Not Meet/

Insufficient Evidence

Metric NN2H:
Materials include problems and activities that serve to connect two or more clusters in a domain, or two or more domains in a grade, in cases where these connections are natural and important.

How to Find the Evidence:
In the grade being evaluated, choose two or more clusters or two or more domains for which connections are natural and important. Evaluate the units, chapters, and lessons that deal with the chosen topics, looking for problems and activities that serve to connect the chosen clusters or domains. NOTE: An example of evaluating this Criterion might include looking at whether problems in grade 4 sometimes or often involve students applying their developing computation skills (detailed in domain NBT) in the context of solving word problems (detailed in domain OA).
For context, read Criterion #6b in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).

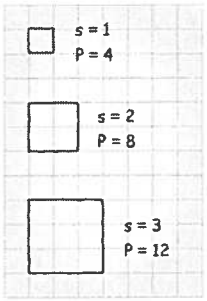
Evidence-
Throughout.
Lesson 2-1 relates proportional relationships and perimeter.

Example

The diagram shows a series of squares drawn on graph paper. The side length and perimeter of each square are labeled.

Use the diagram to complete the table. Draw the next few squares as needed. Write all the ratios in simplest form.

Side length	1	2	3		5	
Perimeter	4			16		24
Ratio $\frac{\text{perimeter}}{\text{side length}}$		$\frac{8}{2}=\frac{4}{1}$				



Is the relationship between the perimeter and side length of a square proportional? How do you know?

Topic 7.5 uses properties of operations to generate equivalent expressions.

(Reviewer only.)

_x___Meets

____Does Not Meet/

Insufficient Evidence

Non-Negotiable 2:

Focus and Coherence

Materials must focus coherently on the Major Work of the grade in a way that is consistent with the progressions in the Standards.

NN 2 If all Metrics 2A – 2H were rated as Meets, then rate Non-Negotiable 2 as Meets. If one or more Metric was rated Does Not Meet/Insufficient Evidence, then rate Non-Negotiable 2 as Does Not Meet. Check the final rating.
Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)**

Before moving to Alignment Criterion 1, record the final Meets or Does Not Meet rating in the Evaluation Summary.

(Reviewer only.)

_x___Meets

____Does Not Meet

Strengths/Weaknesses:

Now continue by evaluating the Alignment Criterion 1 for Rigor and Balance.

Directions for Alignment Criterion 1

Rigor and Balance

Alignment Criterion 1:
Rigor and Balance

Materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.

The Standards set expectations for attention to all three aspects of rigor: conceptual understanding, procedural skill and fluency, and applications. Thus, materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.

Required Materials

- Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf)
- Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)
- Focus by Grade Level for the grade being evaluated (achievethecore.org/focus)
- Situation Types for the Operations in Word Problems (achievethecore.org/situation-types)
- From the materials being evaluated: teacher guides, student texts and workbooks

Rating this Criterion:

Alignment Criterion 1 is rated as Meets or Does Not Meet.

To rate Alignment Criterion 1, first rate metrics 1A, 1B, and 1C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). For each metric, guiding questions are provided to aid in gathering evidence.
Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 1 if the materials rate 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as rigor and balance, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.

Metric AC1A:
The materials support the development of students' conceptual understanding of key mathematical concepts, especially where called for in specific content Standards or cluster headings.

How to Find the Evidence:

Select one or more cluster(s) or Standard(s) from the Major Work for the grade being evaluated that relate specifically conceptual understanding to use throughout the questions associated with this metric. NOTE: Some examples of clusters or Standards that call for conceptual understanding include: K.OA.A.1, (1.NBT.B, 1.NBT.C), (2.NBT.A, 2.NBT.B), (3.OA.A.1, 3.OA.A.2), 4.NF.A, (4.NBT.A, 4.NBT.B), 5.NF.B, (5.NBT.A, 5.NBT.B), 6.RP.A, 6.EE.A.3, 7.NS.A, 7.EE.A, 8.EE.B, 8.F.A, 8.G.A

Clusters or Standards grouped by parentheses are closely connected and could be analyzed together.

For context, read Criterion #4a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).

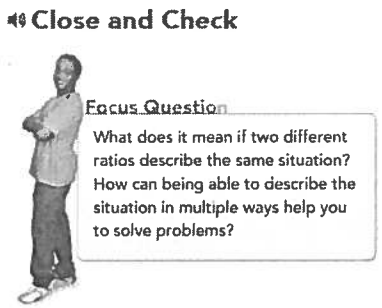
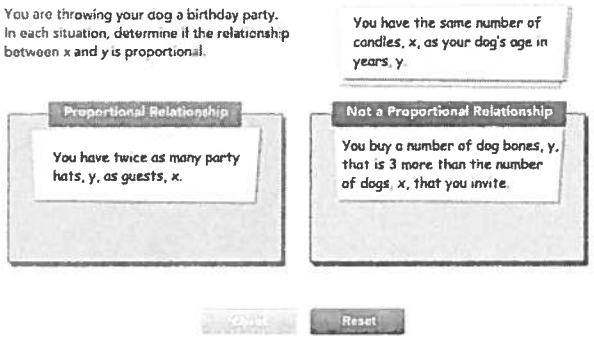
-Choose a cluster/Standard from the Major Work that is aligned to each aspect of rigor and use it to evaluate these metrics. It is most helpful if the same clusters/Standards are chosen for all of the programs being evaluated. (Guidance in choosing clusters/Standards is included in "How to Find the Evidence".)

Use the questions for AC Metric 1A to evaluate Metric 1A. Record evidence for each question and rate Metric 1A.

_x___Meets (2)

_____Partially Meets (1)

_____Does Not Meet (0)

Is conceptual understanding attended to thoroughly where the Standards set explicit expectations for understanding or interpreting? Evaluate lessons, chapter/unit assessments and homework assignments, paying attention to work aligned to Standards that explicitly call for understanding or interpreting. NOTE: Examples of evaluating this Criterion might include looking at how well the multi-digit addition and subtraction algorithms are developed and explained on the basis of place value and properties of operations; or how well the multi-digit multiplication and division algorithms are developed and explained on the basis of place value and properties of operations; or how well solving equations is presented and explained as a process of reasoning.	**Evidence-** Throughout. Conceptual understanding is attended to throughout the curriculum. Each lesson has a "Close and Check" that has students discuss the "Focus Question." Evidence from Lesson 1-1: 	
Do the materials feature high-quality conceptual problems and conceptual discussion questions? Evaluate lessons, chapter/unit assessments, and homework assignments. NOTE: Example of conceptual problems might include such questions as "Find a number greater than 1/5 and less than 1/4," or "If the divisor does not change and the dividend increases, what happens to the quotient?"	**Evidence-** Throughout Evidence from Lesson 2-6: Students must drag and drop each situation into the correct box. Activities such as this promotes conceptual discussion among the class.  They have think about process questions, writing and reflection, and error analysis problems.	

Do the materials feature opportunities to identify correspondences across mathematical representations? Evaluate lessons, chapter/unit assessments and homework assignments. NOTE: Examples of evaluating this Criterion might include looking at whether students are supported in identifying correspondences among: the verbal description of a situation, the diagrams that distill its mathematical features, and the equations that model it; or equivalent forms of numbers (e.g., 3 and 6/2) and the number line; or rational number operations and representations of them via models such as the vector model; or the expression that defines a function and the graph that shows the relationship.	**Evidence-** Diagrams/pictures: Throughout Drag and drop activities: 2-6, 3-3, 4-6 Number lines: Throughout Topic 4 Algorithms: 3-1, 3-3, 3-5, 6-6, 8-5, 11-3 Charts/Graphs: 2-6 Animations: Throughout Topic 14.6 students conduct surveys, compile data, create tables, and then reflect on results.	
Metric AC1B: **The materials are designed so that students attain the fluencies and procedural skills required by the Standards.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Major Work for the grade being evaluated that relate specifically to fluency and procedural skill to use throughout the questions associated with this metric. NOTE: Some examples of Standards that call for procedural skill and fluency include: K.OA.A.5, 1.OA.C.6, 2.OA.B.2, 2.NBT.B.5, 3.OA.C.7, 3.NBT.A.2, 4.NBT.B.4, 5.NBT.B.5, 6.NS.B.2, and 6.NS.B.3, 6.EE.A, 7.NS.A, 7.EE.A.1,7.EE.B.4a, 8.EE.C.7, 8.EE.C.8b For context, read Criterion #4b in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Is progress toward fluency and procedural skill interwoven with students' developing conceptual understanding of the operations in question? Are purely procedural problems and exercises present that include cases in which opportunistic strategies are valuable and generic cases that require efficient algorithms present? Do the materials in grades K-6 provide repeated practice toward attainment of fluency Standards?	**Use the questions for Metric 1B to evaluate Metric 1 B. Record evidence for each question and rate Metric 1B.** **(Reviewer only.)** **_x___Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Is progress toward fluency and procedural skill interwoven with students' developing conceptual understanding of the operations in question? Evaluate lessons, chapter/unit assessments, daily routines, and homework assignments for evidence that the development of fluency and procedural skill is supported by conceptual understanding.	**Evidence-** 4-1: Rational Numbers, Opposites, and Absolute Value 4-2: Adding Integers 4-3: Adding Rational Numbers 4-4: Subtracting Integers 4-5: Subtracting Rational Numbers	
Are purely procedural problems and exercises present that include cases in which opportunistic strategies are valuable and generic cases that require efficient algorithms present? Evaluate lessons, chapter/unit assessments, daily routines, and homework assignments. NOTE: Examples of problems in which opportunistic strategies are valuable might include the sum 698 + 240 or the system $x + y = 1$, $2x + 2y = 3$. Examples of generic cases that require efficient algorithms might include the sum 8767+2286 or the system $6y + x = x + 3$, $-x = 1 + 2y$.	**Evidence-** Most lessons start with a basic algorithm, and then build upon it. 6-6 uses the percent error algorithm. Topics 7 and 8 contain lessons where there are procedural problems using generic algorithms that must be following to solve expressions and equations. Students use factoring to expand and factor expressions.	

Do the materials in grades K–6 provide repeated practice toward attainment of fluency Standards? Evaluate lessons, daily routines, and homework assignments for evidence of repeated practice toward attainment of the following K–6 Standards that set an explicit expectation of fluent (accurate and reasonably fast) computation: K.OA.A.5, 1.OA.C.6, 2.OA.B.2, 2.NBT.B.5, 3.OA.C.7, 3.NBT.A.2, 4.NBT.B.4, 5.NBT.B.5, 6.NS.B.2, 6.NS.B.3.	**Evidence-** N/A	
Metric AC1C: **The materials are designed so that teachers and students spend sufficient time working with engaging applications, without losing focus on the Major Work of each grade.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Major Work for the grade being evaluated that relate specifically application to use throughout the questions associated with this metric. NOTE: Some examples of clusters or Standards that call for application include: K.OA.A.2, 1.OA.A, 2.OA.A, 3.OA.A.3, 3.OA.D.8, 4.OA.A.3, 4.NF.B.3d, 4.NF.B.4c, 5.NF.B.6, 5.NF.B.7c, 6.RP.A.3, 6.NS.A.1, 6.EE.B.7, 6.EE.C.9, 7.RP.A, 7.NS.A.3, 7.EE.B.3, 8.EE.C.8c, 8.F.B For context, read Criterion #4c in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Throughout Each Unit contains an enrichment project. Unit A Project: Recipes from Around the World **Getting Started:** For this project, you are going to create an international bakery cookbook. You will research recipes for bakery items from different parts of the world, and then use your knowledge of unit rates to adapt each recipe to make single servings. **Activities: Researching, Calculating, Comparing, Designing** Unit B Project: Game Time! **Getting Started:** For this project, you are going to design a math game, using operations with rational numbers as the focus of the game. **Activities: Organizing, Researching, Planning, Designing, Writing, Reflect and Revise**	**Use the questions for Metric 1C to evaluate Metric 1C. Record evidence for each question and rate Metric 1C.** **(Reviewer only.)** **_x___Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Are there are single- and multi-step contextual problems, including non-routine problems, that develop the mathematics of the grade, afford opportunities for practice, and engage students in problem solving? Do the problems attend thoroughly to those places in the content Standards where expectations for multi-step and real-world problems are explicit? Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** Throughout Topic 1: Ratios and Rates: Topic Close has students discuss the essential question: Previously you have studied rates and proportional relationships. How do you distinguish the different kinds of rates? What kinds of real-world relationships are rates? The Question has a video that relates the real-world relationship of shopping and trying to determine which product is the better price. Analysis and Reflection is used throughout.	

Do application problems particularly stress applying the Major Work of the grade? Evaluate lessons, chapter/unit assessments, and homework assignments. NOTE: Examples of evaluating this Criterion might include looking at: how well, by the end of grade 2, students using the materials as designed can represent and solve a full range of one-step addition and subtraction word problems; or how well, by the end of grade 3, students using the materials as designed can represent and solve a full range of one-step multiplication and division word problems; or how well these basic situation types for each operation are carried coherently across the grades, (e.g., with fractions and algebraic expressions); or, in all grades, whether the problems connect concepts, Standards, and domains in ways that are natural and important. For a list of situation types for one-step addition, subtraction, multiplication, and division problems, see Situation Types for the Operations in Word Problems	**Evidence-** Each Topic ends with a Problem Solving lesson where students must apply content understanding. 8-5: Writing and solving equations using a bar graph. A company has 5 samples to ship to a client. Each sample has the same weight. A box to ship them weighs 8 ounces before it is packed. The total weight of the shipment is 47 ounces. You can make a bar diagram to represent this situation. Let g represent the weight of one sample. total weight: g g g g g weight of the box 47: $5g$ 8 $47 = 5g + 8$ So you can represent this situation with the equation $5g + 8 = 47$. In general, they move from models, to algorithms, to application.	
Does modeling build slowly across K–8, with applications that are relatively simple in earlier grades and when students are encountering new content? In grades 6–8, do the problems begin to provide opportunities for students to make their own assumptions or simplifications in order to model a situation mathematically? Read Standard for Mathematical Practice 4, Model with Mathematics. Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** Modeling is used throughout this curriculum. There are videos in every lesson that model different concepts to students. 10-1 models how to use a protractor. 10-3 models complementary angles. 11-1 models diameter and radius. 11-3 models how to use a circle and a parallelogram to find the area of a circle. 12-4 models slices of right rectangular prisms. Drawing – Tables – Graphs (building throughout)	

Alignment Criterion 1:
Rigor and Balance

Materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.

AC1 Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 out of 6 points, the Criterion has not been met. Check the final rating.
Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)**

Before moving to Alignment Criterion 2, record the final Meets or Does Not Meet rating in the Evaluation Summary.

(Reviewer only.)

_x___Meets

____Does Not Meet

Strengths/Weaknesses:

Directions for Alignment Criterion 2

Standards for Mathematical Practice

Alignment Criterion 2: Standards for Mathematical Practice

Materials must demonstrate authentic connections between content Standards and practice Standards.

The Standards require that designers of instructional materials connect the mathematical practices to mathematical content in instruction. Thus, materials must demonstrate authentic connections between content Standards and practice Standards.

Required Materials:

- Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf)
- Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)
- Focus by Grade Level for the grade being evaluated (www.achievethecore.org/focus)
- From the materials being evaluated: teacher guides, student texts and workbooks

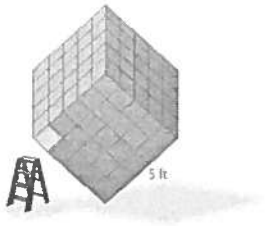
Rating this Criterion

Alignment Criterion 2 is rated as Meets or Does Not Meet.

To rate Alignment Criterion 2, first rate metrics 2A, 2B, and 2C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). For each metric, guiding questions are provided to aid in gathering evidence.

Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 2 if the materials earn 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as mathematical practices, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.

Metric AC2A: **Materials address the practice Standards in such a way as to enrich the Major Work of the grade; practices strengthen the focus on Major Work instead of detracting from it, in both teacher and student materials.** **How to Find the Evidence:** Familiarize yourself with the Major Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate teacher and student materials for evidence that the mathematical practices support and connect to the focus of the grade. NOTE: Examples of evaluating this Criterion might include looking at whether, in grades K–5, students using the materials are supported to look for and express regularity in repeated reasoning about the addition table, the multiplication table, the properties of operations, the relationship between addition and subtraction or multiplication and division, and the place value system; or whether, in grades 6–8, students using the materials are supported to look for and express regularity in repeated reasoning about proportional relationships and linear functions. For context, read Criterion #8 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013).	**Evidence-** Throughout 1. Making sense of problems and persevere in solving them. (Homework assignments allow students to check their answer and then retry if necessary.) 2. Reason abstractly and quantitatively. (Essential questions are provided for each topic.) 3. Construct viable arguments and critique the reasoning of others. (11-3 has students justify whether or not the area of one crop circle is twice the smaller one.) 4. Model with mathematics. (7-1 has students drag and drop to create equivalent expressions.) 5. Use appropriate tools strategically. (Topic 4 students are encouraged to use integer chips from math tools.)(10-1 protractor.) 6. Attend to precision. (Projects are provided for each topic that require students to complete several activities in order to complete the project.) 7. Look for and make use of structure. (8-3 students look for structure when solving two-step equations.) 8. Look for and express regularity in repeated reasoning. (8-2 students look for repeated reasoning when writing two-step equations.)	**(Reviewer only.)** **_x___Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Metric AC2B: **Materials attend to the full meaning of each practice Standard.** **How to Find the Evidence:** For context, read Criterion #7 and Criterion #9 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).		**Use the questions for Metric 2B to evaluate Metric 2B. Record evidence for each question and rate Metric 2B.** **(Reviewer only.)** **_x___Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Over the course of any given year of instruction, is each mathematical practice Standard meaningfully present in the form of assignments, activities, or problems that stimulate students to develop the habits of mind described in the practice Standard? Evaluate lessons, chapter/ unit assessments, and homework assignments for evidence of each mathematical practice being meaningfully present in instruction.	**Evidence-** Each MP is being utilized throughout instruction, lessons, assignments, and assessments. The MPs are meaningfully present. "Explain, reflect, analyze…"	

Do the materials treat the practice Standards as developing across grades? Are the practice Standards in early grades appropriately simple? Do they display an arc of growing sophistication across the grades?	**Evidence-** Mathematical Practice Standards are utilized throughout the curriculum and are grade appropriate. The Program Overview shows MP/CCSS for grades 6-8 and how they correlate together.	
Are there teacher-directed materials that explain the role of the practice Standards in the classroom and in students' mathematical development? Are alignments to practice Standards accurate?	**Evidence-** Program Overview Guide "Common Core State Standards for Mathematical Practice" Pg. 14-29. Rubric for teachers to assess standards for MP Pg. 130-131.	
Metric AC2C: **Materials support the Standards' emphasis on mathematical reasoning.** **How to Find the Evidence:** For context, read Criterion #10 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).		**Use the questions for Metric 2C to evaluate Metric 2C. Record evidence for each question and rate Metric 2C.** **(Reviewer only.)** **_x___Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Do the materials support students in constructing viable arguments and critiquing the arguments of others concerning grade-level mathematics that is detailed in the content Standards? Read Standard for Mathematical Practice 3. Evaluate teacher and student materials to ensure that students are given opportunities to reason with grade-level mathematics.	**Evidence-** Throughout Launch activities support students with justifying their arguments, and making mathematical models. (Each lesson contains a launch activity.) 13-1 **Launch** One square foot of this cube-shaped sculpture takes you 10 minutes to polish. At this rate, how long will it take you to polish the whole thing? Justify your reasoning.  	

Do the materials support students in producing not only answers and solutions but also, in a grade-appropriate way, arguments, explanations, diagrams, mathematical models, etc., especially in the Major Work of the grade? Familiarize yourself with the Major Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate teacher and student materials, to understand the types of work students are expected to produce.	**Evidence-** Throughout 12-1 plays a short video about a customer requesting an 8 sided sign. The customer thinks the sign was made wrong. Students have to explain who was to blame for the wrong sign. 12-1 has students drawing diagrams/models. 12-5 students draw cross sections and the 2D shapes they make. Focus questions ask to model.	
Do materials explicitly attend to the specialized language of mathematics? Is the language of argument, problem solving, and mathematical explanations taught rather than assumed? Evaluate teacher and student materials, paying attention to how mathematical language is taught. NOTE: Examples of evaluating this Criterion might include looking at whether students are supported in: basing arguments on definitions; using the method of providing a counterexample; or recognizing that examples alone do not establish a general statement.	**Evidence-** Program Overview Guide Pg. 118-120 "Key Math Terms." Student Companion Pg. xiv-xxx. All vocabulary terms are in bold throughout the lessons. There is a Vocabulary button that shows students definitions and examples of terms.	

Alignment Criterion 2:
Standards for Mathematical Practice

Materials must demonstrate authentic connections between content Standards and practice Standards.

AC2 Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 out of 6 points, the Criterion has not been met. Check the final rating.
Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion.
(Reviewer only.)

Before moving to Alignment Criterion 3, record the final Meets or Does Not Meet rating in the Evaluation Summary.

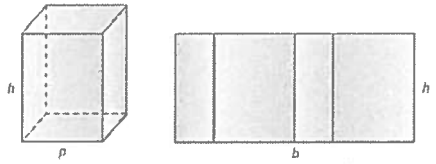
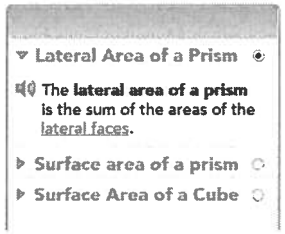
(Reviewer only.)

_x___Meets

____Does Not Meet

Strengths/Weaknesses:

Alignment Criterion 3: **Access to the Standards for All Students** **Materials must provide supports for English Language Learners and other special populations.** Because Standards are for all students, alignment requires thoughtful support to ensure all students are able to meet the Standards. Thus, aligned materials must provide supports for English Language Learners and other special populations.	**Required Materials:** • Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion:** Alignment Criterion 3 [illegible]ed as [illegible]s or Does Not Meet. To rate Alignment Criterion 3, first rate metrics 3A, 3B, and 3C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 3 if the materials earn 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as support for special population, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.
Metric AC3A: **Support for English Language Learners and other special populations is thoughtful and helps those students meet the same Standards as all other students. The language in which problems are posed is carefully considered.** **How to Find the Evidence:** Evaluate teacher and student materials, paying attention to supports offered for special populations.	**Evidence-** There is a Spanish translation tool available on lessons (es). There is a Glossary in English and Spanish. There is also an icon that can be clicked that will read terms and lessons out loud. Program Overview Pg. 143-151 geared specifically to teaching ELL students. Five essential principles geared toward ELL students.	**Reviewer only.)** **_x___Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Metric AC3B: **Materials provide appropriate level and type of scaffolding, differentiation, intervention, and support for a broad range of learners with gradual removal of supports, when needed, to allow students to demonstrate their mathematical understanding independently.** **How to Find the Evidence:** Evaluate teacher and student materials, paying attention to whether materials provide differentiation that will lead all learners to engage with on-grade-level content.	**Evidence-** There is an icon that can be clicked that will read terms and lessons out loud. Students can use this tool until it is no longer needed and they start to understand terms on their own or they can read and comprehend on their own. There are visuals throughout the curriculum and videos that attend to the needs of a broad range of learners. Readiness assessment creates differentiation at the very beginning of the lesson.	**Reviewer only.)** **_x___Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**

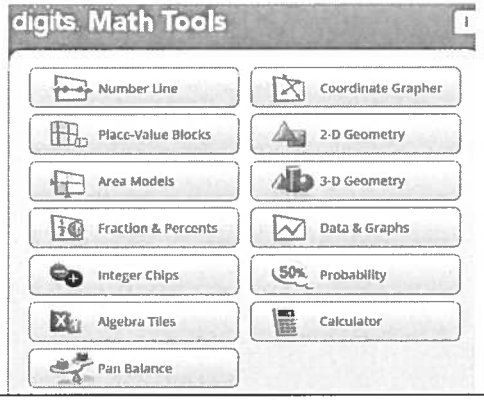
Metric AC3C: **Design of lessons recommends and facilitates a mix of instructional approaches for a variety of learners such as using multiple representations (e.g., including models, using a range of questions, checking for understanding, flexible grouping, pair-share).** **How to Find the Evidence:** Evaluate teacher materials, noting instructional approaches suggested for whole class and differentiated lessons and activities.	**Evidence-** The lessons are designed to implement a wide variety of instructional techniques that will facilitate a variety of learners. Lessons include videos, vocabulary tools, mathematical tools, models and diagrams, real-world problems, drag and drop, etc. 13-1 Students can click on any of the areas on the bottom to listen to a short clip with models of what the concept means.  Lateral Area = perimeter of base • height of prism L. A. = *ph*  	**(Reviewer only.)** **_x___Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Alignment Criterion 3: **Access to the Standards for All Students** **Materials must provide supports for English Language Learners and other special populations.** **AC3** Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 points, the Criterion has not been met. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion.**(Reviewer only.)** **Move to the Evaluation Summary and record the final Meets or Does Not Meet rating .**		**(Reviewer only.)** **_x___Meets** **____Does Not Meet** **Strengths/Weaknesses:**

Once an evaluation for alignment to the Shifts and major features of the CCSS has been conducted using Sections 1-3, it's important to evaluate for overall quality and best practices. A starting list of Indicators of Quality are suggested below. States, districts and others evaluating instructional materials are encouraged to add to this list to ensure materials reflect local contexts. For background information on some of the Indicators of

Quality in this section, refer to pp.18–21 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 20

Indicators of Quality	Evidence- Give specific examples.	Rating: (Reviewers only.)
1. Lessons are thoughtfully structured and support the teacher in leading the class through the learning paths at hand, with active participation by all students in their own learning and in the learning of their classmates.	**Evidence-** Pacing: Program Overview Guide Pg. 94-96, 106-108, 118-120. Teacher in class notes helps direct lesson, provide discussion. Sample questions are provided. The lessons are structured in a way that encourages student participation and group work throughout. After several practice problems done as a group, students are given time to work individually. This curriculum uses the Me, We, You model. Examples of how lessons are set up: 14-1 Launch (group work/discussion prompts) Part 1 (Vocabulary/Modeling) Part 2 (Vocabulary/Modeling/Video Clip) Key Concept (Vocabulary/Model/Discovery) Part 3 (Vocabulary/Diagram/Discussion) Close and Check (Focus Question/discussion prompts) Student Companion (Journal/Reflect/Notes) Homework (G or K) Mixed Review (5 questions, reviews prior topics) 14-2 Launch (group work/discussion prompts) Key Concept (Vocabulary/Links to Prior Knowledge/Model) Part 1 (Video Clip/Activity) Part 2 (Video on how to use the Data and Graphs Tool) Part 3 (Video Clip/Discussion prompts) Close and Check (Focus Question/discussion prompts) Student Companion (Journal/Reflect/Notes) Homework (G or K) Mixed Review (5 questions, reviews prior topics)	**(Reviewer only.)** **__x____ Yes** **_____ No**

2. The underlying design of the materials includes both problems and exercises. (In solving problems, students learn new mathematics, whereas in working exercises, students apply what they have already learned to build mastery.) Each problem or exercise has a purpose. **NOTE: This Criterion does not require that the problems and exercises be labeled as such.**	**Evidence-** During the lessons, exercises are done together as a class throughout the lesson and on the Student Companion form. After the lesson, students are able to work on problems including real-world and skills practice in their homework problems. Students have the ability to check each problem after completion. If they get a wrong answer, they can choose from several options to get help, then they can retry. 	**(Reviewer only.)** __x____ **Yes** _____ **No**
3. Design of assignments is not haphazard: exercises are given in intentional sequences in order to strengthen students' mathematical understanding.	**Evidence-** According to the scope and sequence, the units are: Unit A: Ratios and Proportional Relationships Unit B: Rational Numbers Unit C: Expressions and Equations Unit D: Geometry Unit E: Statistics Unit F: Probability This is a very intentional sequence as the Major Work is focused on first so that it can be continuously applied throughout the rest of the curriculum.	**(Reviewer only.)** __x____ **Yes** _____ **No**
4. There are separate teacher materials that support and reward teacher study including, but not limited to: discussion of the mathematics of the units and the mathematical point of each lesson as it relates to the organizing concepts of the unit, discussion on student ways of thinking and anticipating a variety of students responses, guidance on lesson flow, guidance on questions that prompt students thinking, and discussion of desired mathematical behaviors being elicited among students.	**Evidence-** Program Overview Guide Teacher Resources (available online: answer keys, teacher guide) Data (available online to provide data on scores) "Cliff Notes" for each lesson Scripted Questions Pacing guide	**(Reviewer only.)** __x____ **Yes** _____ **No**

5. Manipulatives suggested in the materials are faithful representations of the mathematical objects they represent and are connected to written methods.	**Evidence-** There are 13 online manipulatives that are available to students online. Lessons are embedded throughout the curriculum that teach students how to use these tools. (14-2) 	**(Reviewer only.)** __x____ **Yes** _____ **No**
6. Materials include a variety of curriculum-embedded assessments. Examples include pre-, formative, summative, and self-assessment resources.	**Evidence-** Formative – Got It? End of each lesson. Formative – Progress Monitoring Summative – Assessment at the end of each Topic. Summative – Mixed Review at the end of each lesson is a quick 5 question test that informs teacher of student understanding of concepts. 	**(Reviewer only.)** __x____ **Yes** _____ **No**

<table>
<tr>
<td>7. Assessments contain aligned rubrics, answer key and scoring guidelines that provide sufficient guidance for interpreting student performance.</td>
<td>Evidence-

Answer Keys are provided online in the Teacher Resources section for each Homework.

While students complete homework online, they can check their answers right away and then reattempt to get the correct answer.

Answer keys are available in the student companion homework pages as well.

Each enrichment project contains a scoring rubric: Topic 1

Scoring Rubric
<table>
<tr><td>3</td><td>All of the required research is collected and displayed in an organized and interesting cookbook. All calculations are accurate.</td></tr>
<tr><td>2</td><td>Most of the required research is collected and displayed in an organized cookbook. Most calculations are accurate.</td></tr>
<tr><td>1</td><td>Some of the required research is collected. The cookbook is disorganized and several calculations are inaccurate.</td></tr>
<tr><td>0</td><td>Significant portions of the project are incomplete or missing.</td></tr>
</table>
MP rubrics available.</td>
<td>(Reviewer only.)

__x____ Yes

_____ No</td>
</tr>
<tr>
<td>8. Materials assess student proficiency using methods that are accessible and unbiased, including the use of course-level language in student prompts.</td>
<td>Evidence-

There are assessment tools throughout the curriculum to determine student proficiency. The language is the same on the lessons and the assessments, with clear sentence structure.

Graphic representation is available to reflect individual data.</td>
<td>(Reviewer only.)

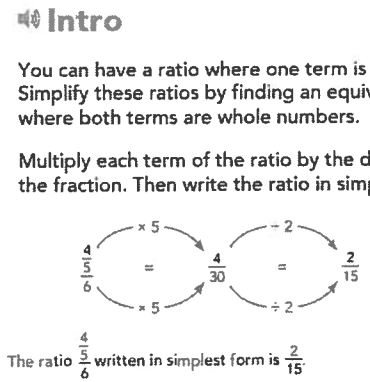
__x____ Yes

_____ No</td>
</tr>
<tr>
<td>9. Materials are carefully evaluated by qualified individuals, whose names are listed, in an effort to ensure freedom from mathematical errors and course-level appropriateness.</td>
<td>Evidence-

Authors and Advisors are listed in the Program Overview Guide Pg. vi-vii.</td>
<td>(Reviewer only.)

__x____ Yes

_____ No</td>
</tr>
</table>

10. The visual design supports students in engaging thoughtfully with the subject. Navigation through the text is clear.	**Evidence-** Throughout This curriculum is full of engaging videos and visual models. Navigation is easy throughout the online curriculum.  	**(Reviewer only.)** **__x____ Yes** **_____ No**
11. The materials engage parents in appropriate ways. For example, homework assignments in elementary grades, consist of routine problems, practice with getting answers, and fluency-building exercises that parents can easily support.	**Evidence-** Students are able to do their homework online at home which enables parent support and engagement. Students can also help students complete their student companion form.	**(Reviewer only.)** **__x____ Yes** **_____ No**

Reviewer IMET Evaluation Summary **Title/Level:** _____

Publisher: _Pearson Education, Inc._____ Copyright: _2015_____

ISBN:_9780133314618_____

Reviewer ID # __HCPLW_____ Date Review Completed:__March 7, 2016_____

Non-Negotiable Criteria- Each Non-Negotiable must be met in order for the Non-Negotiable Alignment Criteria to be met overall.

Non-Negotiable 1: Freedom from Obstacles to Focus	**Non- Negotiable 2: Focus and Coherence**
___x____ Meets	**__x___ Meets**
_____ Does Not Meet	**_____ Does Not Meet**

Non-Negotiable Overall:

__x___ Meets **_____ Does Not Meet**

Alignment Criteria- Each Alignment Criterion must be met with a sufficient number of points in order for Alignment Criteria to be labeled as "Meets" overall. The more points the materials receive on the Alignment Criteria, the better they are aligned.

Alignment Criterion 1: Rigor and Balance	**Alignment Criterion 2: Standards of Mathematical Practice**	**Alignment Criterion 3: Access to Standards for All Learners**
Points: __6___ of 6 possible. **(Materials must receive at least 5 of 6 points to align.)**	**Points: __6___ of 6 possible.** **(Materials must receive at least 5 of 6 points to align.)**	**Points: ___6__ of 6 possible.** **(Materials must receive at least 5 of 6 points to align.)**
___x____ Meets	**___x____ Meets**	**___x____ Meets**
_____ Does Not Meet	**_____ Does Not Meet**	**_____ Does Not Meet**

Alignment Criteria Overall:

__x___ Meets **_____ Does Not Meet**

If the materials meet both Non-Negotiables and relevant Alignment Criterion, they are aligned to the Shifts and major features of the Core Standards. **Do the materials meet every Non-Negotiable and Alignment Criterion? __x___ Yes _____ No**

What are the specific areas of strength and weakness based on this evaluation? Publishers or others modifying or developing assessments can use this information to make improvements and/or to remedy gaps in the alignment of assessment materials.

Strength: Very engaging curriculum for middle school age students because it is an online based curriculum containing animations, interactive tools, and videos.

Strength: Differentiation is made easy with online tools and testing.

2015-16 Mathematics Interim Review Recommendation & Summary

Publisher Name:	Pearson Education, Inc
Title:	Pearson digits Grade 8
ISBN #	9780133314632
Grade Level(s) or Course:	Grade 8 math
Reviewer ID:	~~DH~~ TH

RECOMMENDED AS:

__X__ **Core Mathematics Program-** a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials. Substantial evidence clearly supports the designation of this program as Core.

_____ **Other Mathematics Program-** a program that substantially, but partially, meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for supplemental materials. Substantial evidence clearly supports the designation of this program as Other.

_____ **Component Mathematics Program-** a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs. Substantial evidence clearly supports the designation of this program as Component.

_____ **Intervention Program-** a program designed and intended to target and support students' specific needs. Substantial evidence clearly supports the designation of this program as Intervention.

_____ **Does not meet criteria** for recommendation as a Curricular Material or Online Resource for Mathematics.

EVIDENCE SUMMARY:

FOCUS- The focus is on CCSSM for 8th Grade mathematics.

COHERENCE- The Topics are aligned to the standards for 8th grade math but there is little coherence across the domains.

RIGOR- The online materials reflect procedures and practice for fluency with some application and conceptual understanding problems.

CONCEPTUAL UNDERSTANDING- Digits provides opportunity for students to use and practice concepts with end of lesson and end of topic problems for them to use their skills

MATHEMATICAL PRACTICES- The mathematical practices are provided on the teacher's edition Ebook and are listed but not explained in student work.

ACCESSIBILITY OF STANDARDS TO ALL STUDENTS- Accessability to low performing and ELL students is provided in the teacher's online information. For higher performing students there is little or no opportunity for engaging work.

OTHER:

2015-16 Interim Mathematics Review

Mathematics Evaluation Tool Grades K-8

Publisher: Pearson Education, Inc

Title of Material: Pearson digits Grade 8

Author: Fennell et. al

ISBN #: 9780133314632 **Copyright** 2015

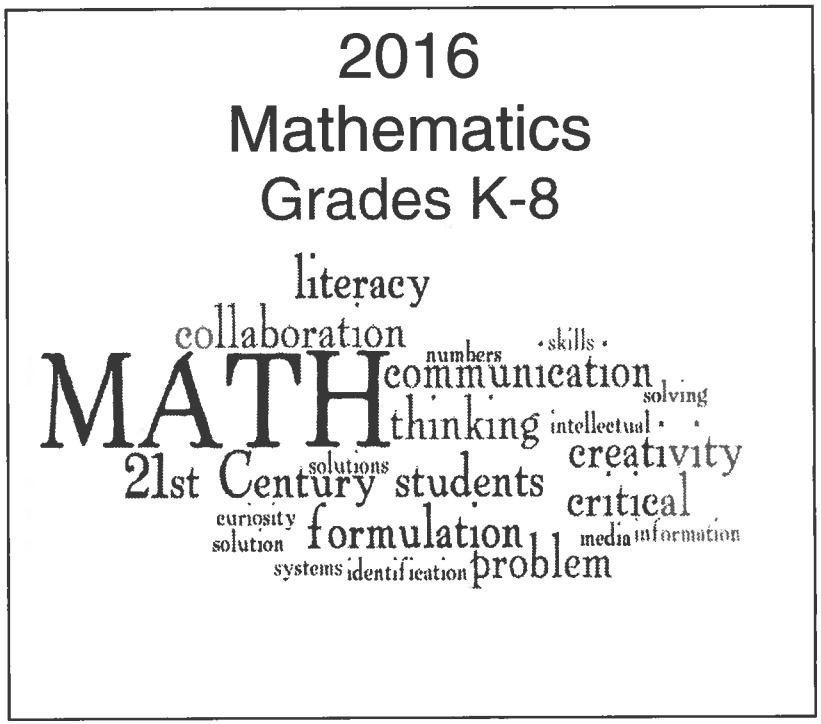
Reviewer ID: DH & TH

Core Mathematics Program- a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Core.

Other Mathematics Program- a program that substantially, but partially, meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Other.

Component Mathematics Program- a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs.
Substantial evidence clearly supports the designation of this program as Component.

Intervention Program- a program designed and intended to target and support students' specific needs.
Substantial evidence clearly supports the designation of this program as Intervention.



- Evaluation Form adapted from Instructional Materials Evaluation Toolkit (IMET).

The IMET was developed by Student Achievement Partners. Educators may use or adapt. http://creativecommons.org/licenses/by/3.0/ Download this tool at http://achievethecore.org/IMET

Instructional Materials Evaluation Tool

Mathematics, Grades K-8

What Are the Purposes of the IMET?

This Math IMET is designed to help educators determine whether instructional materials are aligned to the Shifts and major features of the Common Core State Standards (CCSS). The substantial instructional Shifts (http://www.corestandards.org/other-resources/key-shifts-inmathematics/) at the heart of the Common Core State Standards are:

- **Focus** strongly where the Standards focus
- **Coherence**: Think across grades and link to major topics within the grade
- **Rigor**: In major topics, pursue conceptual understanding, procedural skill and fluency, and application with equal intensity.

The IMET draws directly from the following documents:

- Common Core State Standards for Mathematics (www.corestandards.org/Math)
- Publishers' Criteria for the Common Core State Standards in Mathematics grade K-8 (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)

When to use the IMET

1. Purchasing materials: Many factors go into local purchasing decisions. Alignment to the Standards is a critical factor to consider. This tool is designed to evaluate alignment of instructional materials to the Shifts and the major features of the CCSS. It also provides suggestions of additional indicators to consider in the materials evaluation and purchasing process.

2. Evaluating materials currently in use: The IMET can be used to analyze the degree of alignment of existing materials and help to highlight specific, concrete flaws in alignment. Even where materials and tools currently in use fail to meet one or more of these criteria, the pattern of failure is likely to be informative. States and districts can use the evaluation to create a thoughtful plan to modify or combine existing resources in such a way that students' actual learning experiences approach the focus, coherence, and rigor of the Standards.

3. Developing programs: Those developing new programs can use this tool as guidance for creating aligned curricula.
Please note this tool was designed for evaluating comprehensive curricula (including any supplemental or ancillary materials), but it was not designed for the evaluation of standalone supplemental materials.

Who Uses the IMET?

Evaluating instructional materials requires both subject-matter and pedagogical expertise. Evaluators should be well versed in the Standards (www.corestandards.org/Math) for all grades in which materials are being evaluated. This includes understanding the Major Work of the grade (www.achievethecore/focus), the Supporting and Additional work, how the content fits into the progressions in the Standards (www.achievethecore.org/progressions), and the expectations of the Standards with respect to conceptual understanding, procedural skill and fluency, and application. Evaluators also should be familiar with the substantial instructional Shifts (http:// www.corestandards.org/other-resources/key-shifts-in-mathematics/) of Focus, Coherence and Rigor that are listed above.

Getting Started

Prior to Evaluation

Assemble all of the materials necessary for the evaluation. It is essential for evaluators to have materials for all grades covered by the program, as some criteria cannot be rated without having access to each grade. In addition, each evaluator should have a reference copy of the Common Core State Standards for Mathematics (CCSSM) and the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013).

2015-16 Interim Mathematics Review

Mathematics Evaluation Tool Grades K-8

Publisher: Pearson Education, Inc

Title of Material: Pearson digits Grade 8

Author: Fennell et. al

ISBN #: 978013314632 **Copyright_2015**

Reviewer ID: _____

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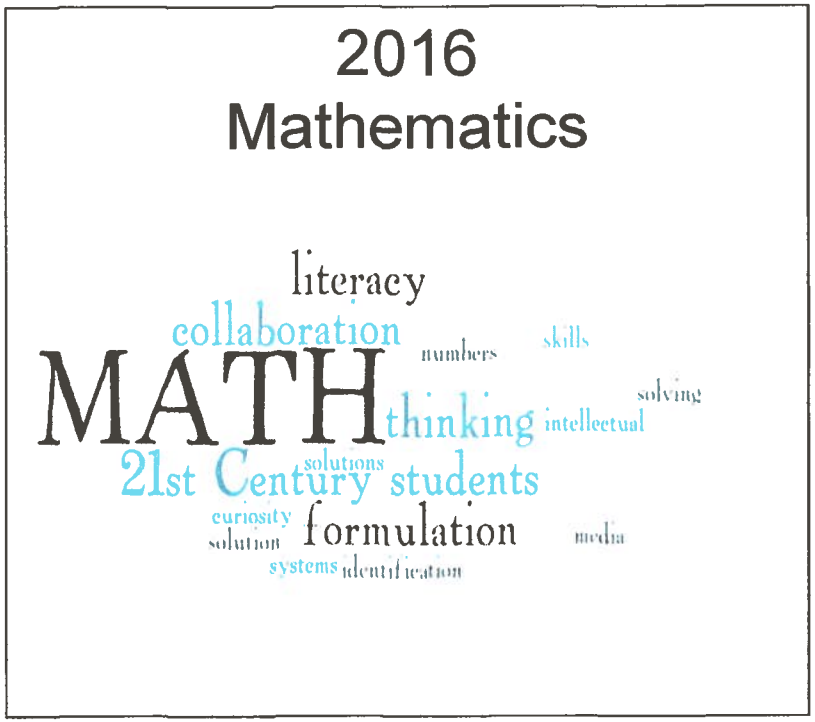
Substantial evidence clearly supports the designation of this program as Component.

Intervention Program- a program designed and intended to target and support students' specific needs.
Substantial evidence clearly supports the designation of this program as Intervention.



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- **Focus** strongly where the Standards focus
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Evaluating instructional materials requires both subject-matter and pedagogical expertise. Evaluators should be well versed in the Standards (www.corestandards.org/Math) for all grades in which materials are being evaluated. This includes understanding the Major Work of the grade (www.achievethecore/focus), the Supporting and Additional work, how the content fits into the progressions in the Standards (www.achievethecore.org/progressions), and the expectations of the Standards with respect to conceptual understanding, procedural skill and fluency, and application. Evaluators also should be familiar with the substantial instructional Shifts (http:// www.corestandards.org/other-resources/key-shifts-in-mathematics/) of Focus, Coherence and Rigor that are listed above.

Getting Started
Prior to Evaluation

Assemble all of the materials necessary for the evaluation. It is essential for evaluators to have materials for all grades covered by the program, as some criteria cannot be rated without having access to each grade. In addition, each evaluator should have a reference copy of the Common Core State Standards for Mathematics (CCSSM) and the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013).

Before conducting the evaluation itself, it is important to develop a protocol for the evaluation process. The protocol should include having evaluators study the Publishers' Criteria and the IMET. It will also be helpful for evaluators to get a sense of each program overall before beginning the process. At a minimum, this would include reading the front matter of the text, looking at the table of contents and paging through multiple chapters.

Sections 1-3 below should be completed to produce a comprehensive picture of the strengths and weaknesses of the materials under evaluation. Information about areas in need of improvement or supplementation should be shared with internal and external stakeholders.

Navigating the Tool

Begin with Section 1: Non-Negotiable Alignment Criteria

- The Non-Negotiable Alignment Criteria must each be met in full for materials to be considered aligned to the Shifts and the major features of the Common Core State Standards. Each Non-Negotiable Alignment Criterion has one or more metrics associated with it; every one of these metrics must be met in order for the criterion as a whole to be met.

- Examine the relevant materials and use evidence to rate the materials against each criterion and its associated metric(s).

- Record and explain the evidence upon which the rating is based.

Continue to Section 2: Alignment Criteria

- The Alignment Criteria must each be met for materials to be considered aligned to the Shifts and the major features of the Common Core State Standards. Each Alignment Criterion has one or more metric associated with it; a specific number of these metrics must be met or partially met in order for the criterion as a whole to be met.

- Examine the materials in relation to these criteria, assigning each metric a point value. Rate the criterion as "Meets" or "Does Note Meet" based on the number of points assigned. The more points the materials receive on the alignment Criteria, the better they are aligned.

- Record and explain the evidence upon which the rating is based.

Proceed to Section 4: Indicators of Quality

- Indicators of Quality are important considerations that will help evaluators better understand the overall quality of instructional materials. These considerations are not criteria for alignment to the CCSS, but they provide valuable information about additional program characteristics. Evaluators may want to add their own indicators to the examples provided.

Directions for Non-Negotiable 1

Freedom from Obstacles to Focus

Criterion	Evidence- Give specific examples.	Rating: (Reviewer only.)
Non-Negotiable 1: **Freedom from Obstacles to Focus** **Materials must reflect the content architecture of the Standards by not assessing the topics named before the grade level where they first appear in the Standards.** The Standards foster students' progress to algebra by focusing strongly on arithmetic. Consistent with this focus, certain topics from outside of arithmetic appear only in later grades. Thus, to be aligned, materials must reflect the content architecture of the Standards by not assessing the topics named before the grade level where they first appear in the Standards. In this criterion, "topics named" means the topics that are explicitly named in Metric 1A. No other topics should be added to the list in Metric 1A. (Note that other topics in the standards are addressed in criterion NN2.)	**Required Materials** • Common Core State Standards for Mathematics (www.corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf) • From the materials being evaluated: teacher guides and all assessment components	**Rating this Criterion**: Non-Negotiable 1 is rated as Meets or Does Not Meet. To rate Non-Negotiable 1, begin by rating Metric 1A. Since Metric 1A is the only metric for Non-Negotiable 1, the rating for Non-Negotiable 1 is the same as the rating for Metric 1A. If Metric 1A is rated as Does Not Meet, include evidence of when the named topic(s) is/are assessed. If the metric is rated as Meets, list the grade(s) examined in the evaluation.

Metric NN1A: **Materials re[illegible]t the basic architecture of the Standards by not assessing the listed topics before the grade level indicated.** • Probability, including chance, likely outcomes, probability models. (Introduced in the CCSSM in grade 7) • Statistical distributions, including center, variation, clumping, outliers, mean, median, mode, range, quartiles; and statistical association or trends, including two-way tables, bivariate measurement data, scatter plots, trend line, line of best fit, correlation. (Introduced in the CCSSM in grade 6) • Similarity, congruence, or geometric transformations. (Introduced in the CCSSM in grade 8) • Symmetry of shapes, including line/ reflection symmetry, rotational symmetry. (Introduced in the CCSSM in grade 4) **How to Find the Evidence:** Evaluate the table of contents, all chapter tests, all unit tests, and other such assessment components (including rubrics). For context, read Criterion #2 from the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013). NOTE: Grade alignments of other topics are addressed in Non-Negotiable 2, Focus and Coherence.) In this criterion, "topics named" means the topics that are explicitly named in Metric 1A. No other topics should be added to the list in Metric 1A. (Note that other topics in the standards are addressed in criterion NN2.)	Evidence- Assesses materi[illegible]nly at grade level, does include some lower level work but only for understanding of 8th grade standards.	**(Reviewer only.)** **__x__Meets** **____Does Not Meet**
Non-Negotiable 1: Materials must reflect the content architecture of the Standards by not assessing the topics named* before the grade level where they first appear in the Standards. **NN 1** If Metric 1A was rated as Meets, then rate Non-Negotiable 1 as Meets. If Metric 1A was rated as Does Not Meet, then rate Non- Negotiable 1 as Does Not Meet. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion.**(Reviewer only.)** **Before moving to Non-Negotiable 2, record the final Meets or Does Not Meet rating in the Evaluation Summary.**		**(Reviewer only.)** **__x__Meets** **____Does Not Meet** **Strengths/Weaknesses:**

Directions for Non-Negotiable 2

Focus and Coherence

Non-Negotiable 2: **Focus and Coherence** **Materials must focus coherently on the Major Work of the grade in a way that is consistent with the progressions in the Standards.** Focus and coherence are the two major evidence-based design principles of the Common Core State Standards for Mathematics (CCSSM, p. 3). Focus is necessary in order to fulfill the ambitious promise the states have made to their students by adopting the Standards: greater achievement at the college and career ready level; greater depth of understanding of mathematics; and a rich classroom environment in which reasoning, sense-making, applications, and a range of mathematical practices flourish. In simpler terms, a mile-wide, inch-deep curriculum translates to less time per topic. Less time means less depth and moving on without many students. Thus, materials must focus coherently on the Major Work of the grade in a way that is consistent with the progressions in the Standards.	**Required Materials** • Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf) • Focus by Grade Level for the grade being evaluated (www.achievethecore.org/focus) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion:** Non-Negotiable 2 is rated as Meets or Does Not Meet. To rate Non-Negotiable 2, first rate metrics 2A–2H. Each of these eight metrics must be rated as Meets in order for Non-Negotiable 2 to be rated as Meets. Rate each metric 2A-2H as Meets or Does Not Meet/Insufficient Evidence. If the evidence examined shows that the Criterion is met, then mark the Criterion Meets. If the evidence examined shows that the Criterion is not met—or if there is insufficient evidence to make a determination—then mark the Criterion as Does Not Meet/Insufficient Evidence. Support all ratings with evidence.
Metric NN2A: **In each grade K–8, students and teachers using the materials as designed devote the large majority of time to the Major Work of the grade.** **How to Find the Evidence:** Familiarize yourself with the Major Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, lessons, homework assignments, and assessments. (Evaluate both student and teacher materials.) Consider time spent on the Major Work of the grade and judge qualitatively whether students and teachers using the materials as designed will devote the large majority of time to the Major Work of the grade. For context, read Criterion #1 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013)	Evidence- The major works of each grade are a focus through the digits program. Access material needed for 8th grade. Topics 1, 3, 5 , 6, 7, 8, 9, 10, 12 cover major works of the grade.	**(Reviewer only.)** **__x__Meets** **____Does Not Meet/** **Insufficient Evidence**

Metric NN2B: **Supporting work, where present, enhances focus and coherence simultaneously by also engaging students in the Major Work of the grade.** **How to Find the Evidence:** Familiarize yourself with the Major Work and Supporting Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate chapters and lessons that focus on Supporting Work. NOTE: Example of evaluating this Criterion might include looking at whether materials for K–5 generally treat data displays as an occasion for solving grade-level word problems using the four operations (e.g., see 3.MD.B.3); or whether materials for grade 7 take advantage of opportunities to use probability to support ratios, proportions, and percentages. For context, read Criterion #3 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	Evidence- Supporting work where present, enhances focus and coherence simultaneously by also engaging students in the major work of the grade. Grade 8 supports include: Know that there are numbers that are not rational, and approximate them by rational numbers. Topic 1	**(Reviewer only.)** **_x___Meets** **____Does Not Meet/ Insufficient Evidence**
Metric NN2C: **Materials base content progressions on the grade-by-grade progressions in the Standards. Content from previous or future grades does not unduly interfere with or displace on-grade-level content.** **How to Find the Evidence:** Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, and lessons in both student and teacher materials. NOTE: In some cases it may be possible that aligned materials might address some aspects of a topic in a strategic way before or after the grade level in which the topic is central in the Standards' progressions; for example, a curriculum author might purposefully choose to explore adding fractions with unlike denominators in a way appropriate to grade four, recognizing that this work is not really required until the next grade. However, any such purposeful discrepancies in content progressions should enhance the required learning in each grade; not unduly interfere with or displace grade-level content; and be clearly aimed at helping students meet the Standards as written rather than effectively rewriting the progressions in the Standards. And in all cases, note that Non-Negotiable 1 must be met for materials to be aligned. For context, read Criterion #5a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** The content progressions of digits align to the progressions in standards. Content from previous grades does not interfere but aids in the development of on grade level content. Topic 8 further explores rational numbers from previous grades.	**(Reviewer only.)** **__x__Meets** **____Does Not Meet/ Insufficient Evidence**

Metric NN2D: **Materials gi[illegible]ll students extensive work with on-grade-level problems.** **How to Find the Evidence:** Evaluate both student and teacher materials. If the materials provide resources for differentiated learning, consider whether lower-performing students have opportunities to engage with grade-level problems. Also consider whether higher-performing students are given opportunities to learn current grade-level content in greater depth. For context, read Criterion #5b in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** All lessons are at[illegible]ade level. There are intervention lessons listed in the teacher's guide for each topic. Intervention only uses previous standard to enhance understanding.	**(Reviewer only.)** **__x__Meets** **____Does Not Meet/ Insufficient Evidence**
Metric NN2E: **Materials relate on-grade-level concepts explicitly to prior knowledge from earlier grades.** **How to Find the Evidence:** Evaluate both student and teacher materials. NOTE: Examples of evaluating this Criterion might include looking at the way the materials extend basic ideas of place value across the decimal point; or the role that properties of operations play when the materials extend arithmetic beyond whole numbers to fractions, variables, and expressions. More generally, cluster headings in the Standards sometimes signal key moments where reorganizing and extending previous knowledge is important in order to accommodate new knowledge (e.g., see cluster headings that use the phrase "Apply and extend previous understanding"). For context, read Criterion #5c in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Materials build on prior knowledge and there is a thoughtful progression of concepts from grade to grade. Topic 14 8.SP.A make connections to functions major content 8.F.B where students use scatterplots to interpret relationships within a function. Topic 2 linear equations builds on prior knowledge of algebraic expressions from grade 7.	**(Reviewer only.)** **____Meets** **____Does Not Meet/ Insufficient Evidence**
Metric NN2F: **Review of material from previous grades is clearly identified as such to the teacher, and teacher and students can see what their specific responsibility is for the current year.** **How to Find the Evidence:** Evaluate the table of contents, but do not stop there; also evaluate units, chapters, lessons, homework assignments and assessments. (Evaluate both student and teacher materials.) Identify any content from previous grades and check whether it is identified as such. For context, read Criterion #5a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** The only previous skills are taught only in specific lessons and only to support understanding of material for 8th grade.	**(Reviewer only.)** **__x__Meets** **____Does Not Meet/ Insufficient Evidence**

Metric NN2G: **Materials include learning objectives that are visibly shaped by CCSSM cluster headings.** **How to Find the Evidence:** Select several clusters from the Major Work in the grade being evaluated. Evaluate teacher and student materials in relation to these clusters. For context, read Criterion #6a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	Evidence- In the teacher's guide in Ebook there are standards and lessons shaped by the cluster headings. There is a list of lesson correlation tied to mathematical practices and standards. Topic 7 lesson 3 is shaped by the cluster heading under 8.F.	**(Reviewer only.)** **__x__Meets** **____Does Not Meet/ Insufficient Evidence**
Metric NN2H: **Materials include problems and activities that serve to connect two or more clusters in a domain, or two or more domains in a grade, in cases where these connections are natural and important.** **How to Find the Evidence:** In the grade being evaluated, choose two or more clusters or two or more domains for which connections are natural and important. Evaluate the units, chapters, and lessons that deal with the chosen topics, looking for problems and activities that serve to connect the chosen clusters or domains. NOTE: An example of evaluating this Criterion might include looking at whether problems in grade 4 sometimes or often involve students applying their developing computation skills (detailed in domain NBT) in the context of solving word problems (detailed in domain OA). For context, read Criterion #6b in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	Evidence- There are connections between clusters but not as many as expected. There are many connections within the domains but few connections between domains. For example there is a connection in Topic 7 lesson 5 the lesson combines two cluster headings. "Define, evaluate, and compare functions." and "Use functions to model relationships between quantities."	**(Reviewer only.)** **__x__Meets** **____Does Not Meet/ Insufficient Evidence**
Non-Negotiable 2: **Focus and Coherence** **Materials must focus coherently on the Major Work of the grade in a way that is consistent with the progressions in the Standards.** NN 2 If all Metrics 2A – 2H were rated as Meets, then rate Non-Negotiable 2 as Meets. If one or more Metric was rated Does Not Meet/Insufficient Evidence, then rate Non-Negotiable 2 as Does Not Meet. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)** **Before moving to Alignment Criterion 1, record the final Meets or Does Not Meet rating in the Evaluation Summary.**		**(Reviewer only.)** **__x__Meets** **____Does Not Meet** **Strengths/Weaknesses:**
Now continue by evaluating the Alignment Criterion 1 for Rigor and Balance.		

Directions for Alignment Criterion 1

Rigor and Balance

Alignment Criterion 1: Rigor and Balance **Materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.** The Standards set expectations for attention to all three aspects of rigor: conceptual understanding, procedural skill and fluency, and applications. Thus, materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.	**Required Materials** • Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf) • Focus by Grade Level for the grade being evaluated (achievethecore.org/focus) • Situation Types for the Operations in Word Problems (achievethecore.org/situation-types) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion:** Alignment Criterion 1 is rated as Meets or Does Not Meet. To rate Alignment Criterion 1, first rate metrics 1A, 1B, and 1C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). For each metric, guiding questions are provided to aid in gathering evidence. Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 1 if the materials rate 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as rigor and balance, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.
Metric AC1A: **The materials support the development of students' conceptual understanding of key mathematical concepts, especially where called for in specific content Standards or cluster headings.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Major Work for the grade being evaluated that relate specifically conceptual understanding to use throughout the questions associated with this metric. NOTE: Some examples of clusters or Standards that call for conceptual understanding include: K.OA.A.1, (1.NBT.B, 1.NBT.C), (2.NBT.A, 2.NBT.B), (3.OA.A.1, 3.OA.A.2), 4.NF.A, (4.NBT.A, 4.NBT.B), 5.NF.B, (5.NBT.A, 5.NBT.B), 6.RP.A, 6.EE.A.3, 7.NS.A, 7.EE.A, 8.EE.B, 8.F.A, 8.G.A Clusters or Standards grouped by parentheses are closely connected and could be analyzed together. For context, read Criterion #4a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	-Choose a cluster/Standard from the Major Work that is aligned to each aspect of rigor and use it to evaluate these metrics. It is most helpful if the same clusters/Standards are chosen for all of the programs being evaluated. (Guidance in choosing clusters/Standards is included in "How to Find the Evidence".)	**Use the questions for AC Metric 1A to evaluate Metric 1A. Record evidence for each question and rate Metric 1A.** **__x__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**

Is conceptual understanding attended to thoroughly where the Standards set explicit expectations for understanding or interpreting? Evaluate lessons, chapter/unit assessments and homework assignments, paying attention to work aligned to Standards that explicitly call for understanding or interpreting. NOTE: Examples of evaluating this Criterion might include looking at how well the multi-digit addition and subtraction algorithms are developed and explained on the basis of place value and properties of operations; or how well the multi-digit multiplication and division algorithms are developed and explained on the basis of place value and properties of operations; or how well solving equations is presented and explained as a process of reasoning.	**Evidence-** There are several lessons throughout the text that the process of reasoning is evident. Topic 5 lessons 1-6 do a great job of getting students to interpret and produce conceptual understandings of the curriculum.	
Do the materials feature high-quality conceptual problems and conceptual discussion questions? Evaluate lessons, chapter/unit assessments, and homework assignments. NOTE: Example of conceptual problems might include such questions as "Find a number greater than 1/5 and less than 1/4," or "If the divisor does not change and the dividend increases, what happens to the quotient?"	**Evidence-** The digits program has high quality problems throughout each lesson. There are reflection question, focus questions, and reasoning questions at the end of each lesson. Topic 5 lesson 2 reasoning question.	
Do the materials feature opportunities to identify correspondences across mathematical representations? Evaluate lessons, chapter/unit assessments and homework assignments. NOTE: Examples of evaluating this Criterion might include looking at whether students are supported in identifying correspondences among: the verbal description of a situation, the diagrams that distill its mathematical features, and the equations that model it; or equivalent forms of numbers (e.g., 3 and 6/2) and the number line; or rational number operations and representations of them via models such as the vector model; or the expression that defines a function and the graph that shows the relationship.	**Evidence-** The launch at the beginning of each lesson sometimes uses multiple representations to present the concepts within the lesson. Topic 6 lesson 1 the launch uses number lines, number chips, and equations to represent positive and negative integers.	
Metric AC1B: **The materials are designed so that students attain the fluencies and procedural skills required by the Standards.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Major Work for the grade being evaluated that relate specifically to fluency and procedural skill to use throughout the questions associated with this metric. NOTE: Some examples of Standards that call for procedural skill and fluency include: K.OA.A.5, 1.OA.C.6, 2.OA.B.2, 2.NBT.B.5, 3.OA.C.7, 3.NBT.A.2, 4.NBT.B.4, 5.NBT.B.5, 6.NS.B.2, and 6.NS.B.3, 6.EE.A, 7.NS.A, 7.EE.A.1,7.EE.B.4a, 8.EE.C.7, 8.EE.C.8b For context, read Criterion #4b in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).		**Use the questions for Metric 1B to evaluate Metric 1 B. Record evidence for each question and rate Metric 1B.** **(Reviewer only.)** **___x_Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**

Is progress toward fluency and procedural skill interwoven with students' devel conceptual understanding of the operations in question? Evaluate lessons, chapter/unit assessments, daily routines, and homework assignments for evidence that the development of fluency and procedural skill is supported by conceptual understanding.	**Evidence-** Fluency standards EE.C.7 and 8.EE.C.8.B solving equation in 1 variable, Topic 2 does not have enough practice problems that are procedural to build fluency. Also Topic 6 systems of linear equation not enough practice problems.	
Are purely procedural problems and exercises present that include cases in which opportunistic strategies are valuable and generic cases that require efficient algorithms present? Evaluate lessons, chapter/unit assessments, daily routines, and homework assignments. NOTE: Examples of problems in which opportunistic strategies are valuable might include the sum 698 + 240 or the system x + y = 1, 2x + 2y = 3. Examples of generic cases that require efficient algorithms might include the sum 8767+2286 or the system 6y + x = x + 3, – x = 1 + 2y.	**Evidence-** The digits program shows students multiple strategies to solve problems. The practice and homework problems from the homework helper are not procedural enough. The digital online homework gives some procedural practice.	
Do the materials in grades K–6 provide repeated practice toward attainment of fluency Standards? Evaluate lessons, daily routines, and homework assignments for evidence of repeated practice toward attainment of the following K–6 Standards that set an explicit expectation of fluent (accurate and reasonably fast) computation: K.OA.A.5, 1.OA.C.6, 2.OA.B.2, 2.NBT.B.5, 3.OA.C.7, 3.NBT.A.2, 4.NBT.B.4, 5.NBT.B.5, 6.NS.B.2, 6.NS.B.3.	**Evidence-** **N/A**	
Metric AC1C: **The materials are designed so that teachers and students spend sufficient time working with engaging applications, without losing focus on the Major Work of each grade.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Major Work for the grade being evaluated that relate specifically application to use throughout the questions associated with this metric. NOTE: Some examples of clusters or Standards that call for application include: K.OA.A.2, 1.OA.A, 2.OA.A, 3.OA.A.3, 3.OA.D.8, 4.OA.A.3, 4.NF.B.3d, 4.NF.B.4c, 5.NF.B.6, 5.NF.B.7c, 6.RP.A.3, 6.NS.A.1, 6.EE.B.7, 6.EE.C.9, 7.RP.A, 7.NS.A.3, 7.EE.B.3, 8.EE.C.8c, 8.F.B For context, read Criterion #4c in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Enrichment project and "Got It" questions in the student companion are the major source of multistep problems. Few multi step problems in each homework set most are procedural.	**Use the questions for Metric 1C to evaluate Metric 1C. Record evidence for each question and rate Metric 1C.** **(Reviewer only.)** **__x__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Are there are single- and multi-step contextual problems, including non-routine problems, that develop the mathematics of the grade, afford opportunities for practice, and engage students in problem solving? Do the problems attend thoroughly to those places in the content Standards where expectations for multi-step and real-world problems are explicit? Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** Real world and multi-step problems are utilized in every lesson to engage students in practicing math. Topic 9 lesson 5 students are asked to come up with multiple strategies to solve the problem.	

Do application problems particularly stress applying the Major Work of the grade? Eva lessons, chapter/unit assessments, and homework assignments. NOTE: Examples of evaluating this Criterion might include looking at: how well, by the end of grade 2, students using the materials as designed can represent and solve a full range of one-step addition and subtraction word problems; or how well, by the end of grade 3, students using the materials as designed can represent and solve a full range of one-step multiplication and division word problems; or how well these basic situation types for each operation are carried coherently across the grades, (e.g., with fractions and algebraic expressions); or, in all grades, whether the problems connect concepts, Standards, and domains in ways that are natural and important. For a list of situation types for one-step addition, subtraction, multiplication, and division problems, see Situation Types for the Operations in Word Problems	**Evidence-** There are 7 major ks of grade 8 and the problems in each lesson focus on the major work of the grade.	
Does modeling build slowly across K–8, with applications that are relatively simple in earlier grades and when students are encountering new content? In grades 6–8, do the problems begin to provide opportunities for students to make their own assumptions or simplifications in order to model a situation mathematically? Read Standard for Mathematical Practice 4, Model with Mathematics. Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** There is evidence of modeling from previous years to current concepts such as Topic 14 lesson 3 students are to look at a scatter plot and think about what the data would look like if it was displayed as a box plot or stem and leaf plot.	

Alignment Criterion 1: Rigor and Balance

Materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.

(Reviewer only.)

__x__Meets

____Does Not Meet

Strengths/Weaknesses:

AC1 Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 out of 6 points, the Criterion has not been met. Check the final rating.
Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)**

Before moving to Alignment Criterion 2, record the final Meets or Does Not Meet rating in the Evaluation Summary.

Directions for Alignment Criterion 2

Standards for Mathematical Practice

Alignment Criterion 2: Standards for Mathematical Practice

Materials must demonstrate authentic connections between content Standards and practice Standards.

The Standards require that designers of instructional materials connect the mathematical practices to mathematical content in instruction. Thus, materials must demonstrate authentic connections between content Standards and practice Standards.

Required Materials:

- Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf)
- Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)
- Focus by Grade Level for the grade being evaluated (www.achievethecore.org/focus)
- From the materials being evaluated: teacher guides, student texts and workbooks

Rating this Criterion

Alignment Criterion 2 is rated as Meets or Does Not Meet.

To rate Alignment Criterion 2, first rate metrics 2A, 2B, and 2C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). For each metric, guiding questions are provided to aid in gathering evidence.

Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 2 if the materials earn 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as mathematical practices, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.

Metric AC2A:

Materials address the practice Standards in such a way as to enrich the Major Work of the grade; practices strengthen the focus on Major Work instead of detracting from it, in both teacher and student materials.

How to Find the Evidence:

Familiarize yourself with the Major Work of the grade being evaluated (see the Focus by Grade Level documents.)

Evaluate teacher and student materials for evidence that the mathematical practices support and connect to the focus of the grade.

NOTE: Examples of evaluating this Criterion might include looking at whether, in grades K–5, students using the materials are supported to look for and express regularity in repeated reasoning about the addition table, the multiplication table, the properties of operations, the relationship between addition and subtraction or multiplication and division, and the place value system; or whether, in grades 6–8, students using the materials are supported to look for and express regularity in repeated reasoning about proportional relationships and linear functions.

For context, read Criterion #8 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013).

Evidence-

Mathematical Practices standards are linked to topics and lessons in the teachers Ebook preparation notes. But not mentioned in the printed materials and just listed by MP number in student materials.

(Reviewer only.)

__x__Meets (2)

____Partially Meets (1)

____Does Not Meet (0)

Metric AC2B: **Materials a[illegible]d to the full meaning of each practice Standard.** **How to Find the Evidence:** For context, read Criterion #7 and Criterion #9 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).		**Use the questions for Metric 2B to evaluate Metric 2B. Record evidence for each ques[illegible]and rate Metric 2B.** **(Reviewer only.)** **__x__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Over the course of any given year of instruction, is each mathematical practice Standard meaningfully present in the form of assignments, activities, or problems that stimulate students to develop the habits of mind described in the practice Standard? Evaluate lessons, chapter/ unit assessments, and homework assignments for evidence of each mathematical practice being meaningfully present in instruction.	Evidence- The online teacher's Ebook fully incorporates the mathematical practice standards throughout each unit.	
Do the materials treat the practice Standards as developing across grades or grade bands? Are the practice Standards in early grades appropriately simple? Do they display an arc of growing sophistication across the grades?	Evidence- N/A	
Are there teacher-directed materials that explain the role of the practice Standards in the classroom and in students' mathematical development? Are alignments to practice Standards accurate?	Evidence- The Mathematical Practice Standards are listed and connected in the Teacher's Ebook only.	
Metric AC2C: **Materials support the Standards' emphasis on mathematical reasoning.** **How to Find the Evidence:** For context, read Criterion #10 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).		**Use the questions for Metric 2C to evaluate Metric 2C. Record evidence for each question and rate Metric 2C.** **(Reviewer only.)** **_x___Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Do the materials support students in constructing viable arguments and critiquing the arguments of others concerning grade-level mathematics that is detailed in the content Standards? Read Standard for Mathematical Practice 3. Evaluate teacher and student materials to ensure that students are given opportunities to reason with grade-level mathematics.	Evidence- The materials support students in constructing viable arguments and critiquing the work of others in the Error Analysis problems and Reasoning problems in the homework helper. The reasoning and error analysis is also addressed in the Close and Check of each topic. Topic 8 lessons 1 and 5	

Do the materials support students in producing not only answers and solutions, but a... a grade-appropriate way, arguments, explanations, diagrams, mathematical models, etc., especially in the Major Work of the grade? Familiarize yourself with the Major Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate teacher and student materials, to understand the types of work students are expected to produce.	Evidence- In each lesson, gr... discussion is encouraged in the launch of the lesson and in the teachers Ebook it is suggested that asked to work in groups as they solve the problems. Topic 13 lesson 6 Got it part 1 and 2.	
Do materials explicitly attend to the specialized language of mathematics? Is the language of argument, problem solving, and mathematical explanations taught rather than assumed? Evaluate teacher and student materials, paying attention to how mathematical language is taught. NOTE: Examples of evaluating this Criterion might include looking at whether students are supported in: basing arguments on definitions; using the method of providing a counterexample; or recognizing that examples alone do not establish a general statement.	Evidence- The vocabulary is listed at the beginning of the topic and lesson in the key terms and includes definitions to be used throughout the lesson.	
Alignment Criterion 2: **Standards for Mathematical Practice** **Materials must demonstrate authentic connections between content Standards and practice Standards.** **AC2** Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 out of 6 points, the Criterion has not been met. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)** **Before moving to Alignment Criterion 3, record the final Meets or Does Not Meet rating in the Evaluation Summary.**		**(Reviewer only.)** **__x__Meets** **____Does Not Meet** **Strengths/Weaknesses:**

Alignment Criterion 3: **Access to the Standards for All Students** **Materials must provide supports for English Language Learners and other special populations.** Because Standards are for all students, alignment requires thoughtful support to ensure all students are able to meet the Standards. Thus, aligned materials must provide supports for English Language Learners and other special populations.	**Required Materials:** • Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion:** Alignment Criterion 3 is rated as Meets or Does Not Meet. To rate Alignment Criterion 3, first rate metrics 3A, 3B, and 3C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 3 if the materials earn 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as support for special population, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.
Metric AC3A: **Support for English Language Learners and other special populations is thoughtful and helps those students meet the same Standards as all other students. The language in which problems are posed is carefully considered.** **How to Find the Evidence:** Evaluate teacher and student materials, paying attention to supports offered for special populations.	**Evidence-** Digits online has a high visual design to the program the core instruction online is also available in English or Spanish. The preparation notes for each lesson includes differentiation strategies designed to target ELL students.	**Reviewer only.)** **_x__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Metric AC3B: **Materials provide appropriate level and type of scaffolding, differentiation, intervention, and support for a broad range of learners with gradual removal of supports, when needed, to allow students to demonstrate their mathematical understanding independently.** **How to Find the Evidence:** Evaluate teacher and student materials, paying attention to whether materials provide differentiation that will lead all learners to engage with on-grade-level content.	Evidence- Digits provides multiple resources with a clear plan on how students can get the help they need to become successful. In the teacher's guide there is a list of alternate strategies, scaffolding ideas, and leveled homework options for students approaching the level, or on level.	**Reviewer only.)** **__x__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Metric AC3C: **Design of lessons recommends and facilitates a mix of instructional approaches for a variety of learners such as using multiple representations (e.g., including models, using a range of questions, checking for understanding, flexible grouping, pair-share).** **How to Find the Evidence:** Evaluate teacher materials, noting instructional approaches suggested for whole class and differentiated lessons and activities.	**Evidence-** Digits lesson are designed to lead students through interactive experience with the content that would be approachable to a variety of learners.	**Reviewer only.)** **__x__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**

Alignment Criterion 3: Access to the Standards for All Students **Materials must provide supports for English Language Learners and other special populations.** **AC3** Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 points, the Criterion has not been met. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion.**(Reviewer only.)** **Move to the Evaluation Summary and record the final Meets or Does Not Meet rating .**	**(Reviewer only.)** **__x__Meets** **____Does Not Meet** **Strengths/Weaknesses:**

Once an evaluation for alignment to the Shifts and major features of the CCSS has been conducted using Sections 1-3, it's important to evaluate for overall quality and best practices. A starting list of Indicators of Quality are suggested below. States, districts and others evaluating instructional materials are encouraged to add to this list to ensure materials reflect local contexts. For background information on some of the Indicators of Quality in this section, refer to pp.18–21 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).

Indicators of Quality	Evidence- Give specific examples.	Rating: (Reviewers only.)
1. Lessons are thoughtfully structured and support the teacher in leading the class through the learning paths at hand, with active participation by all students in their own learning and in the learning of their classmates.	Evidence- Each chapter starts with multiple ways to start the lesson. The focus and standards are very clear. The teacher notes on the Ebook offer guidance for teachers to facilitate and enhance student's engagement.	**(Reviewer only.)** **___x___ Yes** **_____ No**
2. The underlying design of the materials includes both problems and exercises. (In solving problems, students learn new mathematics, whereas in working exercises, students apply what they have already learned to build mastery.) Each problem or exercise has a purpose. **NOTE: This Criterion does not require that the problems and exercises be labeled as such.**	Evidence- The lesson structure clearly distinguishes between problems to be worked during the lesson and homework exercises to be used for practicing the concept.	**(Reviewer only.)** **__x____ Yes** **_____ No**

3. Design of assignments is not haphazard: exercises are given in intentional sequences in order to strengthen students' mathematical understanding.	Evidence- The sequencing provide students away to strengthen their understanding.	**(Reviewer only.)** **___x___ Yes** **_____ No**
4. There are separate teacher materials that support and reward teacher study including, but not limited to: discussion of the mathematics of the units and the mathematical point of each lesson as it relates to the organizing concepts of the unit, discussion on student ways of thinking and anticipating a variety of students responses, guidance on lesson flow, guidance on questions that prompt students thinking, and discussion of desired mathematical behaviors being elicited among students.	Evidence- The teacher materials online support the main focus of the lesson, essential questions to ask, the mathematical standards, scaffolding ideas, and a progression of the learning.	**(Reviewer only.)** **_x_____ Yes** **_____ No**
5. Manipulatives suggested in the materials are faithful representations of the mathematical objects they represent and are connected to written methods.	Evidence- The program has digital manipulatives online for students to use to solve problems.	**(Reviewer only.)** **____x__ Yes** **_____ No**
6. Materials include a variety of curriculum-embedded assessments. Examples include pre-, formative, summative, and self-assessment resources.	Evidence- Teacher materials online contain a variety of pretests to help design instruction, student self-reflective assessments and posttests.	**(Reviewer only.)** **____x__ Yes** **_____ No**
7. Assessments contain aligned rubrics, answer keys, and scoring guidelines that provide sufficient guidance for interpreting student performance.	Evidence- Did not find rubrics but assessments have answer keys and ways to interpret pretests.	**(Reviewer only.)** **__x____ Yes** **_____ No**
8. Materials assess student proficiency using methods that are accessible and unbiased, including the use of course-level language in student prompts.	Evidence- Language for the lessons, examples and assessments us grade level language and situations.	**(Reviewer only.)** **____x__ Yes** **_____ No**

9. Materials are carefully evaluated by qualified individuals, whose names are listed, in an effort to ensure freedom from mathematical errors and course-level appropriateness.	Evidence- Listed in teacher's online manual.	**(Reviewer only.)** **___x___ Yes** **_____ No**
10. The visual design supports students in engaging thoughtfully with the subject. Navigation through the text is clear.	Evidence- The design of digits is to be used as an online learning program. The visuals are engaging and interactive yet free of distractions.	**(Reviewer only.)** **___x___ Yes** **_____ No**
11. The materials engage parents in appropriate ways. For example, homework assignments in elementary grades, consist of routine problems, practice with getting answers, and fluency-building exercises that parents can easily support.	Evidence- The digits program involves parents through written letter ideas and being able to access their homework and activities online at any time.	**(Reviewer only.)** **___x___ Yes** **_____ No**

Reviewer IMET Evaluation Summary **Title/Level:** Pearson digits Grade 8

Publisher: Pearson Education, Inc **Copyright:** 2015

ISBN: 9780133314632

Reviewer ID # _____ **Date Review Completed:** 3/9/2016

Non-Negotiable Criteria- Each Non-Negotiable must be met in order for the Non-Negotiable Alignment Criteria to be met overall.

Non-Negotiable 1: Freedom from Obstacles to Focus	Non- Negotiable 2: Focus and Coherence
___x___ Meets	__x___ Meets
_____ Does Not Meet	_____ Does Not Meet

Non-Negotiable Overall:

__x___ Meets _____ Does Not Meet

Alignment Criteria- Each Alignment Criterion must be met with a sufficient number of points in order for Alignment Criteria to be labeled as "Meets" overall. The more points the materials receive on the Alignment Criteria, the better they are aligned.

Alignment Criterion 1: Rigor and Balance	Alignment Criterion 2: Standards of Mathematical Practice	Alignment Criterion 3: Access to Standards for All Learners
Points: ___6__ of 6 possible. (Materials must receive at least 5 of 6 points to align.)	Points: __6___ of 6 possible. (Materials must receive at least 5 of 6 points to align.)	Points: __6___ of 6 possible. (Materials must receive at least 5 of 6 points to align.)
__x_____ Meets	__x_____ Meets	___x____ Meets
_____ Does Not Meet	_____ Does Not Meet	_____ Does Not Meet

Alignment Criteria Overall:

__x___ Meets _____ Does Not Meet

If the materials meet both Non-Negotiables and relevant Alignment Criterion, they are aligned to the Shifts and major features of the Core Standards. **Do the materials meet every Non-Negotiable and Alignment Criterion? __x___ Yes _____ No**

What are the specific areas of strength and weakness based on this evaluation? Publishers or others modifying or developing assessments can use this information to make improvements and/or to remedy gaps in the alignment of assessment materials.

Strengths:
The digits is an online program for 8th grade math. The program includes the CCSSM Standards for 8th grade mathematics and includes work on the domains and clusters for the major work of the grade. The online work is engaging and interactive and includes opputunities for students to progress in their learning. The teacher's online guide provides information for differentiation, ELL learners and middle to low level learners.

Weakness:
The digits program is designed to be an online learning program, students need to have computer access to be successful in the program. The program has few connections between domains, the clusters have a few connections, so is missing key connections between domains. Digits is to be an online program so could be frustrating for students that have low computer skills.

2015-16 Mathematics Interim Review Recommendation & Summary

Publisher Name:	Pearson Education, Inc
Title:	Pearson Connected Math 3 Grade 6
ISBN #	978013329683990000
Grade Level(s) or Course:	6
Reviewer ID:	SW TR DA

RECOMMENDED AS:

____X___**Core Mathematics Program-** a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials. Substantial evidence clearly supports the designation of this program as Core.

_____**Other Mathematics Program-** a program that substantially, but partially, meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for supplemental materials. Substantial evidence clearly supports the designation of this program as Other.

_____**Component Mathematics Program-** a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs. Substantial evidence clearly supports the designation of this program as Component.

_____**Intervention Program-** a program designed and intended to target and support students' specific needs. Substantial evidence clearly supports the designation of this program as Intervention.

_____ **Does not meet criteria** for recommendation as a Curricular Material or Online Resource for Mathematics.

EVIDENCE SUMMARY:

FOCUS-

Approximately 80% of the time is devoted to the Major Work of the grade.

COHERENCE-

The supporting work enhances the focus and coherence of the Major Work throughout the curriculum.

6.NS.B4 is a supporting standard and 6.EE is a Major Work standard and is embedded in that unit.

The Guide to Connected Mathematics 3 provides the alignment of the standards to the units and investigations

RIGOR-

Each lesson includes application, connection, extension, and reflection problems where students are able to apply the Major Work/standards learned in the lesson to solve problems.

Only 2 Investigations (from Data and Statistics) do not explicitly include Standards from the Major Work of the grade.

CONCEPTUAL UNDERSTANDING-

Throughout the materials, the TG describes each Investigation with a Launch and Presenting the Challenge. These include questions, exploration to investigate the challenge, a summary to answer questions, and a reflection of what has been learned.

The Application and Extension sections provide ample opportunities to work single-step problems and multi-step problems.

MATHEMATICAL PRACTICES-

Throughout the materials, MPs are identified at the beginning of each Unit and Investigation. The TG highlights the MPs through questioning and suggests questions for teachers to use to facilitate the mathematical thinking set forth by the Practice Standards.

Each Investigation includes specific questions for students to reflect on the Practice Standards called Math Reflections.

ACCESSIBILITY OF STANDARDS TO ALL STUDENTS-

Scaffolding and differentiation is provided throughout the curriculum. Open-ended questions allow for students to show their individual understanding at their own level. The real life problems u[illegible]ized improves the motivation and participation of special needs students.

"Providing for Individual Needs" gives teachers ideas of what they can do for differentiation and scaffolding.

"[illegible]ing Further" gives teachers ideas of what they can do for more advanced students beyond the basic curriculum.

OTHER:

A high degree of cultural diversity in the images, names, and mathematical situations presented in the materials.
Different levels of student ability are addressed and considered to ensure access for all.
The materials include extensive background in ensuring success with implementation including *building and strengthening teacher's mathematical background*, *physical classroom set up*, classroom culture, and even how to work with substitutes (guest teachers).

2015-16 Interim Mathematics Review

Mathematics Evaluation Tool Grades K-8

Publisher: Pearson Education, Inc.

Title of Material: Pearson Connected Mathematics 3 Grade 6

Author: Lappan et al

ISBN #: 9780133296839900000 **Copyright** 2014

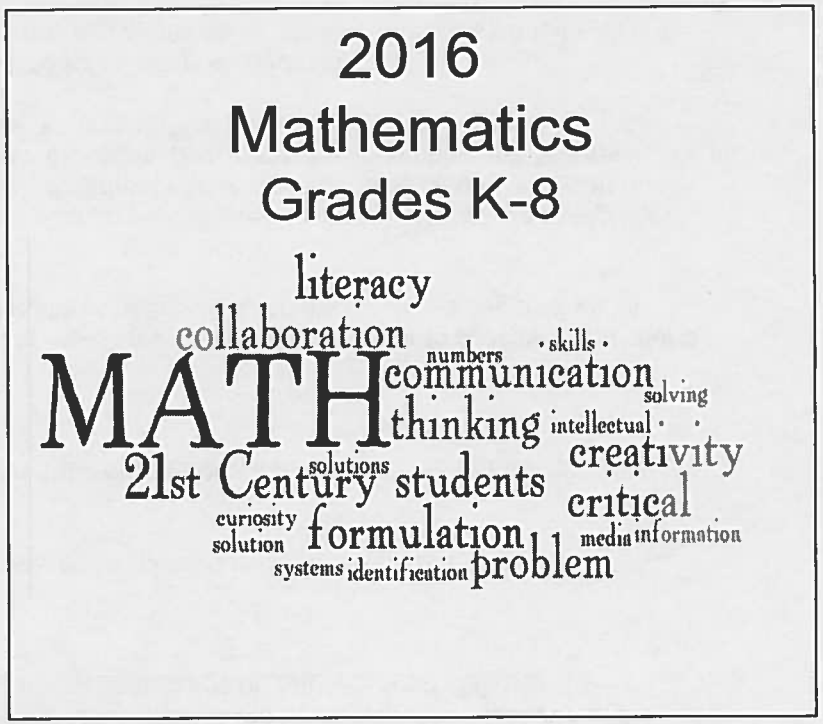
Reviewer ID: SW TR DA

Core Mathematics Program- a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Core.

Other Mathematics Program- a program that substantially, but partially, meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Other.

Component Mathematics Program- a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs.
Substantial evidence clearly supports the designation of this program as Component.

Intervention Program- a program designed and intended to target and support students' specific needs.
Substantial evidence clearly supports the designation of this program as Intervention.



- Evaluation Form adapted from Instructional Materials Evaluation Toolkit (IMET).

The IMET was developed by Student Achievement Partners. Educators may use or adapt. http://creativecommons.org/licenses/by/3.0/ Download this tool at http://achievethecore.org/IMET

Instructional Materials Evaluation Tool
Mathematics, Grades K-8

What Are the Purposes of the IMET?
This Math IMET is designed to help educators determine whether instructional materials are aligned to the Shifts and major features of the Common Core State Standards (CCSS). The substantial instructional Shifts (http://www.corestandards.org/other-resources/key-shifts-inmathematics/) at the heart of the Common Core State Standards are:
- **Focus** strongly where the Standards focus
- **Coherence**: Think across grades and link to major topics within the grade
- **Rigor**: In major topics, pursue conceptual understanding, procedural skill and fluency, and application with equal intensity.

The IMET draws directly from the following documents:
- Common Core State Standards for Mathematics (www.corestandards.org/Math)
- Publishers' Criteria for the Common Core State Standards in Mathematics grade K-8 (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)

When to use the IMET
1. Purchasing materials: Many factors go into local purchasing decisions. Alignment to the Standards is a critical factor to consider. This tool is designed to evaluate alignment of instructional materials to the Shifts and the major features of the CCSS. It also provides suggestions of additional indicators to consider in the materials evaluation and purchasing process.

2. Evaluating materials currently in use: The IMET can be used to analyze the degree of alignment of existing materials and help to highlight specific, concrete flaws in alignment. Even where materials and tools currently in use fail to meet one or more of these criteria, the pattern of failure is likely to be informative. States and districts can use the evaluation to create a thoughtful plan to modify or combine existing resources in such a way that students' actual learning experiences approach the focus, coherence, and rigor of the Standards.

3. Developing programs: Those developing new programs can use this tool as guidance for creating aligned curricula.
Please note this tool was designed for evaluating comprehensive curricula (including any supplemental or ancillary materials), but it was not designed for the evaluation of standalone supplemental materials.

Who Uses the IMET?
Evaluating instructional materials requires both subject-matter and pedagogical expertise. Evaluators should be well versed in the Standards (www.corestandards.org/Math) for all grades in which materials are being evaluated. This includes understanding the Major Work of the grade (www.achievethecore/focus), the Supporting and Additional work, how the content fits into the progressions in the Standards (www.achievethecore.org/progressions), and the expectations of the Standards with respect to conceptual understanding, procedural skill and fluency, and application. Evaluators also should be familiar with the substantial instructional Shifts (http:// www.corestandards.org/other-resources/key-shifts-in-mathematics/) of Focus, Coherence and Rigor that are listed above.

Getting Started
Prior to Evaluation

Assemble all of the materials necessary for the evaluation. It is essential for evaluators to have materials for all grades covered by the program, as some criteria cannot be rated without having access to each grade. In addition, each evaluator should have a reference copy of the Common Core State Standards for Mathematics (CCSSM) and the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013).

Before conducting the evaluation itself, it is important to develop a protocol for the evaluation process. The protocol should include having evaluators study the Publishers' Criteria and the IMET. It will also be helpful for evaluators to get a sense of each program overall before beginning the process. At a minimum, this would include reading the front matter of the text, looking at the table of contents and paging through multiple chapters.

Sections 1-3 below should be completed to produce a comprehensive picture of the strengths and weaknesses of the materials under evaluation. Information about areas in need of improvement or supplementation should be shared with internal and external stakeholders.

Navigating the Tool

Begin with Section 1: Non-Negotiable Alignment Criteria

- The Non-Negotiable Alignment Criteria must each be met in full for materials to be considered aligned to the Shifts and the major features of the Common Core State Standards. Each Non-Negotiable Alignment Criterion has one or more metrics associated with it; every one of these metrics must be met in order for the criterion as a whole to be met.

- Examine the relevant materials and use evidence to rate the materials against each criterion and its associated metric(s).

- Record and explain the evidence upon which the rating is based.

Continue to Section 2: Alignment Criteria

- The Alignment Criteria must each be met for materials to be considered aligned to the Shifts and the major features of the Common Core State Standards. Each Alignment Criterion has one or more metric associated with it; a specific number of these metrics must be met or partially met in order for the criterion as a whole to be met.

- Examine the materials in relation to these criteria, assigning each metric a point value. Rate the criterion as "Meets" or "Does Note Meet" based on the number of points assigned. The more points the materials receive on the alignment Criteria, the better they are aligned.

Record and explain the evidence upon which the rating is based.

Proceed to Section 4: Indicators of Quality

- Indicators of Quality are important considerations that will help evaluators better understand the overall quality of instructional materials. These considerations are not criteria for alignment to the CCSS, but they provide valuable information about additional program characteristics. Evaluators may want to add their own indicators to the examples provided.

Directions for Non-Negotiable 1

Freedom from Obstacles to Focus

Criterion	Evidence- Give specific examples.	Rating: (Reviewer only.)
Non-Negotiable 1: **Freedom from Obstacles to Focus** **Materials must reflect the content architecture of the Standards by not assessing the topics named before the grade level where they first appear in the Standards.** The Standards foster students' progress to algebra by focusing strongly on arithmetic. Consistent with this focus, certain topics from outside of arithmetic appear only in later grades. Thus, to be aligned, materials must reflect the content architecture of the Standards by not assessing the topics named before the grade level where they first appear in the Standards. In this criterion, "topics named" means the topics that are explicitly named in Metric 1A. No other topics should be added to the list in Metric 1A. (Note that other topics in the standards are addressed in criterion NN2.)	**Required Materials** • Common Core State Standards for Mathematics ( ) • Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf) • From the materials being evaluated: teacher guides and all assessment components	**Rating this Criterion**: Non-Negotiable 1 is rated as Meets or Does Not Meet. To rate Non-Negotiable 1, begin by rating Metric 1A. Since Metric 1A is the only metric for Non-Negotiable 1, the rating for Non-Negotiable 1 is the same as the rating for Metric 1A. If Metric 1A is rated as Does Not Meet, include evidence of when the named topic(s) is/are assessed. If the metric is rated as Meets, list the grade(s) examined in the evaluation.

Metric NN1A: **Materials re the basic architecture of the Standards by not assessing the listed topics before the grade level indicated.** • Probability, including chance, likely outcomes, probability models. (Introduced in the CCSSM in grade 7) • Statistical distributions, including center, variation, clumping, outliers, mean, median, mode, range, quartiles; and statistical association or trends, including two-way tables, bivariate measurement data, scatter plots, trend line, line of best fit, correlation. (Introduced in the CCSSM in grade 6) • Similarity, congruence, or geometric transformations. (Introduced in the CCSSM in grade 8) • Symmetry of shapes, including line/ reflection symmetry, rotational symmetry. (Introduced in the CCSSM in grade 4) **How to Find the Evidence:** Evaluate the table of contents, all chapter tests, all unit tests, and other such assessment components (including rubrics). For context, read Criterion #2 from the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013). NOTE: Grade alignments of other topics are addressed in Non-Negotiable 2, Focus and Coherence.) In this criterion, "topics named" means the topics that are explicitly named in Metric 1A. No other topics should be added to the list in Metric 1A. (Note that other topics in the standards are addressed in criterion NN2.)	**Evidence-** All of the CCSS for grade 6 are covered in this curriculum. This curriculum does not assess any content above grade level standards.	**(Reviewer only.)** **__x__Meets** **____Does Not Meet**
Non-Negotiable 1: Materials must reflect the content architecture of the Standards by not assessing the topics named* before the grade level where they first appear in the Standards. **NN 1** If Metric 1A was rated as Meets, then rate Non-Negotiable 1 as Meets. If Metric 1A was rated as Does Not Meet, then rate Non- Negotiable 1 as Does Not Meet. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion.**(Reviewer only.)** **Before moving to Non-Negotiable 2, record the final Meets or Does Not Meet rating in the Evaluation Summary.**		**(Reviewer only.)** **__x__Meets** **____Does Not Meet** **Strengths/Weaknesses:**

Directions for Non-Negotiable 2

Focus and Coherence

Non-Negotiable 2: **Focus and Coherence** **Materials must focus coherently on the Major Work of the grade in a way that is consistent with the progressions in the Standards.** Focus and coherence are the two major evidence-based design principles of the Common Core State Standards for Mathematics (CCSSM, p. 3). Focus is necessary in order to fulfill the ambitious promise the states have made to their students by adopting the Standards: greater achievement at the college and career ready level; greater depth of understanding of mathematics; and a rich classroom environment in which reasoning, sense-making, applications, and a range of mathematical practices flourish. In simpler terms, a mile-wide, inch-deep curriculum translates to less time per topic. Less time means less depth and moving on without many students. Thus, materials must focus coherently on the Major Work of the grade in a way that is consistent with the progressions in the Standards.	**Required Materials** • Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf) • Focus by Grade Level for the grade being evaluated (www.achievethecore.org/focus) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion:** Non-Negotiable 2 is rated as Meets or Does Not Meet. To rate Non-Negotiable 2, first rate metrics 2A–2H. Each of these eight metrics must be rated as Meets in order for Non-Negotiable 2 to be rated as Meets. Rate each metric 2A-2H as Meets or Does Not Meet/Insufficient Evidence. If the evidence examined shows that the Criterion is met, then mark the Criterion Meets. If the evidence examined shows that the Criterion is not met—or if there is insufficient evidence to make a determination—then mark the Criterion as Does Not Meet/Insufficient Evidence. Support all ratings with evidence.
Metric NN2A: **In each grade K–8, students and teachers using the materials as designed devote the large majority of time to the Major Work of the grade.** **How to Find the Evidence:** Familiarize yourself with the Major Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, lessons, homework assignments, and assessments. (Evaluate both student and teacher materials.) Consider time spent on the Major Work of the grade and judge qualitatively whether students and teachers using the materials as designed will devote the large majority of time to the Major Work of the grade. For context, read Criterion #1 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013)	**Evidence-** Approximately 80% of the time is devoted to the Major Work of the grade.	**(Reviewer only.)** **__x__Meets** **____Does Not Meet/** **Insufficient Evidence**

Metric NN2B: **Supporting work, where present, enhances focus and coherence simultaneously by also engaging students in the Major Work of the grade.** **How to Find the Evidence:** Familiarize yourself with the Major Work and Supporting Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate chapters and lessons that focus on Supporting Work. NOTE: Example of evaluating this Criterion might include looking at whether materials for K–5 generally treat data displays as an occasion for solving grade-level word problems using the four operations (e.g., see 3.MD.B.3); or whether materials for grade 7 take advantage of opportunities to use probability to support ratios, proportions, and percentages. For context, read Criterion #3 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** The supporting work enhances the focus and coherence of the Major Work throughout the curriculum. 6.NS.B4 is a supporting standard and 6.EE is a Major Work standard and is embedded in that unit. The Guide to Connected Mathematics 3 provides the alignment of the standards to the units and investigations	**(Reviewer only.)** **__x__Meets** **____Does Not Meet/** **Insufficient Evidence**
Metric NN2C: **Materials base content progressions on the grade-by-grade progressions in the Standards. Content from previous or future grades does not unduly interfere with or displace on-grade-level content.** **How to Find the Evidence:** Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, and lessons in both student and teacher materials. NOTE: In some cases it may be possible that aligned materials might address some aspects of a topic in a strategic way before or after the grade level in which the topic is central in the Standards' progressions; for example, a curriculum author might purposefully choose to explore adding fractions with unlike denominators in a way appropriate to grade four, recognizing that this work is not really required until the next grade. However, any such purposeful discrepancies in content progressions should enhance the required learning in each grade; not unduly interfere with or displace grade-level content; and be clearly aimed at helping students meet the Standards as written rather than effectively rewriting the progressions in the Standards. And in all cases, note that Non-Negotiable 1 must be met for materials to be aligned. For context, read Criterion #5a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** The scope and sequence of this curriculum matches the progression of the Grade 6 standards. This curriculum is grade appropriate throughout.	**(Reviewer only.)** **__x__Meets** **____Does Not Meet/** **Insufficient Evidence**

Metric NN2D: **Materials gi[illegible]l students extensive work with on-grade-level problems.** **How to Find the Evidence:** Evaluate both student and teacher materials. If the materials provide resources for differentiated learning, consider whether lower-performing students have opportunities to engage with grade-level problems. Also consider whether higher-performing students are given opportunities to learn current grade-level content in greater depth. For context, read Criterion #5b in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** The curriculum contains "Providing for Individual Needs" throughout. TG & ACE problems – Application, Connections (previous content), Extensions	(Reviewer only.) **__x__Meets** **____Does Not Meet/** **Insufficient Evidence**
Metric NN2E: **Materials relate on-grade-level concepts explicitly to prior knowledge from earlier grades.** **How to Find the Evidence:** Evaluate both student and teacher materials. NOTE: Examples of evaluating this Criterion might include looking at the way the materials extend basic ideas of place value across the decimal point; or the role that properties of operations play when the materials extend arithmetic beyond whole numbers to fractions, variables, and expressions. More generally, cluster headings in the Standards sometimes signal key moments where reorganizing and extending previous knowledge is important in order to accommodate new knowledge (e.g., see cluster headings that use the phrase "Apply and extend previous understanding"). For context, read Criterion #5c in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** The Mathematics Background section in the TG explains and describes the content previously learned that the current content is built upon.	(Reviewer only.) **__x__Meets** **____Does Not Meet/** **Insufficient Evidence**
Metric NN2F: **Review of material from previous grades is clearly identified as such to the teacher, and teacher and students can see what their specific responsibility is for the current year.** **How to Find the Evidence:** Evaluate the table of contents, but do not stop there; also evaluate units, chapters, lessons, homework assignments and assessments. (Evaluate both student and teacher materials.) Identify any content from previous grades and check whether it is identified as such. For context, read Criterion #5a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** The "Launch – Explore – Summarize" in the TG connects lessons to prior knowledge throughout the materials at the beginning of each unit. The Mathematics Background section in the TG explains and describes the content previously learned that the current content is built upon.	(Reviewer only.) **__x__Meets** **____Does Not Meet/** **Insufficient Evidence**

Non-Negotiable 2:
Focus and Coherence

Materials must focus coherently on the Major Work of the grade in a way that is consistent with the progressions in the Standards.

NN 2 If all Metrics 2A – 2H were rated as Meets, then rate Non-Negotiable 2 as Meets. If one or more Metric was rated Does Not Meet/Insufficient Evidence, then rate Non-Negotiable 2 as Does Not Meet. Check the final rating.
Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)**

The materials are focused on the Major Work of the grade and they are coherent throughout.

Before moving to Alignment Criterion 1, record the final Meets or Does Not Meet rating in the Evaluation Summary.

(Reviewer only.)

__x__Meets

____Does Not Meet

Strengths/Weaknesses:

Now continue by evaluating the Alignment Criterion 1 for Rigor and Balance.

Directions for Alignment Criterion 1

Rigor and Balance

Alignment Criterion 1: Rigor and Balance

Materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.

The Standards set expectations for attention to all three aspects of rigor: conceptual understanding, procedural skill and fluency, and applications. Thus, materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.

Required Materials

- Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf)
- Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)
- Focus by Grade Level for the grade being evaluated (achievethecore.org/focus)
- Situation Types for the Operations in Word Problems (achievethecore.org/situation-types)
- From the materials being evaluated: teacher guides, student texts and workbooks

Rating this Criterion:

Alignment Criterion 1 is rated as Meets or Does Not Meet.

To rate Alignment Criterion 1, first rate metrics 1A, 1B, and 1C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). For each metric, guiding questions are provided to aid in gathering evidence.
Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 1 if the materials rate 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as rigor and balance, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.

Metric NN2G: **Materials in[illegible]e learning objectives that are visibly shaped by CCSSM cluster headings.** **How to Find the Evidence:** Select several clusters from the Major Work in the grade being evaluated. Evaluate teacher and student materials in relation to these clusters. For context, read Criterion #6a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** TG has provided learning objectives for each unit and for each investigation in both the TG and SE. SE also includes the SMP that are a focus in each unit. Examples are from **Prime Time → Bits and Pieces** TG includes Focus Questions, Unit Overview with Summary of Investigations, Facilitating Mathematical Practices.	**(Reviewer only.)** **__x__Meets** **____Does Not Meet/** **Insufficient Evidence**
Metric NN2H: **Materials include problems and activities that serve to connect two or more clusters in a domain, or two or more domains in a grade, in cases where these connections are natural and important.** **How to Find the Evidence:** In the grade being evaluated, choose two or more clusters or two or more domains for which connections are natural and important. Evaluate the units, chapters, and lessons that deal with the chosen topics, looking for problems and activities that serve to connect the chosen clusters or domains. NOTE: An example of evaluating this Criterion might include looking at whether problems in grade 4 sometimes or often involve students applying their developing computation skills (detailed in domain NBT) in the context of solving word problems (detailed in domain OA). For context, read Criterion #6b in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Multiple domains are focus areas in a single unit. For example, Unit 1, Investigations 3 & 4 include 6.EE and 6.NS, Unit 2, Investigations 1, 2, & 3 include 6.RP and 6.NS, and Unit 4, Investigations 2-4 include 6.EE and 6.G.	**(Reviewer only.)** **__x__Meets** **____Does Not Meet/** **Insufficient Evidence**

Metric AC1A: **The materials support the development of students' conceptual understanding of key mathematical concepts, especially where called for in specific content Standards or cluster headings.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Major Work for the grade being evaluated that relate specifically conceptual understanding to use throughout the questions associated with this metric. NOTE: Some examples of clusters or Standards that call for conceptual understanding include: K.OA.A.1, (1.NBT.B, 1.NBT.C), (2.NBT.A, 2.NBT.B), (3.OA.A.1, 3.OA.A.2), 4.NF.A, (4.NBT.A, 4.NBT.B), 5.NF.B, (5.NBT.A, 5.NBT.B), 6.RP.A, 6.EE.A.3, 7.NS.A, 7.EE.A, 8.EE.B, 8.F.A, 8.G.A Clusters or Standards grouped by parentheses are closely connected and could be analyzed together. For context, read Criterion #4a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	-Choose a cluster/Standard from the Major Work that is aligned to each aspect of rigor and use to evaluate these metrics. It is most helpful if the same clusters/Standards are chosen for all of the programs being evaluated. (Guidance in choosing clusters/Standards is included in "How to Find the Evidence".)	**Use the questions for AC Metric 1A to evaluate Metric 1A. Record evidence for each question and rate Metric 1A.** **__x__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Is conceptual understanding attended to thoroughly where the Standards set explicit expectations for understanding or interpreting? Evaluate lessons, chapter/unit assessments and homework assignments, paying attention to work aligned to Standards that explicitly call for understanding or interpreting. NOTE: Examples of evaluating this Criterion might include looking at how well the multi-digit addition and subtraction algorithms are developed and explained on the basis of place value and properties of operations; or how well the multi-digit multiplication and division algorithms are developed and explained on the basis of place value and properties of operations; or how well solving equations is presented and explained as a process of reasoning.	**Evidence-** Conceptual understanding is thoroughly attended to throughout the curriculum. The curriculum contains 'Applications' and 'Extensions' in every lesson. For example, Unit 2, Investigations 1-4 utilize fraction strips as a modeling method to build understanding of the less than and greater than 1 ideas. Procedure Understanding is seen throughout as well.	
Do the materials feature high-quality conceptual problems and conceptual discussion questions? Evaluate lessons, chapter/unit assessments, and homework assignments. NOTE: Example of conceptual problems might include such questions as "Find a number greater than 1/5 and less than 1/4," or "If the divisor does not change and the dividend increases, what happens to the quotient?"	**Evidence-** "Mathematical Reflections" provides students with the opportunity to consider high-quality conceptual problems and questions. Extensions in ACE problems. For example, Unit 2, Investigation 1, problem 1.3 asks students to find fractions not equal to but near another fraction.	

Do the materials feature opportunities to identify correspondences across mathema representations? Evaluate lessons, chapter/unit assessments and homework assignments. NOTE: Examples of evaluating this Criterion might include looking at whether students are supported in identifying correspondences among: the verbal description of a situation, the diagrams that distill its mathematical features, and the equations that model it; or equivalent forms of numbers (e.g., 3 and 6/2) and the number line; or rational number operations and representations of them via models such as the vector model; or the expression that defines a function and the graph that shows the relationship.	**Evidence-** This curriculum has students work with a variety of mathematical representations including graphs, equations, pictures, spinners, and number lines. Labsheets 3.3C use grids broken into 10ths, 100ths and 1000ths to represent decimal equivalence.	
Metric AC1B: **The materials are designed so that students attain the fluencies and procedural skills required by the Standards.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Major Work for the grade being evaluated that relate specifically to fluency and procedural skill to use throughout the questions associated with this metric. NOTE: Some examples of Standards that call for procedural skill and fluency include: K.OA.A.5, 1.OA.C.6, 2.OA.B.2, 2.NBT.B.5, 3.OA.C.7, 3.NBT.A.2, 4.NBT.B.4, 5.NBT.B.5, 6.NS.B.2, and 6.NS.B.3, 6.EE.A, 7.NS.A, 7.EE.A.1,7.EE.B.4a, 8.EE.C.7, 8.EE.C.8b For context, read Criterion #4b in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).		**Use the questions for Metric 1B to evaluate Metric 1 B. Record evidence for each question and rate Metric 1B.** **(Reviewer only.)** **__x__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Is progress toward fluency and procedural skill interwoven with students' developing conceptual understanding of the operations in question? Evaluate lessons, chapter/unit assessments, daily routines, and homework assignments for evidence that the development of fluency and procedural skill is supported by conceptual understanding.	**Evidence-** Throughout the materials ACE problems for applications (operation problems) serve to build fluency and strengthen procedural knowledge.	
Are purely procedural problems and exercises present that include cases in which opportunistic strategies are valuable and generic cases that require efficient algorithms present? Evaluate lessons, chapter/unit assessments, daily routines, and homework assignments. NOTE: Examples of problems in which opportunistic strategies are valuable might include the sum 698 + 240 or the system $x + y = 1$, $2x + 2y = 3$. Examples of generic cases that require efficient algorithms might include the sum 8767+2286 or the system $6y + x = x + 3$, $– x = 1 + 2y$.	**Evidence-** Application and Connections sections are largely procedural fluency type problems. The Application problems, while given in a context, are still procedural. Both opportunistic and generic strategies are seen for working with algorithms.	

Do the materials in grades K–6 provide repeated practice toward attainment of fluency Standards? Evaluate lessons, daily routines, and homework assignments for evidence of repeated practice toward attainment of the following K–6 Standards that set an explicit expectation of fluent (accurate and reasonably fast) computation: K.OA.A.5, 1.OA.C.6, 2.OA.B.2, 2.NBT.B.5, 3.OA.C.7, 3.NBT.A.2, 4.NBT.B.4, 5.NBT.B.5, 6.NS.B.2, 6.NS.B.3.	**Evidence-** Decimal Operations Investigation 3, Application problems provide repeated practice toward attainment of fluency.	
Metric AC1C: **The materials are designed so that teachers and students spend sufficient time working with engaging applications, without losing focus on the Major Work of each grade.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Major Work for the grade being evaluated that relate specifically application to use throughout the questions associated with this metric. NOTE: Some examples of clusters or Standards that call for application include: K.OA.A.2, 1.OA.A, 2.OA.A, 3.OA.A.3, 3.OA.D.8, 4.OA.A.3, 4.NF.B.3d, 4.NF.B.4c, 5.NF.B.6, 5.NF.B.7c, 6.RP.A.3, 6.NS.A.1, 6.EE.B.7, 6.EE.C.9, 7.RP.A, 7.NS.A.3, 7.EE.B.3, 8.EE.C.8c, 8.F.B For context, read Criterion #4c in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Throughout the materials there are ample engaging problems to blend with concepts being taught. TG also provides facilitating questions.	**Use the questions for Metric 1C to evaluate Metric 1C. Record evidence for each question and rate Metric 1C.** **(Reviewer only.)** **__x__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Are there are single- and multi-step contextual problems, including non-routine problems, that develop the mathematics of the grade, afford opportunities for practice, and engage students in problem solving? Do the problems attend thoroughly to those places in the content Standards where expectations for multi-step and real-world problems are explicit? Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** Throughout the materials, the TG describes each Investigation with a Launch and Presenting the Challenge. These include questions, exploration to investigate the challenge, a summary to answer questions, and a reflection of what has been learned. The Application and Extension sections provide ample opportunities to work single-step problems and multi-step problems.	

Do application problems particularly stress applying the Major Work of the grade? Evaluate lessons, chapter/unit assessments, and homework assignments. NOTE: Examples of evaluating this Criterion might include looking at: how well, by the end of grade 2, students using the materials as designed can represent and solve a full range of one-step addition and subtraction word problems; or how well, by the end of grade 3, students using the materials as designed can represent and solve a full range of one-step multiplication and division word problems; or how well these basic situation types for each operation are carried coherently across the grades, (e.g., with fractions and algebraic expressions); or, in all grades, whether the problems connect concepts, Standards, and domains in ways that are natural and important. For a list of situation types for one-step addition, subtraction, multiplication, and division problems, see Situation Types for the Operations in Word Problems	**Evidence-** Each lesson includes application, connection, extension, and reflection problems where students are able to apply the Major Work/standards learned in the lesson to solve problems. Only 2 Investigations (from Data and Statistics) do not explicitly include Standards from the Major Work of the grade.	
Does modeling build slowly across K–8, with applications that are relatively simple in earlier grades and when students are encountering new content? In grades 6–8, do the problems begin to provide opportunities for students to make their own assumptions or simplifications in order to model a situation mathematically? Read Standard for Mathematical Practice 4, Model with Mathematics. Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** Modeling is a major component of all Units and in every Investigation. The models increase in complexity and sophistication as content increases.	

Alignment Criterion 1: Rigor and Balance

Materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.

AC1 Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 out of 6 points, the Criterion has not been met. Check the final rating.
Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)**

Before moving to Alignment Criterion 2, record the final Meets or Does Not Meet rating in the Evaluation Summary.

(Reviewer only.)

__x__Meets

____Does Not Meet

Strengths/Weaknesses:

Directions for Alignment Criterion 2

Standards for Mathematical Practice

Alignment Criterion 2: Standards for Mathematical Practice

Materials must demonstrate authentic connections between content Standards and practice Standards.

The Standards require that designers of instructional materials connect the mathematical practices to mathematical content in instruction. Thus, materials must demonstrate authentic connections between content Standards and practice Standards.

Required Materials:

- Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf)
- Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)
- Focus by Grade Level for the grade being evaluated (www.achievethecore.org/focus)
- From the materials being evaluated: teacher guides, student texts and workbooks

Rating this Criterion

Alignment Criterion 2 is rated as Meets or Does Not Meet.

To rate Alignment Criterion 2, first rate metrics 2A, 2B, and 2C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). For each metric, guiding questions are provided to aid in gathering evidence.

Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 2 if the materials earn 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as mathematical practices, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.

Metric AC2A:
Materials address the practice Standards in such a way as to enrich the Major Work of the grade; practices strengthen the focus on Major Work instead of detracting from it, in both teacher and student materials.

How to Find the Evidence:

Familiarize yourself with the Major Work of the grade being evaluated (see the Focus by Grade Level documents.)

Evaluate teacher and student materials for evidence that the mathematical practices support and connect to the focus of the grade.

NOTE: Examples of evaluating this Criterion might include looking at whether, in grades K–5, students using the materials are supported to look for and express regularity in repeated reasoning about the addition table, the multiplication table, the properties of operations, the relationship between addition and subtraction or multiplication and division, and the place value system; or whether, in grades 6–8, students using the materials are supported to look for and express regularity in repeated reasoning about proportional relationships and linear functions.

For context, read Criterion #8 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013).

Evidence-

Throughout the materials, MPs are identified at the beginning of each Unit and Investigation. The TG highlights the MPs through questioning and suggests questions for teachers to use to facilitate the mathematical thinking set forth by the Practice Standards.

Each Investigation includes specific questions for students to reflect on the Practice Standards called Math Reflections.

(Reviewer only.)

__x__Meets (2)

____Partially Meets (1)

____Does Not Meet (0)

Metric AC2B: **Materials attend to the full meaning of each practice Standard.** **How to Find the Evidence:** For context, read Criterion #7 and Criterion #9 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).		**Use the questions for Metric 2B to evaluate Metric 2B. Record evidence for each question and rate Metric 2B.** **(Reviewer only.)** **__x__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Over the course of any given year of instruction, is each mathematical practice Standard meaningfully present in the form of assignments, activities, or problems that stimulate students to develop the habits of mind described in the practice Standard? Evaluate lessons, chapter/ unit assessments, and homework assignments for evidence of each mathematical practice being meaningfully present in instruction.	**Evidence-** Each MP is being utilized throughout instruction, lessons, assignments, and assessments. The MPs are meaningfully present.	
Do the materials treat the practice Standards as developing across grades or grade bands? Are the practice Standards in early grades appropriately simple? Do they display an arc of growing sophistication across the grades?	**Evidence-** Throughout the materials, students are provided many opportunities to engage in the practice Standards. Many questions (in the TG and SE) are designed in sufficiently complex ways as to elicit grade level appropriate responses.	
Are there teacher-directed materials that explain the role of the practice Standards in the classroom and in students' mathematical development? Are alignments to practice Standards accurate?	**Evidence-** Each Investigation has a section in the TG called "Facilitating the Mathematical Practice" that explains in detail the spirit of the Standard and where it is found in the Unit/Investigation.	
Metric AC2C: **Materials support the Standards' emphasis on mathematical reasoning.** **How to Find the Evidence:** For context, read Criterion #10 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).		**Use the questions for Metric 2C to evaluate Metric 2C. Record evidence for each question and rate Metric 2C.** **(Reviewer only.)** **__x__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Do the materials support students in constructing viable arguments and critiquing the arguments of others concerning grade-level mathematics that is detailed in the content Standards? Read Standard for Mathematical Practice 3. Evaluate teacher and student materials to ensure that students are given opportunities to reason with grade-level mathematics.	**Evidence-** Throughout ACE assignments. Students analyze other student work by making connections through the analysis.	
Do the materials support students in producing not only answers and solutions, but also, in a grade-appropriate way, arguments, explanations, diagrams, mathematical models, etc., especially in the Major Work of the grade? Familiarize yourself with the Major Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate teacher and student materials, to understand the types of work students are expected to produce.	**Evidence-** Lessons have questioning throughout that support students in producing arguments and explanations as well as representing problems using diagrams, graphs, drawings, and tables to model situations.	

Do materials explicitly attend to the specialized language of mathematics? Is language of argument, problem solving, and mathematical explanations taught rather than assumed? Evaluate teacher and student materials, paying attention to how mathematical language is taught. NOTE: Examples of evaluating this Criterion might include looking at whether students are supported in: basing arguments on definitions; using the method of providing a counterexample; or recognizing that examples alone do not establish a general statement.	**Evidence-** The academic language of mathematics is appropriate throughout the curriculum. Provide glossary of key math terms. A Glossary containing vocabulary words is provided in each unit as well as an Index.	

Alignment Criterion 2:
Standards for Mathematical Practice

Materials must demonstrate authentic connections between content Standards and practice Standards.

AC2 Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 out of 6 points, the Criterion has not been met. Check the final rating.
Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion.
(Reviewer only.)

Before moving to Alignment Criterion 3, record the final Meets or Does Not Meet rating in the Evaluation Summary.

(Reviewer only.)

__x__Meets

____Does Not Meet

Strengths/Weaknesses:

Alignment Criterion 3:
Access to the Standards for All Students

Materials must provide supports for English Language Learners and other special populations.

Because Standards are for all students, alignment requires thoughtful support to ensure all students are able to meet the Standards. Thus, aligned materials must provide supports for English Language Learners and other special populations.

Required Materials:

- Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf)
- Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)
- From the materials being evaluated: teacher guides, student texts and workbooks

Rating this Criterion:
Alignment Criterion 3 is rated as Meets or Does Not Meet.

To rate Alignment Criterion 3, first rate metrics 3A, 3B, and 3C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points).

Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 3 if the materials earn 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as support for special population, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.

Metric AC3A: **Support for English Language Learners and other special populations is thoughtful and helps those students meet the same Standards as all other students. The language in which problems are posed is carefully considered.** **How to Find the Evidence:** Evaluate teacher and student materials, paying attention to supports offered for special populations.	**Evidence-** "Providing for Individual Needs" is available for every lesson in the TG to provide teachers with supporting differentiation in their classroom. An English/Spanish glossary is in each Unit. Modeling, Questions, Grouping, Active Participation.	**Reviewer only.)** **__x__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Metric AC3B: **Materials provide appropriate level and type of scaffolding, differentiation, intervention, and support for a broad range of learners with gradual removal of supports, when needed, to allow students to demonstrate their mathematical understanding independently.** **How to Find the Evidence:** Evaluate teacher and student materials, paying attention to whether materials provide differentiation that will lead all learners to engage with on-grade-level content.	**Evidence-** Scaffolding and differentiation is provided throughout the curriculum. Open-ended questions allow for students to show their individual understanding at their own level. The real life problems utilized improves the motivation and participation of special needs students. "Providing for Individual Needs" gives teachers ideas of what they can do for differentiation and scaffolding. "Going Further" gives teachers ideas of what they can do for more advanced students beyond the basic curriculum.	**Reviewer only.)** **__x__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Metric AC3C: **Design of lessons recommends and facilitates a mix of instructional approaches for a variety of learners such as using multiple representations (e.g., including models, using a range of questions, checking for understanding, flexible grouping, pair-share).** **How to Find the Evidence:** Evaluate teacher materials, noting instructional approaches suggested for whole class and differentiated lessons and activities.	**Evidence-** This curriculum uses a variety of instruction strategies, modeling, questioning, and grouping. Students work individually, in pairs, small groups, or as a whole class.	**Reviewer only.)** **__x__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**

Alignment Criterion 3: Access to the Standards for All Students **Materials must provide supports for English Language Learners and other special populations.** **AC3** Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 points, the Criterion has not been met. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion.**(Reviewer only.)** **Move to the Evaluation Summary and record the final Meets or Does Not Meet rating .**	**(Reviewer only.)** **__x__Meets** **____Does Not Meet** **Strengths/Weaknesses:**

Once an evaluation for alignment to the Shifts and major features of the CCSS has been conducted using Sections 1-3, it's important to evaluate for overall quality and best practices. A starting list of Indicators of Quality are suggested below. States, districts and others evaluating instructional materials are encouraged to add to this list to ensure materials reflect local contexts. For background information on some of the Indicators of Quality in this section, refer to pp.18–21 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).

Indicators of Quality	Evidence- Give specific examples.	Rating: (Reviewers only.)
1. Lessons are thoughtfully structured and support the teacher in leading the class through the learning paths at hand, with active participation by all students in their own learning and in the learning of their classmates.	**Evidence-** Lessons are thoughtfully structured and support teacher and students in learning standards.	**(Reviewer only.)** **___x___ Yes** **_____ No**
2. The underlying design of the materials includes both problems and exercises. (In solving problems, students learn new mathematics, whereas in working exercises, students apply what they have already learned to build mastery.) Each problem or exercise has a purpose. **NOTE: This Criterion does not require that the problems and exercises be labeled as such.**	**Evidence-** Problems and exercises throughout. ACE sections include both problems and exercises.	**(Reviewer only.)** **___x___ Yes** **_____ No**

3. Design of assignments is not haphazard: exercises are given in intentional sequences in order to strengthen students' mathematical understanding.	**Evidence-** Curriculum has an intentional sequence that strengthens students understanding of content. Content is introduced, questions scaffold and builds to a better understanding. Practice, application, and summary of investigations is provided in the ACE sections and the Mathematical Reflections.	**(Reviewer only.)** **___x___ Yes** **_____ No**
4. There are separate teacher materials that support and reward teacher study including, but not limited to: discussion of the mathematics of the units and the mathematical point of each lesson as it relates to the organizing concepts of the unit, discussion on student ways of thinking and anticipating a variety of students responses, guidance on lesson flow, guidance on questions that prompt students thinking, and discussion of desired mathematical behaviors being elicited among students.	**Evidence-** Every unit has a Teacher's Guide. Provides a mathematical background. **Teacher Resources** book provides parent letters, lab sheets, assessments, and answer keys. **A Guide to Connected Mathematics 3** has an overview of the curriculum as well as correlations to CCSS. Teacher Lesson Support DVD.	**(Reviewer only.)** **___x___ Yes** **_____ No**
5. Manipulatives suggested in the materials are faithful representations of the mathematical objects they represent and are connected to written methods.	**Evidence-** When manipulatives are suggested in the materials, they are well connected to the content.	**(Reviewer only.)** **___x___ Yes** **_____ No**
6. Materials include a variety of curriculum-embedded assessments. Examples include pre-, formative, summative, and self-assessment resources.	**Evidence-** Exam View Test Bank CD-ROM Formative assessments include a checkup, self-assessment, notebook check list, and project. (TG) Summative assessments include a partner quiz, unit test, and individual quiz. Evidence is from **Teacher Resources**	**(Reviewer only.)** **___x___ Yes** **_____ No**
7. Assessments contain aligned rubrics, answer keys, and scoring guidelines that provide sufficient guidance for interpreting student performance.	**Evidence-** Answer keys, and student examples are provided.	**(Reviewer only.)** **___x___ Yes** **_____ No**

8. Materials assess student proficiency using methods that are accessible and unbiased, including the use of course-level language in student prompts.	**Evidence-** The assessment and curriculum language are the same. They both contain clear sentence structure that is accessible and unbiased for students. There are a variety of assessments available in this curriculum.	**(Reviewer only.)** **___x___ Yes** **_____ No**
9. Materials are carefully evaluated by qualified individuals, whose names are listed, in an effort to ensure freedom from mathematical errors and course-level appropriateness.	**Evidence-** Authors, assessment team, reviewers, content consultants, consultants, and field test sites are listed in the following: **A Guide to Connected Mathematics 3** Every TG **Teacher Resources Grade 6** **CMP3 Grade 6**	**(Reviewer only.)** **___x___ Yes** **_____ No**
10. The visual design supports students in engaging thoughtfully with the subject. Navigation through the text is clear.	**Evidence-** The visual design supports students throughout. There is bold-faced and colored fonts that draw attention to vocabulary terms and important information for content understanding. Graphics and pictures are used throughout. Table of contents is provided.	**(Reviewer only.)** **___x___ Yes** **_____ No**
11. The materials engage parents in appropriate ways. For example, homework assignments in elementary grades, consist of routine problems, practice with getting answers, and fluency-building exercises that parents can easily support.	**Evidence-** Evidence from **Teacher Resources** book Parent Letters provided in English and Spanish Parent letters include: unit goals, homework helps, CCSS, helpful mathematical ideas, including examples, information, formulas, etc.	**(Reviewer only.)** **___x___ Yes** **_____ No**

Reviewer IMET Evaluation Summary **Title/Level: Pearson Connected Mathematics3 Grade 6**

Publisher: Pearson Education, Inc. **Copyright: 2014** **ISBN: 978013329683990000**

Reviewer ID # SW TR DA **Date Review Completed: March 9, 2016**

Non-Negotiable Criteria- Each Non-Negotiable must be met in order for the Non-Negotiable Alignment Criteria to be met overall.

Non-Negotiable 1: Freedom from Obstacles to Focus	Non- Negotiable 2: Focus and Coherence
____x___ Meets _____ Does Not Meet	___x__ Meets _____ Does Not Meet

Non-Negotiable Overall:

___x__ Meets **_____ Does Not Meet**

Alignment Criteria- Each Alignment Criterion must be met with a sufficient number of points in order for Alignment Criteria to be labeled as "Meets" overall. The more points the materials receive on the Alignment Criteria, the better they are aligned.

Alignment Criterion 1: Rigor and Balance	Alignment Criterion 2: Standards of Mathematical Practice	Alignment Criterion 3: Access to Standards for All Learners
Points: __6___ of 6 possible. (Materials must receive at least 5 of 6 points to align.) ____x___ Meets _____ Does Not Meet	Points: __6___ of 6 possible. (Materials must receive at least 5 of 6 points to align.) ____x___ Meets _____ Does Not Meet	Points: __6___ of 6 possible. (Materials must receive at least 5 of 6 points to align.) ____x___ Meets _____ Does Not Meet

Alignment Criteria Overall:

___x__ Meets **_____ Does Not Meet**

If the materials meet both Non-Negotiables and relevant Alignment Criterion, they are aligned to the Shifts and major features of the Core Standards. **the materials meet every Non-Negotiable and Alignment Criterion? __x___ Yes _____ No**

What are the specific areas of strength and weakness based on this evaluation? Publishers or others modifying or developing assessments can use this information to make improvements and/or to remedy gaps in the alignment of assessment materials.

Strengths:
High level of engagement for students.
Tests focus on open ended questions leading to higher conceptual understanding.
ACE problems provide a variety of opportunities to meet the needs of diverse students.
ELL supports throughout. (Spanish versions available)
Very teacher friendly: Written in a way to guide teacher through teaching process.
Activity based and discovery learning.
Good vertical alignment connections across mathematical domains.

Weaknesses:
N/A

2015-16 Mathematics Interim Review Recommendation & Summary

Publisher Name:	Pearson Education, Inc.
Title:	Pearson Connected Mathematics Grade 7
ISBN #	9780133296754
Grade Level(s) or Course:	9780133296754 Grade 7
Reviewer ID:	HCSW

RECOMMENDED AS:

_✓_ **Core Mathematics Program-** a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials. Substantial evidence clearly supports the designation of this program as Core.

_____ **Other Mathematics Program-** a program that substantially, but partially, meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for supplemental materials. Substantial evidence clearly supports the designation of this program as Other.

_____ **Component Mathematics Program-** a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs. Substantial evidence clearly supports the designation of this program as Component.

_____ **Intervention Program-** a program designed and intended to target and support students' specific needs. Substantial evidence clearly supports the designation of this program as Intervention.

_____ **Does not meet criteria** for recommendation as a Curricular Material or Online Resource for Mathematics.

EVIDENCE SUMMARY:

FOCUS- Materials reflect the content architecture of Grade 7 Standards. Appropriate topics are assessed.

COHERENCE- Approximately 70% of the curriculum is focused coherently on the Major Work Standards.

RIGOR- Materials contain many open-ended questions that reflect the balance of the standards rigorous expectations. The open-ended questions lead students to conceptual understanding of concepts.

CONCEPTUAL UNDERSTANDING- Conceptual understanding is attended to thoroughly through problem solving, open-ended questions, activities, and ACE problems.

MATHEMATICAL PRACTICES- MP are thoroughly addressed in the teachers guide to help teachers facilitate in the lessons. MPs utilized throughout lessons, assessments, etc. Reflection at the end of each investigation focuses on MPs related to content.

ACCESSIBILITY OF STANDARDS TO ALL STUDENTS- Excellent supports for all students including high-performing, low-performing, and ELLs. ACE problems provide supports. "Providing for Individual Needs" supports differentiation.

OTHER:
Curriculum is inclusive and engaging to all learners.
Differentiation throughout.
Activity based and discovery learning.
Great conceptual learning opportunities.

2015-16 Interim Mathematics Review

Mathematics Evaluation Tool Grades K-8

Publisher: Pearson Education, Inc.

Title of Material: Pearson Connected Mathematics 3 Grade 7

Author: Lappan et al.

ISBN #: 9780133296754 **Copyright** 2014

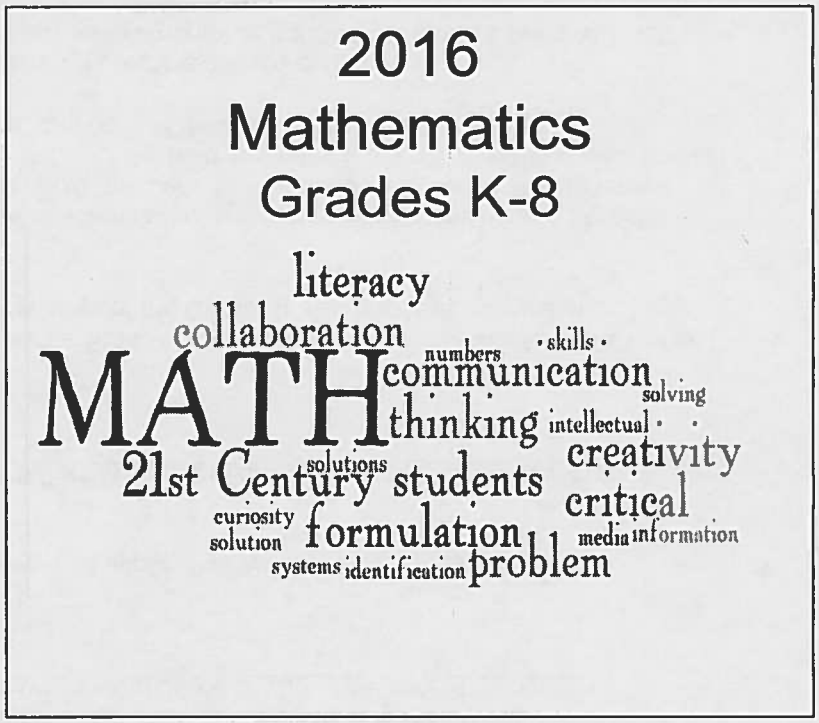
Reviewer ID: HL, SW

Core Mathematics Program- a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Core.

Other Mathematics Program- a program that substantially, but partially, meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Other.

Component Mathematics Program- a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs.
Substantial evidence clearly supports the designation of this program as Component.

Intervention Program- a program designed and intended to target and support students' specific needs.
Substantial evidence clearly supports the designation of this program as Intervention.



- Evaluation Form adapted from Instructional Materials Evaluation Toolkit (IMET).

The IMET was developed by Student Achievement Partners. Educators may use or adapt. http://creativecommons.org/licenses/by/3.0/ Download this tool at http://achievethecore.org/IMET

Instructional Materials Evaluation Tool

Mathematics, Grades K-8

What Are the Purposes of the IMET?

This Math IMET is designed to help educators determine whether instructional materials are aligned to the Shifts and major features of the Common Core State Standards (CCSS). The substantial instructional Shifts (http://www.corestandards.org/other-resources/key-shifts-inmathematics/) at the heart of the Common Core State Standards are:

- **Focus** strongly where the Standards focus
- **Coherence**: Think across grades and link to major topics within the grade
- **Rigor**: In major topics, pursue conceptual understanding, procedural skill and fluency, and application with equal intensity.

The IMET draws directly from the following documents:

- Common Core State Standards for Mathematics (www.corestandards.org/Math)
- Publishers' Criteria for the Common Core State Standards in Mathematics grade K-8 (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)

When to use the IMET

1. Purchasing materials: Many factors go into local purchasing decisions. Alignment to the Standards is a critical factor to consider. This tool is designed to evaluate alignment of instructional materials to the Shifts and the major features of the CCSS. It also provides suggestions of additional indicators to consider in the materials evaluation and purchasing process.

2. Evaluating materials currently in use: The IMET can be used to analyze the degree of alignment of existing materials and help to highlight specific, concrete flaws in alignment. Even where materials and tools currently in use fail to meet one or more of these criteria, the pattern of failure is likely to be informative. States and districts can use the evaluation to create a thoughtful plan to modify or combine existing resources in such a way that students' actual learning experiences approach the focus, coherence, and rigor of the Standards.

3. Developing programs: Those developing new programs can use this tool as guidance for creating aligned curricula.
Please note this tool was designed for evaluating comprehensive curricula (including any supplemental or ancillary materials), but it was not designed for the evaluation of standalone supplemental materials.

Who Uses the IMET?

Evaluating instructional materials requires both subject-matter and pedagogical expertise. Evaluators should be well versed in the Standards (www.corestandards.org/Math) for all grades in which materials are being evaluated. This includes understanding the Major Work of the grade (www.achievethecore/focus), the Supporting and Additional work, how the content fits into the progressions in the Standards (www.achievethecore.org/progressions), and the expectations of the Standards with respect to conceptual understanding, procedural skill and fluency, and application. Evaluators also should be familiar with the substantial instructional Shifts (http:// www.corestandards.org/other-resources/key-shifts-in-mathematics/) of Focus, Coherence and Rigor that are listed above.

Getting Started
Prior to Evaluation

Assemble all of the materials necessary for the evaluation. It is essential for evaluators to have materials for all grades covered by the program, as some criteria cannot be rated without having access to each grade. In addition, each evaluator should have a reference copy of the Common Core State Standards for Mathematics (CCSSM) and the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013).

2015-16 Interim Mathematics Review

Mathematics Evaluation Tool Grades K-8

Publisher: Pearson Education, Inc.

Title of Material: Pearson Connected Mathematics 3 -Grade 7

Author: Lappan et al.

ISBN #: 9780133296754 **Copyright** 2014

Reviewer ID: HCSW

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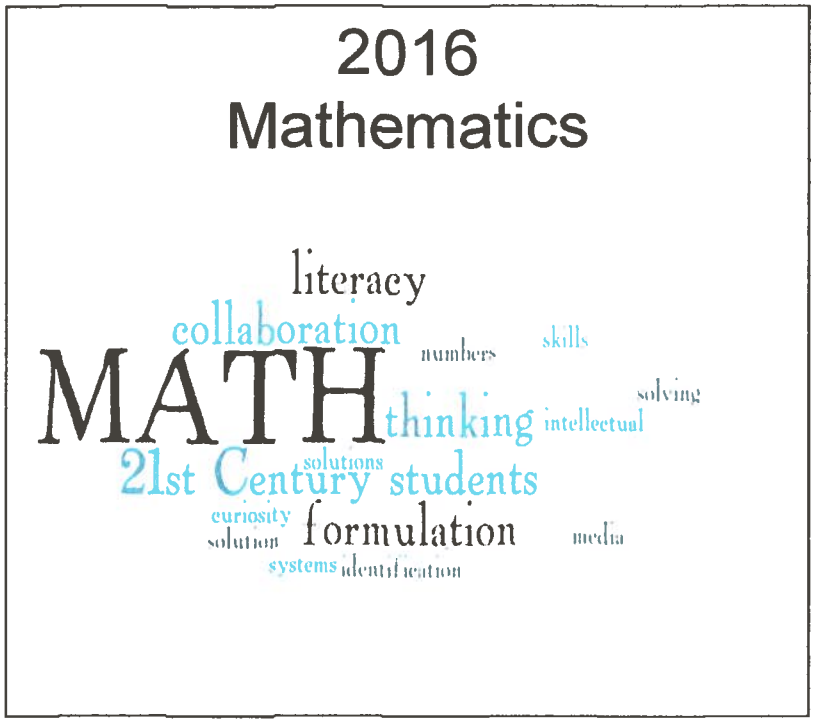

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Instructional Materials Evaluation Tool
Mathematics, Grades K-8

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Please note this tool was designed for evaluating comprehensive curricula (including any supplemental or ancillary materials), but it was not designed for the evaluation of standalone supplemental materials.

Who Uses the IMET?
Evaluating instructional materials requires both subject-matter and pedagogical expertise. Evaluators should be well versed in the Standards (www.corestandards.org/Math) for all grades in which materials are being evaluated. This includes understanding the Major Work of the grade (www.achievethecore/focus), the Supporting and Additional work, how the content fits into the progressions in the Standards (www.achievethecore.org/progressions), and the expectations of the Standards with respect to conceptual understanding, procedural skill and fluency, and application. Evaluators also should be familiar with the substantial instructional Shifts (http:// www.corestandards.org/other-resources/key-shifts-in-mathematics/) of Focus, Coherence and Rigor that are listed above.

Getting Started
Prior to Evaluation

Assemble all of the materials necessary for the evaluation. It is essential for evaluators to have materials for all grades covered by the program, as some criteria cannot be rated without having access to each grade. In addition, each evaluator should have a reference copy of the Common Core State Standards for Mathematics (CCSSM) and the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013).

Before conducting the evaluation itself, it is important to develop a protocol for the evaluation process. The protocol should include having evaluators study the Publishers' Criteria and the IMET. It will also be helpful for evaluators to get a sense of each program overall before beginning the process. At a minimum, this would include reading the front matter of the text, looking at the table of contents and paging through multiple chapters.

Sections 1-3 below should be completed to produce a comprehensive picture of the strengths and weaknesses of the materials under evaluation. Information about areas in need of improvement or supplementation should be shared with internal and external stakeholders.

Navigating the Tool

Begin with Section 1: Non-Negotiable Alignment Criteria

- The Non-Negotiable Alignment Criteria must each be met in full for materials to be considered aligned to the Shifts and the major features of the Common Core State Standards. Each Non-Negotiable Alignment Criterion has one or more metrics associated with it; every one of these metrics must be met in order for the criterion as a whole to be met.

- Examine the relevant materials and use evidence to rate the materials against each criterion and its associated metric(s).

- Record and explain the evidence upon which the rating is based.

Continue to Section 2: Alignment Criteria

- The Alignment Criteria must each be met for materials to be considered aligned to the Shifts and the major features of the Common Core State Standards. Each Alignment Criterion has one or more metric associated with it; a specific number of these metrics must be met or partially met in order for the criterion as a whole to be met.

- Examine the materials in relation to these criteria, assigning each metric a point value. Rate the criterion as "Meets" or "Does Note Meet" based on the number of points assigned. The more points the materials receive on the alignment Criteria, the better they are aligned.

Record and explain the evidence upon which the rating is based.

Proceed to Section 4: Indicators of Quality

- Indicators of Quality are important considerations that will help evaluators better understand the overall quality of instructional materials. These considerations are not criteria for alignment to the CCSS, but they provide valuable information about additional program characteristics. Evaluators may want to add their own indicators to the examples provided.

Directions for Non-Negotiable 1

Freedom from Obstacles to Focus

Criterion	Evidence- Give specific examples.	Rating: (Reviewer only.)
Non-Negotiable 1: **Freedom from Obstacles to Focus** **Materials must reflect the content architecture of the Standards by not assessing the topics named before the grade level where they first appear in the Standards.** The Standards foster students' progress to algebra by focusing strongly on arithmetic. Consistent with this focus, certain topics from outside of arithmetic appear only in later grades. Thus, to be aligned, materials must reflect the content architecture of the Standards by not assessing the topics named before the grade level where they first appear in the Standards. In this criterion, "topics named" means the topics that are explicitly named in Metric 1A. No other topics should be added to the list in Metric 1A. (Note that other topics in the standards are addressed in criterion NN2.)	**Required Materials** • Common Core State Standards for Mathematics (www.corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf) • From the materials being evaluated: teacher guides and all assessment components	**Rating this Criterion:** Non-Negotiable 1 is rated as Meets or Does Not Meet. To rate Non-Negotiable 1, begin by rating Metric 1A. Since Metric 1A is the only metric for Non-Negotiable 1, the rating for Non-Negotiable 1 is the same as the rating for Metric 1A. If Metric 1A is rated as Does Not Meet, include evidence of when the named topic(s) is/are assessed. If the metric is rated as Meets, list the grade(s) examined in the evaluation.

Metric NN1A: **Materials reflect the basic architecture of the Standards by not assessing the listed topics before the grade level indicated.** • Probability, including chance, likely outcomes, probability models. (Introduced in the CCSSM in grade 7) • Statistical distributions, including center, variation, clumping, outliers, mean, median, mode, range, quartiles; and statistical association or trends, including two-way tables, bivariate measurement data, scatter plots, trend line, line of best fit, correlation. (Introduced in the CCSSM in grade 6) • Similarity, congruence, or geometric transformations. (Introduced in the CCSSM in grade 8) • Symmetry of shapes, including line/ reflection symmetry, rotational symmetry. (Introduced in the CCSSM in grade 4) **How to Find the Evidence:** Evaluate the table of contents, all chapter tests, all unit tests, and other such assessment components (including rubrics). For context, read Criterion #2 from the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013). NOTE: Grade alignments of other topics are addressed in Non-Negotiable 2, Focus and Coherence.) In this criterion, "topics named" means the topics that are explicitly named in Metric 1A. No other topics should be added to the list in Metric 1A. (Note that other topics in the standards are addressed in criterion NN2.)	**Evidence-** All of the CCSS for grade 7 are covered in this curriculum. This curriculum does not assess any content above grade level standards.	**(Reviewer only.)** **__x__Meets** **____Does Not Meet**
Non-Negotiable 1: Materials must reflect the content architecture of the Standards by not assessing the topics named* before the grade level where they first appear in the Standards. **NN 1** If Metric 1A was rated as Meets, then rate Non-Negotiable 1 as Meets. If Metric 1A was rated as Does Not Meet, then rate Non- Negotiable 1 as Does Not Meet. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion.**(Reviewer only.)** **Before moving to Non-Negotiable 2, record the final Meets or Does Not Meet rating in the Evaluation Summary.**		**(Reviewer only.)** **__x__Meets** **____Does Not Meet** **Strengths/Weaknesses:**

Directions for Non-Negotiable 2

Focus and Coherence

Non-Negotiable 2: **Focus and Coherence** **Materials must focus coherently on the Major Work of the grade in a way that is consistent with the progressions in the Standards.** Focus and coherence are the two major evidence-based design principles of the Common Core State Standards for Mathematics (CCSSM, p. 3). Focus is necessary in order to fulfill the ambitious promise the states have made to their students by adopting the Standards: greater achievement at the college and career ready level; greater depth of understanding of mathematics; and a rich classroom environment in which reasoning, sense-making, applications, and a range of mathematical practices flourish. In simpler terms, a mile-wide, inch-deep curriculum translates to less time per topic. Less time means less depth and moving on without many students. Thus, materials must focus coherently on the Major Work of the grade in a way that is consistent with the progressions in the Standards.	**Required Materials** • Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf) • Focus by Grade Level for the grade being evaluated (www.achievethecore.org/focus) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion:** Non-Negotiable 2 is rated as Meets or Does Not Meet. To rate Non-Negotiable 2, first rate metrics 2A–2H. Each of these eight metrics must be rated as Meets in order for Non-Negotiable 2 to be rated as Meets. Rate each metric 2A-2H as Meets or Does Not Meet/Insufficient Evidence. If the evidence examined shows that the Criterion is met, then mark the Criterion Meets. If the evidence examined shows that the Criterion is not met—or if there is insufficient evidence to make a determination—then mark the Criterion as Does Not Meet/Insufficient Evidence. Support all ratings with evidence.
Metric NN2A: **In each grade K–8, students and teachers using the materials as designed devote the large majority of time to the Major Work of the grade.** **How to Find the Evidence:** Familiarize yourself with the Major Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, lessons, homework assignments, and assessments. (Evaluate both student and teacher materials.) Consider time spent on the Major Work of the grade and judge qualitatively whether students and teachers using the materials as designed will devote the large majority of time to the Major Work of the grade. For context, read Criterion #1 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013)	**Evidence-** Book 1 = 33% Book 2 = 100% Book 3 = 50% Book 4 = 100% Book 5 = 100% Book 6 = 50% Book 7 = 100% Book 8 = 23% Approximately 70% of the time is devoted to the Major Work of the grade.	**(Reviewer only.)** **__x__Meets** **____Does Not Meet/** **Insufficient Evidence**

Metric NN2B: **Supporting work, where present, enhances focus and coherence simultaneously by also engaging students in the Major Work of the grade.** **How to Find the Evidence:** Familiarize yourself with the Major Work and Supporting Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate chapters and lessons that focus on Supporting Work. NOTE: Example of evaluating this Criterion might include looking at whether materials for K–5 generally treat data displays as an occasion for solving grade-level word problems using the four operations (e.g., see 3.MD.B.3); or whether materials for grade 7 take advantage of opportunities to use probability to support ratios, proportions, and percentages. For context, read Criterion #3 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** The supporting work enhances the focus and coherence of the Major Work throughout the curriculum. Book 7: **Filling and Wrapping** has students determining the measurements of three dimensional figures by writing equations and solving them.	**(Reviewer only.)** **__x__Meets** **____Does Not Meet/** **Insufficient Evidence**
Metric NN2C: **Materials base content progressions on the grade-by-grade progressions in the Standards. Content from previous or future grades does not unduly interfere with or displace on-grade-level content.** **How to Find the Evidence:** Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, and lessons in both student and teacher materials. NOTE: In some cases it may be possible that aligned materials might address some aspects of a topic in a strategic way before or after the grade level in which the topic is central in the Standards' progressions; for example, a curriculum author might purposefully choose to explore adding fractions with unlike denominators in a way appropriate to grade four, recognizing that this work is not really required until the next grade. However, any such purposeful discrepancies in content progressions should enhance the required learning in each grade; not unduly interfere with or displace grade-level content; and be clearly aimed at helping students meet the Standards as written rather than effectively rewriting the progressions in the Standards. And in all cases, note that Non-Negotiable 1 must be met for materials to be aligned. For context, read Criterion #5a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** The scope and sequence of this curriculum matches the progression of the Grade 7 standards. This curriculum is grade appropriate throughout.	**(Reviewer only.)** **__x__Meets** **____Does Not Meet/** **Insufficient Evidence**

Metric NN2D: **Materials gi[illegible] students extensive work with on-grade-level problems.** **How to Find the Evidence:** Evaluate both student and teacher materials. If the materials provide resources for differentiated learning, consider whether lower-performing students have opportunities to engage with grade-level problems. Also consider whether higher-performing students are given opportunities to learn current grade-level content in greater depth. For context, read Criterion #5b in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** The curriculum contains "Providing for Individual Needs" throughout. Differentiation for low-performing students: TG **Shapes and Designs** Pg. 103, 112 TG **Sketching and Shrinking** Pg. 28 Differentiation for higher-performing students: TG **Shapes and Designs** Pg. 109, 114. ACE problems – Application, Connections, Extensions	**(Reviewer only.)** **__x__Meets** **____Does Not Meet/** **Insufficient Evidence**
Metric NN2E: **Materials relate on-grade-level concepts explicitly to prior knowledge from earlier grades.** **How to Find the Evidence:** Evaluate both student and teacher materials. NOTE: Examples of evaluating this Criterion might include looking at the way the materials extend basic ideas of place value across the decimal point; or the role that properties of operations play when the materials extend arithmetic beyond whole numbers to fractions, variables, and expressions. More generally, cluster headings in the Standards sometimes signal key moments where reorganizing and extending previous knowledge is important in order to accommodate new knowledge (e.g., see cluster headings that use the phrase "Apply and extend previous understanding"). For context, read Criterion #5c in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Throughout TG **Samples and Populations** Pg. 47 Has students build on concepts learned previously by connecting to mean, mode, median, and range to make a box and whisker plot and to find the MAD.	**(Reviewer only.)** **__x__Meets** **____Does Not Meet/** **Insufficient Evidence**
Metric NN2F: **Review of material from previous grades is clearly identified as such to the teacher, and teacher and students can see what their specific responsibility is for the current year.** **How to Find the Evidence:** Evaluate the table of contents, but do not stop there; also evaluate units, chapters, lessons, homework assignments and assessments. (Evaluate both student and teacher materials.) Identify any content from previous grades and check whether it is identified as such. For context, read Criterion #5a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Throughout "Launch – Explore – Summarize" connects lessons to prior knowledge. "Mathematics Background" TG **Shapes and Designs** Pg. 14 TG **Accentuate the Negative** Pg. 13 TG **Samples and Populations** Pg.13	**(Reviewer only.)** **__x__Meets** **____Does Not Meet/** **Insufficient Evidence**

Metric NN2G: **Materials include learning objectives that are visibly shaped by CCSSM cluster headings.** **How to Find the Evidence:** Select several clusters from the Major Work in the grade being evaluated. Evaluate teacher and student materials in relation to these clusters. For context, read Criterion #6a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Throughout Examples are from **Filling and Wrapping** Focus Questions: TG Pg. 47, 51, 57, 63, 96, 103, 108, 142, 147, 153, 160, 194, 201, 208, 214, 222. SWB Pg. 7, 27, 49, 71. Unit Overview with Summary of Investigations Pg. 2-3. Facilitating Mathematical Practices. TE has provided learning objectives for each unit and for each investigation.	**(Reviewer only.)** **__x__Meets** **____Does Not Meet/** **Insufficient Evidence**
Metric NN2H: **Materials include problems and activities that serve to connect two or more clusters in a domain, or two or more domains in a grade, in cases where these connections are natural and important.** **How to Find the Evidence:** In the grade being evaluated, choose two or more clusters or two or more domains for which connections are natural and important. Evaluate the units, chapters, and lessons that deal with the chosen topics, looking for problems and activities that serve to connect the chosen clusters or domains. NOTE: An example of evaluating this Criterion might include looking at whether problems in grade 4 sometimes or often involve students applying their developing computation skills (detailed in domain NBT) in the context of solving word problems (detailed in domain OA). For context, read Criterion #6b in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Throughout **What Do You Expect?** SWB Pg. 9 (Probability connects to Ratios which connects to fractions and percent). SWB Pg. 62 (Probability connects to fractions, decimals, and percent).	**(Reviewer only.)** **__x__Meets** **____Does Not Meet/** **Insufficient Evidence**

Non-Negotiable 2:
Focus and Coherence

Materials must focus coherently on the Major Work of the grade in a way that is consistent with the progressions in the Standards.

NN 2 If all Metrics 2A – 2H were rated as Meets, then rate Non-Negotiable 2 as Meets. If one or more Metric was rated Does Not Meet/Insufficient Evidence, then rate Non-Negotiable 2 as Does Not Meet. Check the final rating.
Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)**

Before moving to Alignment Criterion 1, record the final Meets or Does Not Meet rating in the Evaluation Summary.

(Reviewer only.)

__x__Meets

____Does Not Meet

Strengths/Weaknesses:

Now continue by evaluating the Alignment Criterion 1 for Rigor and Balance.

Directions for Alignment Criterion 1

Rigor and Balance

Alignment Criterion 1: Rigor and Balance

Materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.

The Standards set expectations for attention to all three aspects of rigor: conceptual understanding, procedural skill and fluency, and applications. Thus, materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.

Required Materials

- Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf)
- Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)
- Focus by Grade Level for the grade being evaluated (achievethecore.org/focus)
- Situation Types for the Operations in Word Problems (achievethecore.org/situation-types)
- From the materials being evaluated: teacher guides, student texts and workbooks

Rating this Criterion:

Alignment Criterion 1 is rated as Meets or Does Not Meet.

To rate Alignment Criterion 1, first rate metrics 1A, 1B, and 1C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). For each metric, guiding questions are provided to aid in gathering evidence.
Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 1 if the materials rate 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as rigor and balance, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.

Metric AC1A: **The material[illegible]pport the development of students' conceptual understanding of key mathematical concepts, especially where called for in specific content Standards or cluster headings.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Major Work for the grade being evaluated that relate specifically conceptual understanding to use throughout the questions associated with this metric. NOTE: Some examples of clusters or Standards that call for conceptual understanding include: K.OA.A.1, (1.NBT.B, 1.NBT.C), (2.NBT.A, 2.NBT.B), (3.OA.A.1, 3.OA.A.2), 4.NF.A, (4.NBT.A, 4.NBT.B), 5.NF.B, (5.NBT.A, 5.NBT.B), 6.RP.A, 6.EE.A.3, 7.NS.A, 7.EE.A, 8.EE.B, 8.F.A, 8.G.A Clusters or Standards grouped by parentheses are closely connected and could be analyzed together. For context, read Criterion #4a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	-Choose a cluster/Standard from the Major Work that is aligned to each aspect of rigor and use [illegible]valuate these metrics. It is most helpful if the same clusters/Standards are chosen for all of the programs being evaluated. (Guidance in choosing clusters/Standards is included in "How to Find the Evidence".)	**Use the questions for AC Metric 1A to evaluate Metric 1A. Record evidence for ea[illegible]uestion and rate Metric 1A.** **__x__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Is conceptual understanding attended to thoroughly where the Standards set explicit expectations for understanding or interpreting? Evaluate lessons, chapter/unit assessments and homework assignments, paying attention to work aligned to Standards that explicitly call for understanding or interpreting. NOTE: Examples of evaluating this Criterion might include looking at how well the multi-digit addition and subtraction algorithms are developed and explained on the basis of place value and properties of operations; or how well the multi-digit multiplication and division algorithms are developed and explained on the basis of place value and properties of operations; or how well solving equations is presented and explained as a process of reasoning.	**Evidence-** Conceptual understanding is thoroughly attended to throughout the curriculum. The curriculum contains 'Applications' and 'Extensions' in every lesson. **Shapes and Designs** SWB Pg. 39 **Moving Straight Ahead** SWB Pg. 7, 9 (How? Describe. Write an equation. Predict. Check Reasonableness.) Pg. 11 Pg. 15 (What? Make a Table. Write an equation. Compare. Explain.) Pg. 19 (Describe similarities and differences). Procedure Understanding is seen throughout as well. **Moving Straight Ahead** SWB Pg. 16, 45-46, 64. Numerical, graphical, and symbolic way of looking at data.	
Do the materials feature high-quality conceptual problems and conceptual discussion questions? Evaluate lessons, chapter/unit assessments, and homework assignments. NOTE: Example of conceptual problems might include such questions as "Find a number greater than 1/5 and less than 1/4," or "If the divisor does not change and the dividend increases, what happens to the quotient?"	**Evidence-** "Mathematical Reflections" provides students with the opportunity to consider high-quality conceptual problems and questions. Extensions in ACE problems. **What Do You Expect?** SWB Pg. 25, 48, 69, 97, 111. High quality conceptual questions can be seen throughout. Ex. Pg. 4, 9, 15, 28, 51, 77, 105.	

Do the materials feature opportunities to identify correspondences across mathematical representations? Evaluate lessons, chapter/unit assessments and homework assignments. NOTE: Examples of evaluating this Criterion might include looking at whether students are supported in identifying correspondences among: the verbal description of a situation, the diagrams that distill its mathematical features, and the equations that model it; or equivalent forms of numbers (e.g., 3 and 6/2) and the number line; or rational number operations and representations of them via models such as the vector model; or the expression that defines a function and the graph that shows the relationship.	**Evidence-** This curriculum has students work with a variety of mathematical representations including graphs, equations, pictures, spinners, and number lines. Examples are from **What Do You Expect?** Graphs Pg. 9, 43, 64, 79. Equations Pg. 12 Pictures Pg. 30, 51 Spinners Pg. 58, 59, 60, 72, 75 Number Lines Pg. 42	
Metric AC1B: **The materials are designed so that students attain the fluencies and procedural skills required by the Standards.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Major Work for the grade being evaluated that relate specifically to fluency and procedural skill to use throughout the questions associated with this metric. NOTE: Some examples of Standards that call for procedural skill and fluency include: K.OA.A.5, 1.OA.C.6, 2.OA.B.2, 2.NBT.B.5, 3.OA.C.7, 3.NBT.A.2, 4.NBT.B.4, 5.NBT.B.5, 6.NS.B.2, and 6.NS.B.3, 6.EE.A, 7.NS.A, 7.EE.A.1,7.EE.B.4a, 8.EE.C.7, 8.EE.C.8b For context, read Criterion #4b in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).		**Use the questions for Metric 1B to evaluate Metric 1 B. Record evidence for each question and rate Metric 1B.** **(Reviewer only.)** **__x__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Is progress toward fluency and procedural skill interwoven with students' developing conceptual understanding of the operations in question? Evaluate lessons, chapter/unit assessments, daily routines, and homework assignments for evidence that the development of fluency and procedural skill is supported by conceptual understanding.	**Evidence-** Throughout **Accentuate the Negative** AND **Moving Straight Ahead** Both units focus on developing conceptual understanding of the operations with progress towards fluency. **Moving Straight Ahead** has students working with word problems where they set up equations that lead to distributive property. **Samples and Predictions** SWB Pg. 31 ("A new term is used in this investigation: sample. What do you think sample means?") ACE problems for applications (operation problems).	

Are purely procedural problems and exercises present that include cases in which opportunistic strategies are valuable and generic cases that require efficient algorithms present? Evaluate lessons, chapter/unit assessments, daily routines, and homework assignments. NOTE: Examples of problems in which opportunistic strategies are valuable might include the sum 698 + 240 or the system x + y = 1, 2x + 2y = 3. Examples of generic cases that require efficient algorithms might include the sum 8767+2286 or the system 6y + x = x + 3, – x = 1 + 2y.	**Evidence-** Both opportunistic and generic strategies are seen for working with algorithms. Opportunistic: **Accentuate the Negative** TG Pg. 193. Generic: **Shapes and Designs** TG Pg. 19. **Filling and Wrapping** SWB Pg. 56 (Circumference/Area of a Circle) SWB Pg. 75 (Volume Formulas) TG Pg. 17 (Area and SA) Pg. 19 (Area and Circumference)	
Do the materials in grades K–6 provide repeated practice toward attainment of fluency Standards? Evaluate lessons, daily routines, and homework assignments for evidence of repeated practice toward attainment of the following K–6 Standards that set an explicit expectation of fluent (accurate and reasonably fast) computation: K.OA.A.5, 1.OA.C.6, 2.OA.B.2, 2.NBT.B.5, 3.OA.C.7, 3.NBT.A.2, 4.NBT.B.4, 5.NBT.B.5, 6.NS.B.2, 6.NS.B.3.	**Evidence-** N/A	
Metric AC1C: **The materials are designed so that teachers and students spend sufficient time working with engaging applications, without losing focus on the Major Work of each grade.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Major Work for the grade being evaluated that relate specifically application to use throughout the questions associated with this metric. NOTE: Some examples of clusters or Standards that call for application include: K.OA.A.2, 1.OA.A, 2.OA.A, 3.OA.A.3, 3.OA.D.8, 4.OA.A.3, 4.NF.B.3d, 4.NF.B.4c, 5.NF.B.6, 5.NF.B.7c, 6.RP.A.3, 6.NS.A.1, 6.EE.B.7, 6.EE.C.9, 7.RP.A, 7.NS.A.3, 7.EE.B.3, 8.EE.C.8c, 8.F.B For context, read Criterion #4c in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Throughout **Shapes and Designs** SWB Pg. 15 (Polar Coordinate Systems), 18 (Angles/Honeybees), 22 (Goniometer/Angles), 38 (Angles/Amelia Earhart). **Accentuate the Negative** SWB Pg. 13 (Integers/Golf). **Stretching and Shrinking** SWB Pg. 13 (Measurement/Police Work). **Samples and Populations** SWB Pg. 53 (Random Sampling/Polling). TE: also provides facilitating questions.	**Use the questions for Metric 1C to evaluate Metric 1C. Record evidence for each question and rate Metric 1C.** **(Reviewer only.)** **__x__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Are there are single- and multi-step contextual problems, including non-routine problems, that develop the mathematics of the grade, afford opportunities for practice, and engage students in problem solving? Do the problems attend thoroughly to those places in the content Standards where expectations for multi-step and real-world problems are explicit? Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** Throughout. Each investigation includes presentation of the challenge with questions, exploration to investigate the challenge, a summary to answer questions, and a reflection of what has been learned.	

Do application problems particularly stress applying the Major Work of the grade? Evaluate lessons, chapter/unit assessments, and homework assignments. NOTE: Examples of evaluating this Criterion might include looking at: how well, by the end of grade 2, students using the materials as designed can represent and solve a full range of one-step addition and subtraction word problems; or how well, by the end of grade 3, students using the materials as designed can represent and solve a full range of one-step multiplication and division word problems; or how well these basic situation types for each operation are carried coherently across the grades, (e.g., with fractions and algebraic expressions); or, in all grades, whether the problems connect concepts, Standards, and domains in ways that are natural and important. For a list of situation types for one-step addition, subtraction, multiplication, and division problems, see Situation Types for the Operations in Word Problems	**Evidence-** Throughout Each lesson includes application, connection, extension, and reflection problems where students are able to apply the Major Work/standards learned in the lesson to solve problems. **Samples and Populations** SWB Application: Pg. 20-25, 45-47, 69-74. Connection: Pg. 25-28, 49-53, 75-78. Extension: Pg. 29-30, 53, 78-79. Reflection: Pg. 31-32, 54-55, 80-81.	
Does modeling build slowly across K–8, with applications that are relatively simple in earlier grades and when students are encountering new content? In grades 6–8, do the problems begin to provide opportunities for students to make their own assumptions or simplifications in order to model a situation mathematically? Read Standard for Mathematical Practice 4, Model with Mathematics. Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** **Samples and Populations** SWB Pg. 26-27 (Data from Chart to Making a bar graph). Pg.70-71 (Data from Chart to a Line Plot). Provide open-ended questions throughout the investigation units.	

Alignment Criterion 1: Rigor and Balance

Materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.

(Reviewer only.)

__x__Meets

____Does Not Meet

Strengths/Weaknesses:

AC1 Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 out of 6 points, the Criterion has not been met. Check the final rating.
Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)**

Before moving to Alignment Criterion 2, record the final Meets or Does Not Meet rating in the Evaluation Summary.

Directions for Alignment Criterion 2

Standards for Mathematical Practice

Alignment Criterion 2: Standards for Mathematical Practice

Materials must demonstrate authentic connections between content Standards and practice Standards.

The Standards require that designers of instructional materials connect the mathematical practices to mathematical content in instruction. Thus, materials must demonstrate authentic connections between content Standards and practice Standards.

Required Materials:

- Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf)
- Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)
- Focus by Grade Level for the grade being evaluated (www.achievethecore.org/focus)
- From the materials being evaluated: teacher guides, student texts and workbooks

Rating this Criterion

Alignment Criterion 2 is rated as Meets or Does Not Meet.

To rate Alignment Criterion 2, first rate metrics 2A, 2B, and 2C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). For each metric, guiding questions are provided to aid in gathering evidence.

Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 2 if the materials earn 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as mathematical practices, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.

Metric AC2A:

Materials address the practice Standards in such a way as to enrich the Major Work of the grade; practices strengthen the focus on Major Work instead of detracting from it, in both teacher and student materials.

How to Find the Evidence:

Familiarize yourself with the Major Work of the grade being evaluated (see the Focus by Grade Level documents.)

Evaluate teacher and student materials for evidence that the mathematical practices support and connect to the focus of the grade.

NOTE: Examples of evaluating this Criterion might include looking at whether, in grades K–5, students using the materials are supported to look for and express regularity in repeated reasoning about the addition table, the multiplication table, the properties of operations, the relationship between addition and subtraction or multiplication and division, and the place value system; or whether, in grades 6–8, students using the materials are supported to look for and express regularity in repeated reasoning about proportional relationships and linear functions.

For context, read Criterion #8 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013).

Evidence-

Throughout

Examples from **Shapes and Designs** SWB

1. Making sense of problems and persevere in solving them. Pg. 76.
2. Reason abstractly and quantitatively. Pg. 67, 64, 65.
3. Construct viable arguments and critique the reasoning of others. Pg. 10. TG Pg. 104.
4. Model with mathematics. Pg. 45, 48.
5. Use appropriate tools strategically. Pg. 63, 66, 19-20.
6. Attend to precision. Pg. 65.
7. Look for and make use of structure. Pg. 10.
8. Look for and express regularity in repeated reasoning. Pg. 43.

(Reviewer only.)

__x__Meets (2)

____Partially Meets (1)

____Does Not Meet (0)

Metric AC2B: **Materials att[redacted]to the full meaning of each practice Standard.** **How to Find the Evidence:** For context, read Criterion #7 and Criterion #9 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).		**Use the questions for Metric 2B to evaluate Metric 2B. Record evidence for each que[redacted] and rate Metric 2B.** **(Reviewer only.)** **__x__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Over the course of any given year of instruction, is each mathematical practice Standard meaningfully present in the form of assignments, activities, or problems that stimulate students to develop the habits of mind described in the practice Standard? Evaluate lessons, chapter/ unit assessments, and homework assignments for evidence of each mathematical practice being meaningfully present in instruction.	**Evidence-** Each MP is being utilized throughout instruction, lessons, assignments, and assessments. The MPs are meaningfully present.	
Do the materials treat the practice Standards as developing across grades or grade bands? Are the practice Standards in early grades appropriately simple? Do they display an arc of growing sophistication across the grades?	**Evidence-** Throughout **Shapes and Designs** TG Pg. 37-38, 100, 150. "Mathematical Reflections" and "Habits of Mind" MPs are appropriate for Grade 7.	
Are there teacher-directed materials that explain the role of the practice Standards in the classroom and in students' mathematical development? Are alignments to practice Standards accurate?	**Evidence-** Throughout Each investigation has a section "Facilitating the Mathematical Practice." **Stretching and Shrinking** TG Pg. 43, 85, 134, 199.	
Metric AC2C: **Materials support the Standards' emphasis on mathematical reasoning.** **How to Find the Evidence:** For context, read Criterion #10 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).		**Use the questions for Metric 2C to evaluate Metric 2C. Record evidence for each question and rate Metric 2C.** **(Reviewer only.)** **__x__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Do the materials support students in constructing viable arguments and critiquing the arguments of others concerning grade-level mathematics that is detailed in the content Standards? Read Standard for Mathematical Practice 3. Evaluate teacher and student materials to ensure that students are given opportunities to reason with grade-level mathematics.	**Evidence-** Throughout ACE assignments. **Shapes and Designs** TG Pg. 104. **Accentuate the Negative** SWB Pg. 10, 16. **Stretching and Shrinking** SWB Pg. 14, 66, 67. **Ratios, Rates, Percent, and Proportion** SWB Pg. 24. **Moving Straight Ahead** SWB Pg. 65, 73. **Samples and Populations** SWB Pg. 11.	

Do the materials support students in producing not only answers and solutions, but also in a grade-appropriate way, arguments, explanations, diagrams, mathematical models, etc., especially in the Major Work of the grade? Familiarize yourself with the Major Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate teacher and student materials, to understand the types of work students are expected to produce.	**Evidence-** Throughout. Lessons have questioning throughout that support students in producing arguments, explanations, diagrams, and models. **Shapes and Designs** TG Pg. 153, 154. **Accentuate the Negative** SWB Pg. 17.	
Do materials explicitly attend to the specialized language of mathematics? Is the language of argument, problem solving, and mathematical explanations taught rather than assumed? Evaluate teacher and student materials, paying attention to how mathematical language is taught. NOTE: Examples of evaluating this Criterion might include looking at whether students are supported in: basing arguments on definitions; using the method of providing a counterexample; or recognizing that examples alone do not establish a general statement.	**Evidence-** The academic language of mathematics is appropriate throughout the curriculum. Provide glossary of key math terms. **Shapes and Designs** TG Pg. 153 has students explore to understand the meaning of triangle inequality They then have to list any special triangles (isosceles, equilateral, right triangle, etc.) they have discovered. A Glossary containing vocabulary words is provided in each unit.	

Alignment Criterion 2:
Standards for Mathematical Practice

Materials must demonstrate authentic connections between content Standards and practice Standards.

AC2 Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 out of 6 points, the Criterion has not been met. Check the final rating.
Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion.
(Reviewer only.)

Before moving to Alignment Criterion 3, record the final Meets or Does Not Meet rating in the Evaluation Summary.

(Reviewer only.)

__x__Meets

____Does Not Meet

Strengths/Weaknesses:

Alignment Criterion 3: **Access to the Standards for All Students** **Materials must provide supports for English Language Learners and other special populations.** Because Standards are for all students, alignment requires thoughtful support to ensure all students are able to meet the Standards. Thus, aligned materials must provide supports for English Language Learners and other special populations.	**Required Materials:** • Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion:** Alignment Criterion 3 is rated as Meets or Does Not Meet. To rate Alignment Criterion 3, first rate metrics 3A, 3B, and 3C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 3 if the materials earn 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as support for special population, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.
Metric AC3A: **Support for English Language Learners and other special populations is thoughtful and helps those students meet the same Standards as all other students. The language in which problems are posed is carefully considered.** **How to Find the Evidence:** Evaluate teacher and student materials, paying attention to supports offered for special populations.	**Evidence-** "Providing for Individual Needs" is available for every lesson in the TG to provide teachers with supporting differentiation in their classroom. **Moving Straight Ahead** TG Pg. 47, 53, 69, etc. Modeling, Questions, Grouping, Active Participation	**Reviewer only.)** **__x__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Metric AC3B: **Materials provide appropriate level and type of scaffolding, differentiation, intervention, and support for a broad range of learners with gradual removal of supports, when needed, to allow students to demonstrate their mathematical understanding independently.** **How to Find the Evidence:** Evaluate teacher and student materials, paying attention to whether materials provide differentiation that will lead all learners to engage with on-grade-level content.	**Evidence-** Scaffolding and differentiation is provided throughout the curriculum. "Providing for Individual Needs" gives teachers ideas of what they can do for differentiation and scaffolding. "Going Further" gives teachers ideas of what they can do for more advanced students beyond the basic curriculum.	**Reviewer only.)** **__x__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**

Metric AC3C: **Design of lessons recommends and facilitates a mix of instructional approaches for a variety of learners such as using multiple representations (e.g., including models, using a range of questions, checking for understanding, flexible grouping, pair-share).** **How to Find the Evidence:** Evaluate teacher materials, noting instructional approaches suggested for whole class and differentiated lessons and activities.	**Evidence-** This curriculum uses a variety of instruction strategies, modeling, questioning, and grouping. Questioning is provided throughout. **What Do You Expect?** TG Pg. 50, 52, 56, 57. "Did you all arrive at the same conclusion about which outcome is more likely? Students must write number sentences, expressions, draw tables, graphs, diagrams, and write equations. **What Do You Expect?** SWB Pg. 0 has students complete a table. Pg. 33 has students draw a tree diagram. Pg. 42 has students working on a number line to determine if something is impossible or certain to happen. Pg. 45 has students using a line plot to find data. Pg. 58 has students using a spinner to interpret data. Students work individually, in pairs, small groups, or as a whole class. **What Do You Expect?** SWB Pg. 11 has students work in small groups to complete an experiment and then combine their data as a class to answer questions. Pg. 58 has students working individually to interpret data, and then comparing their data with a partner.	**Reviewer only.)** **__x__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**

Alignment Criterion 3:
Access to the Standards for All Students

Materials must provide supports for English Language Learners and other special populations.

AC3 Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 points, the Criterion has not been met. Check the final rating.
Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion.**(Reviewer only.)**

Move to the Evaluation Summary and record the final Meets or Does Not Meet rating .

(Reviewer only.)

__x__Meets

____Does Not Meet

Strengths/Weaknesses:

Once an evaluation for alignment to the Shifts and major features of the CCSS has been conducted using Sections 1-3, it's important to evaluate for overall quality and best practices. A starting list of Indicators of Quality are suggested below. States, districts and others evaluating instructional materials are encouraged to add to this list to ensure materials reflect local contexts. For background information on some of the Indicators of Quality in this section, refer to pp.18–21 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).

Indicators of Quality	Evidence- Give specific examples.	Rating: (Reviewers only.)
1. Lessons are thoughtfully structured and support the teacher in leading the class through the learning paths at hand, with active participation by all students in their own learning and in the learning of their classmates.	**Evidence-** Lessons are thoughtfully structured and support teacher and students in learning standards. All evidence comes from **Accentuate the Negative** TG Pacing is provided for each unit and lesson. Differentiation Pg. 49, 55, 62, 99, 151. Activities/Discovery "Presenting the Challenge" Pg. 48, 60, 64, 103, 203. Discussion prompts Pg. 49-52, 61, 65, 100, 502. Links to prior knowledge Pg. 48, 64, 59, 61, 64, 103, 208. Vocabulary (Each unit and lesson) Pg. 4, 41, 47, 54, 92, 197. Guided teacher instruction throughout. Students reflect Pg. 44, 57, 106, 115-116. Common misconceptions "Math Background" Pg. 14, 17. Launch videos Pg. 59, 98, 112, 148, 213. Project Pg. 29.	**(Reviewer only.)** **___x___ Yes** **_____ No**
2. The underlying design of the materials includes both problems and exercises. (In solving problems, students learn new mathematics, whereas in working exercises, students apply what they have already learned to build mastery.) Each problem or exercise has a purpose. **NOTE: This Criterion does not require that the problems and exercises be labeled as such.**	**Evidence-** Problems and exercises throughout. All evidence comes from **Stretching and Shrinking** SWB TG project Pg. 28, SWB Pg. 106-106. Introduction – Warmup Pg. 8-11. Problems and Exercises Pg. 52-59, 82-89. Application Pg. 16-18, 36-41, 60-68, 90-94. Connections Pg. 18-20, 41-43, 69-73, 95-98. Extensions Pg. 21-22, 43-47, 73-77, 99-103. Reflections P. 23-24, 48-49, 78-79, 104-105. Looking Back (Summary) Pg. 108-110.	**(Reviewer only.)** **___x___ Yes** **_____ No**

3. Design of assignments is not haphazard: exercises are given in intentional sequences in order to strengthen students' mathematical understanding.	**Evidence-** Curriculum has an intentional sequence that strengthens students understanding of content. Content is introduced, questions scaffold and builds to a better understanding. Practice, application, and summary of investigations is provided. All evidence comes from **Comparing and Scaling** TG Goals Pg. 8 Table of Contents Pg. vi-vii. Summary of Investigations Pg. 4. Exploration (Comparisons) Pg. 46. Scaffolded Questions Pg. 50. Builds to Ratios Pg. 53. Practice Pg. 55-61. Application Pg. 87-95. SWB Pg. 7-9 provides questioning, Pg. 10-18 provided scaffolding and builds to better understanding, Pg.18 connect to prior learning, and Pg. 19-27 application.	**(Reviewer only.)** **___x___ Yes** **_____ No**
4. There are separate teacher materials that support and reward teacher study including, but not limited to: discussion of the mathematics of the units and the mathematical point of each lesson as it relates to the organizing concepts of the unit, discussion on student ways of thinking and anticipating a variety of students responses, guidance on lesson flow, guidance on questions that prompt students thinking, and discussion of desired mathematical behaviors being elicited among students.	**Evidence-** • Every unit has a Teacher's Guide. Provides a mathematical background. • **Teacher Resources** book provides parent letters, lab sheets, assessments, and answer keys. • **A Guide to Connected Mathematics 3** has an overview of the curriculum as well as correlations to CCSS. • Teacher Lesson Support DVD	**(Reviewer only.)** **___x___ Yes** **_____ No**
5. Manipulatives suggested in the materials are faithful representations of the mathematical objects they represent and are connected to written methods.	**Evidence-** When manipulatives are suggested in the materials, they are well connected to the content. **Accentuate the Negative** SWB has students use the Active-Book Chip board for operations with integers. **Moving Straight Ahead** SWB has students use the Active-Book pouch and coins for solving one and two step equations.	**(Reviewer only.)** **___x___ Yes** **_____ No**

6. Materials include a variety of curriculum-embedded assessments. Examples include pre-, formative, summative, and self-assessment resources.	**Evidence-** Exam View Test Bank CD-ROM Formative assessments include a checkup, self-assessment, notebook check list, and project. (TE) Summative assessments include a partner quiz, unit test, and individual quiz. Evidence is from **Teacher Resources Grade 7** book. Checkup Pg. 31, 64, 67, 118, 121. Partner Quiz Pg. 34, 65, 119, 170. Unit Test Pg. 37, 69, 125, 174, 229, 288. Self-Assessment Pg. 41, 72, 130, 181, 233, 292. Notebook Check List Pg., 44, 74, 132, 235, 294. Quiz Pg. 281.	**(Reviewer only.)** ___x___ **Yes** _____ **No**
7. Assessments contain aligned rubrics, answer keys, and scoring guidelines that provide sufficient guidance for interpreting student performance.	**Evidence-** Rubrics, answer keys, and student examples are provided. Rubrics: **Shapes and Designs** TG Pg. 25-26. **Accentuate the Negative** TG Pg. 29-32. **Stretching and Shrinking** TG Pg.29-30. **Filling and Wrapping** Pg. 29-30. **Comparing and Scaling** Pg. 29-31. Answer Keys: **Shapes and Designs** TG Pg. 259-270. **Accentuate the Negative** TG Pg. 247-301. **Filling and Wrapping** Pg. 309-325. **Comparing and Scaling** Pg. 251-268. Student Examples: **Accentuate the Negative** TG Pg. 33. **Filling and Wrapping** Pg. 31-32. **Comparing and Scaling** Pg. 31-33.	**(Reviewer only.)** ___x___ **Yes** _____ **No**
8. Materials assess student proficiency using methods that are accessible and unbiased, including the use of course-level language in student prompts.	**Evidence-** The assessment and curriculum language are the same. They both contain clear sentence structure that is accessible and unbiased for students. There are a variety of assessments available in this curriculum.	**(Reviewer only.)** ___x___ **Yes** _____ **No**

9. Materials are carefully evaluated by qualified individuals, whose names are listed, in an effort to ensure freedom from mathematical errors and course-level appropriateness.	**Evidence-** Authors, assessment team, reviewers, content consultants, consultants, and field test sites are listed in the following: **A Guide to Connected Mathematics 3** Every TG Every SWB **Teacher Resources Grade 7** **CMP3 Grade 7**	**(Reviewer only.)** **___x___ Yes** **_____ No**
10. The visual design supports students in engaging thoughtfully with the subject. Navigation through the text is clear.	**Evidence-** The visual design supports students throughout. There is bold-faced and colored fonts that draw attention to vocabulary terms and important information for content understanding. Graphics and pictures are used throughout. Table of contents is provided.	**(Reviewer only.)** **___x___ Yes** **_____ No**
11. The materials engage parents in appropriate ways. For example, homework assignments in elementary grades, consist of routine problems, practice with getting answers, and fluency-building exercises that parents can easily support.	**Evidence-** Throughout Evidence from **Teacher Resources** book Parent Letters provided in English and Spanish Pg.3, 5, 49, 51, 83, 85, 139, 141, 189, 191, 245, 247, 303, 305, 369, 371. Parent letters include: unit goals, homework helps, CCSS, helpful mathematical ideas, including examples, information, formulas, etc.	**(Reviewer only.)** **___x___ Yes** **_____ No**

Reviewer IMET Evaluation Summary **Title/Level: Pearson Connected Mathematics3 Grade 7**

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Reviewer ID # HCSW **Date Review Completed: March 8, 2016**

Non-Negotiable Criteria- Each Non-Negotiable must be met in order for the Non-Negotiable Alignment Criteria to be met overall.

Non-Negotiable 1: Freedom from Obstacles to Focus	Non- Negotiable 2: Focus and Coherence
____x___ Meets _____ Does Not Meet	___x__ Meets _____ Does Not Meet

Non-Negotiable Overall:

___x__ Meets **_____ Does Not Meet**

Alignment Criteria- Each Alignment Criterion must be met with a sufficient number of points in order for Alignment Criteria to be labeled as "Meets" overall. The more points the materials receive on the Alignment Criteria, the better they are aligned.

Alignment Criterion 1: Rigor and Balance	Alignment Criterion 2: Standards of Mathematical Practice	Alignment Criterion 3: Access to Standards for All Learners
Points: __6___ of 6 possible. (Materials must receive at least 5 of 6 points to align.) ____x___ Meets _____ Does Not Meet	Points: __6___ of 6 possible. (Materials must receive at least 5 of 6 points to align.) ____x___ Meets _____ Does Not Meet	Points: __6___ of 6 possible. (Materials must receive at least 5 of 6 points to align.) ____x___ Meets _____ Does Not Meet

Alignment Criteria Overall:

___x__ Meets **_____ Does Not Meet**

If the materials meet both Non-Negotiables and relevant Alignment Criterion, they are aligned to the Shifts and major features of the Core Standards. **Do the materials meet every Non-Negotiable and Alignment Criterion? __x___ Yes _____ No**

What are the specific areas of strength and weakness based on this evaluation? Publishers or others modifying or developing assessments can use this information to make improvements and/or to remedy gaps in the alignment of assessment materials.

Strengths:
High level of engagement for students.
Tests focus on open ended questions leading to higher conceptual understanding.
ACE problems provide a variety of opportunities to meet the needs of diverse students.
ELL supports throughout. (Spanish versions available)
Very teacher friendly: Written in a way to guide teacher through teaching process.
Activity based and discovery learning.
Good vertical alignment connections across mathematical domains.

Weaknesses:
Will be a challenging curriculum, but it will be worth it.

2015-16 Mathematics Interim Review Recommendation & Summary

Publisher Name:	Pearson Education Inc
Title:	Pearson Connected Mathematics 3 Grade 8
ISBN #	9780133296761
Grade Level(s) or Course:	Grade 8
Reviewer ID:	ACSF

RECOMMENDED AS:

__✓__ **Core Mathematics Program-** a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials. Substantial evidence clearly supports the designation of this program as Core.

_____ **Other Mathematics Program-** a program that substantially, but partially, meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for supplemental materials. Substantial evidence clearly supports the designation of this program as Other.

_____ **Component Mathematics Program-** a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs. Substantial evidence clearly supports the designation of this program as Component.

_____ **Intervention Program-** a program designed and intended to target and support students' specific needs. Substantial evidence clearly supports the designation of this program as Intervention.

_____ **Does not meet criteria** for recommendation as a Curricular Material or Online Resource for Mathematics.

EVIDENCE SUMMARY:

FOCUS-

Materials reflect the content architecture of the standards by not assessing above grade level.
The focus is 8th grade CCSS.

COHERENCE-

Materials focus coherently on all Major Work Grade 8 standars.

RIGOR-

Materials reflect the balances in the standards with rigorous expectations.

CONCEPTUAL UNDERSTANDING-

Conceptual and procedural understanding are attended to throughout the curriculum with investigations, real-world problems, activities and grouping.

MATHEMATICAL PRACTICES-

MPs are seen throughout this curriculum and make authentic connections between standards. MPs meet the needs of ELLs and diverse learners.

ACCESSIBILITY OF STANDARDS TO ALL STUDENTS-

MPs and content throughout this curriculum meet the needs of ELLs and diverse learners through investigations, cooperative learning, connections to prior knowledge and checking for understanding.

OTHER:

~~this~~

2015-16 Interim Mathematics Review

Mathematics Evaluation Tool Grades K-8

Publisher: Pearson Education Inc.

Title of Material: Pearson Connected Mathematics 3

Author: Lappan et al.

ISBN #: 9780133296761 **Copyright** 2014

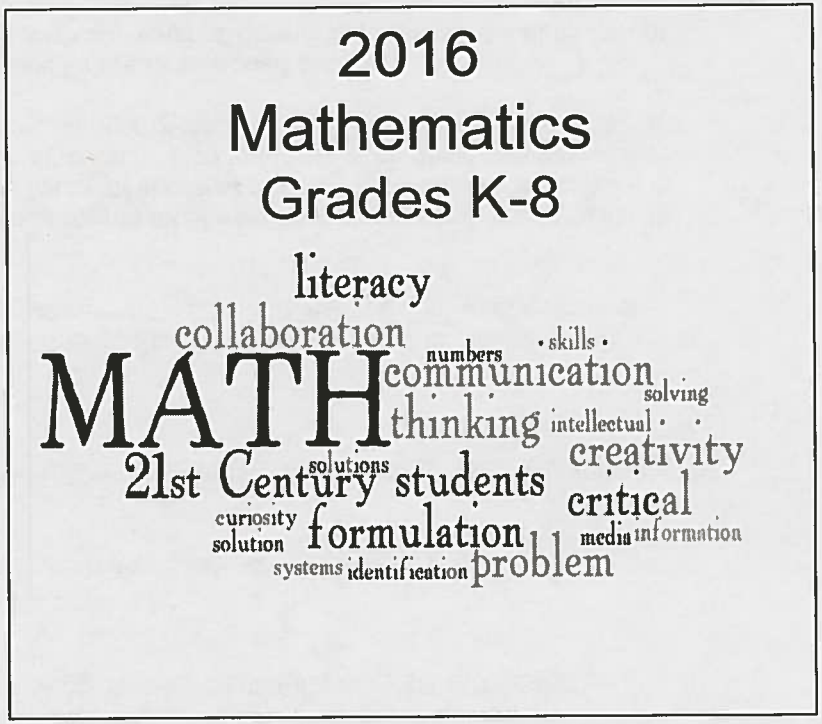
Reviewer ID: ACSF

Core Mathematics Program- a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Core.

Other Mathematics Program- a program that substantially, but partially, meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Other.

Component Mathematics Program- a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs.
Substantial evidence clearly supports the designation of this program as Component.

Intervention Program- a program designed and intended to target and support students' specific needs.
Substantial evidence clearly supports the designation of this program as Intervention.



- Evaluation Form adapted from Instructional Materials Evaluation Toolkit (IMET).

The IMET was developed by Student Achievement Partners. Educators may use or adapt. http://creativecommons.org/licenses/by/3.0/ Download this tool at http://achievethecore.org/IMET

Instructional Materials Evaluation Tool

Mathematics, Grades K-8

What Are the Purposes of the IMET?

This Math IMET is designed to help educators determine whether instructional materials are aligned to the Shifts and major features of the Common Core State Standards (CCSS). The substantial instructional Shifts (http://www.corestandards.org/other-resources/key-shifts-inmathematics/) at the heart of the Common Core State Standards are:

- **Focus** strongly where the Standards focus
- **Coherence**: Think across grades and link to major topics within the grade
- **Rigor**: In major topics, pursue conceptual understanding, procedural skill and fluency, and application with equal intensity.

The IMET draws directly from the following documents:

- Common Core State Standards for Mathematics (www.corestandards.org/Math)
- Publishers' Criteria for the Common Core State Standards in Mathematics grade K-8 (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)

When to use the IMET

1. Purchasing materials: Many factors go into local purchasing decisions. Alignment to the Standards is a critical factor to consider. This tool is designed to evaluate alignment of instructional materials to the Shifts and the major features of the CCSS. It also provides suggestions of additional indicators to consider in the materials evaluation and purchasing process.

2. Evaluating materials currently in use: The IMET can be used to analyze the degree of alignment of existing materials and help to highlight specific, concrete flaws in alignment. Even where materials and tools currently in use fail to meet one or more of these criteria, the pattern of failure is likely to be informative. States and districts can use the evaluation to create a thoughtful plan to modify or combine existing resources in such a way that students' actual learning experiences approach the focus, coherence, and rigor of the Standards.

3. Developing programs: Those developing new programs can use this tool as guidance for creating aligned curricula.
Please note this tool was designed for evaluating comprehensive curricula (including any supplemental or ancillary materials), but it was not designed for the evaluation of standalone supplemental materials.

Who Uses the IMET?

Evaluating instructional materials requires both subject-matter and pedagogical expertise. Evaluators should be well versed in the Standards (www.corestandards.org/Math) for all grades in which materials are being evaluated. This includes understanding the Major Work of the grade (www.achievethecore/focus), the Supporting and Additional work, how the content fits into the progressions in the Standards (www.achievethecore.org/progressions), and the expectations of the Standards with respect to conceptual understanding, procedural skill and fluency, and application. Evaluators also should be familiar with the substantial instructional Shifts (http:// www.corestandards.org/other-resources/key-shifts-in-mathematics/) of Focus, Coherence and Rigor that are listed above.

Getting Started

Prior to Evaluation

Assemble all of the materials necessary for the evaluation. It is essential for evaluators to have materials for all grades covered by the program, as some criteria cannot be rated without having access to each grade. In addition, each evaluator should have a reference copy of the Common Core State Standards for Mathematics (CCSSM) and the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013).

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Prior to Evaluation

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Before conducting the evaluation itself, it is important to develop a protocol for the evaluation process. The protocol should include having evaluators study the Publishers' Criteria and the IMET. It will also be helpful for evaluators to get a sense of each program overall before beginning the process. At a minimum, this would include reading the front matter of the text, looking at the table of contents and paging through multiple chapters.

Sections 1-3 below should be completed to produce a comprehensive picture of the strengths and weaknesses of the materials under evaluation. Information about areas in need of improvement or supplementation should be shared with internal and external stakeholders.

Navigating the Tool

Begin with Section 1: Non-Negotiable Alignment Criteria

- The Non-Negotiable Alignment Criteria must each be met in full for materials to be considered aligned to the Shifts and the major features of the Common Core State Standards. Each Non-Negotiable Alignment Criterion has one or more metrics associated with it; every one of these metrics must be met in order for the criterion as a whole to be met.

- Examine the relevant materials and use evidence to rate the materials against each criterion and its associated metric(s).

- Record and explain the evidence upon which the rating is based.

Continue to Section 2: Alignment Criteria

- The Alignment Criteria must each be met for materials to be considered aligned to the Shifts and the major features of the Common Core State Standards. Each Alignment Criterion has one or more metric associated with it; a specific number of these metrics must be met or partially met in order for the criterion as a whole to be met.

- Examine the materials in relation to these criteria, assign each metric a point value. Rate the criterion as "Meets" or "Does Note Meet" based on the number of points assigned. The more points the materials receive on the alignment Criteria, the better they are aligned.

- Record and explain the evidence upon which the rating is based.

Proceed to Section 4: Indicators of Quality

- Indicators of Quality are important considerations that will help evaluators better understand the overall quality of instructional materials. These considerations are not criteria for alignment to the CCSS, but they provide valuable information about additional program characteristics. Evaluators may want to add their own indicators to the examples provided.

Directions for Non-Negotiable 1

Freedom from Obstacles to Focus

Criterion	Evidence- Give specific examples.	Rating: (Reviewer only.)
Non-Negotiable 1: **Freedom from Obstacles to Focus** **Materials must reflect the content architecture of the Standards by not assessing the topics named before the grade level where they first appear in the Standards.** The Standards foster students' progress to algebra by focusing strongly on arithmetic. Consistent with this focus, certain topics from outside of arithmetic appear only in later grades. Thus, to be aligned, materials must reflect the content architecture of the Standards by not assessing the topics named before the grade level where they first appear in the Standards. In this criterion, "topics named" means the topics that are explicitly named in Metric 1A. No other topics should be added to the list in Metric 1A. (Note that other topics in the standards are addressed in criterion NN2.)	**Required Materials** • Common Core State Standards for Mathematics (www.corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf) • From the materials being evaluated: teacher guides and all assessment components	**Rating this Criterion:** Non-Negotiable 1 is rated as Meets or Does Nc To rate Non-Negotiable 1, begin by rating Metri Since Metric 1A is the only metric for Non-Negc the rating for Non-Negotiable 1 is the same as rating for Metric 1A. If Metric 1A is rated as Does Not Meet, include evidence of when the named topic(s) is/are ass the metric is rated as Meets, list the grade(s) e in the evaluation.
Metric NN1A: **Materials reflect the basic architecture of the Standards by not assessing the listed topics before the grade level indicated.**	Evidence- Reviewed table of contents- reviewed High School standards, none appear in any	**(Reviewer only.)** **_x_ Meets**

bability, including chance, likely outcomes, probability models. (Introduced in the CCSSM in grade 7) • Statistical distributions, including center, variation, clumping, outliers, mean, median, mode, range, quartiles; and statistical association or trends, including two-way tables, bivariate measurement data, scatter plots, trend line, line of best fit, correlation. (Introduced in the CCSSM in grade 6) • Similarity, congruence, or geometric transformations. (Introduced in the CCSSM in grade 8) • Symmetry of shapes, including line/ reflection symmetry, rotational symmetry. (Introduced in the CCSSM in grade 4) **How to Find the Evidence:** Evaluate the table of contents, all chapter tests, all unit tests, and other such assessment components (including rubrics). For context, read Criterion #2 from the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013). NOTE: Grade alignments of other topics are addressed in Non- Negotiable 2, Focus and Coherence.) In this criterion, "topics named" means the topics that are explicitly named in Metric 1A. No other topics should be added to the list in Metric 1A. (Note that other topics in the standards are addressed in criterion NN2.)	assess nt in this book. 6th and 7th grade appear in review but not overwhelming. All 8th grade CCSS standards are met. Examples of such Geometry and congruence merely show how transformations can be similar In high school the difference is describing transformations as functions. Rotations and reflections occur in both but transversals are introduced in 8th grade but extended in for 9th grade. No assessments assess any topics after this grade level	____**Does Not Meet**

Non-Negotiable 1: Materials must reflect the content architecture of the Standards by not assessing the topics named* before the grade level where they first appear in the Standards.

(Reviewer only.)

NN 1 If Metric 1A was rated as Meets, then rate Non-Negotiable 1 as Meets. If Metric 1A was rated as Does Not Meet, then rate Non- Negotiable 1 as Does Not Meet. Check the final rating.

_x___Meets

Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion.**(Reviewer only.)**

____Does Not Meet

The strength is that the material aligns well with the grade standards for 8th grade. No material is assessed belonging to standards beyond the 8th grade. The teacher material explains very nicely all of the assessments and what is being tested.

Strengths/Weaknesses:

The weakness would be the problems at the beginning of each section is not clearly defined for the student without the teacher explaining the area. The student may feel he is being tested beyond his capability.

Before moving to Non-Negotiable 2, record the final Meets or Does Not Meet rating in the Evaluation Summary.

Directions for Non-Negotiable 2

Focus and Coherence

n-Negotiable 2:

Focus and Coherence

Materials must focus coherently on the Major Work of the grade in a way that is consistent with the progressions in the Standards.

Focus and coherence are the two major evidence-based design principles of the Common Core State Standards for Mathematics (CCSSM, p. 3). Focus is necessary in order to fulfill the ambitious promise the states have made to their students by adopting the Standards: greater achievement at the college and career ready level; greater depth of understanding of mathematics; and a rich classroom environment in which reasoning, sense-making, applications, and a range of mathematical practices flourish. In simpler terms, a mile-wide, inch-deep curriculum translates to less time per topic. Less time means less depth and moving on without many students. Thus, materials must focus coherently on the Major Work of the grade in a way that is consistent with the progressions in the Standards.

Required rials

- Co n Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf)
- Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)
- Focus by Grade Level for the grade being evaluated (www.achievethecore.org/focus)
- From the materials being evaluated: teacher guides, student texts and workbooks

Rating this Criterion:
Non-Negotiable 2 is rate Meets or Does Nc

To rate Non-Negotiable 2, first rate metrics 2A-
Each of these eight metrics must be rated as M
order for Non-Negotiable 2 to be rated as Meet
each metric 2A-2H as Meets or Does Not
Meet/Insufficient Evidence. If the evidence exa
shows that the Criterion is met, then mark the C
Meets. If the evidence examined shows that th
Criterion is not met—or if there is insufficient ev
to make a determination—then mark the Criteri
Does Not Meet/Insufficient Evidence. Support a
ratings with evidence.

Metric NN2A:
In each grade K–8, students and teachers using the materials as designed devote the large majority of time to the Major Work of the grade.

How to Find the Evidence:
Familiarize yourself with the Major Work of the grade being evaluated (see the Focus by Grade Level documents.)
Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, lessons, homework assignments, and assessments. (Evaluate both student and teacher materials.)
Consider time spent on the Major Work of the grade and judge qualitatively whether students and teachers using the materials as designed will devote the large majority of time to the Major Work of the grade.
For context, read Criterion #1 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013)

Evidence-
The majority of the time is spent on the major work of the grade. The estimated amount is 80%

Major clusters 8.FA.3, 8.FA.1. 8.FA.2 are covered in working with Models

In looking for Pythagoras most of the time is devoted to the major work but much less than in others probably 60 %.
Growing, growing , growing -100% devoted to functions which is a major work

Say it with symbols- some review but labeled as such. 70% devoted to major work

(Reviewer only.)

_X__Meets

____Does Not Meet/

Insufficient Evidence

Metric NN2B:
Supporting Work, where present, enhances focus and coherence simultaneously by also engaging students in the Major Work of the grade.

How to Find the Evidence:

Evidence-
The supporting work is a great supplement to the student and teacher textbook.

(Reviewer only.)

__X_Meets

Familiarize yourself with the Major Work and Supporting Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate chapters and lessons that focus on Supporting Work. NOTE: Example of evaluating this Criterion might include looking at whether materials for K–5 generally treat data displays as an occasion for solving grade-level word problems using the four operations (e.g., see 3.MD.B.3); or whether materials for grade 7 take advantage of opportunities to use probability to support ratios, proportions, and percentages. For context, read Criterion #3 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	throughout the work evidence exists. An example is in Thinking with Mathematical Models on page 102. Modeling linear data patterns. Connects statistics- data patterns and categorical/ numerical data with linear functions, proportional relationships, unit rates and solving linear equations.	____Does Not Meet **Insufficient Evidence**
Metric NN2C: **Materials base content progressions on the grade-by-grade progressions in the Standards. Content from previous or future grades does not unduly interfere with or displace on-grade-level content.** **How to Find the Evidence:** Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, and lessons in both student and teacher materials. NOTE: In some cases it may be possible that aligned materials might address some aspects of a topic in a strategic way before or after the grade level in which the topic is central in the Standards' progressions; for example, a curriculum author might purposefully choose to explore adding fractions with unlike denominators in a way appropriate to grade four, recognizing that this work is not really required until the next grade. However, any such purposeful discrepancies in content progressions should enhance the required learning in each grade; not unduly interfere with or displace grade-level content; and be clearly aimed at helping students meet the Standards as written rather than effectively rewriting the progressions in the Standards. And in all cases, note that Non-Negotiable 1 must be met for materials to be aligned. For context, read Criterion #5a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** All standards met by the lesson appear at the beginning of each unit. example is Thinking with Math Models pg 11,17. the topic are in line with CCSS Domain Progression	**(Reviewer only.)** _X__Meets ____Does Not Meet/ **Insufficient Evidence**
Metric NN2D: **Materials give all students extensive work with on-grade-level problems.** **How to Find the Evidence:** Evaluate both student and teacher materials. If the materials provide resources for differentiated learning, consider whether lower-performing students have opportunities to engage with grade-level problems. Also consider whether higher-performing students are given opportunities to learn current grade-level content in greater depth. For context, read Criterion #5b in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Tools are made available for all learners Example would be in Say it with Symbols, the visuals are used to express ideas to all learning levels. The exercises in each section get progressively more enriched. Giving advance learners a chance to build their problem solving skills at a	**(Reviewer only.)** _X__Meets ____Does Not Meet/ **Insufficient Evidence**

	higher er while less advanced learners get the basic skills the standards call for. English language learners can compare the Spanish versions with the English to build understanding and vocabulary. Also uses Cooperative groups and hands on Discovery. An example is Thinking with Math Models pages 65 (video) and 73	
Metric NN2E: **Materials relate on-grade-level concepts explicitly to prior knowledge from earlier grades.** **How to Find the Evidence:** Evaluate both student and teacher materials. NOTE: Examples of evaluating this Criterion might include looking at the way the materials extend basic ideas of place value across the decimal point; or the role that properties of operations play when the materials extend arithmetic beyond whole numbers to fractions, variables, and expressions. More generally, cluster headings in the Standards sometimes signal key moments where reorganizing and extending previous knowledge is important in order to accommodate new knowledge (e.g., see cluster headings that use the phrase "Apply and extend previous understanding"). For context, read Criterion #5c in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** every problem in every unit has a section " Connecting to prior knowledge An example is thinking with Math Models page 103.	**(Reviewer only.)** **__X__Meets** **____Does Not Meet/ Insufficient Evidence**
Metric NN2F: **Review of material from previous grades is clearly identified as such to the teacher, and teacher and students can see what their specific responsibility is for the current year.** **How to Find the Evidence:** Evaluate the table of contents, but do not stop there; also evaluate units, chapters, lessons, homework assignments and assessments. (Evaluate both student and teacher materials.) Identify any content from previous grades and check whether it is identified as such. For context, read Criterion #5a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** launch lesson at the beginning of each unit has a "Connecting to Prior Knowledge " section and a "Looking Ahead" and "Looking behind " section	**(Reviewer only.)** **_X__Meets** **____Does Not Meet/ Insufficient Evidence**
Metric NN2G: **Materials include learning objectives that are visibly shaped by CCSSM cluster headings.** **How to Find the Evidence:** Select several clusters from the Major Work in the grade being evaluated. Evaluate teacher and student materials in relation to these clusters.	**Evidence-** At the beginning of every investigation in each unit the CCSS covered are listed. Example Thinking with Math Models page 205. At the conclusion of each investigation there is a mathematical reflection where at least one	**(Reviewer only.)** **__X__Meets** **____Does Not Meet/**

ntext, read Criterion #6a in the Publishers' Criteria for the Common State Standards for Mathematics, Grades K–8 (Spring 2013).	questi s explicitly related to a CC math practice	**Insufficient Evidence**
Metric NN2H: **Materials include problems and activities that serve to connect two or more clusters in a domain, or two or more domains in a grade, in cases where these connections are natural and important.** **How to Find the Evidence:** In the grade being evaluated, choose two or more clusters or two or more domains for which connections are natural and important. Evaluate the units, chapters, and lessons that deal with the chosen topics, looking for problems and activities that serve to connect the chosen clusters or domains. NOTE: An example of evaluating this Criterion might include looking at whether problems in grade 4 sometimes or often involve students applying their developing computation skills (detailed in domain NBT) in the context of solving word problems (detailed in domain OA). For context, read Criterion #6b in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** In the CCss alignment, page A21 of " a Guide to Connected Math 3" you can clearly see there is more than one cluster covered in multiple units. for example, Looking for Pythagoras, Investigation 5 problem 5.3 page 87 uses 8. EE.B, 8.EE.C, 8.F.B, 8.G.B.	**(Reviewer only.)** **_X__Meets** **____Does Not Meet/ Insufficient Evidence**

Non-Negotiable 2:

Focus and Coherence

Materials must focus coherently on the Major Work of the grade in a way that is consistent with the progressions in the Standards.

(Reviewer only.)

_X__Meets

____Does Not Meet

NN 2 If all Metrics 2A – 2H were rated as Meets, then rate Non-Negotiable 2 as Meets. If one or more Metric was rated Does Not Meet/Insufficient Evidence, then rate Non-Negotiable 2 as Does Not Meet. Check the final rating.
Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)**

Strengths/Weaknesses:

All major clusters are well covered. The supporting work in each book provide helps for the students and teacher to stay on task.

Some of the problems at the beginning of each section may cause exacerbation and the teachers may have to backtrack to reteach items.

Before moving to Alignment Criterion 1, record the final Meets or Does Not Meet rating in the Evaluation Summary.

Now continue by evaluating the Alignment Criterion 1 for Rigor and Balance.

Directions for Alignment Criterion 1

Rigor and Balance

gnment Criterion 1: Rigor and Balance **Materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.** The Standards set expectations for attention to all three aspects of rigor: conceptual understanding, procedural skill and fluency, and applications. Thus, materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.	**Required Mat** • Common e State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf) • Focus by Grade Level for the grade being evaluated (achievethecore.org/focus) • Situation Types for the Operations in Word Problems (achievethecore.org/situation-types) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion:** Alignment Criterion 1 is r d as Meets or Does Meet. To rate Alignment Criterion 1, first rate metrics and 1C. Rate each metric as Meets (2 points), Meets (1 point), or Does Not Meet (0 points). F metric, guiding questions are provided to aid in gathering evidence. Since there are three metrics, and each metric up to 2 points, the maximum possible rating ac three metrics is 6 points. Ideally, aligned materi earn all 6 points; materials are judged to have r Alignment Criterion 1 if the materials rate 5 or 6 This threshold recognizes that evaluators some differ in how they assess features such as rigor balance, while at the same time ensuring that r metric can receive a rating of zero and be align the Shifts and major features of the CCSSM.
Metric AC1A: **The materials support the development of students' conceptual understanding of key mathematical concepts, especially where called for in specific content Standards or cluster headings.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Major Work for the grade being evaluated that relate specifically conceptual understanding to use throughout the questions associated with this metric. NOTE: Some examples of clusters or Standards that call for conceptual understanding include: K.OA.A.1, (1.NBT.B, 1.NBT.C), (2.NBT.A, 2.NBT.B), (3.OA.A.1, 3.OA.A.2), 4.NF.A, (4.NBT.A, 4.NBT.B), 5.NF.B, (5.NBT.A, 5.NBT.B), 6.RP.A, 6.EE.A.3, 7.NS.A, 7.EE.A, 8.EE.B, 8.F.A, 8.G.A Clusters or Standards grouped by parentheses are closely connected and could be analyzed together. For context, read Criterion #4a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	-Choose a cluster/Standard from the Major Work that is aligned to each aspect of rigor and use it to evaluate these metrics. It is most helpful if the same clusters/Standards are chosen for all of the programs being evaluated. (Guidance in choosing clusters/Standards is included in "How to Find the Evidence".)	**Use the questions for AC Metric 1A to evalu Metric 1A. Record evidence for each questi rate Metric 1A.** **__x__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**

ceptual understanding attended to thoroughly where the Standards set explicit expectations for understanding or interpreting? Evaluate lessons, chapter/unit assessments and homework assignments, paying attention to work aligned to Standards that explicitly call for understanding or interpreting. NOTE: Examples of evaluating this Criterion might include looking at how well the multi-digit addition and subtraction algorithms are developed and explained on the basis of place value and properties of operations; or how well the multi-digit multiplication and division algorithms are developed and explained on the basis of place value and properties of operations; or how well solving equations is presented and explained as a process of reasoning.	**Evidence-** The following conceptual context is covered in the text and matches to major clusters of the standards. 8.G.B.6 – builds up concept of squares and distance in looking for Pythagoras 8.F.A.2 – builds up how to compare functions 8.G.A.1 – in Butterflies, pinwheels, builds up symmetry and transformation and concepts of different reflections	
Do the materials feature high-quality conceptual problems and conceptual discussion questions? Evaluate lessons, chapter/unit assessments, and homework assignments. NOTE: Example of conceptual problems might include such questions as "Find a number greater than 1/5 and less than 1/4," or "If the divisor does not change and the dividend increases, what happens to the quotient?"	**Evidence-** Examples of questions in reflections problem 1.1 It's in the System the shirts and caps problem. After each investigation, reflection questions spawn discussions	
Do the materials feature opportunities to identify correspondences across mathematical representations? Evaluate lessons, chapter/unit assessments and homework assignments. NOTE: Examples of evaluating this Criterion might include looking at whether students are supported in identifying correspondences among: the verbal description of a situation, the diagrams that distill its mathematical features, and the equations that model it; or equivalent forms of numbers (e.g., 3 and 6/2) and the number line; or rational number operations and representations of them via models such as the vector model; or the expression that defines a function and the graph that shows the relationship.	**Evidence-** Conceptual understanding is built up with different representations of the same concept. Each book includes charts and tables to help with the ideas. In Say it with symbols, the tables graphs and equations on page 80 all provide mathematical fluency to help students learn the concept	
Metric AC1B: **The materials are designed so that students attain the fluencies and procedural skills required by the Standards.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Major Work for the grade being evaluated that relate specifically to fluency and procedural skill to use throughout the questions associated with this metric. NOTE: Some examples of Standards that call for procedural skill and fluency include: K.OA.A.5, 1.OA.C.6, 2.OA.B.2, 2.NBT.B.5, 3.OA.C.7, 3.NBT.A.2, 4.NBT.B.4, 5.NBT.B.5, 6.NS.B.2, and 6.NS.B.3, 6.EE.A, 7.NS.A, 7.EE.A.1,7.EE.B.4a, 8.EE.C.7, 8.EE.C.8b For context, read Criterion #4b in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).		**Use the questions for Metric 1B to evaluate B. Record evidence for each question and r Metric 1B.** **(Reviewer only.)** **__X__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**

[illegible]gress toward fluency and procedural skill interwoven with students' developing conceptual understanding of the operations in question? Evaluate lessons, chapter/unit assessments, daily routines, and homework assignments for evidence that the development of fluency and procedural skill is supported by conceptual understanding.	**Evidence-** The following procedural standards are found in association with the aforementioned conceptual standards 8.F.B.5 in Models 8.G.B.8 – Pythagoras 8.EE.A.3 Growing, growing, growing	
Are purely procedural problems and exercises present that include cases in which opportunistic strategies are valuable and generic cases that require efficient algorithms present? Evaluate lessons, chapter/unit assessments, daily routines, and homework assignments. NOTE: Examples of problems in which opportunistic strategies are valuable might include the sum 698 + 240 or the system $x + y = 1$, $2x + 2y = 3$. Examples of generic cases that require efficient algorithms might include the sum 8767+2286 or the system $6y + x = x + 3$, $-x = 1 + 2y$.	**Evidence-** The best example of this is in Searching for Pythagoras The problems all follow conceptual ideas with procedural problem to reinforce these teachings. An example is the Pool tiles problems in say it with Symbols Growing, Growing, Growing also showing the same progression	
Do the materials in grades K–6 provide repeated practice toward attainment of fluency Standards? Evaluate lessons, daily routines, and homework assignments for evidence of repeated practice toward attainment of the following K–6 Standards that set an explicit expectation of fluent (accurate and reasonably fast) computation: K.OA.A.5, 1.OA.C.6, 2.OA.B.2, 2.NBT.B.5, 3.OA.C.7, 3.NBT.A.2, 4.NBT.B.4, 5.NBT.B.5, 6.NS.B.2, 6.NS.B.3.	**Evidence-** na	
Metric AC1C: **The materials are designed so that teachers and students spend sufficient time working with engaging applications, without losing focus on the Major Work of each grade.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Major Work for the grade being evaluated that relate specifically application to use throughout the questions associated with this metric. NOTE: Some examples of clusters or Standards that call for application include: K.OA.A.2, 1.OA.A, 2.OA.A, 3.OA.A.3, 3.OA.D.8, 4.OA.A.3, 4.NF.B.3d, 4.NF.B.4c, 5.NF.B.6, 5.NF.B.7c, 6.RP.A.3, 6.NS.A.1, 6.EE.B.7, 6.EE.C.9, 7.RP.A, 7.NS.A.3, 7.EE.B.3, 8.EE.C.8c, 8.F.B For context, read Criterion #4c in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Reviewed table of contents- reviewed High School standards, none appear in any assessment in this book. 6th and 7th grade appear in review but not overwhelming. All material aligns 8th grade Common core standards. Examples of such Geometry and congruence merely show how transformations can be similar In high school the difference is describing transformations as functions. Rotations and reflections occur in both but transversals are introduced in 8th grade but extended in for 9th grade.	**Use the questions for Metric 1C to evaluate 1C. Record evidence for each question and Metric 1C.** **(Reviewer only.)** **_X__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**

Are there are single- and multi-step contextual problems, including non-routine problems, that develop the mathematics of the grade, afford opportunities for practice, and engage students in problem solving? Do the problems attend thoroughly to those places in the content Standards where expectations for multi-step and real-world problems are explicit? Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** The work uses single and multistep problems to help students place work in context. Examples of single and multi step problems appear in Butterflies on page 83	
Do application problems particularly stress applying the Major Work of the grade? Evaluate lessons, chapter/unit assessments, and homework assignments. NOTE: Examples of evaluating this Criterion might include looking at: how well, by the end of grade 2, students using the materials as designed can represent and solve a full range of one-step addition and subtraction word problems; or how well, by the end of grade 3, students using the materials as designed can represent and solve a full range of one-step multiplication and division word problems; or how well these basic situation types for each operation are carried coherently across the grades, (e.g., with fractions and algebraic expressions); or, in all grades, whether the problems connect concepts, Standards, and domains in ways that are natural and important. For a list of situation types for one-step addition, subtraction, multiplication, and division problems, see Situation Types for the Operations in Word Problems	**Evidence-** Each unit is made up of investigation problems and then an ACE problem set. these build on prior lessons and lead to future lessons. Examples are ACE problems in Growing, Growing, Growing use concepts learned in Thinking with mathematical models 8.F.A is taught with the foundation of 8.EE.B	
Does modeling build slowly across K–8, with applications that are relatively simple in earlier grades and when students are encountering new content? In grades 6–8, do the problems begin to provide opportunities for students to make their own assumptions or simplifications in order to model a situation mathematically? Read Standard for Mathematical Practice 4, Model with Mathematics. Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** the exercises increase with difficulty as students progress and refer to prior learning. Example: Say it with Symbols is the last unit progressing from concrete to abstract.	

Alignment Criterion 1: Rigor and Balance

Materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.

AC1 Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 out of 6 points, the Criterion has not been met. Check the final rating.
Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)**

The strength is that teacher workbooks support what the students are learning in their books by strengthening concepts through questions. Students are taught to think through problems.

A weakness would be the order of problems without sufficient time to build fluency might cause exacerbation

(Reviewer only.)

__X__Meets

____Does Not Meet

Strengths/Weaknesses:

Before moving to Alignment Criterion 2, record the final Meets or Does Not Meet rating in the Evaluation Summary.

Directions for Alignment Criterion 2

Standards for Mathematical Practice

Alignment Criterion 2: Standards for Mathematical Practice

Materials must demonstrate authentic connections between content Standards and practice Standards.

The Standards require that designers of instructional materials connect the mathematical practices to mathematical content in instruction. Thus, materials must demonstrate authentic connections between content Standards and practice Standards.

Required Materials:

- Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf)
- Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)
- Focus by Grade Level for the grade being evaluated (www.achievethecore.org/focus)
- From the materials being evaluated: teacher guides, student texts and workbooks

Rating this Criterion

Alignment Criterion 2 is rated as Meets or Does Meet.

To rate Alignment Criterion 2, first rate metrics and 2C. Rate each metric as Meets (2 points), Meets (1 point), or Does Not Meet (0 points). F metric, guiding questions are provided to aid in gathering evidence.

Since there are three metrics, and each metric up to 2 points, the maximum possible rating ac three metrics is 6 points. Ideally, aligned materi earn all 6 points; materials are judged to have r Alignment Criterion 2 if the materials earn 5 or This threshold recognizes that evaluators some differ in how they assess features such as mathematical practices, while at the same time ensuring that no single metric can receive a rat zero and be aligned to the Shifts and major fea the CCSSM.

Metric AC2A:

Materials address the practice Standards in such a way as to enrich the Major Work of the grade; practices strengthen the focus on Major Work instead of detracting from it, in both teacher and student materials.

How to Find the Evidence:

Familiarize yourself with the Major Work of the grade being evaluated (see the Focus by Grade Level documents.)

Evaluate teacher and student materials for evidence that the mathematical practices support and connect to the focus of the grade.

NOTE: Examples of evaluating this Criterion might include looking at whether, in grades K–5, students using the materials are supported to look for and express regularity in repeated reasoning about the addition table, the multiplication table, the properties of operations, the relationship between addition and subtraction or multiplication and division, and the place value system; or whether, in grades 6–8, students using the materials are supported to look for and express regularity in repeated reasoning about proportional relationships and linear functions.

For context, read Criterion #8 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013).

Evidence-

Investigations use mathematical practices to enrich lessons. math practices are clearly identified at the beginning of each lesson throughout.

Examples : It's in the System" unit

Page 37 (teacher edition) identifies math practices used in that lesson; more specifically how parts of the lesson will use these practices

Page 70 (teacher edition) has mathematical reflections that have students identify how they used the mathematical practices

(Reviewer only.)

__X_ Meets (2)

____Partially Meets (1)

____Does Not Meet (0)

Metric AC2B: **Materials attend to the full meaning of each practice Standard.** **How to Find the Evidence:** For context, read Criterion #7 and Criterion #9 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).		**Use the questions for Metric 2B to evaluate 2B. Record evidence for each question and Metric 2B.** **(Reviewer only.)** **__X__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Over the course of any given year of instruction, is each mathematical practice Standard meaningfully present in the form of assignments, activities, or problems that stimulate students to develop the habits of mind described in the practice Standard? Evaluate lessons, chapter/ unit assessments, and homework assignments for evidence of each mathematical practice being meaningfully present in instruction.	**Evidence-** The best example is in the teacher resource book on page 222. The assignment is painted cubes. Personally I had to do this and it is a tough problem and requires applying all math practice standards . Also "thinking with Math models, teachers edition explains where all math practices are used throughout the lesson.	
Do the materials treat the practice Standards as developing across grades or grade bands? Are the practice Standards in early grades appropriately simple? Do they display an arc of growing sophistication across the grades?	**Evidence-** In reviewing the standards for 6-8, the problems in grade 8 ask for more analysis instead of just problem solving. An example is Looking for Pythagoras, instead of given a table and working from that, students are asked to build the table and draw inferences from that. mathematical reflections at the end of each unit has the students identify each practice they used.	
Are there teacher-directed materials that explain the role of the practice Standards in the classroom and in students' mathematical development? Are alignments to practice Standards accurate?	**Evidence-** mathematical practices are clearly identified at the beginning of each lesson with detailed explanations. the teacher's guide for each unit has a section to help the teacher facilitate the use of the practices.	
Metric AC2C: **Materials support the Standards' emphasis on mathematical reasoning.** **How to Find the Evidence:** For context, read Criterion #10 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).		**Use the questions for Metric 2C to evaluate 2C. Record evidence for each question and Metric 2C.** **(Reviewer only.)** **__X__Meets (2)** **____Partially Meets (1)**

materials support students in constructing viable arguments and critiquing the arguments of others concerning grade-level mathematics that is detailed in the content Standards? Read Standard for Mathematical Practice 3. Evaluate teacher and student materials to ensure that students are given opportunities to reason with grade-level mathematics.	**Evidence-** Modeling book-in the strips of paper to build a bridge, this experiment causes the student to observe and construct an argument for their answer on page 88 32d. Most investigations work in groups and require discussion and questioning to uncover the arguments and critique the thinking of others.	**____Does Not Meet (0)**
Do the materials support students in producing not only answers and solutions, but also, in a grade-appropriate way, arguments, explanations, diagrams, mathematical models, etc., especially in the Major Work of the grade? Familiarize yourself with the Major Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate teacher and student materials, to understand the types of work students are expected to produce.	**Evidence-** Most investigations and ACE problems require explanations or description of strategies used. example: Thinking with Math Models pages 133,141	
Do materials explicitly attend to the specialized language of mathematics? Is the language of argument, problem solving, and mathematical explanations taught rather than assumed? Evaluate teacher and student materials, paying attention to how mathematical language is taught. NOTE: Examples of evaluating this Criterion might include looking at whether students are supported in: basing arguments on definitions; using the method of providing a counterexample; or recognizing that examples alone do not establish a general statement.	**Evidence-** At the end of each section there is a vocabulary glossary to build terminology. Important words are identified in the student editions	

Alignment Criterion 2:
Standards for Mathematical Practice

Materials must demonstrate authentic connections between content Standards and practice Standards.

(Reviewer only.)

_X__Meets

____Does Not Meet

AC2 Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 out of 6 points, the Criterion has not been met. Check the final rating.
Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion.
(Reviewer only.)

Strengths/Weaknesses:

The strengths in this section are the integration of visuals into the problems and exercises. Models help the students express themselves and develop understanding.

A weakness might be to integrate some of the teacher guided questions into the student text

Before moving to Alignment Criterion 3, record the final Meets or Does Not Meet rating in the Evaluation Summary.

Alignment Criterion 3: **Access to the Standards for All Students**	**Required Materials:** • Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf)	**Rating this Criterion:** Alignment Criterion 3 is rated as Meets or Does Meet.

Materials must provide supports for English Language Learners and other special populations. Because Standards are for all students, alignment requires thoughtful support to ensure all students are able to meet the Standards. Thus, aligned materials must provide supports for English Language Learners and other special populations.	• Publishe iteria for the Common Core State Standards for Mathemati Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf) • From the materials being evaluated: teacher guides, student texts and workbooks	To rate Alignment Criteri first rate metrics and 3C. Rate each metri Meets (2 points), Meets (1 point), or Does Not Meet (0 points). Since there are three metrics, and each metric up to 2 points, the maximum possible rating ac three metrics is 6 points. Ideally, aligned materi earn all 6 points; materials are judged to have Alignment Criterion 3 if the materials earn 5 or This threshold recognizes that evaluators some differ in how they assess features such as supp special population, while at the same time ensu no single metric can receive a rating of zero an aligned to the Shifts and major features of the
Metric AC3A: **Support for English Language Learners and other special populations is thoughtful and helps those students meet the same Standards as all other students. The language in which problems are posed is carefully considered.** **How to Find the Evidence:** Evaluate teacher and student materials, paying attention to supports offered for special populations.	**Evidence-** There are books in Spanish that can help these learners. It aligns with the English version. Also at the end of sections are words in Spanish and English. For other learners, the problems have easy to understand scenarios that can cross cultural identities Investigations are completed through cooperative learning. effective questioning is suggested in teacher guide and videos and other extensions provide help for english language Learners	**Reviewer only.)** **_X___Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Metric AC3B: **Materials provide appropriate level and type of scaffolding, differentiation, intervention, and support for a broad range of learners with gradual removal of supports, when needed, to allow students to demonstrate their mathematical understanding independently.** **How to Find the Evidence:** Evaluate teacher and student materials, paying attention to whether materials provide differentiation that will lead all learners to engage with on-grade-level content.	**Evidence-** In the teacher edition there are aids that the teacher can use entitled " providing for individual needs". Each section has a multi level of problems that can challenge each learner. Simpler problems for less advanced learners expect compliance with standards while complex problems challenge gifted students. Cooperative learning helps all learners.	**Reviewer only.)** **_X___Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Metric AC3C: **Design of lessons recommends and facilitates a mix of instructional approaches for a variety of learners such as using multiple representations (e.g., including models, using a range of questions, checking for understanding, flexible grouping, pair-share).**	**Evidence-** Units take on various forms to help students visualize concepts As mentioned above Each section has multi level of problems that can challenge each learner. Simpler problems for less advanced learners have the expectation that the students comply with	**Reviewer only.)** **_X___Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**

o Find the Evidence: Evaluate teacher materials, noting instructional approaches suggested for whole class and differentiated lessons and activities.	standards le complex problems challenge gifted students. design includes tables, graphs, equations, diagrams, cooperative learning, videos, open ended questions	
Alignment Criterion 3: **Access to the Standards for All Students** **Materials must provide supports for English Language Learners and other special populations.** **AC3** Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 points, the Criterion has not been met. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion.**(Reviewer only.)** **Move to the Evaluation Summary and record the final Meets or Does Not Meet rating .**		**(Reviewer only.)** **_X___Meets** **____Does Not Meet** **Strengths/Weaknesses:**

Once an evaluation for alignment to the Shifts and major features of the CCSS has been conducted using Sections 1-3, it's important to evaluate for overall quality and best practices. A starting list of Indicators of Quality are suggested below. States, districts and others evaluating instructional materials are encouraged to add to this list to ensure materials reflect local contexts. For background information on some of the Indicators of Quality in this section, refer to pp.18–21 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).

Indicators of Quality	**Evidence- Give specific examples.**	**Rating: (Reviewers only.)**
1. Lessons are thoughtfully structured and support the teacher in leading the class through the learning paths at hand, with active participation by all students in their own learning and in the learning of their classmates.	**Evidence-** Investigations are learning through cooperative learning/discovery. ACE- independent study reflection	**(Reviewer only.)** **__X___ Yes** **_____ No**

The underlying design of the materials includes both problems and exercises. (In solving problems, students learn new mathematics, whereas in working exercises, students apply what they have already learned to build mastery.) Each problem or exercise has a purpose. **NOTE: This Criterion does not require that the problems and exercises be labeled as such.**	**Evidence-** The investigations in each unit are all related and build upon each other. there are both real world and skills practice type problems.	**(Reviewer only.)** __X___ **Yes** _____ **No**
3. Design of assignments is not haphazard: exercises are given in intentional sequences in order to strengthen students' mathematical understanding.	**Evidence-** In each book three sections are provided. Problems then Connections and then Applications. ACE assignments are sequential and increase in difficulty. Example: Thinking with Math models pg 69-78	**(Reviewer only.)** __X___ **Yes** _____ **No**
4. There are separate teacher materials that support and reward teacher study including, but not limited to: discussion of the mathematics of the units and the mathematical point of each lesson as it relates to the organizing concepts of the unit, discussion on student ways of thinking and anticipating a variety of students responses, guidance on lesson flow, guidance on questions that prompt students thinking, and discussion of desired mathematical behaviors being elicited among students.	**Evidence-** The separate teacher editions give ideas and questions that can be used to prompt students in the lesson. the teacher's guides have lab sheets quizzes and tests and an online help called " a Guide to Connected Math Three"	**(Reviewer only.)** __X___ **Yes** _____ **No**
5. Manipulatives suggested in the materials are faithful representations of the mathematical objects they represent and are connected to written methods.	**Evidence-** Visuals and question that ask to build tables flow with problem and lesson. Visuals are drawn by the students and include number lines and graphs.	**(Reviewer only.)** __X___ **Yes** _____ **No**
6. Materials include a variety of curriculum-embedded assessments. Examples include pre-, formative, summative, and self-assessment resources.	**Evidence-** Teacher materials have a wide variety of assessments to determine student readiness and proficiency Examples; Unit tests, ACE problems, Self Assessments, partner quizzes	**(Reviewer only.)** _X____ **Yes** _____ **No**

ssessments contain aligned rubrics, answer keys, and scoring guidelines that provide sufficient guidance for interpreting student performance.	**Evidence-** All teacher materials and assessments have answer keys. There is a notebook checklist to keep track of all student's progress	**(Reviewer only.)** _X___ **Yes** _____ **No**
8. Materials assess student proficiency using methods that are accessible and unbiased, including the use of course-level language in student prompts.	**Evidence-** Problems in resource guide include scenarios that all students would be able to relate too. Examples would be buying a bike, congress, etc.	**(Reviewer only.)** _X___ **Yes** _____ **No**
9. Materials are carefully evaluated by qualified individuals, whose names are listed, in an effort to ensure freedom from mathematical errors and course-level appropriateness.	**Evidence-** The list of evaluators are provided in the front of the books under contributors.	**(Reviewer only.)** _X___ **Yes** _____ **No**
10. The visual design supports students in engaging thoughtfully with the subject. Navigation through the text is clear.	**Evidence-** Design on each page flows well. The amount of text on the page is broken up well by the visuals. Font sie is appropriate and easy to read	**(Reviewer only.)** __X___ **Yes** _____ **No**
11. The materials engage parents in appropriate ways. For example, homework assignments in elementary grades, consist of routine problems, practice with getting answers, and fluency-building exercises that parents can easily support.	**Evidence-** The real life problems can help parents relate to what is happening in the problem. The flow makes it easy for the parents to see what is happening. teacher resources include parent letters	**(Reviewer only.)** __X___ **Yes** _____ **No**

Reviewer IMET Evaluation Summary **Title/Level: _Pearson Connected Math 3 Grade 8_**

Publisher: _Pearson Education Inc_ Copyright: _2014_ ISBN:_9780133296761_____

Reviewer ID # _____ Date Review Completed:__2/1/2016__

Non-Negotiable Criteria- Each Non-Negotiable must be met in order for the Non-Negotiable Alignment Criteria to be met overall.

Non-Negotiable 1: Freedom from Obstacles to Focus	Non- Negotiable 2: Focus and Coherence
__X____ Meets _____ Does Not Meet	__X__ Meets _____ Does Not Meet

Non-Negotiable Overall:

__X__ Meets **_____ Does Not Meet**

Alignment Criteria- Each Alignment Criterion must be met with a sufficient number of points in order for Alignment Criteria to be labeled as "Meet overall. The more points the materials receive on the Alignment Criteria, the better they are aligned.

Alignment Criterion 1: Rigor and Balance	Alignment Criterion 2: Standards of Mathematical Practice	Alignment Criterion 3: Access to Standards for All Learners
Points: ___6_ of 6 possible. (Materials must receive at least 5 of 6 points to align.) ____X___ Meets	Points: _6___ of 6 possible. (Materials must receive at least 5 of 6 points to align.) ____X___ Meets	Points: __6__ of 6 possible. (Materials must receive at least 5 of 6 point align.)

_____ Does Not Meet	_____ Does Not Meet	___X____ Meets _____ Does Not Meet

Alignment Criteria Overall:

___X_ Meets **_____ Does Not Meet**

e materials meet both Non-Negotiables and relevant Al nent Criterion, they are aligned to the Shifts and major fea s of the Co
Standards. **Do the materials meet every Non-Negotiable and Alignment Criterion? __X__ Yes _____ No**

What are the specific areas of strength and weakness based on this evaluation? Publishers or others modifying or developing assessments can use this information to make improvements and/or to remedy gaps in the alignment of assessment materials.

Specific areas of strength

Teacher resources provide ideas and teaching examples to integrate math practices into lessons.
The lessons for the students provide a wide degree of difficulty and expect all students to master clusters in standards.

Gifted students are challenged with advanced thinking problems
Visually pleasing pages in books provide the right amount of text per page.

Specific areas of weakness
Initial problems may be such that they can cause exacerbation with the students and cause them to quit before ideas and concepts are presented.

2015-16 Mathematics Interim Review Recommendation & Summary

Publisher Name:	Pearson Education Inc
Title:	Pearson Connected Mathematics 3 Grade 8 Algebra 1
ISBN #	9780133296778
Grade Level(s) or Course:	Grade 8
Reviewer ID:	ACHC

RECOMMENDED AS:

✓ **Core Mathematics Program-** a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials. Substantial evidence clearly supports the designation of this program as Core.

_____ **Other Mathematics Program-** a program that substantially, but partially, meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for supplemental materials. Substantial evidence clearly supports the designation of this program as Other.

_____ **Component Mathematics Program-** a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs. Substantial evidence clearly supports the designation of this program as Component.

_____ **Intervention Program-** a program designed and intended to target and support students' specific needs. Substantial evidence clearly supports the designation of this program as Intervention.

_____ **Does not meet criteria** for recommendation as a Curricular Material or Online Resource for Mathematics.

EVIDENCE SUMMARY:

FOCUS-

Materials reflect the content architecture of the Standards by not assessing above grade level.
The focus is Appendix A, grade 8 Algebra 1 standards.

COHERENCE-

Materials focus coherently on all Major Work Grade 8 Standards and the Widely Applicable Algebra 1 Standards listed in Appendix A.

RIGOR-

Materials reflect the balances in the Standards with rigorous expectations.

CONCEPTUAL UNDERSTANDING-

Conceptual and procedural understanding are attended to throughout the curriculum with investigations, real-world problems, activities and grouping.

MATHEMATICAL PRACTICES-

MPs are seen throughout this curriculum and make authentic connections between standards. MPs meet the needs of ELLs and diverse learners.

ACCESSIBILITY OF STANDARDS TO ALL STUDENTS-

MPs and content throughout this curriculum meet the needs of ELLs and diverse learners through investigations, cooperative learning, connections to prior knowledge and checking for understanding.

OTHER:

This curriculum meets Appendix A 8th grade accelerated Pathway requirements. It meets all High School Algebra standards except A-APR.C.4, A-APR.D.6 and A-REI.A.2.

2015-1 Interim Mathematics Review

Mathematics Evaluation Tool – High School

Publisher: Pearson Education Inc

Title of Material: Pearson Connected Mathematics 3 Grade 8 Algebra 1

Author: Lappan et al.

ISBN #: 9780133296778 **Copyright** 2014

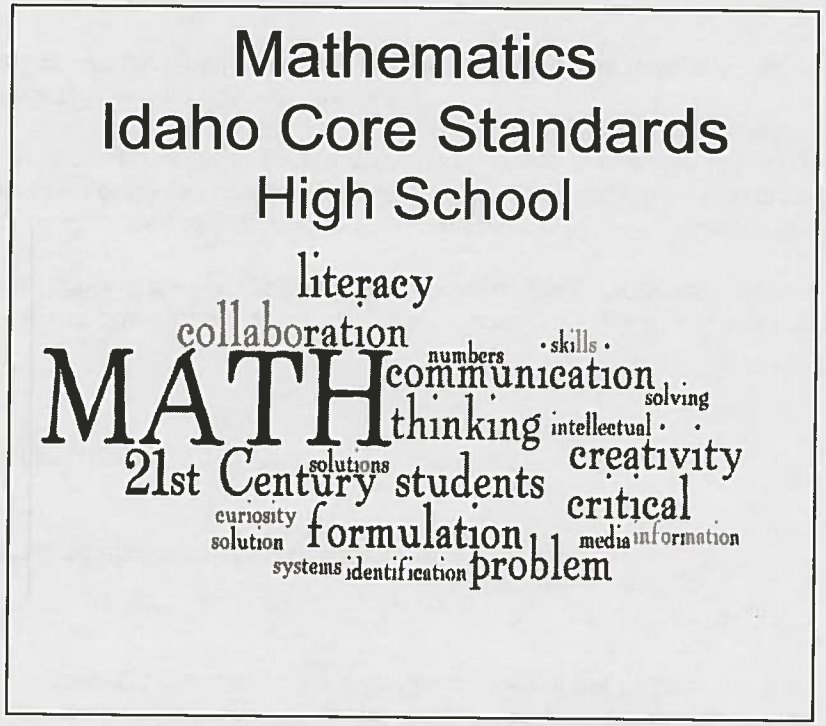
Reviewer ID: ACHC

Core Mathematics Program- a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Core.

Other Mathematics Program- a program that substantially, but partially, meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Other.

Component Mathematics Program- a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs.
Substantial evidence clearly supports the designation of this program as Component.

Intervention Program- a program designed and intended to target and support students' specific needs.
Substantial evidence clearly supports the designation of this program as Intervention.



- Evaluation Form adapted from Instructional Materials Evaluation Toolkit (IMET).

The IMET was developed by Student Achievement Partners. Educators may use or adapt. http://creativecommons.org/licenses/by/3.0/ Download this tool at http://achievethecore.org/IMET

Instructional Materials Evaluation Tool

Mathematics, High School

What Are the Purposes of the IMET?

This Math IMET is designed to help educators determine whether instructional materials are aligned to the Shifts and major features of the Common Core State Standards (CCSS). The substantial instructional Shifts (http://www.corestandards.org/other-resources/key-shifts-in-mathematics/) at the heart of the Common Core State Standards are:

- **Focus** strongly where the Standards focus
- **Coherence**: Think across grades and link to major topics within the grade
- **Rigor**: In major topics, pursue conceptual understanding, procedural skill and fluency, and application with equal intensity.

The IMET draws directly from the following documents:

- Common Core State Standards for Mathematics (www.corestandards.org/Math)
- Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013) (http://www. corestandards.org/wp-content/uploads/Math_Publishers_Criteria_ HS_Spring_2013_FINAL1.pdf)

When to use the IMET

1. Purchasing materials: Many factors go into local purchasing decisions. Alignment to the Standards is a critical factor to consider. This tool is designed to evaluate alignment of instructional materials to the Shifts and the major features of the CCSS. It also provides suggestions of additional indicators to consider in the materials evaluation and purchasing process
2. Evaluating materials currently in use: The IMET can be used to analyze the degree of alignment of existing materials and help to highlight specific, concrete flaws in alignment. Even where materials and tools currently in use fail to meet one or more of these criteria, the pattern of failure is likely to be informative. States and districts can use the evaluation to create a thoughtful plan to modify or combine existing resources in such a way that students' actual learning experiences approach the focus, coherence, and rigor of the Standards.
3. Developing programs: Those developing new programs can use this tool as guidance for creating aligned curricula.

Please note this tool was designed for evaluating comprehensive curricula (including any supplemental or ancillary materials), but it was not designed for the evaluation of standalone supplemental materials.

Who Uses the IMET?

Evaluating instructional materials requires both subject-matter and pedagogical expertise. Evaluators should be well versed in the Standards (www.corestandards.org/Math) for all grades in which materials are being evaluated. This includes understanding the Widely Applicable Prerequisites (www.achievethecore.org/prerequisites), how the content fits into the progressions in the Standards (www. achievethecore.org/progressions), and the expectations of the Standards with respect to conceptual understanding, procedural skill and fluency, and application. Evaluators also should be familiar with the substantial instructional Shifts (http://www.corestandards.org/other-resources/key-shifts-in-mathematics/) of Focus, Coherence and Rigor that are listed above.

Getting Started

Prior to Evaluation

Assemble all of the materials necessary for the evaluation. It is essential for evaluators to have materials for all grades covered by the program, as some criteria cannot be rated without having access to each grade. In addition, each evaluator should have a reference copy of the Common Core State Standards for Mathematics (CCSSM) and the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).

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Before conducting the evaluation itself, it is important to develop a protocol for the evaluation process. The protocol should include having evaluators study the Publishers' Criteria and the IMET. It will also be helpful for evaluators to get a sense of each program overall before beginning the process. At a minimum, this would include reading the front matter of the text, looking at the table of contents and paging through multiple chapters.

Sections 1-3 below should be completed to produce a comprehensive picture of the strengths and weaknesses of the materials under evaluation. Information about areas in need of improvement or supplementation should be shared with internal and external stakeholders.

Navigating the Tool

Begin with Section 1: Non-Negotiable Alignment Criteria

- The Non-Negotiable Alignment Criteria must each be met in full for materials to be considered aligned to the Shifts and the major features of the Common Core State Standards. Each Non-Negotiable Alignment Criterion has one or more metrics associated with it; every one of these metrics must be met in order for the criterion as a whole to be met.

- Examine the relevant materials and use evidence to rate the materials against each criterion and its associated metric(s).

- Record and explain the evidence upon which the rating is based.

Continue to Section 2: Alignment Criteria

- The Alignment Criteria must each be met for materials to be considered aligned to the Shifts and the major features of the Common Core State Standards. Each Alignment Criterion has one or more metric associated with it; a specific number of these metrics must be met or partially met in order for the criterion as a whole to be met.

- Examine the materials in relation to these criteria, assigning each metric a point value. Rate the criterion as "Meets" or "Does Note Meet" based on the number of points assigned. The more points the materials receive on the alignment Criteria, the better they are aligned.

- Record and explain the evidence upon which the rating is based.

Proceed to Section 4: Indicators of Quality

- Indicators of Quality are important considerations that will help evaluators better understand the overall quality of instructional materials. These considerations are not criteria for alignment to the CCSS, but they provide valuable information about additional program characteristics. Evaluators may want to add their own indicators to the examples provided.

Directions for Non-Negotiable 1

Focus and Coherence

Criterion	Evidence- Give specific examples.	Rating: (Reviewer only.)
Non-Negotiable 1: Focus and Coherence- Materials must focus coherently on the Widely Applicable Prerequisites in a way that is consistent with the progressions in the Standards. Focus and coherence are the two major evidence-based design principles of the Common Core State Standards for Mathematics (CCSSM, p. 3). Focus is necessary in order to fulfill the ambitious promise the states have made to their students by adopting the Standards: greater achievement at the college and career-ready level; greater depth of understanding of mathematics; and a rich classroom environment in which reasoning, sense-making, applications, and a range of mathematical practices flourish. In high school courses, narrowing and deepening the curriculum creates a structure that ties topics together. Thus, materials must focus coherently on the Widely Applicable Prerequisites in a way that is consistent with the progressions in the Standards.	Focus and coherence are the two major evidence-based design principles of the Common Core State Standards for Mathematics (CCSSM, p. 3). Focus is necessary in order to fulfill the ambitious promise the states have made to their students by adopting the Standards: greater achievement at the college and career-ready level; greater depth of understanding of mathematics; and a rich classroom environment in which reasoning, sense-making, applications, and a range of mathematical practices flourish. In high school courses, narrowing and deepening the curriculum creates a structure that ties topics together. Thus, materials must focus coherently on the Widely Applicable Prerequisites in a way that is consistent with the progressions in the Standards. **Required Materials:** • Common Core State Standards for Mathematics (www.corestandards.org/wpcontent/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_HS_Spring_2013_FINAL1.pdf) • Widely Applicable Prerequisites for College and Careers (http://achievethecore.org/prerequisites) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion:** Non-Negotiable 1 is rated as Meets or Does Not Meet. To rate Non-Negotiable 1, first rate Metrics 1A–1H. Each of these eight metrics must be rated as Meets in order for Non-Negotiable 1 to be rated as Meets. Rate each metric 1A–1H as Meets or Does Not Meet/Insufficient Evidence. If the evidence examined shows that the Criterion is met, then mark the Criterion as Meets. If the evidence examined shows that the Criterion is not met—or if there is insufficient evidence to make a determination—then mark the Criterion as Does Not Meet/Insufficient Evidence. Support all ratings with evidence.

Metric NN1A: **In any single course, students spend at least 50% of their time on Widely Applicable Prerequisites.** **How to Find the Evidence:** Familiarize yourself with the Widely Applicable Prerequisites. Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, lessons, homework assignments, and assessments. (Evaluate both student and teacher materials.) Consider time spent on the Widely Applicable Prerequisites and judge qualitatively whether students and teachers using the materials as designed will devote the majority of time to the Widely Applicable Prerequisites For context, read Criterion #1 in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** 209/254 standards taught are widely applicable prerequisites. This curriculum spends approximately 82% of their time on widely applicable prerequisites. 89% of the 8th grade standards are major work. Real Numbers: **Thinking With Mathematical Models** **Function Junction** Quantities: **Growing, Growing, Growing** **Frogs, Fleas, and Painted Cubes** Seeing Structure in Expressions: **Say It With Symbols** **It's In the System**	**__x__Meets** **____Does Not Meet Insufficient Evidence**
Metric NN1B: **Student work in Geometry involves significant work with applications/modeling and problems that use algebra skills.** **How to Find the Evidence:** Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, lessons, homework assignments, and assessments. (Evaluate both student and teacher materials. NOTE: Since Geometry contains relatively fewer Widely Applicable Prerequisites, this Criterion is important to help foster students' college and career readiness. Problems that use algebra skills might include, for example, algebraic geometry problems in a coordinate setting, or problems of measurement involving unknown quantities.	**Evidence-** Throughout **Looking for Pythagoras**: TG Pg. 157 After learning the Pythagorean Theorem, curriculum connect to right triangle prisms and finding the unknown side using the Pythagorean Theorem. Applications/modeling is used to write and solve equations in Geometry such as finding volume, surface area, and sketching a net. **Looking for Pythagoras**: TG Page 161 The extension problems look for relationships between right triangles and other 2D shapes (circles and hexagons).	**__x__Meets** **____Does Not Meet Insufficient Evidence**

Metric NN1C: **There are problems at a level of sophistication appropriate to high school (beyond mere review of middle school topics) that involve the application of knowledge and skills from grades 6-8.** **How to Find the Evidence:** Evaluate lessons, chapter/unit assessments, and homework assignments. NOTE: Problems should include application of the following topics from grades 6-8: • Ratios and proportional relationships. • Percentage and unit conversions, e.g., in the context of complex measurement problems involving quantities with derived or compound units (such as mg/mL, kg/ m3, acre-feet, etc.). • Basic function concepts, e.g., by interpreting the features of a graph in the context of an applied problem. • Concepts and skills of geometric measurement e.g., when analyzing a diagram or schematic. • Concepts and skills of basic statistics and probability (see grades 6–8.SP) • Performing rational number arithmetic fluently. For context, read Table 1 on Page 8 of the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** Throughout. Evidence of where these topics can be found can be seen below. Ratios and Proportional Relationships: **Thinking With Mathematical Models** SWB Pg. 70, 85. Percentage and unit conversions: **Growing, Growing, Growing** SWB Pg. 52, 70. **Function Junction** SWB Pg. 7-8. Basic function concepts: **Function Junction** throughout. Concepts and skills of geometric measurement: **Looking for Pythagoras** SWB Pg. 157, 161. Concepts and skills of basic statistics and probability: **Thinking With Mathematical Models** SWB Pg. 32, 91, 94, 130. Performing rational number arithmetic fluently: **It's In the System** SWB Pg. 47, 63. Test notes which are Algebra 1 only Ex. Teacher Resources Pg. 125	**__x__Meets** **____Does Not Meet Insufficient Evidence**
Metric NN1D: **Materials base courses on the content specified in the Standards.** **How to Find the Evidence:** Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, and lessons in both student and teacher materials. For context, read Criterion #3a in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** All of the standards are met in this curriculum that are required by Appendix A for 8th Grade Algebra I. A correlation of the curriculum to the Idaho Core Standards is provided linking each standard to the curriculum.	**__x__Meets** **____Does Not Meet Insufficient Evidence**

Metric NN1E: **Materials give all students extensive work with course-level problems.** **How to Find the Evidence:** Evaluate both student and teacher materials. If the materials provide resources for differentiated learning, consider whether lower-performing students have opportunities to engage with course-level problems. Also consider whether higher-performing students are given opportunities to learn current course-level content in greater depth. For context, read Criterion #3b in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** Throughout Differentiation "Providing for Individual Needs": **Looking for Pythagoras**: TG Pg. 42, 48, 54, 78, 83, 95, 123, 128, 134, 140, etc. Differentiation "Going Forward": **Looking for Pythagoras**: TG Pg. 90, 95, 134, 140. Provides extensions to lesson and challenges. Embedded strategies include technology, manipulatives, real life problems. Manipulatives, looking back, cooperative learning groups, student notes, investigations.	**__x__Meets** **____Does Not Meet Insufficient Evidence**
Metric NN1F: **Materials relate course-level concepts explicitly to prior knowledge from earlier grades or courses. The materials are designed so that prior knowledge becomes reorganized and extended to accommodate the new knowledge.** **How to Find the Evidence:** Evaluate student and teacher materials, looking for problems that involve extending the knowledge learned in earlier grades and courses. NOTE: An example of evaluating this Criterion might be to look at whether materials connect the equation of a circle with the distance formula and the Pythagorean theorem. For context, read Criterion #3c in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** Throughout. Every lesson contains: "Connecting to Previous Knowledge." **Thinking With Mathematical Models** TG Pg. 54, 55 (Do you remember...?). Mathematics Background explains previous content and understanding needed for curriculum. (Specifies previous grade): **Thinking With Mathematical Models** TG Pg. 17-19, 24, 39. **Looking for Pythagoras**: TG Pg. 157 After learning the Pythagorean Theorem, curriculum connect to right triangle prisms and finding the unknown side using the Pythagorean Theorem. Applications/modeling is used to write and solve equations in Geometry such as finding volume, surface area, and sketching a net. **Looking for Pythagoras**: TG Page 161 The extension problems look for relationships between right triangles and other 2D shapes (circles and hexagons).	**__x__Meets** **____Does Not Meet Insufficient Evidence**

Metric NN1G: **Materials include learning objectives that are visibly shaped by CCSSM cluster and domain headings.** **How to Find the Evidence:** Select several clusters from the course being evaluated. Evaluate teacher and student materials in relation to these clusters. For context, read Criterion #4a in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** Throughout. Every lesson contains Focus questions. **Looking for Pythagoras**: TG Pg. 39, 46, 51, etc. Every investigation contains "Goals and Standards, and "Facilitating Mathematical Practices." **Looking for Pythagoras**: TG Pg. 36-38, 74-76, 118-119, etc. Every book contains "Goals, Standards, and MP. **Looking for Pythagoras**: TG Pg. 8-10. Making connections and building is throughout. **Frogs, Fleas, and Painted Cubes** SWB Pg. 12 (Apply finding area of 2D shapes to writing area equations.) Pg. 32 (Apply distributive property to factoring quadratic equations.)	**__x__Meets** **____Does Not Meet Insufficient Evidence**
Metric NN1H: **Materials include problems and activities that serve to connect two or more clusters in a domain, or two or more domains in a category, or two or more categories, in cases where these connections are natural and important.** **How to Find the Evidence:** In the course being evaluated, choose two or more clusters, two or more domains, or two or more categories for which connections are natural and important. Evaluate the units, chapters, and lessons that deal with the chosen topics, looking for problems and activities that serve to connect the chosen clusters or domains. NOTE: An example of evaluating this Criterion might be to look at whether materials include problems in which students analyze a situation by building a function, graphing it, and using it to create and solve an equation. For context, read Criterion #4b in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** Throughout. **Looking for Pythagoras**: TG Pg. 157 After learning the Pythagorean Theorem, curriculum connect to right triangle prisms and finding the unknown side using the Pythagorean Theorem. Applications/modeling is used to write and solve equations in Geometry such as finding volume, surface area, and sketching a net. **Looking for Pythagoras**: TG Page 161 The extension problems look for relationships between right triangles and other 2D shapes (circles and hexagons). **Say It With Symbols**: SWB Pg. 12 While working with equivalent expressions, students must use area models and distributive property to model expressions. **Looking for Pythagoras**: TG Investigation 5, Problem 5.3 Pg. 87 uses 8.EE.B, 8.EE.c, 8.F.B, and 8.G.B	**__x__Meets** **____Does Not Meet Insufficient Evidence**

Non-Negotiable 1: Focus and Coherence- Materials must focus coherently on the Widely Applicable Prerequisites in a way that is consistent with the progressions in the Standards. **Metric NN 1:** If all metrics 1A–1H were rated as Meets, then rate Non-Negotiable 1 as Meets. If one or more metrics were rated as Does Not Meet/Insufficient Evidence, then rate Non-Negotiable 1 as Does Not Meet. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)** **Before moving to Alignment Criterion 1, record the final Meets or Does Not Meet rating in the Evaluation Summary.**	**__x__Meets** **____Does Not Meet** **Strengths/Weaknesses**

Now continue by evaluating Alignment Criterion 1 for Rigor and Balance.

Directions for Alignment Criterion 1

Rigor and Balance

Alignment Criterion 1: **Rigor and Balance- Materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.** The Standards set expectations for attention to all three aspects of rigor: conceptual understanding, procedural skill and fluency, and applications. Thus, materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.	The Standards set expectations for attention to all three aspects of rigor: conceptual understanding, procedural skill and fluency, and applications. Thus, materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations. • Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_HS_Spring_2013_FINAL1.pdf) • Widely Applicable Prerequisites for College and Careers (http://achievethecore.org/prerequisites) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion:** Alignment Criterion 1 is rated as Meets or Does Not Meet. To rate Alignment Criterion 1, first rate metrics 1A, 1B, and 1C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). For each metric, guiding questions are provided to aid in gathering evidence. Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 1 if the materials rate 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as rigor and balance, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.

AC Metric 1A: **The materials support the development of students' conceptual understanding of key mathematical concepts, especially where called for in specific content Standards or cluster headings.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Widely Applicable Prerequisites that relate specifically to conceptual understanding to use throughout the questions associated with this metric. NOTE: Some examples of clusters or Standards that call for conceptual understanding include: N-RN.A.1, A-APR.B, A-REI.A.1, A-REI.D.10, A.REI.D.11, F.IF.A.1, F-LE.A.1, G.SRT.A.2, G-SRT.C.6, S-ID.C.7 For context, read Criterion #2a in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	• Choose a cluster/Standard from the Widely Applicable Prerequisites that is aligned to each aspect of rigor and use it to evaluate these metrics. It is most helpful if the same clusters and Standards are chosen for all of the programs being evaluated. (Guidance in choosing clusters/Standards is included in "How to Find the Evidence" below.)	**Use the questions for AC Metric 1A to evaluate Metric 1A. Record evidence for each question and rate Metric.** **__x__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Is conceptual understanding attended to thoroughly where the Standards set explicit expectations for understanding or interpreting? Evaluate lessons, chapter/unit assessments and homework assignments, paying attention to work aligned to Standards that explicitly call for understanding or interpreting.	**Evidence-** Throughout. Investigations are used to discover and understand math concepts. Ex. **Thinking with mathematical models**. Investigation 1: Students build bridges out of paper to discover if the relationship between paper layers and breaking weight in linear. It continues to Investigation 2 that is graphing relationships, making predictions, and looking for patterns. Conceptual: **Frogs, Fleas, and Painted Cubes** TG Pg. 44 "Describe patterns you see…" Pg. 51 "Describe the growth pattern…" Pg. 52 "Compare the patterns of change…" Pg. 55 "How can you express…" Pg. 88 "What happens to the area if the side increases…" Pg. 91 "Which part of the graph makes sense…" Procedural: **Frogs, Fleas, and Painted Cubes** SWB Pg. 40-41 Use distributive property to write in expanded form. Pg. 62 Write each expression in factored form.	

Do the materials feature high-quality conceptual problems and conceptual discussion questions? Evaluate lessons, chapter/unit assessments, and homework assignments. NOTE: Examples of conceptual problems might include such questions as "What is the maximum value of the function f(t) = 5 – t2 ?" or "Is √2 a polynomial? How about ½(x + √2)+ ½ (-x + √2)?"	**Evidence-** Throughout. AC assignments (every investigation). **Butterflies, Pinwheels, and Wallpaper**: Applications: Pg. 18-22, 38-42, 61-66, 86-90. Connections: Pg. 23-24, 42-46, 67-69, 91-92. Extensions: Pg. 24-27, 46-47, 70-72, 93-94. Unit Project: Pg. 97-99. **Growing, Growing, Growing**: Pg. 142 Fractional Growth Patterns, write equations based on a model of population growth. Pg. 148 Understanding the growth in value of a stamp connected to compound growth.	
Do the materials feature opportunities to identify correspondences across mathematical representations? Evaluate lessons, chapter/unit assessments and homework assignments. NOTE: An example of evaluating this metric might include looking at whether materials support students in identifying correspondences among the expression that defines a function, the graph that shows the relationship, and the behavior of the phenomenon being modeled (if any).	**Evidence-** Throughout. **Looking for Pythagoras** Geoboard Pg. 51, 120. Number Line Pg. 87, 107. Manipulatives Pg. 78, 137. Grid paper Pg. 103, 122. Puzzle Frames for Pythagorean Theorem Pg. 128. Conceptual understanding is built up with different representations of the same concepts. For example, in thinking with math models studdents learn to represent problems in different ways, proportional relationships, linear models, etc. In **Say It With Symbols**, students use variables to represent problems.	
AC Metric 1B: **The materials are designed so that students attain the fluencies and procedural skills required by the Standards.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Widely Applicable Prerequisites that relate specifically to fluency and procedural skill to use throughout the questions associated with this metric. NOTE: Some examples of Standards that call for procedural skill and fluency include: A-SSE.A.1b, A-SSE.2, A-APR.A.1, A-APR.C.6, F-BF.B.3, G-GPE.B.4, G-GPE.B.5, G-GPE.B.7, G-CO.A.1, G-SRT.B.5 For context, read Criterion #2b in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).		**Use the questions for AC Metric 1B to evaluate Metric 1B. Record evidence for each question and rate Metric 1B.** **__x__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**

Is progress toward fluency and procedural skill interwoven with the student's [illegible]oping conceptual understanding of the skills in question? Evaluate lessons, chapter/unit assessments, daily routines, and homework assignments for evidence that the development of fluency and procedural skill is supported by conceptual understanding.	**Evidence-** Fluency standa[illegible]re used throughout curriculum. **Say It With Symbols** SWB Pg. 10 Different way to write equivalent equations. Pg. 13 Use diagrams to write two equivalent equations. Pg. 46-49 Solving linear equations. **It's In the System** SWB Pg. 63 Investigation 4 Systems of Linear Equations. Pg. 72-76, 79-80, 115 Solving systems of equations. Each unit has problems that require both procedural understanding along and both procedural and conceptual understanding. **Thinking With Mathematical Models** SWB Pg. 71 Find the fuel efficiency in m/g for each vehicle. How do he answers for part d show that the relationship is not linear?	
Are purely procedural problems and exercises present that include cases in which opportunistic strategies are valuable and generic cases that require efficient and general procedures present? Evaluate lessons, chapter/unit assessments, daily routines, and homework assignments. NOTE: Problems in which opportunistic strategies are valuable might include such examples as solving x2 + 5 = 49 + 5 or (3x − 2)2 = 6x − 4. Generic cases that require efficient and general procedures might include such problems as solving c + 8 – c2 = 3(c – 1)2 − 5).	**Evidence-** **Growing, Growing, Growing** SWB Pg. 49 Procedural problems using exponential growth algorithms and completing a table. Solve conceptual problems using the table. **Looking for Pythagoras** TG Pg. 19, 125 Pythagorean Theorem Pg. 21 Distance Formula Pg. 22, 223 Special Right Triangles Pg. 24, 201 Converting Repeated decimals to fractions **Say It With Symbols** SWB Pg. 14 Problem 1.4 Practice solving expressions. Pg. 49 Problem 3.2 Solve Linear Equations. Pg. 56-62 ACE problems **It's In the System** SWB Pg. 33-34, 41	

AC Metric 1C: **The materials are designed so that teachers and students spend sufficient time working with engaging applications, without losing focus on the Widely Applicable Prerequisites.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Widely Applicable Prerequisites that relate specifically to application to use throughout the questions associated with this metric. NOTE: Some examples of clusters or Standards that call for application include: N-Q.A, A-SSE.B.3, A-REI.D.11, F-IF.B, F-IF.C.7, F-BF.A.1, G-SRT.C.8, S-ID.A.2, S-IC.A.1 For context, read Criterion #2c in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).		**Use the questions for AC Metric 1C to evaluate Metric 1C. Record evidence for each question and rate Metric** **__x__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Are there single- and multi-step contextual problems, including non-routine problems, that develop the mathematics of the course, afford opportunities for practice, and engage students in problem solving? Do the problems attend thoroughly to those places in the content Standards where expectations for multi-step and real-world problems are explicit? Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** **Growing, Growing, Growing** TG Pg. 85 Relating Amoeba splitting exponential functions. Pg. 118 Water hyacinths in Lake Victoria, Africa exponential functions. Pg. 119 Growing mold exponential functions. Pg. 121 Growth of garter snake population, interpreting graphs of exponential functions.	
Do application problems particularly stress applying the Widely Applicable Prerequisites? Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** Throughout. ACE questions located at the end of each Investigation.	
Are there ample opportunities for students to engage with modeling problems? Do materials require students to use both individual parts of the modeling cycle as well as the full modeling cycle? Read the pages on High School—Modeling in the Standards for Mathematics (pp. 72 and 73). Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** **Thinking With Mathematical Models** TG Pg. 59 Students use models to discuss bridge length and strength. They collect data, make scatter plots, find nonlinear relationships, and make predictions. Pg. 78. **Growing, Growing, Growing** SWB Pg. 64-65 Students do an experiment with cooling water to determine exponential decay. Students must model using a table to record their data, and make a graph using the data. They answer questions, then add a column to the table to record new data. They write an equation for the model.	

Alignment Criterion 1: Materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations. **AC 1:** Materials must earn at least 5 of 6 points to meet this Alignment Criterion. If materials earn less than 5 points, the Criterion has not been met. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)** **Before moving to Alignment Criterion 2, record the final Meets or Does Not Meet rating in the Evaluation Summary.**		**__x__Meets** **____Does Not Meet** **Strengths/Weaknesses:**
Alignment Criterion 2: **Standards for Mathematical Practice- Materials must demonstrate authentic connections between content Standards and practice Standards.** The Standards require that designers of instructional materials connect the mathematical practices to mathematical content in instruction. Thus, materials must demonstrate authentic connections between content Standards and practice Standards.	The Standards require that designers of instructional materials connect the mathematical practices to mathematical content in instruction. Thus, materials must demonstrate authentic connections between content Standards and practice Standards. **Required Materials**: • Common Core State Standards for Mathematics (http:// corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_ Publishers_Criteria_HS_Spring_2013_FINAL1.pdf) • Widely Applicable Prerequisites for College and Careers (http:// achievethecore.org/prerequisites) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion:** Alignment Criterion 2 is rated as Meets or Does Not Meet. To rate Alignment Criterion 2, first rate metrics 2A, 2B, and 2C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). For each metric, guiding questions are provided to aid in gathering evidence. Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 2 if the materials rate 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as mathematical practices, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.

AC Metric 2A: **Materials address the practice Standards in such a way as to enrich the Widely Applicable Prerequisites; practices strengthen the focus of the course instead of detracting from it, in both teacher and student materials.** **How to Find the Evidence:** Familiarize yourself with the Widely Applicable Prerequisites. Evaluate teacher and student materials for evidence that the mathematical practices support and connect to the focus of the course. NOTE: An example of evaluating this Criterion might include looking at whether materials use regularity in repeated reasoning to illuminate formal algebra as well as functions, particularly recursive definitions of functions. For context, read Criterion #6 in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** Mathematical Practices are addressed throughout the curriculum. Evidence is from **Thinking With Mathematical Models** TG: MP1 Make sense of problems and persevere in solving them: Pg. 283-290 ACE problems at end of each investigation. MP2 Reason abstractly and quantitatively: Pg. 52 Students relate bridge strength to linear relationships and use data/relationships to make predictions. MP3 Construct viable arguments and critique the reasoning of others: Pg. 89 Students must make viable arguments based on associations between variables on graphs. MP4 Model with mathematics: Pg. 208, 230 Students analyze data and plot data points on a graph to model a relationship. MP5 Use appropriate tools strategically: Pg. 111 Students use words, tables, and graphs to write linear equations. MP6 Attend to precision: Pg. 102 Students find linear models for data sets, and use the models to make predictions. Calculate errors of predictions. MP7 Look for and make use of structure: Pg. 64 Students predict if there is a pattern between variables; linear vs. nonlinear. MP8 Look for and express regularity in repeated reasoning: Pg. 163 Students develop understanding of the patterns in data tables and graphs that can be modeled by inverse variation functions.	**__x__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**

AC Metric 2B: **Materials attend to the full meaning of each practice Standard.** **How to Find the Evidence:** For context, read Criterion #7 in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).		**Use the questions for AC Metric 2B to evaluate Metric 2B. Record evidence for each question and rate Metric.** **__x__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Over the course of any given year of instruction, is each mathematical practice Standard meaningfully present in the form of assignments, activities, or problems that stimulate students to develop the habits of mind described in the practice Standard? Evaluate lessons, chapter/ unit assessments, and homework assignments for evidence of each mathematical practice being meaningfully present in instruction.	**Evidence-** MP are present throughout instruction, assignment, and assessments.	
Are teacher-directed materials that explain the role of the practice Standards in the classroom and in students' mathematical development included? Are alignments to practice Standards accurate? Evaluate teacher materials, paying attention to explanations of the role of the practice Standards in the classroom and in students' mathematical development. Evaluate documents aligning lessons to practice Standards for accuracy. NOTE: Examples to look for when evaluating this metric might include the following: a highly scaffolded problem should not be aligned to MP.1; or a problem that directs a student to use a calculator should not be aligned to MP.5; or a problem about merely extending a pattern should not be aligned to MP.8.	**Evidence-** Throughout. Every unit overview and investigation overview has "Facilitating Mathematical Practices." At the end of each investigation, there is "Mathematical Practices Reflections." **Thinking With Mathematical Models** TG: Unit overview Pg. 15-16. Investigation overview Pg. 52, 101, 161, 207, 264. End of investigation Pg. 69, 123-124, 179, 226, 276.	
AC Metric 2C: **Materials support the Standards' emphasis on mathematical reasoning.** **How to Find the Evidence:** For context, read Criterion #8 in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).		**Use the questions for AC Metric 2C to evaluate Metric 2C. Record evidence for each question and rate Metric 2C.** **__x__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Do the materials support students in constructing viable arguments and critiquing the arguments of others concerning course-level mathematics that is detailed in the content Standards? Read Standard for Mathematical Practice 3. Evaluate teacher and student materials to ensure that students are given opportunities to reason with grade-level mathematics.	**Evidence-** Materials promote discussion/reasoning throughout. There are many instances where a problem/conjecture is provided and the student must figure out which one is correct and explain why. **Thinking With Mathematical Models** TG: Pg. 136, **271**. **Growing, Growing, Growing** SWB: Pg. 54, 67, 82, 83, 179, 226, 276. Discussion: **Thinking With Mathematical Models** TG: PG. 118, 121, 163, 267.	

Do the materials support students in producing not only answers and solutions, but also, in a course-appropriate way, arguments, explanations, diagrams, mathematical models, etc., especially in the Widely Applicable Prerequisites? Familiarize yourself with the Widely Applicable Prerequisites. Evaluate teacher and student materials to understand the types of work students are expected to produce.	**Evidence-** Throughout. **Butterflies, Pinwheels, and Wallpaper** SWB: Producing reflections Pg. 10-11. Identifying symmetry/design elements Pg. 18. Critiquing transformations/congruency Pg. 22, 41. Showing diagrams/models Pg. 61, 70, 25. Most investigations are made to work in groups or with a partner. Questioning techniques require discussion, explanations, and finding errors.	
Do materials explicitly attend to the specialized language of mathematics? Is the language of argument, problem solving, and mathematical explanations taught rather than assumed? Evaluate teacher and student materials, paying attention to how mathematical language is taught. NOTE: An example of evaluating this Criterion might include looking at whether students are supported in: basing arguments on definitions; using the method of providing a counter example; or recognizing that examples alone do not establish a general statement.	**Evidence-** In the TG, each unit, investigation, and lesson contains an overview of vocabulary being used. **Frogs, Fleas, and Painted Cubes** TG: Pg. 4, 35, 47, 81, 95, 103, 109, 143, 148, 198, 209. In the SWB, vocabulary is highlighted throughout the lessons and an English/Spanish Glossary and Index are at the end. **Frogs, Fleas, and Painted Cubes** SWB: Pg. 9, 28-29, 33b 35-37, 48, 74, 101-109, 110-112.	
Alignment Criterion 2: Materials must demonstrate authentic connections between content Standards and practice Standards. **AC 2:** Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 points, the Criterion has not been met. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewers only.)** **Before moving to Alignment Criterion 3, record the final Meets or Does Not Meet rating in the Evaluation Summary.**		**__x__Meets** **____Does Not Meet** **Strengths/Weaknesses:**

Alignment Criterion 3: **Access the Standards for All Students- Materials must provide supports for English Language Learners and other special populations.** Because Standards are for all students, alignment requires thoughtful support to ensure all students are able to meet the Standards. Thus, aligned materials must provide supports for English Language Learners and other special populations.	Because Standards are for all students, alignment requires thoughtful support to ensure all students are able to meet the Standards. Thus, aligned materials must provide supports for English Language Learners and other special populations. **Required Materials:** • Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math Publishers_Criteria_HS_Spring_2013_FINAL1.pdf) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion:** Alignment Criterion 3 is rated as Meets or Does Not Meet. To rate Alignment Criterion 3, first rate metrics 3A, 3B, and 3C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 3 if the materials rate 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as support for special population, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.
AC Metric 3A: **Support for English Language Learners and other special populations is thoughtful and helps those students meet the same Standards as all other students. The language in which problems are posed is carefully considered.** **How to Find the Evidence:** Evaluate teacher and student materials, paying attention to supports offered for special populations.	**Evidence-** "Providing for Individual Needs" is available for every lesson in the TG to provide teachers with supporting differentiation in their classroom. **It's In the System** TG: Pg. 41, 46, 51, 80, 86, 89, etc. Modeling, Questions, Grouping, Active Participation, Teaching Strategies, Allowing Extra Time. **It's In the System** SWB: English/Spanish Glossary Pg. 81-85. Spanish student workbooks provided for every unit. Curriculum available in Spanish Investigations completed three cooperative learning Effective questioning suggested in teacher guide Videos/technology Extensions Go further	**__x__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**

AC Metric 3B: **Materials provide appropriate level and type of scaffolding, differentiation, intervention, and support for a broad range of learners with gradual removal of supports, when needed, to allow students to demonstrate their mathematical understanding independently.** **How to Find the Evidence:** Evaluate teacher and student materials, paying attention to whether materials provide differentiation that will lead all learners to engage with on-grade-level content.	**Evidence-** Scaffolding/differentiation is provided throughout with "Connecting to Prior Knowledge" and "Checking for Understanding." Lessons also contain "Providing for Individual needs" and "Going Forward" to help with intervention and support. **It's In the System** TG: Pg. 39, 45, 50, 53, 78, 84, 87, 89, 91.	**__x__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
AC Metric 3C: **Design of lessons recommends and facilitates a mix of instructional approaches for a variety of learners such as using multiple representations (e.g., including models, using a range of questions, checking for understanding, flexible grouping, pair-share).** **How to Find the Evidence:** Evaluate teacher materials, noting instructional approaches suggested for whole class and differentiated lessons and activities.	**Evidence-** A variety of instructional approaches and representations are used throughout the curriculum. **It's In the System** TG: Use coordinate grapher: Pg. 125. Video Launch: Pg. 39, 84, 126. Suggested Questions: Pg. 133, 138. Number Line: Pg. 134-135, 145. Grouping: Pg. 41, 89, 103, 176, 180, 186, 190. Discussion: Pg. 134, 139. Graphs: Pg. 144, 174, 180. Graphing calculator: Pg. 163. Matching: Pg. 190.	**__x__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Alignment Criterion 3: Materials must provide supports for English Language Learners and other special populations. **AC 3** Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 points, the Criterion has not been met. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewers only.)** **Move to the Evaluation Summary and record the final Meets or Does Not Meet rating .**		**__x__Meets** **____Does Not Meet** **Strengths/Weaknesses:**

Once an evaluation for alignment to the Shifts and major features of the CCSS has been conducted using Sections 1-3, it's important to evaluate for overall quality and best practices. A starting list of Indicators of Quality are suggested below. States, districts and others evaluating instructional materials are encouraged to add

to this list to ensure materials reflect local contexts. For background information on some of the Indicators of Quality in this section, refer to pp.16–18 in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).

Indicators of Quality	Evidence- Give specific examples.	Rating: (Reviewer only.)
1. Lessons are thoughtfully structured and support the teacher in leading the class through the learning paths at hand, with active participation by all students in their own learning and in the learning of their classmates.	**Evidence-** Each unit is structured the same: **Function Junction** TG: Unit Overview: Pg. 2-3. Planning Charts: Pg. 4-7. Goals and Standards: Pg. 8-12. Math Background: Pg. 13-36. Investigation Overview: Pg. 43-47. Investigations (focus questions, materials, vocab, connecting to prior knowledge, presenting challenge, providing for individual needs, summary, reflecting on student learning, problems, ACE questions, video launch, using technology): Pg. 48-53. Math Reflections: Pg. 76-77. "At a Glance" Lessons with Answer Keys: Pg. 297-344. Investigation Answers: Pg. 347-369. Index: Pg. 370-371. Investigations are learning through cooperative learning/discovery. ACE – independent study reflection	**(Reviewer only.)** **___x___ Yes** **_____ No**
2. The underlying design of the materials includes both problems and exercises. (In solving problems, students learn new mathematics, whereas in working exercises, students apply what they have already learned to build mastery.) Each problem or exercise has a purpose. **NOTE: This Criterion does not require that the problems and exercises be labeled as such.**	**Evidence-** Real world and skills practice problems/exercises throughout. TG Connects topics in connecting to prior knowledge. "Summarize" at end of each investigation with an orchestrated discussion. **Function Junction** SWB: After guided lessons with real world discussions, have problems and exercises. Pg. 9, 11, 13, 15, 18-19. ACE problems: Pg. 20-29. Math reflections Pg. 30-31. Looking Back Project (Summarize): Pg. 103-105.	**(Reviewer only.)** **___x___ Yes** **_____ No**

3. Design of assignments is not haphazard: exercises are given in intentional sequences in order to strengthen students' mathematical understanding.	**Evidence-** Concepts connect and build throughout each unit. **Butterflies, Pinwheels, and Wallpaper** SWB: Pg. 7 Investigation 1 – Symmetry and Transformations. Pg. 30 Investigation 2 – Transformations and Congruency. Pg. 50 Investigation 3 – Transforming Coordinates. Pg. 75 Investigation 4 – Dilations and Similar Figures. Pg. 97 Unit Project The ACE assignments in each lesson are sequential and increase in difficulty. The investigation problems are sequential and increase in difficulty. **Thinking with mathematical models**: Pg. 69-78.	**(Reviewer only.)** **___x___ Yes** **_____ No**
4. There are separate teacher materials that support and reward teacher study including, but not limited to: discussion of the mathematics of the units and the mathematical point of each lesson as it relates to the organizing concepts of the unit, discussion on student ways of thinking and anticipating a variety of students responses, guidance on lesson flow, guidance on questions that prompt students thinking, and discussion of desired mathematical behaviors being elicited among students.	**Evidence-** • Every unit has a Teacher's Guide. * At a Glance • **Teacher Resources Grade 8** book provides parent letters, lab sheets, assessments, and answer keys. • **A Guide to Connected Mathematics 3** has an overview of the curriculum as well as correlations to CCSS. • Teacher Lesson Support DVD. • ExamView Test Bank CD-ROM.	**(Reviewer only.)** **___x___ Yes** **_____ No**
5. Manipulatives suggested in the materials are faithful representations of the mathematical objects they represent and are connected to written methods.	**Evidence-** Manipulatives are suggested throughout. **Function Junction** SWB: Factor Game II (polynomial expressions) Pg. 94-95. Functions Five Game Pg. 103-105. Manipulatives match lessons. **Teacher Resources**: Number lines, lab sheets, graphs, etc.	**(Reviewer only.)** **___x___ Yes** **_____ No**

6. Materials include a variety of curriculum-embedded assessme Examples include pre-, formative, summative, and self-assessment resources.	**Evidence-** Exam View Test CD-ROM Formative assessments include a checkup, self-assessment, notebook check list, and project. Investigations, ACE problems, checkups, observations. Summative assessments include a partner quiz, unit test, and individual quiz. Evidence is from **Teacher Resources Grade 7** book. Checkup Pg. 31, 64, 67, 118, 121. Partner Quiz Pg. 34, 65, 119, 170. Unit Test Pg. 37, 69, 125, 174, 229, 288. Self-Assessment Pg. 41, 72, 130, 181, 233, 292. Notebook Check list Pg. 44, 74, 132, 235, 294. Quiz Pg. 281.	**(Reviewer only.)** ___x___ **Yes** _____ **No**
7. Assessments contain aligned rubrics, answer keys, and scoring guidelines that provide sufficient guidance for interpreting student performance.	**Evidence-** Answer Keys are contained throughout the curriculum. **Function Junction** TG Pg. 297-346 contains "At a Glance" which includes problem answers. Pg. 347-369 ACE answers. Pg. 76-77, 120-121, 168, 211-212, 260-261. "Mathematical Reflections" possible answers.	**(Reviewer only.)** ___x___ **Yes** _____ **No**
8. Materials assess student proficiency using methods that are accessible and unbiased, including the use of course-level language in student prompts.	**Evidence-** The assessment and curriculum language are the same. They both contain clear sentence structure that is accessible and unbiased for students. There are a variety of assessments available in this curriculum.	**(Reviewer only.)** ___x___ **Yes** _____ **No**
9. Materials are carefully evaluated by qualified individuals, whose names are listed, in an effort to ensure freedom from mathematical errors and course-level appropriateness.	**Evidence-** Authors, assessment team, reviewers, content consultants, consultants, and field tests sites are listed in the following: **A Guide to Connected Mathematics 3** Every TG Every SWB **Teacher Resources Grade 8** **CMP 3 Grade 8 Algebra I** **Say It With Symbols** TG: Pg. iii-v. **Say It With Symbols** SWB: Pg. iii-v.	**(Reviewer only.)** ___x___ **Yes** _____ **No**

10. The visual design supports students in engaging thoughtfu[illegible]with the subject. Navigation through the text is clear.	**Evidence-** The visual design[illegible]ports students throughout. There is bold-faced and colored fonts that draw attention to vocabulary terms and important information for content understanding. Graphics and pictures are used throughout. Table of contents is provided. **Frogs, Fleas, and Painted Cubes** SWB: Table of Contents Pg. vi-vii, Graphics/Pics Pg. 8, 15, 32, 36, Appropriate pictures Pg. 90 (dot paper with cube buildings), Index Pg. 110-112. **Butterflies, Pinwheels, and Wallpaper** SWB: Table of Contents Pg. vi-vii, Graphics are appropriate throughout. Pg. 8-9 contains butterfly for reflectional symmetry, pinwheels for rotational symmetry, and boat wallpaper for translational symmetry. Other graphics can be seen on Pg. 18, 48, 69, 75. Font is nicely sized/easy to read. Visually appealing Pictures	**(Reviewer only.)** **___x___ Yes** **_____ No**

Reviewer IMET Evaluation Summary Title/Level: Pearson Connected Mathematics 3 Grade 8 Algebra I

Publisher: Pearson Education, Inc. Copyright: ____2014_____ ISBN:_9780133296778_____

Reviewer ID # ___HCAC_____ Date Review Completed:__March 8, 2016_____

Non-Negotiable Criteria-The Non-Negotiable must be met in order for the Non-Negotiable Alignment Criteria to be met overall.

Non- Negotiable 1: Focus and Coherence

__x___ Meets

_____ Does Not Meet

Non-Negotiable Overall:

__x___ Meets _____ Does Not Meet

Alignment Criteria- Each Alignment Criterion must be met with a sufficient number of points in order for Alignment Criteria to be labeled as "Meets" overall. The more points the materials receive on the Alignment Criteria, the better they are aligned.

Alignment Criterion 1: Rigor and Balance	Alignment Criterion 2: Standards of Mathematical Practice	Alignment Criterion 3: Access to Standards for All Learners
Points: __6___ of 6 possible. **(Materials must receive at least 5 of 6 points to align.)**	**Points: __6___ of 6 possible.** **(Materials must receive at least 5 of 6 points to align.)**	**Points: __6___ of 6 possible.** **(Materials must receive at least 5 of 6 points to align.)**
___x____ Meets	**___x____ Meets**	**___x____ Meets**
_____ Does Not Meet	**_____ Does Not Meet**	**_____ Does Not Meet**

Alignment Criteria Overall:

__x___ Meets _____ Does Not Meet

If the materials meet the Non-Negotiable Criterion and each Alignment Criterion, they are aligned to the Shifts and major features of the Co[illegible]tandards. **Do the materials meet every Non-Negotia[illegible] and Alignment Criterion? __x___ Yes _____ N[illegible]**

What are the specific areas of strength and weakness based on this evaluation? Publishers or others modifying or developing assessments can use this information to make improvements and/or to remedy gaps in the alignment of assessment materials.

Strengths:
Investigations of real world problems
Cooperative learning/activity based
Teacher resources
Engaging
Differentiation embedded throughout
Meets the accelerated pathway in Appendix A for Grade 8 Algebra I.

Weaknesses:
Curriculum materials may seem a little overwhelming at first, but once there is an understanding of how it is set up, it flows smoothly.
It does not meet the high school Algebra standards: A-APR.C.4, A-APR.D.6, and A-REI.A.2

2015-16 Mathematics Interim Review Recommendation & Summary

Publisher Name:	Pearson
Title:	Algebra 1
ISBN #	9780133315332
Grade Level(s) or Course:	9-12
Reviewer ID:	RW and PVP

RECOMMENDED AS:

____X____**Core Mathematics Program-** a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials. Substantial evidence clearly supports the designation of this program as Core.

_____**Other Mathematics Program-** a program that substantially, but partially, meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for supplemental materials. Substantial evidence clearly supports the designation of this program as Other.

_____**Component Mathematics Program-** a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs. Substantial evidence clearly supports the designation of this program as Component.

_____**Intervention Program-** a program designed and intended to target and support students' specific needs. Substantial evidence clearly supports the designation of this program as Intervention.

_____ **Does not meet criteria** for recommendation as a Curricular Material or Online Resource for Mathematics.

EVIDENCE SUMMARY:

FOCUS-
The textbook is completely aligned with the CCSS and consistently incorporates all 8 MPs.

COHERENCE-
The sections do a really good job of scaffolding problems from skill building to application problem solving. The chapters are ordered in a way in which all concepts build on each other.

RIGOR-
Problems definitely meet the standards rigorous expectations. The practice and apply problems are well written with a conceptual understanding basis and includes high order thinking skills.

CONCEPTUAL UNDERSTANDING-
The textbook suggests problems to assign students based on their understanding demonstrated through assess and remediate quizzes. The Pacing Guide also suggests worksheets for remediate and re-teaching. The materials allow for differentiated teaching.

MATHEMATICAL PRACTICES-
The materials do a great job of connecting content standards and practice standards.

ACCESSIBILITY OF STANDARDS TO ALL STUDENTS-
The material does a great job in reaching all types of learners. Including ELL students, special population students as well as advanced students.

OTHER:
This program provides great opportunity for scaffolding learning for all populations and challenging honors students. The program is traditional and does not include task based learning or cooperative learning.

2015-1 nterim Mathematics Review

Mathematics Evaluation Tool – High School

Publisher: Pearson Education, Inc

Title of Material: Pearson Algebra I Common Core Edition

Author: Laurie Bass et al.

ISBN #: 9780133315332 **Copyright** 2015

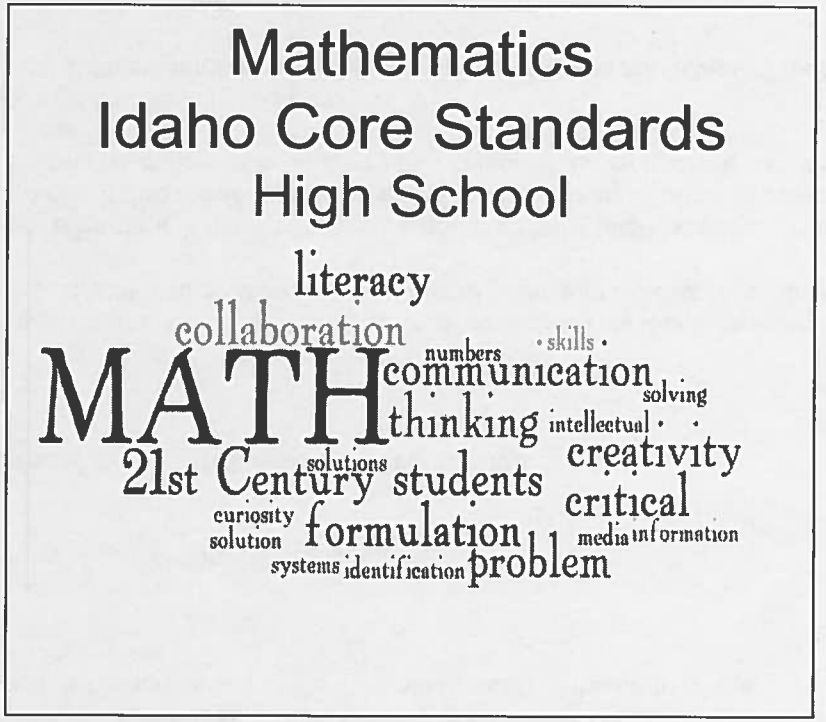
Reviewer ID: R.W and PVP

Core Mathematics Program- a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Core.

Other Mathematics Program- a program that substantially, but partially, meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Other.

Component Mathematics Program- a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs.
Substantial evidence clearly supports the designation of this program as Component.

Intervention Program- a program designed and intended to target and support students' specific needs.
Substantial evidence clearly supports the designation of this program as Intervention.



- Evaluation Form adapted from Instructional Materials Evaluation Toolkit (IMET).

The IMET was developed by Student Achievement Partners. Educators may use or adapt. http://creativecommons.org/licenses/by/3.0/ Download this tool at http://achievethecore.org/IMET

Instructional Materials Evaluation Tool

Mathematics, High School

What Are the Purposes of the IMET?

This Math IMET is designed to help educators determine whether instructional materials are aligned to the Shifts and major features of the Common Core State Standards (CCSS). The substantial instructional Shifts (http://www.corestandards.org/other-resources/key-shifts-in-mathematics/) at the heart of the Common Core State Standards are:

- **Focus** strongly where the Standards focus
- **Coherence**: Think across grades and link to major topics within the grade
- **Rigor**: In major topics, pursue conceptual understanding, procedural skill and fluency, and application with equal intensity.

The IMET draws directly from the following documents:

- Common Core State Standards for Mathematics (www.corestandards.org/Math)
- Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_ HS_Spring_2013_FINAL1.pdf)

When to use the IMET

1. Purchasing materials: Many factors go into local purchasing decisions. Alignment to the Standards is a critical factor to consider. This tool is designed to evaluate alignment of instructional materials to the Shifts and the major features of the CCSS. It also provides suggestions of additional indicators to consider in the materials evaluation and purchasing process
2. Evaluating materials currently in use: The IMET can be used to analyze the degree of alignment of existing materials and help to highlight specific, concrete flaws in alignment. Even where materials and tools currently in use fail to meet one or more of these criteria, the pattern of failure is likely to be informative. States and districts can use the evaluation to create a thoughtful plan to modify or combine existing resources in such a way that students' actual learning experiences approach the focus, coherence, and rigor of the Standards.
3. Developing programs: Those developing new programs can use this tool as guidance for creating aligned curricula.

Please note this tool was designed for evaluating comprehensive curricula (including any supplemental or ancillary materials), but it was not designed for the evaluation of standalone supplemental materials.

Who Uses the IMET?

Evaluating instructional materials requires both subject-matter and pedagogical expertise. Evaluators should be well versed in the Standards (www.corestandards.org/Math) for all grades in which materials are being evaluated. This includes understanding the Widely Applicable Prerequisites (www.achievethecore.org/prerequisites), how the content fits into the progressions in the Standards (www. achievethecore.org/progressions), and the expectations of the Standards with respect to conceptual understanding, procedural skill and fluency, and application. Evaluators also should be familiar with the substantial instructional Shifts (http://www.corestandards.org/other-resources/key-shifts-in-mathematics/) of Focus, Coherence and Rigor that are listed above.

Getting Started

Prior to Evaluation

Assemble all of the materials necessary for the evaluation. It is essential for evaluators to have materials for all grades covered by the program, as some criteria cannot be rated without having access to each grade. In addition, each evaluator should have a reference copy of the Common Core State Standards for Mathematics (CCSSM) and the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).

Before conducting the evaluation itself, it is important to develop a protocol for the evaluation process. The protocol should include having evaluators study the Publishers' Criteria and the IMET. It will also be helpful for evaluators to get a sense of each program overall before beginning the process. At a minimum, this would include reading the front matter of the text, looking at the table of contents and paging through multiple chapters.

Sections 1-3 below should be completed to produce a comprehensive picture of the strengths and weaknesses of the materials under evaluation. Information about areas in need of improvement or supplementation should be shared with internal and external stakeholders.

Navigating the Tool

Begin with Section 1: Non-Negotiable Alignment Criteria

- The Non-Negotiable Alignment Criteria must each be met in full for materials to be considered aligned to the Shifts and the major features of the Common Core State Standards. Each Non-Negotiable Alignment Criterion has one or more metrics associated with it; every one of these metrics must be met in order for the criterion as a whole to be met.

- Examine the relevant materials and use evidence to rate the materials against each criterion and its associated metric(s).

- Record and explain the evidence upon which the rating is based.

Continue to Section 2: Alignment Criteria

- The Alignment Criteria must each be met for materials to be considered aligned to the Shifts and the major features of the Common Core State Standards. Each Alignment Criterion has one or more metric associated with it; a specific number of these metrics must be met or partially met in order for the criterion as a whole to be met.

- Examine the materials in relation to these criteria, assigning each metric a point value. Rate the criterion as "Meets" or "Does Not Meet" based on the number of points assigned. The more points the materials receive on the alignment Criteria, the better they are aligned.

- Record and explain the evidence upon which the rating is based.

Proceed to Section 4: Indicators of Quality

- Indicators of Quality are important considerations that will help evaluators better understand the overall quality of instructional materials. These considerations are not criteria for alignment to the CCSS, but they provide valuable information about additional program characteristics. Evaluators may want to add their own indicators to the examples provided.

Directions for Non-Negotiable 1

Focus and Coherence

Criterion	Evidence- Give specific examples.	Rating: (Reviewer only.)

Non-Negotiable 1: Focus and Coherence- Materials must focus coherently on the Widely Applicable Prerequisites in a way that is consistent with the progressions in the Standards. Focus and coherence are the two major evidence-based design principles of the Common Core State Standards for Mathematics (CCSSM, p. 3). Focus is necessary in order to fulfill the ambitious promise the states have made to their students by adopting the Standards: greater achievement at the college and career-ready level; greater depth of understanding of mathematics; and a rich classroom environment in which reasoning, sense-making, applications, and a range of mathematical practices flourish. In high school courses, narrowing and deepening the curriculum creates a structure that ties topics together. Thus, materials must focus coherently on the Widely Applicable Prerequisites in a way that is consistent with the progressions in the Standards.	Focus and coherence are the two major evidence-based design principles of the Common Core State Standards for Mathematics (CCSSM, p. 3). Focus is necessary in order to fulfill the ambitious promise the states have made to their students by adopting the Standards: greater achievement at the college and career-ready level; greater depth of understanding of mathematics; and a rich classroom environment in which reasoning, sense-making, applications, and a range of mathematical practices flourish. In high school courses, narrowing and deepening the curriculum creates a structure that ties topics together. Thus, materials must focus coherently on the Widely Applicable Prerequisites in a way that is consistent with the progressions in the Standards. **Required Materials:** • Common Core State Standards for Mathematics (www.corestandards.org/wpcontent/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_HS_Spring_2013_FINAL1.pdf) • Widely Applicable Prerequisites for College and Careers (http://achievethecore.org/prerequisites) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion**: Non-Negotiable 1 is rated as Meets or Does Not Meet. To rate Non-Negotiable 1, first rate Metrics 1A–1H. Each of these eight metrics must be rated as Meets in order for Non-Negotiable 1 to be rated as Meets. Rate each metric 1A–1H as Meets or Does Not Meet/Insufficient Evidence. If the evidence examined shows that the Criterion is met, then mark the Criterion as Meets. If the evidence examined shows that the Criterion is not met—or if there is insufficient evidence to make a determination—then mark the Criterion as Does Not Meet/Insufficient Evidence. Support all ratings with evidence.
Metric NN1A: **In any single course, students spend at least 50% of their time on Widely Applicable Prerequisites.** **How to Find the Evidence:** Familiarize yourself with the Widely Applicable Prerequisites. Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, lessons, homework assignments, and assessments. (Evaluate both student and teacher materials.) Consider time spent on the Widely Applicable Prerequisites and judge qualitatively whether students and teachers using the materials as designed will devote the majority of time to the Widely Applicable Prerequisites For context, read Criterion #1 in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence- The students spend at least 50% of their time on the Widely Applicable Prerequisites. You can open the textbook to almost any lesson and the WAP are present. For example: Lesson 2-10 (N-Q.3), Lessoon 3-7 (A-CED.1), Lesson 5-4 (F-IF.4 and 7a)**	**__X__Meets** **____Does Not Meet Insufficient Evidence**
Metric NN1B: **Student work in Geometry involves significant work with applications/modeling and problems that use algebra skills.** **How to Find the Evidence:** Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, lessons, homework assignments, and assessments. (Evaluate both student and teacher materials. NOTE: Since Geometry contains relatively fewer Widely Applicable Prerequisites, this Criterion is important to help foster students' college and career readiness. Problems that use algebra skills might include, for	**Evidence- In many of the student application problems, geometry is addressed. For example: pg. 14 #36, pg. 258 #35, pg. 496 #42)** **Geometry is also present in 10-1 (Pythagorean Thm) and 10-6 (Trig ratios). Chapter 10 Common Core Performance Task (pg. 613).** **In the geometry problems throughout the textbook, algebra skills are required.**	**___X_Meets** **____Does Not Meet Insufficient Evidence**

example, a[illegible]aic geometry problems in a coordinate setting, or problems of measurement involving unknown quantities.		
Metric NN1C: **There are problems at a level of sophistication appropriate to high school (beyond mere review of middle school topics) that involve the application of knowledge and skills from grades 6-8.** **How to Find the Evidence:** Evaluate lessons, chapter/unit assessments, and homework assignments. NOTE: Problems should include application of the following topics from grades 6-8: • Ratios and proportional relationships. • Percentage and unit conversions, e.g., in the context of complex measurement problems involving quantities with derived or compound units (such as mg/mL, kg/ m3, acre-feet, etc.). • Basic function concepts, e.g., by interpreting the features of a graph in the context of an applied problem. • Concepts and skills of geometric measurement e.g., when analyzing a diagram or schematic. • Concepts and skills of basic statistics and probability (see grades 6–8.SP) • Performing rational number arithmetic fluently. For context, read Table 1 on Page 8 of the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence- In order to complete the mathematics in this textbook, students are required to use skills taught in grades 6-8 and they are expected to build on these skills, creating a higher level of sophistication for the mathematics.** **For example:** Rates and Proportional Relationships 2-7,2-8, Get ready Ch 10 pg 611 Basic Probability and Statistics 12-3, 12-4, 12-6, 12-7, 12-8 Rational Number Arithmetic Fluency Ch 1	**__X__Meets** **____Does Not Meet Insufficient Evidence**
Metric NN1D: **Materials base courses on the content specified in the Standards.** **How to Find the Evidence:** Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, and lessons in both student and teacher materials. For context, read Criterion #3a in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** Throughout the textbook, the Standards, as well as, the Mathematical Practices, being used in that section are noted at the beginning of each chapter for example pg 23	**__X__Meets** **____Does Not Meet Insufficient Evidence**
Metric NN1E: **Materials give all students extensive work with course-level problems.** **How to Find the Evidence:** Evaluate both student and teacher materials. If the materials provide resources for differentiated learning, consider whether lower-performing students have opportunities to engage with course-level problems. Also consider whether higher-performing students are given opportunities to learn current course-level content in greater depth. For context, read Criterion #3b in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** At the beginning of each chapter they have a Pacing and Assignment Guide that tells the teacher which problems to assign based on student level. (pg 293c TE) They give a short lesson quiz to identify student levels. (pg 300A TE). They also have a list of all extra practice and enrichment activities available for students on the Resources page (pg294D TE)	**__X__Meets** **____Does Not Meet Insufficient Evidence**

Metric N[illegible]: **Materials relate course-level concepts explicitly to prior knowledge from earlier grades or courses. The materials are designed so that prior knowledge becomes reorganized and extended to accommodate the new knowledge.** **How to Find the Evidence:** Evaluate student and teacher materials, looking for problems that involve extending the knowledge learned in earlier grades and courses. NOTE: An example of evaluating this Criterion might be to look at whether materials connect the equation of a circle with the distance formula and the Pythagorean theorem. For context, read Criterion #3c in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** Math Background section in the TE (pg 613A and 613B) indicates the Big ideas and the Essential Understandings for that chapter. Each lesson starts with an interactive learning piece to make sure the students have the required background knowledge to be successful in the upcoming lesson (pg 614) The flow of each chapter builds to scaffold concepts for example 3-5 Working with Sets comes after solving inequalities in sections 3-1 through 3-4	**__X__Meets** **____Does Not Meet Insufficient Evidence**
Metric NN1G: **Materials include learning objectives that are visibly shaped by CCSSM cluster and domain headings.** **How to Find the Evidence:** Select several clusters from the course being evaluated. Evaluate teacher and student materials in relation to these clusters. For context, read Criterion #4a in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** At the beginning of each section the CCSS is stated for that section along with objectives that mirror the standard being taught. The MP's being used are also listed at the beginning and throughout the section. TE pg 178 lesson 3-3 -top of the page & the Solve It! then on pg 182 it tells which MP's are supported in which exercises	**__X__Meets** **____Does Not Meet Insufficient Evidence**
Metric NN1H: **Materials include problems and activities that serve to connect two or more clusters in a domain, or two or more domains in a category, or two or more categories, in cases where these connections are natural and important.** **How to Find the Evidence:** In the course being evaluated, choose two or more clusters, two or more domains, or two or more categories for which connections are natural and important. Evaluate the units, chapters, and lessons that deal with the chosen topics, looking for problems and activities that serve to connect the chosen clusters or domains. NOTE: An example of evaluating this Criterion might be to look at whether materials include problems in which students analyze a situation by building a function, graphing it, and using it to create and solve an equation. For context, read Criterion #4b in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** The teachers edition of the textbook shows how clusters are being connected in each section. The textbook does a great job of incorporating activities that tie clusters together. TE pg 78 margin. Resources on pgs 114B provide extra practice and activities that ties these clusters together.	**__X__Meets** **____Does Not Meet Insufficient Evidence**

Non-Negotiable 1: Focus and Coherence- Materials must focus coherently on the Widely Applicable Prerequisites in a way that is consistent with the progressions in the Standards. **Metric NN 1:** If all metrics 1A–1H were rated as Meets, then rate Non-Negotiable 1 as Meets. If one or more metrics were rated as Does Not Meet/Insufficient Evidence, then rate Non-Negotiable 1 as Does Not Meet. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)** **Before moving to Alignment Criterion 1, record the final Meets or Does Not Meet rating in the Evaluation Summary.**	**__X__Meets** **____Does Not Meet** **Strengths/Weaknesses** The textbook is completely aligned with the CCSS and consistently incorporates all 8 MP's

Now continue by evaluating Alignment Criterion 1 for Rigor and Balance.

Directions for Alignment Criterion 1

Rigor and Balance

Alignment Criterion 1: **Rigor and Balance- Materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.** The Standards set expectations for attention to all three aspects of rigor: conceptual understanding, procedural skill and fluency, and applications. Thus, materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.	The Standards set expectations for attention to all three aspects of rigor: conceptual understanding, procedural skill and fluency, and applications. Thus, materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations. • Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_HS_Spring_2013_FINAL1.pdf) • Widely Applicable Prerequisites for College and Careers (http://achievethecore.org/prerequisites) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion:** Alignment Criterion 1 is rated as Meets or Does Not Meet. To rate Alignment Criterion 1, first rate metrics 1A, 1B, and 1C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). For each metric, guiding questions are provided to aid in gathering evidence. Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 1 if the materials rate 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as rigor and balance, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.

AC Metric 1A: **The materials support the development of students' conceptual understanding of key mathematical concepts, especially where called for in specific content Standards or cluster headings.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Widely Applicable Prerequisites that relate specifically to conceptual understanding to use throughout the questions associated with this metric. NOTE: Some examples of clusters or Standards that call for conceptual understanding include: N-RN.A.1, A-APR.B, A-REI.A.1, A-REI.D.10, A.REI.D.11, F.IF.A.1, F-LE.A.1, G.SRT.A.2, G-SRT.C.6, S-ID.C.7 For context, read Criterion #2a in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	• Choose a cluster/Standard from the Widely Applicable Prerequisites that is aligned to each aspect of rigor and use it to evaluate these metrics. It is most helpful if the same clusters and Standards are chosen for all of the programs being evaluated. (Guidance in choosing clusters/Standards is included in "How to Find the Evidence" below.)	**Use the questions for AC Metric 1A to evaluate Metric 1A. Record evidence for each question and rate Metric 1A.** **__X__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Is conceptual understanding attended to thoroughly where the Standards set explicit expectations for understanding or interpreting? Evaluate lessons, chapter/unit assessments and homework assignments, paying attention to work aligned to Standards that explicitly call for understanding or interpreting.	**Evidence-** Each lesson is aligned to the standards in both content and rigor. In the practice problems, students are required to write about the math being taught (pg 128 #53) as well as conduct an error analysis to show understanding (pg 128 #51)	
Do the materials feature high-quality conceptual problems and conceptual discussion questions? Evaluate lessons, chapter/unit assessments, and homework assignments. NOTE: Examples of conceptual problems might include such questions as "What is the maximum value of the function f(t) = 5 – t2 ?" or "Is √2 a polynomial? How about ½(x + √2)+ ½ (-x + √2)?"	**Evidence-** Every lesson has a Lesson Check section (pg 127) in which students can show they know the concepts before they do the practice and application problems.The Concept Bytes (pg 59) and the Apply What You've Learned (pg 100) also indicate the high quality conceptual discussion problems throughout this text.	
Do the materials feature opportunities to identify correspondences across mathematical representations? Evaluate lessons, chapter/unit assessments and homework assignments. NOTE: An example of evaluating this metric might include looking at whether materials support students in identifying correspondences among the expression that defines a function, the graph that shows the relationship, and the behavior of the phenomenon being modeled (if any).	**Evidence-** Many different types of representations are used in all of the lessons as well as to connect concepts in other sections. For example, pg 294-299 students have to find avg rate of change/slope using tables, points, graphs, and word problems. Then they use slope to graph lines and write the equation of lines (pgs. 315 - 320, 322-3280. Slope is also used on pages 330-335 to recognize parallel and perpendicular lines and then apply slope to scatter plots and trend lines on pg 386.	
AC Metric 1B: **The materials are designed so that students attain the fluencies and procedural skills required by the Standards.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Widely Applicable Prerequisites that relate specifically to fluency and procedural skill to use		**Use the questions for AC Metric 1B to evaluate Metric 1B. Record evidence for each question and rate Metric 1B.** **__X__Meets (2)** **____Partially Meets (1)**

throughout questions associated with this metric. NOTE: Some examples of standards that call for procedural skill and fluency include: A-SSE.A.1b, A-SSE.2, A-APR.A.1, A-APR.C.6, F-BF.B.3, G-GPE.B.4, G-GPE.B.5, G-GPE.B.7, G-CO.A.1, G-SRT.B.5 For context, read Criterion #2b in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).		____Does Not Meet (0)
Is progress toward fluency and procedural skill interwoven with the student's developing conceptual understanding of the skills in question? Evaluate lessons, chapter/unit assessments, daily routines, and homework assignments for evidence that the development of fluency and procedural skill is supported by conceptual understanding.	**Evidence-** Interactive learning (Getting ready pg 308), guided instruction(pgs 308-311), lesson check(pg 311), and practice problems(pgs 312) all help build procedural skills and math fluency. Conceptual understanding and application are a focus of every section as evidenced by the application problems (pg 313-314)	
Are purely procedural problems and exercises present that include cases in which opportunistic strategies are valuable and generic cases that require efficient and general procedures present? Evaluate lessons, chapter/unit assessments, daily routines, and homework assignments. NOTE: Problems in which opportunistic strategies are valuable might include such examples as solving x2 + 5 = 49 + 5 or (3x – 2)2 = 6x – 4. Generic cases that require efficient and general procedures might include such problems as solving c + 8 – c2 = 3(c – 1)2 – 5).	**Evidence-** There are both opportunistic and generic problems present in the sections in the text for example pg 516 problems 32 - 40 are purely procedural and opportunistic in their nature and then problem #41 is a generic problem that require students to generalize their procedures	
AC Metric 1C: **The materials are designed so that teachers and students spend sufficient time working with engaging applications, without losing focus on the Widely Applicable Prerequisites.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Widely Applicable Prerequisites that relate specifically to application to use throughout the questions associated with this metric. NOTE: Some examples of clusters or Standards that call for application include: N-Q.A, A-SSE.B.3, A-REI.D.11, F-IF.B, F-IF.C.7, F-BF.A.1, G-SRT.C.8, S-ID.A.2, S-IC.A.1 For context, read Criterion #2c in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).		**Use the questions for AC Metric 1C to evaluate Metric 1C. Record evidence for each question and rate Metric 1C.** **__X__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Are there single- and multi-step contextual problems, including non-routine problems, that develop the mathematics of the course, afford opportunities for practice, and engage students in problem solving? Do the problems attend thoroughly to those places in the content Standards where expectations for multi-step and real-world problems are explicit? Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** Lessons contain both single- and multi-step conceptual problems that give students plenty of opportunity for practice. Single-step examples include: problem #41 on pg 299 and problem #44 on pg 327. Examples include: Solve it (pg 308) and Problem #62 pg 314.	
Do application problems particularly stress applying the Widely Applicable Prerequisites? Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** The Widely Applicable Prerequisites are consistently incorporated throughout the entire text. Examples include pg 135 #23, 24, 28 and pg 136 #29, 30	

Are there a[illegible] opportunities for students to engage with modeling problems? Do materials require students to use both individual parts of the modeling cycle as well as the full modeling cycle? Read the pages on High School—Modeling in the Standards for Mathematics (pp. 72 and 73). Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** Every lesson presents opportunity for students to engage with modeling problems. Examples include: pg 312 - 313 #34,35,47,58, and the Forestry problem #32 on pg 320	
Alignment Criterion 1: Materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations. **AC 1:** Materials must earn at least 5 of 6 points to meet this Alignment Criterion. If materials earn less than 5 points, the Criterion has not been met. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)** **Before moving to Alignment Criterion 2, record the final Meets or Does Not Meet rating in the Evaluation Summary.**		**__X__Meets** **____Does Not Meet** **Strengths/Weaknesses:** Problems definitely meet the standards rigorous expectations. Would like to see more task based learning opportunities, but the practice and apply problems are well written with a conceptual understanding basis.
Alignment Criterion 2: **Standards for Mathematical Practice- Materials must demonstrate authentic connections between content Standards and practice Standards.** The Standards require that designers of instructional materials connect the mathematical practices to mathematical content in instruction. Thus, materials must demonstrate authentic connections between content Standards and practice Standards.	The Standards require that designers of instructional materials connect the mathematical practices to mathematical content in instruction. Thus, materials must demonstrate authentic connections between content Standards and practice Standards. **Required Materials**: • Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_HS_Spring_2013_FINAL1.pdf) • Widely Applicable Prerequisites for College and Careers (http://achievethecore.org/prerequisites) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion:** Alignment Criterion 2 is rated as Meets or Does Not Meet. To rate Alignment Criterion 2, first rate metrics 2A, 2B, and 2C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). For each metric, guiding questions are provided to aid in gathering evidence. Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 2 if the materials rate 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as mathematical practices, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.

AC Metric 2A: **Materials address the practice Standards in such a way as to enrich the Widely Applicable Prerequisites; practices strengthen the focus of the course instead of detracting from it, in both teacher and student materials.** **How to Find the Evidence:** Familiarize yourself with the Widely Applicable Prerequisites. Evaluate teacher and student materials for evidence that the mathematical practices support and connect to the focus of the course. NOTE: An example of evaluating this Criterion might include looking at whether materials use regularity in repeated reasoning to illuminate formal algebra as well as functions, particularly recursive definitions of functions. For context, read Criterion #6 in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** The 8 Mathematical Practices are consistently present throughout the textbook and are used to enrich the Widely Applicable Prerequisites. Section 3-1 on top of page 164 shows the CCSS as well as the Mathematical Practice Standards covered in that section's practice and application problems . Other opportunities to tie the two together include making sense and solving the problems in the Solve It!, Concept Bytes, and Pull It All together sections throughout the text.	**__X__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
AC Metric 2B: **Materials attend to the full meaning of each practice Standard.** **How to Find the Evidence:** For context, read Criterion #7 in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).		**Use the questions for AC Metric 2B to evaluate Metric 2B. Record evidence for each question and rate Metric 2B.** **__X__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Over the course of any given year of instruction, is each mathematical practice Standard meaningfully present in the form of assignments, activities, or problems that stimulate students to develop the habits of mind described in the practice Standard? Evaluate lessons, chapter/ unit assessments, and homework assignments for evidence of each mathematical practice being meaningfully present in instruction.	**Evidence-** The mathematical practice standards are included in every section problems are presented in the guided instruction and then assigned in the practice and application problems to build knowledge.Common Core Performance Tasks (pg 3) and the Apply What You've Learned (pg 52) give students opportunities to stimulate mathematical practice thinking and apply skills and concepts.	
Are teacher-directed materials that explain the role of the practice Standards in the classroom and in students' mathematical development included? Are alignments to practice Standards accurate? Evaluate teacher materials, paying attention to explanations of the role of the practice Standards in the classroom and in students' mathematical development. Evaluate documents aligning lessons to practice Standards for accuracy. NOTE: Examples to look for when evaluating this metric might include the following: a highly scaffolded problem should not be aligned to MP.1; or a problem that directs a student to use a calculator should not be aligned to MP.5; or a problem about merely extending a pattern should not be aligned to MP.8.	**Evidence-** At the beginning of every chapter there are pages of all the resources available to teachers to help them see the alignment of the practice standards to all of the sections in that chapter. There are also extra practices included that will further aid teachers in helping students build their knowledge of the practice standards. See for example pgs 543 - 545	

AC Metric 2C: **Materials support the Standards' emphasis on mathematical reasoning.** **How to Find the Evidence:** For context, read Criterion #8 in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).		**Use the questions for AC Metric 2C to evaluate Metric 2C. Record evidence for each question and rate Metric 2C.** **__X__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Do the materials support students in constructing viable arguments and critiquing the arguments of others concerning course-level mathematics that is detailed in the content Standards? Read Standard for Mathematical Practice 3. Evaluate teacher and student materials to ensure that students are given opportunities to reason with grade-level mathematics.	**Evidence-** In each lesson, students are required to think about a plan, write and reason. They also perform error analysis and critique others thinking in many of the section; for example section 5-2 pg 305 problem #34, 36 - 42	
Do the materials support students in producing not only answers and solutions, but also, in a course-appropriate way, arguments, explanations, diagrams, mathematical models, etc., especially in the Widely Applicable Prerequisites? Familiarize yourself with the Widely Applicable Prerequisites. Evaluate teacher and student materials to understand the types of work students are expected to produce.	**Evidence-** Students are supported in each section with worked-out example problems that are then checked in the Lesson Check before students practice and apply.	
Do materials explicitly attend to the specialized language of mathematics? Is the language of argument, problem solving, and mathematical explanations taught rather than assumed? Evaluate teacher and student materials, paying attention to how mathematical language is taught. NOTE: An example of evaluating this Criterion might include looking at whether students are supported in: basing arguments on definitions; using the method of providing a counter example; or recognizing that examples alone do not establish a general statement.	**Evidence-** In each section there is a vocabulary section (pg 2) in which students are tested on their knowledge and understanding of the mathematical terms being used. Instructional examples before practice like problems #1 - #6 on pgs 82 - 84 explain each step using proper mathematical explanation and language; #6 especially good at stepping out problem solving.	
Alignment Criterion 2: Materials must demonstrate authentic connections between content Standards and practice Standards. **AC 2:** Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 points, the Criterion has not been met. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewers only.)** **Before moving to Alignment Criterion 3, record the final Meets or Does Not Meet rating in the Evaluation Summary.**		**__X__Meets** **____Does Not Meet** **Strengths/Weaknesses:** Materials do a great job of connecting content standards and practice standards.

Alignment Criterion 3: **Access to the Standards for All Students- Materials must provide supports for English Language Learners and other special populations.** Because Standards are for all students, alignment requires thoughtful support to ensure all students are able to meet the Standards. Thus, aligned materials must provide supports for English Language Learners and other special populations.	Because Standards are for all students, alignment requires thoughtful support to ensure all students are able to meet the Standards. Thus, aligned materials must provide supports for English Language Learners and other special populations. **Required Materials:** • Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math Publishers_Criteria_HS_Spring_2013_FINAL1.pdf) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion:** Alignment Criterion 3 is rated as Meets or Does Not Meet. To rate Alignment Criterion 3, first rate metrics 3A, 3B, and 3C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 3 if the materials rate 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as support for special population, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.
AC Metric 3A: **Support for English Language Learners and other special populations is thoughtful and helps those students meet the same Standards as all other students. The language in which problems are posed is carefully considered.** **How to Find the Evidence:** Evaluate teacher and student materials, paying attention to supports offered for special populations.	**Evidence-** **The textbook provides a lot of support for ELL students. Every section has an ELL support section to help teacher know how to help their ELL population (pg 87A). It includes ideas of what kinds of posters teachers can put up in their classroom, as well as materials that teachers can print off to give to students. Materials also include a Student Companion Book in Spanish, additional on-line vocabulary support and visually supportive problems like the Solve It Problem on pg 88.**	**__X__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
AC Metric 3B: **Materials provide appropriate level and type of scaffolding, differentiation, intervention, and support for a broad range of learners with gradual removal of supports, when needed, to allow students to demonstrate their mathematical understanding independently.** **How to Find the Evidence:** Evaluate teacher and student materials, paying attention to whether materials provide differentiation that will lead all learners to engage with on-grade-level content.	**Evidence-** **At the beginning of every lesson it shows the Lesson Resources (pgs 93A - 93B) these include the extra practice worksheets and enrichment worksheets that will give students more opportunities to complete understanding. There is also an on-line teacher resource center that includes activities, games and puzzles to reinforce concepts being taught. Also included on those pages are assessments that will let the teacher know the level of remediation needed for each student.**	**__X__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**

AC Met C: **Design of lessons recommends and facilitates a mix of instructional approaches for a variety of learners such as using multiple representations (e.g., including models, using a range of questions, checking for understanding, flexible grouping, pair-share).** **How to Find the Evidence:** Evaluate teacher materials, noting instructional approaches suggested for whole class and differentiated lessons and activities.	**Evidence-** All lessons incorporate many different types of questions that require students to have a complete understanding of the mathematics being taught. Each lesson starts with a Solve It! problem, followed by Lesson Checks, then practice and apply problems and then Concept Byte activities. There is a great range of different questioning strategies.	**__X__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Alignment Criterion 3: Materials must provide supports for English Language Learners and other special populations. **AC 3** Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 points, the Criterion has not been met. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewers only.)** **Move to the Evaluation Summary and record the final Meets or Does Not Meet rating .**		**__X__Meets** **____Does Not Meet** **Strengths/Weaknesses:** This book does a great job in reaching all types of learners, including ELL students, special population students, as well as advanced students.

Once an evaluation for alignment to the Shifts and major features of the CCSS has been conducted using Sections 1-3, it's important to evaluate for overall quality and best practices. A starting list of Indicators of Quality are suggested below. States, districts and others evaluating instructional materials are encouraged to add to this list to ensure materials reflect local contexts. For background information on some of the Indicators of Quality in this section, refer to pp.16–18 in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).

Indicators of Quality	Evidence- Give specific examples.	Rating: (Reviewer only.)
1. Lessons are thoughtfully structured and support the teacher in leading the class through the learning paths at hand, with active participation by all students in their own learning and in the learning of their classmates.	**Evidence-** Lessons start with an interactive Solve It! problem and examples worked out to demonstrate the concepts to be learned. In the margins of the teacher edition helps are given that aid the teacher in preventing errors (pg 90) and giving questioning techniques to assess student understanding. On-line helps and resources in the connected.mcgraw-hill.com also address this well.	**(Reviewer only.)** **___X___ Yes** **_____ No**

2. The underlying design of the materials includes both problems and exercises. (In solving problems, students learn new mathematics, whereas in working exercises, students apply what they have already learned to build mastery.) Each problem or exercise has a purpose. **NOTE: This Criterion does not require that the problems and exercises be labeled as such.**	**Evidence-** Practice problems in every section include procedural skill building problems and problem solving application problems then finish off with review problems.(pg 105 - 108) Generously sprinkled through the book are Concept Byte activities (pg 344-345) and Apply It Now multi- step problems (pg 58) to deepen students' understanding.	**(Reviewer only.)** ___X___ **Yes** _____ **No**
3. Design of assignments is not haphazard: exercises are given in intentional sequences in order to strengthen students' mathematical understanding.	**Evidence-** The exercises for each lesson are structurally designed to provided students with problems appropriate for their abilities. Problems sequence from easier procedural problems and then move to application and problem solving problems that require higher level thinking. See any section for example pgs 168 -170	**(Reviewer only.)** ___X___ **Yes** _____ **No**
4. There are separate teacher materials that support and reward teacher study including, but not limited to: discussion of the mathematics of the units and the mathematical point of each lesson as it relates to the organizing concepts of the unit, discussion on student ways of thinking and anticipating a variety of students responses, guidance on lesson flow, guidance on questions that prompt students thinking, and discussion of desired mathematical behaviors being elicited among students.	**Evidence-** Each chapter includes pages of Math Background that explains the concepts in that chapter (pg 163A - 163B) Pacing and Assignment Guides and available Resources (pg 163C - 163D). Also included through the chapter there are helps on every page with prompts and guidance for teaching that lesson.	**(Reviewer only.)** ___X___ **Yes** _____ **No**
5. Manipulatives suggested in the materials are faithful representations of the mathematical objects they represent and are connected to written methods.	**Evidence-** Algebra tiles (pg 80) and activities built in for graphing calculators (pg 59) are faithful representations of the mathematical objects that they represent and are connected to the written methods. The on-line program also has a suite with a graphing utility, number line tool and algebra tiles.	**(Reviewer only.)** ___X___ **Yes** _____ **No**
6. Materials include a variety of curriculum-embedded assessments. Examples include pre-, formative, summative, and self-assessment resources.	**Evidence-** Each lesson has an Assess and Remediate Lesson Quiz (pg 177A), Mid-Chapter Quizzes (pg 193) and End of Chapter Quiz (pg 227), and Standardized Test Prep (pg 220) in every section. There are also online assessments on the connected.mcgraw-hill.com site and an ExamView test bank disc included in the teacher resource materials.	**(Reviewer only.)** ___X___ **Yes** _____ **No**
7. Assessments contain aligned rubrics, answer keys, and scoring guidelines that provide sufficient guidance for interpreting student performance.	**Evidence-** Answer Keys are included for all activities in the Teacher's Edition. Worked out solutions are provided at connected.mcgraw-hill.com	**(Reviewer only.)** __X____ **Yes** _____ **No**

8. Materials assess student proficiency using methods that are accessible and unbiased, including the use of course-level language in student prompts.	**Evidence-** Questions in assessments are written in a format that is easy to understand and are language appropriate.	**(Reviewer only.)** ___X___ **Yes** _____ **No**
9. Materials are carefully evaluated by qualified individuals, whose names are listed, in an effort to ensure freedom from mathematical errors and course-level appropriateness.	**Evidence-** Authors are listed on pages T4 - T5 and Reviewers on pg T6 complete with a short bio about those individuals.	**(Reviewer only.)** ____X__ **Yes** _____ **No**
10. The visual design supports students in engaging thoughtfully with the subject. Navigation through the text is clear.	**Evidence-** The text is visually appealing and easy to navigate. They use avatars in specific locations to engage and appeal to students (Solve It! problems) and pages are not cluttered with distracting unnecessary material.	**(Reviewer only.)** ___X___ **Yes** _____ **No**

Reviewer IMET Evaluation Summary Title/Level: ___Pearson Algebra 1 Common Core_

Publisher: ____Pearson Education____ Copyright: ____2015____ ISBN:__9780133315332_____

Reviewer ID # _____ Date Review Completed:____March 8, 2016____

Non-Negotiable Criteria-The Non-Negotiable must be met in order for the Non-Negotiable Alignment Criteria to be met overall.

Non- Negotiable 1: Focus and Coherence

___X__ Meets

_____ Does Not Meet

Non-Negotiable Overall:

____X_ Meets _____ Does Not Meet

Alignment Criteria- Each Alignment Criterion must be met with a sufficient number of points in order for Alignment Criteria to be labeled as "Meets" overall. The more points the materials receive on the Alignment Criteria, the better they are aligned.

Alignment Criterion 1: Rigor and Balance	Alignment Criterion 2: Standards of Mathematical Practice	Alignment Criterion 3: Access to Standards for All Learners
Points: ___6__ of 6 possible. **(Materials must receive at least 5 of 6 points to align.)**	**Points: __6___ of 6 possible.** **(Materials must receive at least 5 of 6 points to align.)**	**Points: __6___ of 6 possible.** **(Materials must receive at least 5 of 6 points to align.)**
___X____ Meets	**___X____ Meets**	**__X_____ Meets**
_____ Does Not Meet	**_____ Does Not Meet**	**_____ Does Not Meet**

Alignment Criteria Overall:

___X__ Meets _____ Does Not Meet

If the materials meet the Non-Negotiable Criterion and each Alignment Criterion, they are aligned to the Shifts and major features of the Core Standards. **Do the materials meet every Non-Negotiable and Alignment Criterion? __X___ Yes _____ No**

What are the specific areas of strength and weakness based on this evaluation? Publishers or others modifying or developing assessments can use this information to make improvements and/or to remedy gaps in the alignment of assessment materials.

The textbook is completely aligned with the CCSS and consistently incorporates all 8 MP's

Problems definitely meet the standards rigorous expectations. Would like to see more task based learning opportunities, but the practice and apply problems are well written with a conceptual understanding basis.

Materials do a great job of connecting content standards and practice standards.

This book does a great job in reaching all types of learners, including ELL students, special population students, as well as advanced students.

This program provides great opportunity for scaffolding learning for all populations and challenging honors students. The material is very traditional and lacks task based learning.

2015-16 Mathematics Interim Review Recommendation & Summary

Publisher Name:	Pearson Publishing Inc
Title:	Pearson Algebra 2 Common Core Edition
ISBN #	9780133315400
Grade Level(s) or Course:	Algebra 2
Reviewer ID:	TT + RW

RECOMMENDED AS:

___X___**Core Mathematics Program-** a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials. Substantial evidence clearly supports the designation of this program as Core.

_____**Other Mathematics Program-** a program that substantially, but partially, meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for supplemental materials. Substantial evidence clearly supports the designation of this program as Other.

_____**Component Mathematics Program-** a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs. Substantial evidence clearly supports the designation of this program as Component.

_____**Intervention Program-** a program designed and intended to target and support students' specific needs. Substantial evidence clearly supports the designation of this program as Intervention.

_____ **Does not meet criteria** for recommendation as a Curricular Material or Online Resource for Mathematics.

EVIDENCE SUMMARY:

FOCUS-
Materials are completely aligned and appear to be constructed for standards and mathematical practices.

COHERENCE-
Material follows concepts in an appropriate manner and demonstrates an aligned approach to the standards. Differentiation and practices are appropriate and designated well.

RIGOR-
Problems definitely meet the standards rigorous expectations. Extensive problems of depth and extension is available.

CONCEPTUAL UNDERSTANDING-
There needs to be more task based learning, but the practice problems are well written with a conceptual understanding in mind. More performance problems are available.

MATHEMATICAL PRACTICES-
Materials strongly follow standards and provide many opportunities to improve reasoning skills. Quite a lot of material to peruse through. The material provides many opportunities to connect to mathematical practices and they are noted quite readily.

ACCESSIBILITY OF STANDARDS TO ALL STUDENTS-
Material is very accessible, however very standard in approach. There are many diverse lesson types, but no group/pair activities for most if not all lessons.

OTHER: Book is very traditional and not task based learning, however, there are many activities available for supplementation.

2015-1 nterim Mathematics Review

Mathematics Evaluation Tool – High School

Publisher: Pearson Education. Inc.

Title of Material: Pearson Algebra 2 CommonCore Edition

Author: Laurie Bass et al.

ISBN #: 9780133315400 **Copyright** 2015

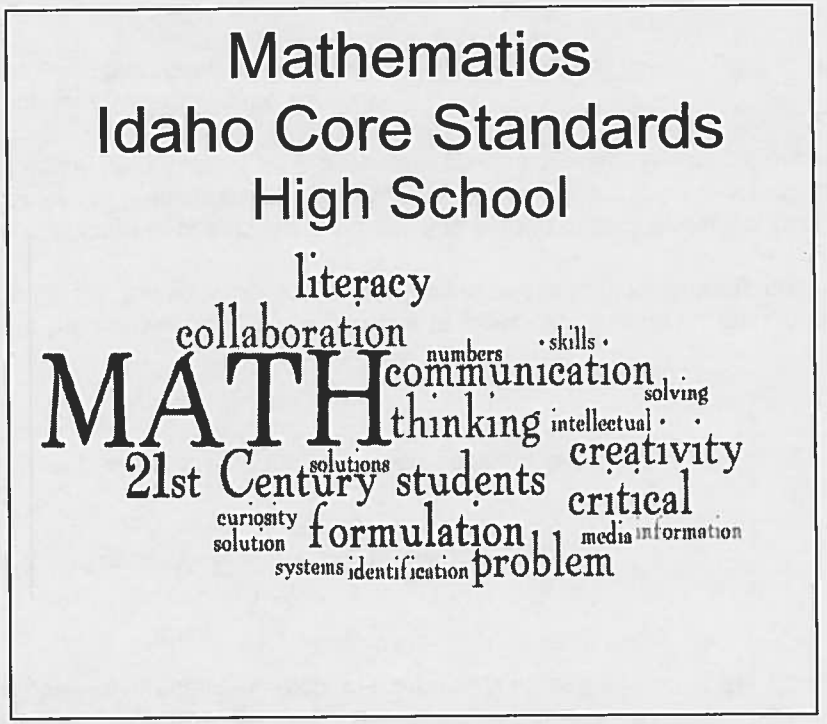
Reviewer ID: ~~IT~~ RW

Core Mathematics Program- a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Core.

Other Mathematics Program- a program that substantially, but partially, meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Other.

Component Mathematics Program- a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs.
Substantial evidence clearly supports the designation of this program as Component.

Intervention Program- a program designed and intended to target and support students' specific needs.
Substantial evidence clearly supports the designation of this program as Intervention.



- Evaluation Form adapted from Instructional Materials Evaluation Toolkit (IMET).

The IMET was developed by Student Achievement Partners. Educators may use or adapt. http://creativecommons.org/licenses/by/3.0/ Download this tool at http://achievethecore.org/IMET

Instructional Materials Evaluation Tool

Mathematics, High School

What Are the Purposes of the IMET?

This Math IMET is designed to help educators determine whether instructional materials are aligned to the Shifts and major features of the Common Core State Standards (CCSS). The substantial instructional Shifts (http://www.corestandards.org/other-resources/key-shifts-in-mathematics/) at the heart of the Common Core State Standards are:

- **Focus** strongly where the Standards focus
- **Coherence**: Think across grades and link to major topics within the grade
- **Rigor**: In major topics, pursue conceptual understanding, procedural skill and fluency, and application with equal intensity.

The IMET draws directly from the following documents:

- Common Core State Standards for Mathematics (www.corestandards.org/Math)
- Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013) (http://www. corestandards.org/wp-content/uploads/Math_Publishers_Criteria_ HS_Spring_2013_FINAL1.pdf)

When to use the IMET

1. Purchasing materials: Many factors go into local purchasing decisions. Alignment to the Standards is a critical factor to consider. This tool is designed to evaluate alignment of instructional materials to the Shifts and the major features of the CCSS. It also provides suggestions of additional indicators to consider in the materials evaluation and purchasing process
2. Evaluating materials currently in use: The IMET can be used to analyze the degree of alignment of existing materials and help to highlight specific, concrete flaws in alignment. Even where materials and tools currently in use fail to meet one or more of these criteria, the pattern of failure is likely to be informative. States and districts can use the evaluation to create a thoughtful plan to modify or combine existing resources in such a way that students' actual learning experiences approach the focus, coherence, and rigor of the Standards.
3. Developing programs: Those developing new programs can use this tool as guidance for creating aligned curricula.

Please note this tool was designed for evaluating comprehensive curricula (including any supplemental or ancillary materials), but it was not designed for the evaluation of standalone supplemental materials.

Who Uses the IMET?

Evaluating instructional materials requires both subject-matter and pedagogical expertise. Evaluators should be well versed in the Standards (www.corestandards.org/Math) for all grades in which materials are being evaluated. This includes understanding the Widely Applicable Prerequisites (www.achievethecore.org/prerequisites), how the content fits into the progressions in the Standards (www. achievethecore.org/progressions), and the expectations of the Standards with respect to conceptual understanding, procedural skill and fluency, and application. Evaluators also should be familiar with the substantial instructional Shifts (http://www.corestandards.org/other-resources/key-shifts-in-mathematics/) of Focus, Coherence and Rigor that are listed above.

Getting Started

Prior to Evaluation

Assemble all of the materials necessary for the evaluation. It is essential for evaluators to have materials for all grades covered by the program, as some criteria cannot be rated without having access to each grade. In addition, each evaluator should have a reference copy of the Common Core State Standards for Mathematics (CCSSM) and the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).

Before conducting the evaluation itself, it is important to develop a protocol for the evaluation process. The protocol should include having evaluators study the Publishers' Criteria and the IMET. It will also be helpful for evaluators to get a sense of each program overall before beginning the process. At a minimum, this would include reading the front matter of the text, looking at the table of contents and paging through multiple chapters.

Sections 1-3 below should be completed to produce a comprehensive picture of the strengths and weaknesses of the materials under evaluation. Information about areas in need of improvement or supplementation should be shared with internal and external stakeholders.

Navigating the Tool

Begin with Section 1: Non-Negotiable Alignment Criteria

- The Non-Negotiable Alignment Criteria must each be met in full for materials to be considered aligned to the Shifts and the major features of the Common Core State Standards. Each Non-Negotiable Alignment Criterion has one or more metrics associated with it; every one of these metrics must be met in order for the criterion as a whole to be met.

- Examine the relevant materials and use evidence to rate the materials against each criterion and its associated metric(s).

- Record and explain the evidence upon which the rating is based.

Continue to Section 2: Alignment Criteria

- The Alignment Criteria must each be met for materials to be considered aligned to the Shifts and the major features of the Common Core State Standards. Each Alignment Criterion has one or more metric associated with it; a specific number of these metrics must be met or partially met in order for the criterion as a whole to be met.

- Examine the materials in relation to these criteria, assigning each metric a point value. Rate the criterion as "Meets" or "Does Note Meet" based on the number of points assigned. The more points the materials receive on the alignment Criteria, the better they are aligned.

- Record and explain the evidence upon which the rating is based.

Proceed to Section 4: Indicators of Quality

- Indicators of Quality are important considerations that will help evaluators better understand the overall quality of instructional materials. These considerations are not criteria for alignment to the CCSS, but they provide valuable information about additional program characteristics. Evaluators may want to add their own indicators to the examples provided.

Directions for Non-Negotiable 1

Focus and Coherence

Criterion	Evidence- Give specific examples.	Rating: (Reviewer only.)
Non-Negotiable 1: Focus and Coherence- Materials must focus coherently on the Widely Applicable Prerequisites in a way that is consistent with the progressions in the Standards. Focus and coherence are the two major evidence-based design principles of the Common Core State Standards for Mathematics (CCSSM, p. 3). Focus is necessary in order to fulfill the ambitious promise the states have made to their students by adopting the Standards: greater achievement at the college and career-ready level; greater depth of understanding of mathematics; and a rich classroom environment in which reasoning, sense-making, applications, and a range of mathematical practices flourish. In high school courses, narrowing and deepening the curriculum creates a structure that ties topics together. Thus, materials must focus coherently on the Widely Applicable Prerequisites in a way that is consistent with the progressions in the Standards.	Focus and coherence are the two major evidence-based design principles of the Common Core State Standards for Mathematics (CCSSM, p. 3). Focus is necessary in order to fulfill the ambitious promise the states have made to their students by adopting the Standards: greater achievement at the college and career-ready level; greater depth of understanding of mathematics; and a rich classroom environment in which reasoning, sense-making, applications, and a range of mathematical practices flourish. In high school courses, narrowing and deepening the curriculum creates a structure that ties topics together. Thus, materials must focus coherently on the Widely Applicable Prerequisites in a way that is consistent with the progressions in the Standards. **Required Materials:** • Common Core State Standards for Mathematics (www.corestandards.org/wpcontent/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_HS_Spring_2013_FINAL1.pdf) • Widely Applicable Prerequisites for College and Careers (http://achievethecore.org/prerequisites) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion:** Non-Negotiable 1 is rated as Meets or Does Not Meet. To rate Non-Negotiable 1, first rate Metrics 1A–1H. Each of these eight metrics must be rated as Meets in order for Non-Negotiable 1 to be rated as Meets. Rate each metric 1A–1H as Meets or Does Not Meet/Insufficient Evidence. If the evidence examined shows that the Criterion is met, then mark the Criterion as Meets. If the evidence examined shows that the Criterion is not met—or if there is insufficient evidence to make a determination—then mark the Criterion as Does Not Meet/Insufficient Evidence. Support all ratings with evidence.

Metric NN1A: **In any single course, students spend at least 50% of their time on Widely Applicable Prerequisites.** **How to Find the Evidence:** Familiarize yourself with the Widely Applicable Prerequisites. Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, lessons, homework assignments, and assessments. (Evaluate both student and teacher materials.) Consider time spent on the Widely Applicable Prerequisites and judge qualitatively whether students and teachers using the materials as designed will devote the majority of time to the Widely Applicable Prerequisites For context, read Criterion #1 in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** **The students spend at least 50% of their time on the WAP throughout the entire textbook. For example: 2-1, p.60 F-IF.A.1, 4-1 p.194 A-CED.A.1, and 6-1 p.361 A-SSE.A.2**	**__X__Meets** **____Does Not Meet Insufficient Evidence**
Metric NN1B: **Student work in Geometry involves significant work with applications/modeling and problems that use algebra skills.** **How to Find the Evidence:** Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, lessons, homework assignments, and assessments. (Evaluate both student and teacher materials. NOTE: Since Geometry contains relatively fewer Widely Applicable Prerequisites, this Criterion is important to help foster students' college and career readiness. Problems that use algebra skills might include, for example, algebraic geometry problems in a coordinate setting, or problems of measurement involving unknown quantities.	**Evidence-** A few of the Geometry standards are covered in this book. Those standards are present in chapter 10 (Quadratic Relations) and chapter 14 (Conic Sections). Algebra skills are required to complete the geometry work in this textbook. Example 10-3, p.630 utilizes equations and solving for unknown variables.	**__X__Meets** **____Does Not Meet Insufficient Evidence**

Metric NN1C: **There are problems at a level of sophistication appropriate to high school (beyond mere review of middle school topics) that involve the application of knowledge and skills from grades 6-8.** **How to Find the Evidence:** Evaluate lessons, chapter/unit assessments, and homework assignments. NOTE: Problems should include application of the following topics from grades 6-8: • Ratios and proportional relationships. • Percentage and unit conversions, e.g., in the context of complex measurement problems involving quantities with derived or compound units (such as mg/mL, kg/ m3, acre-feet, etc.). • Basic function concepts, e.g., by interpreting the features of a graph in the context of an applied problem. • Concepts and skills of geometric measurement e.g., when analyzing a diagram or schematic. • Concepts and skills of basic statistics and probability (see grades 6–8.SP) • Performing rational number arithmetic fluently. For context, read Table 1 on Page 8 of the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** In order to complete the mathematics in this textbook, students are required to use skills taught in grades 6-8 and they are expected to build on these skills, creating a higher level of sophistication for the mathematics. See ch. 3, ch 6, solve it problems and more. In Ch. 2 takes basic function concepts beyond. Also, rational number arithmetic fluently is continually moved further.	**__X__Meets** **____Does Not Meet Insufficient Evidence**
Metric NN1D: **Materials base courses on the content specified in the Standards.** **How to Find the Evidence:** Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, and lessons in both student and teacher materials. For context, read Criterion #3a in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** Throughout the textbook, the Standards, as well as Mathematical Practices, being used in the section are noted in the margins of the book. This material contains the material required as noted in the Mathematics Standards appendix.	**__X__Meets** **____Does Not Meet Insufficient Evidence**
Metric NN1E: **Materials give all students extensive work with course-level problems.** **How to Find the Evidence:** Evaluate both student and teacher materials. If the materials provide resources for differentiated learning, consider whether lower-performing students have opportunities to engage with course-level problems. Also consider whether higher-performing students are given opportunities to learn current course-level content in greater depth. For context, read Criterion #3b in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** The textbook and materials provide a pacing guide as well as recommendations of questions to assign for homework based on the level of knowledge you expect the students to have. The questions start off very basic and lead up to higher order thinking questions. The resources, such as challenge problems, enrichment, performance tasks, and Get Ready pages (see, p.131 for example which covers previous work) provide many opportunities for extensive work.	**__X__Meets** **____Does Not Meet Insufficient Evidence**

Metric NN1F: **Materials relate course-level concepts explicitly to prior knowledge from earlier grades or courses. The materials are designed so that prior knowledge becomes reorganized and extended to accommodate the new knowledge.** **How to Find the Evidence:** Evaluate student and teacher materials, looking for problems that involve extending the knowledge learned in earlier grades and courses. NOTE: An example of evaluating this Criterion might be to look at whether materials connect the equation of a circle with the distance formula and the Pythagorean theorem. For context, read Criterion #3c in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** Each lesson starts with an interactive learning piece to make sure the students have the required background knowledge to be able to be successful in the upcoming lesson. There is also a Get Ready review at the beginning of each chapter. For example, p.191 refers back to 1-4, 1-6, 2-3, 2-6, and 3-2 before beginning chapter 4. For example, 2-6 relates to 4-2 by connecting translating absolute value equations to translating parabolic equations. Throughout the textbook, mathematical knowledge is constantly being solidified and built upon.	**__X__Meets** **____Does Not Meet Insufficient Evidence**
Metric NN1G: **Materials include learning objectives that are visibly shaped by CCSSM cluster and domain headings.** **How to Find the Evidence:** Select several clusters from the course being evaluated. Evaluate teacher and student materials in relation to these clusters. For context, read Criterion #4a in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** Yes (see Teacher's edition p. 65) for example. Clusters are identified and Mathematical Practices are noted in teacher's edition for application.	**__X__Meets** **____Does Not Meet Insufficient Evidence**
Metric NN1H: **Materials include problems and activities that serve to connect two or more clusters in a domain, or two or more domains in a category, or two or more categories, in cases where these connections are natural and important.** **How to Find the Evidence:** In the course being evaluated, choose two or more clusters, two or more domains, or two or more categories for which connections are natural and important. Evaluate the units, chapters, and lessons that deal with the chosen topics, looking for problems and activities that serve to connect the chosen clusters or domains. NOTE: An example of evaluating this Criterion might be to look at whether materials include problems in which students analyze a situation by building a function, graphing it, and using it to create and solve an equation. For context, read Criterion #4b in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** The teacher's edition of the textbook shows how cluster are being connected in each section. The textbook does a great job of incorporating activities that tie together.	**__X__Meets** **____Does Not Meet Insufficient Evidence**

Non-Negotiable 1: Focus and Coherence- Materials must focus coherently on the Widely Applicable Prerequisites in a way that is consistent with the progressions in the Standards.	__X__Meets ____Does Not Meet
Metric NN 1: If all metrics 1A–1H were rated as Meets, then rate Non-Negotiable 1 as Meets. If one or more metrics were rated as Does Not Meet/Insufficient Evidence, then rate Non-Negotiable 1 as Does Not Meet. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)** **Before moving to Alignment Criterion 1, record the final Meets or Does Not Meet rating in the Evaluation Summary.**	**Strengths/Weaknesses** **Curriculum is completely aligned and consistently incorporates all 9 mathematical practices. Extensive differentiated problem opportunities with the supplemental materials.**

Now continue by evaluating Alignment Criterion 1 for Rigor and Balance.

Directions for Alignment Criterion 1

Rigor and Balance

Alignment Criterion 1: **Rigor and Balance- Materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.** The Standards set expectations for attention to all three aspects of rigor: conceptual understanding, procedural skill and fluency, and applications. Thus, materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.	The Standards set expectations for attention to all three aspects of rigor: conceptual understanding, procedural skill and fluency, and applications. Thus, materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations. • Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_HS_Spring_2013_FINAL1.pdf) • Widely Applicable Prerequisites for College and Careers (http://achievethecore.org/prerequisites) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion:** Alignment Criterion 1 is rated as Meets or Does Not Meet. To rate Alignment Criterion 1, first rate metrics 1A, 1B, and 1C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). For each metric, guiding questions are provided to aid in gathering evidence. Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 1 if the materials rate 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as rigor and balance, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.

AC Metric 1A: **The materials support the development of students' conceptual understanding of key mathematical concepts, especially where called for in specific content Standards or cluster headings.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Widely Applicable Prerequisites that relate specifically to conceptual understanding to use throughout the questions associated with this metric. NOTE: Some examples of clusters or Standards that call for conceptual understanding include: N-RN.A.1, A-APR.B, A-REI.A.1, A-REI.D.10, A.REI.D.11, F.IF.A.1, F-LE.A.1, G.SRT.A.2, G-SRT.C.6, S-ID.C.7 For context, read Criterion #2a in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	• Choose a cluster/Standard from the Widely Applicable Prerequisites that is aligned to each aspect of rigor and use it to evaluate these metrics. It is most helpful if the same clusters and Standards are chosen for all of the programs being evaluated. (Guidance in choosing clusters/Standards is included in "How to Find the Evidence" below.)	**Use the questions for AC Metric 1A to evaluate Metric 1A. Record evidence for each question and rate Metric 1A.** **__X__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Is conceptual understanding attended to thoroughly where the Standards set explicit expectations for understanding or interpreting? Evaluate lessons, chapter/unit assessments and homework assignments, paying attention to work aligned to Standards that explicitly call for understanding or interpreting.	**Evidence-** Each lesson is aligned to the standards in both content and rigor. In the practice problems, students are required to write about the math being taught in the compare and contrast questions as well as conduct an error analysis to show understanding. (example p.199 #38 of these)	
Do the materials feature high-quality conceptual problems and conceptual discussion questions? Evaluate lessons, chapter/unit assessments, and homework assignments. NOTE: Examples of conceptual problems might include such questions as "What is the maximum value of the function f(t) = 5 – t2 ?" or "Is √2 a polynomial? How about ½(x + √2)+ ½ (-x + √2)?"	**Evidence-** They are noted and differentiated into three categories for use, and given the tasks and advanced questions available. Every lesson has a "Lesson Check" section in which students are required to have a conceptual understanding in order to answer the questions.	
Do the materials feature opportunities to identify correspondences across mathematical representations? Evaluate lessons, chapter/unit assessments and homework assignments. NOTE: An example of evaluating this metric might include looking at whether materials support students in identifying correspondences among the expression that defines a function, the graph that shows the relationship, and the behavior of the phenomenon being modeled (if any).	**Evidence-** Many different types of representations are used in all of the lesson. Students must know how to interpret graphs, tables, equations, and story problems to be successful.	

AC Metric 1B: **The materials are designed so that students attain the fluencies and procedural skills required by the Standards.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Widely Applicable Prerequisites that relate specifically to fluency and procedural skill to use throughout the questions associated with this metric. NOTE: Some examples of Standards that call for procedural skill and fluency include: A-SSE.A.1b, A-SSE.2, A-APR.A.1, A-APR.C.6, F-BF.B.3, G-GPE.B.4, G-GPE.B.5, G-GPE.B.7, G-CO.A.1, G-SRT.B.5 For context, read Criterion #2b in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).		**Use the questions for AC Metric 1B to evaluate Metric 1B. Record evidence for each question and rate Metric 1B.** **__X__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Is progress toward fluency and procedural skill interwoven with the student's developing conceptual understanding of the skills in question? Evaluate lessons, chapter/unit assessments, daily routines, and homework assignments for evidence that the development of fluency and procedural skill is supported by conceptual understanding.	**Evidence-** Interactive learning, guided instruction, lesson check, and practice problems all help to build procedural skills and math fluency. Conceptual understanding and application are focused on throughout the text.	
Are purely procedural problems and exercises present that include cases in which opportunistic strategies are valuable and generic cases that require efficient and general procedures present? Evaluate lessons, chapter/unit assessments, daily routines, and homework assignments. NOTE: Problems in which opportunistic strategies are valuable might include such examples as solving x2 + 5 = 49 + 5 or (3x – 2)2 = 6x – 4. Generic cases that require efficient and general procedures might include such problems as solving c + 8 – c2 = 3(c – 1)2 – 5).	**Evidence-** Procedural problems have many opportunities to include generic cases. Also, many strategies are made available and are relevant to the lesson and standard. Examples given on pages 216, 296 (Solve It), 286 and 644.	
AC Metric 1C: **The materials are designed so that teachers and students spend sufficient time working with engaging applications, without losing focus on the Widely Applicable Prerequisites.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Widely Applicable Prerequisites that relate specifically to application to use throughout the questions associated with this metric. NOTE: Some examples of clusters or Standards that call for application include: N-Q.A, A-SSE.B.3, A-REI.D.11, F-IF.B, F-IF.C.7, F-BF.A.1, G-SRT.C.8, S-ID.A.2, S-IC.A.1 For context, read Criterion #2c in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).		**Use the questions for AC Metric 1C to evaluate Metric 1C. Record evidence for each question and rate Metric 1C.** **__X__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**

Are there single- and multi-step contextual problems, including non-routine problems, that develop the mathematics of the course, afford opportunities for practice, and engage students in problem solving? Do the problems attend thoroughly to those places in the content Standards where expectations for multi-step and real-world problems are explicit? Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** Every lesson contains both single- and multi-step conceptual problems that give students opportunities for practice. See pages 193 and198-200 for example.	
Do application problems particularly stress applying the Widely Applicable Prerequisites? Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** The WAP prerequisites are consistently incorporated throughout the entire text. There are good application problems in each section, the emphasis is on quick routine questions with just a couple/few application problems.	
Are there ample opportunities for students to engage with modeling problems? Do materials require students to use both individual parts of the modeling cycle as well as the full modeling cycle? Read the pages on High School—Modeling in the Standards for Mathematics (pp. 72 and 73). Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** Every lesson presents opportunity for students to engage with modeling problems. Performance tasks are available and supplementary material provides many more of these types of problems. See online version and student companion.	
Alignment Criterion 1: Materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations. **AC 1:** Materials must earn at least 5 of 6 points to meet this Alignment Criterion. If materials earn less than 5 points, the Criterion has not been met. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)** **Before moving to Alignment Criterion 2, record the final Meets or Does Not Meet rating in the Evaluation Summary.**	**__X__Meets** **____Does Not Meet** **Strengths/Weaknesses:** **Problems definitely meet the standards rigorous expectations. We personally wish there were more task based learning, but the practice problems are well written with a conceptual understanding in mind.**	

Alignment Criterion 2: **Standards for Mathematical Practice- Materials must demonstrate authentic connections between content Standards and practice Standards.** The Standards require that designers of instructional materials connect the mathematical practices to mathematical content in instruction. Thus, materials must demonstrate authentic connections between content Standards and practice Standards.	The Standards require that designers of instructional materials connect the mathematical practices to mathematical content in instruction. Thus, materials must demonstrate authentic connections between content Standards and practice Standards. **Required Materials**: • Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_HS_Spring_2013_FINAL1.pdf) • Widely Applicable Prerequisites for College and Careers (http://achievethecore.org/prerequisites) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion:** Alignment Criterion 2 is rated Meets or Does Not Meet. To rate Alignment Criterion 2, first rate metrics 2A, 2B, and 2C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). For each metric, guiding questions are provided to aid in gathering evidence. Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 2 if the materials rate 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as mathematical practices, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.
AC Metric 2A: **Materials address the practice Standards in such a way as to enrich the Widely Applicable Prerequisites; practices strengthen the focus of the course instead of detracting from it, in both teacher and student materials.** **How to Find the Evidence:** Familiarize yourself with the Widely Applicable Prerequisites. Evaluate teacher and student materials for evidence that the mathematical practices support and connect to the focus of the course. NOTE: An example of evaluating this Criterion might include looking at whether materials use regularity in repeated reasoning to illuminate formal algebra as well as functions, particularly recursive definitions of functions. For context, read Criterion #6 in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** There are practice standards that are being repeated and are consistently present throughout the textbook. They are used to enrich the WAP. The supplemental work, performance tasks, and other extra available questions do more of this. See also: Solve It's , Putting it all together, and other.	**__X__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
AC Metric 2B: **Materials attend to the full meaning of each practice Standard.** **How to Find the Evidence:** For context, read Criterion #7 in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).		**Use the questions for AC Metric 2B to evaluate Metric 2B. Record evidence for each question and rate Metric 2B.** **__X__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**

Over the course of any given year of instruction, is each mathematical practice Standard meaningfully present in the form of assignments, activities, or problems that stimulate students to develop the habits of mind described in the practice Standard? Evaluate lessons, chapter/ unit assessments, and homework assignments for evidence of each mathematical practice being meaningfully present in instruction.	**Evidence-** The textbook is designed in a way in which new material is presented in the guided instruction and then the students are assigned homework to build the knowledge of the new material. The TE identifies this and it can be verified that the performance tasks, challenge questions, solve it's and such do this.	
Are teacher-directed materials that explain the role of the practice Standards in the classroom and in students' mathematical development included? Are alignments to practice Standards accurate? Evaluate teacher materials, paying attention to explanations of the role of the practice Standards in the classroom and in students' mathematical development. Evaluate documents aligning lessons to practice Standards for accuracy. NOTE: Examples to look for when evaluating this metric might include the following: a highly scaffolded problem should not be aligned to MP.1; or a problem that directs a student to use a calculator should not be aligned to MP.5; or a problem about merely extending a pattern should not be aligned to MP.8.	**Evidence-** For example 3-5, there are 4 problems that address MPs. Proper alignment is there, but the emphasis in the lessons is not on these. And there are not a lot of them. The extra materials do give more opportunities help students build their knowledge of the practice standards.	
AC Metric 2C: **Materials support the Standards' emphasis on mathematical reasoning.** **How to Find the Evidence:** For context, read Criterion #8 in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).		**Use the questions for AC Metric 2C to evaluate Metric 2C. Record evidence for each question and rate Metric 2C.** **_X___Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Do the materials support students in constructing viable arguments and critiquing the arguments of others concerning course-level mathematics that is detailed in the content Standards? Read Standard for Mathematical Practice 3. Evaluate teacher and student materials to ensure that students are given opportunities to reason with grade-level mathematics.	**Evidence-** Students are given opportunities to do this in every lesson. Writing, reasoning and error analysis type questions are examples of this. They must also critique others thinking. For example: p.709, #15,16, 17 and p. 710 #29-32	
Do the materials support students in producing not only answers and solutions, but also, in a course-appropriate way, arguments, explanations, diagrams, mathematical models, etc., especially in the Widely Applicable Prerequisites? Familiarize yourself with the Widely Applicable Prerequisites. Evaluate teacher and student materials to understand the types of work students are expected to produce.	**Evidence-** A plethora of these are available. In each lesson there is a "Lesson Check" section in which students have to show understanding of the math and state whether or not answers make sense. Performance Tasks, Solve it's and extra materials do this a lot.	

Do materials explicitly attend to the specialized language of mathema[illegible]s the language of argument, problem solving, and mathematical explanations taught rather than assumed? Evaluate teacher and student materials, paying attention to how mathematical language is taught. NOTE: An example of evaluating this Criterion might include looking at whether students are supported in: basing arguments on definitions; using the method of providing a counter example; or recognizing that examples alone do not establish a general statement.	**Evidence-** Vocabulary is [illegible]ered extensively and examples of arguments and reasoning are given. See p. 212 lesson check, 213 #23. Also, each lesson has lesson vocabulary at the beginning and in each lesson problems. See p. 707#5.	
Alignment Criterion 2: Materials must demonstrate authentic connections between content Standards and practice Standards. **AC 2:** Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 points, the Criterion has not been met. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewers only.)** **Before moving to Alignment Criterion 3, record the final Meets or Does Not Meet rating in the Evaluation Summary.**		**__X__Meets** **____Does Not Meet** **Strengths/Weaknesses:** **Materials strongly follow standards and proved many opportunities to improve reasoning skills. Quite a lot of material to peruse through.**
Alignment Criterion 3: **Access to the Standards for All Students- Materials must provide supports for English Language Learners and other special populations.** Because Standards are for all students, alignment requires thoughtful support to ensure all students are able to meet the Standards. Thus, aligned materials must provide supports for English Language Learners and other special populations.	Because Standards are for all students, alignment requires thoughtful support to ensure all students are able to meet the Standards. Thus, aligned materials must provide supports for English Language Learners and other special populations. **Required Materials:** • Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math Publishers_Criteria_HS_Spring_2013_FINAL1.pdf) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion:** Alignment Criterion 3 is rated as Meets or Does Not Meet. To rate Alignment Criterion 3, first rate metrics 3A, 3B, and 3C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 3 if the materials rate 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as support for special population, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.

AC Metric 3A: **Support for English Language Learners and other special populations is thoughtful and helps those students meet the same Standards as all other students. The language in which problems are posed is carefully considered.** **How to Find the Evidence:** Evaluate teacher and student materials, paying attention to supports offered for special populations.	**Evidence-** **The textbook provides a lot of support for ELL students. Every section has an ELL support section to help teachers know how to help their ELL population. The ELL support section includes ideas of what kinds of posters teachers can put up in their classroom, as well as materials that teachers can print off to give to the ELL and special populations. Also, there are glossary, different language glossaries, and vocabulary breakdown.**	**__X__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
AC Metric 3B: **Materials provide appropriate level and type of scaffolding, differentiation, intervention, and support for a broad range of learners with gradual removal of supports, when needed, to allow students to demonstrate their mathematical understanding independently.** **How to Find the Evidence:** Evaluate teacher and student materials, paying attention to whether materials provide differentiation that will lead all learners to engage with on-grade-level content.	**Evidence-** **There are repeated handouts for intervention and skill review handouts. There is an intervention section along with worksheets for re-teaching as well as assessments to let you know the level of remediation needed. The material also includes more than one extra practice worksheet and enrichment worksheets to give students more opportunities for complete understanding. The materials also include an online teacher resource center that has activities, games, and puzzles to enforce concepts being taught.**	**__X__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
AC Metric 3C: **Design of lessons recommends and facilitates a mix of instructional approaches for a variety of learners such as using multiple representations (e.g., including models, using a range of questions, checking for understanding, flexible grouping, pair-share).** **How to Find the Evidence:** Evaluate teacher materials, noting instructional approaches suggested for whole class and differentiated lessons and activities.	**Evidence-** All lessons incorporate many different types of questions that require students to have a complete understanding of the mathematics being taught. There is a great range of different questioning types. The Teacher's edition gives a lot of opportunity to adjust and guide down other paths. Extensive descriptions of activities. **Lacks some group type work and cooperative work. All individual work.**	**____Meets (2)** **__X__Partially Meets (1)** **____Does Not Meet (0)**

Alignment Criterion 3: Materials must provide supports for English Language Learners and other special populations.	__X__Meets ____Does Not Meet
AC 3 Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 points, the Criterion has not been met. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewers only.)** **Move to the Evaluation Summary and record the final Meets or Does Not Meet rating .**	**Strengths/Weaknesses:** **Many scaffolding and support materials, but lacks cooperative learning opportunities.**

Once an evaluation for alignment to the Shifts and major features of the CCSS has been conducted using Sections 1-3, it's important to evaluate for overall quality and best practices. A starting list of Indicators of Quality are suggested below. States, districts and others evaluating instructional materials are encouraged to add to this list to ensure materials reflect local contexts. For background information on some of the Indicators of Quality in this section, refer to pp.16–18 in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).

Indicators of Quality	Evidence- Give specific examples.	Rating: (Reviewer only.)
1. Lessons are thoughtfully structured and support the teacher in leading the class through the learning paths at hand, with active participation by all students in their own learning and in the learning of their classmates.	**Evidence-** **Yes, all lessons incorporate a lot of structure, scaffolding and support. For example 1-2 plus numerous of others. Except, active participation. Some stuff is involved early in the lesson, but not in the meat of the lesson. (examples are online and on disc)**	**(Reviewer only.)** **__X____ Yes** **_____ No**
2. The underlying design of the materials includes both problems and exercises. (In solving problems, students learn new mathematics, whereas in working exercises, students apply what they have already learned to build mastery.) Each problem or exercise has a purpose. **NOTE: This Criterion does not require that the problems and exercises be labeled as such.**	**Evidence-** **This is in evidence throughout the lessons and in the extra materials available. Available projects contribute to this also.**	**(Reviewer only.)** **__X____ Yes** **_____ No**

3. Design of assignments is not haphazard: exercises are given in intentional sequences in order to strengthen students' mathematical understanding.	**Evidence-** **Assignments, lessons, and sections all follow sequences that are logical and building properly. For example, P. 133c in the TE**	**(Reviewer only.)** **___X___ Yes** **_____ No**
4. There are separate teacher materials that support and reward teacher study including, but not limited to: discussion of the mathematics of the units and the mathematical point of each lesson as it relates to the organizing concepts of the unit, discussion on student ways of thinking and anticipating a variety of students responses, guidance on lesson flow, guidance on questions that prompt students thinking, and discussion of desired mathematical behaviors being elicited among students.	**Evidence-** **There are a LOT of materials to go through and given time, entirely new lessons could be constructed with the support materials. Disc and online provides a lot of extras.**	**(Reviewer only.)** **___X___ Yes** **_____ No**
5. Manipulatives suggested in the materials are faithful representations of the mathematical objects they represent and are connected to written methods.	**Evidence-** **Manipulatives such as the math tools work fine if you have computer access. Graphing calculators are represented properly and that's as far as I can perceive this.**	**(Reviewer only.)** **__X____ Yes** **_____ No**
6. Materials include a variety of curriculum-embedded assessments. Examples include pre-, formative, summative, and self-assessment resources.	**Evidence-** **There are Get Ready opportunities, differentiation (TE), Got Its, , take notes, lesson checks, and assignments as well as a number of summative assessments. However, could use more self assessments.**	**(Reviewer only.)** **__X____ Yes** **_____ No**
7. Assessments contain aligned rubrics, answer keys, and scoring guidelines that provide sufficient guidance for interpreting student performance.	**Evidence-** **Keys are there and rubrics are there for non simple answers, but no alignment shown and very little guidance to go along with the assessments.**	**(Reviewer only.)** **____X__ Yes** **_____ No**
8. Materials assess student proficiency using methods that are accessible and unbiased, including the use of course-level language in student prompts.	**Evidence-** **Assessments appear unbiased to these readers.**	**(Reviewer only.)** **___X___ Yes** **_____ No**

9. Materials are carefully evaluated by qualified individua[illegible]hose names are listed, in an effort to ensure fre[illegible]om from mathematical errors and course-level appropriateness.	**Evidence-** **Evaluation appe[illegible]appropriate and by qualified people.**	**(Reviewer only.)** **___X___ Yes** **_____ No**
10. The visual design supports students in engaging thoughtfully with the subject. Navigation through the text is clear.	**Evidence-** **Very striking text and easy to follow. Text is clear and easy to follow.**	**(Reviewer only.)** **___X___ Yes** **_____ No**

Reviewer IMET Evaluation Summary Title/Level: _____

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Reviewer ID # _____ Date Review Completed:_____Pear

Non-Negotiable Criteria-The Non-Negotiable must be met in order for the Non-Negotiable Alignment Criteria to be met overall.
Non- Negotiable 1: Focus and Coherence **__X___ Meets** **_____ Does Not Meet**

Non-Negotiable Overall:

___X__ Meets _____ Does Not Meet

Alignment Criteria- Each Alignment Criterion must be met with a sufficient number of points in order for Alignment Criteria to be labeled as "Meets" overall. The more points the materials receive on the Alignment Criteria, the better they are aligned.

Alignment Criterion 1: Rigor and Balance	Alignment Criterion 2: Standards of Mathematical Practice	Alignment Criterion 3: Access to Standards for All Learners
Points: ___6__ of 6 possible. **(Materials must receive at least 5 of 6 points to align.)** **___X____ Meets** **_____ Does Not Meet**	**Points: __6___ of 6 possible.** **(Materials must receive at least 5 of 6 points to align.)** **____X___ Meets** **_____ Does Not Meet**	**Points: ___6__ of 6 possible.** **(Materials must receive at least 5 of 6 points to align.)** **___X____ Meets** **_____ Does Not Meet**

Alignment Criteria Overall:

__X___ Meets _____ Does Not Meet

If the materials meet the Non-Negotiable Criterion and each Alignment Criterion, they are aligned to the Shifts and major features of the Co tandards. **Do the materials meet every Non-Negoti and Alignment Criterion? ___X__ Yes _____**

What are the specific areas of strength and weakness based on this evaluation? Publishers or others modifying or developing assessments can use this information to make improvements and/or to remedy gaps in the alignment of assessment materials.

Curriculum is completely aligned and consistently incorporates all 9 mathematical practices.
Extensive differentiated problem opportunities with the supplemental materials.
Problems definitely meet the standards rigorous expectations. We personally wish there were more task based learning, but the practice problems are well written with a conceptual understanding in mind.
Materials strongly follow standards and provide many opportunities to improve reasoning skills. Quite a lot of material to peruse through.
Many scaffolding and support materials, but lacks cooperative learning opportunities.
In short, these materials have strong depth, support, and alignment, however, they are still traditional in nature and lack more group and pair work opportunities.

2015-16 Mathematics Interim Review Recommendation & Summary

Publisher Name:	Pearson Education, Inc.
Title:	Pearson Geometry Common Core Edition
ISBN #	9780133315363
Grade Level(s) or Course:	10 - Geometry
Reviewer ID:	JHW TG

RECOMMENDED AS:

__X__ **Core Mathematics Program-** a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials. Substantial evidence clearly supports the designation of this program as Core.

_____ **Other Mathematics Program-** a program that substantially, but partially, meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for supplemental materials. Substantial evidence clearly supports the designation of this program as Other.

_____ **Component Mathematics Program-** a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs. Substantial evidence clearly supports the designation of this program as Component.

_____ **Intervention Program-** a program designed and intended to target and support students' specific needs. Substantial evidence clearly supports the designation of this program as Intervention.

_____ **Does not meet criteria** for recommendation as a Curricular Material or Online Resource for Mathematics.

EVIDENCE SUMMARY:

FOCUS- More than 50% of the time is spent on Widely Applicable Prerequisites. Use of modeling and Algebra skills are integrated within the Geometry. Problems are grade level applicable.

COHERENCE-

Content is aligned to the standards.

RIGOR-

Content of the text is rigorous but at grade level.

CONCEPTUAL UNDERSTANDING-

For the most part conceptual understanding a focus but shortcuts are still present.

MATHEMATICAL PRACTICES-

All 8 mathematical practices are addressed. Textbook is well organized and easy to follow

ACCESSIBILITY OF STANDARDS TO ALL STUDENTS-

Accessible to all students such as ELL, struggle students and excelled students through supplementary resources.

OTHER:

Multiple Resources
Common Core Aligned
Easy to follow the lessons and curriculum.
Good Assessments

Current Content.

Not task based oriented - traditional.

Proceed to Section 4: Indicators of Quality

- Indicators of Quality are important considerations that will help evaluators better understand the overall quality of instructional materials. These considerations are not criteria for alignment to the CCSS, but they provide valuable information about additional program characteristics. Evaluators may want to add their own indicators to the examples provided.

Directions for Non-Negotiable 1

Focus and Coherence

Criterion	Evidence- Give specific examples.	Rating: (Reviewer only.)
Non-Negotiable 1: Focus and Coherence- Materials must focus coherently on the Widely Applicable Prerequisites in a way that is consistent with the progressions in the Standards. Focus and coherence are the two major evidence-based design principles of the Common Core State Standards for Mathematics (CCSSM, p. 3). Focus is necessary in order to fulfill the ambitious promise the states have made to their students by adopting the Standards: greater achievement at the college and career-ready level; greater depth of understanding of mathematics; and a rich classroom environment in which reasoning, sense-making, applications, and a range of mathematical practices flourish. In high school courses, narrowing and deepening the curriculum creates a structure that ties topics together. Thus, materials must focus coherently on the Widely Applicable Prerequisites in a way that is consistent with the progressions in the Standards.	Focus and coherence are the two major evidence-based design principles of the Common Core State Standards for Mathematics (CCSSM, p. 3). Focus is necessary in order to fulfill the ambitious promise the states have made to their students by adopting the Standards: greater achievement at the college and career-ready level; greater depth of understanding of mathematics; and a rich classroom environment in which reasoning, sense-making, applications, and a range of mathematical practices flourish. In high school courses, narrowing and deepening the curriculum creates a structure that ties topics together. Thus, materials must focus coherently on the Widely Applicable Prerequisites in a way that is consistent with the progressions in the Standards. **Required Materials:** • Common Core State Standards for Mathematics (www.corestandards.org/wpcontent/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_HS_Spring_2013_FINAL1.pdf) • Widely Applicable Prerequisites for College and Careers (http://achievethecore.org/prerequisites) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion:** Non-Negotiable 1 is rated as Meets or Does Not Meet. To rate Non-Negotiable 1, first rate Metrics 1A–1H. Each of these eight metrics must be rated as Meets in order for Non-Negotiable 1 to be rated as Meets. Rate each metric 1A–1H as Meets or Does Not Meet/Insufficient Evidence. If the evidence examined shows that the Criterion is met, then mark the Criterion as Meets. If the evidence examined shows that the Criterion is not met—or if there is insufficient evidence to make a determination—then mark the Criterion as Does Not Meet/Insufficient Evidence. Support all ratings with evidence.

Metric NN1A: **In any single course, students spend at least 50% of their time on Widely Applicable Prerequisites.** **How to Find the Evidence:** Familiarize yourself with the Widely Applicable Prerequisites. Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, lessons, homework assignments, and assessments. (Evaluate both student and teacher materials.) Consider time spent on the Widely Applicable Prerequisites and judge qualitatively whether students and teachers using the materials as designed will devote the majority of time to the Widely Applicable Prerequisites For context, read Criterion #1 in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** In Pearson Geometry students spend 57.1% of the time on Widely Applicable Pre-requisites of the 91 lessons ~~52~~ cover the Widely Applicable Prerequisites Examples: Unit 1-9 primarily cover the Widely Applicable Prerequisites in the geometry conceptual category. Units 10-13 have little to no Widely Applicable Prerequisites	X **Meets** ___ **Does Not Meet Insufficient Evidence**
Metric NN1B: **Student work in Geometry involves significant work with applications/modeling and problems that use algebra skills.** **How to Find the Evidence:** Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, lessons, homework assignments, and assessments. (Evaluate both student and teacher materials. NOTE: Since Geometry contains relatively fewer Widely Applicable Prerequisites, this Criterion is important to help foster students' college and career readiness. Problems that use algebra skills might include, for example, algebraic geometry problems in a coordinate setting, or problems of measurement involving unknown quantities.	**Evidence-** Throughout the geometry course, students work involves significant work with applications and modeling and problems that use algebra skills. Examples: There are 3 sections in the textbook related to Algebra review designed to review key algebra concepts needed in that unit. Such as finding angle measures and sides of proportional shapes (Unit 7)	X **Meets** ___ **Does Not Meet Insufficient Evidence**

Metric NN1C: **There are problems at a level of sophistication appropriate to high school (beyond mere review of middle school topics) that involve the application of knowledge and skills from grades 6-8.** **How to Find the Evidence:** Evaluate lessons, chapter/unit assessments, and homework assignments. NOTE: Problems should include application of the following topics from grades 6-8: • Ratios and proportional relationships. • Percentage and unit conversions, e.g., in the context of complex measurement problems involving quantities with derived or compound units (such as mg/mL, kg/ m3, acre-feet, etc.). • Basic function concepts, e.g., by interpreting the features of a graph in the context of an applied problem. • Concepts and skills of geometric measurement e.g., when analyzing a diagram or schematic. • Concepts and skills of basic statistics and probability (see grades 6–8.SP) • Performing rational number arithmetic fluently. For context, read Table 1 on Page 8 of the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** Throughout the geometry text, students apply the knowledge and skills from grades 6-8 at a level of sophistication appropriate to high school. Example: Unit 7 lesson 4: geometric mean: students use knowledge from grades 6-8 about fractions and proportions to find the geometric mean of similar right triangles.	X **Meets** ____**Does Not Meet Insufficient Evidence**
Metric NN1D: **Materials base courses on the content specified in the Standards.** **How to Find the Evidence:** Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, and lessons in both student and teacher materials. For context, read Criterion #3a in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** In the geometry text, the beginning of each chapter and sections within the chapter the Common Core State Standards are identified. The exercises also contain Mathematical Practices and Pace Guides Examples: Units in the Standards and Chapters in the textbooks, Unit 1 Chapter 1, 2 and 9. Unit 2 is Chapters 2, 7 and 8.	X **Meets** ____**Does Not Meet Insufficient Evidence**
Metric NN1E: **Materials give all students extensive work with course-level problems.** **How to Find the Evidence:** Evaluate both student and teacher materials. If the materials provide resources for differentiated learning, consider whether lower-performing students have opportunities to engage with course-level problems. Also consider whether higher-performing students are given opportunities to learn current course-level content in greater depth. For context, read Criterion #3b in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** The geometry text materials that give all students extensive work with course-level problems. Examples: TE: Every homework assignment has a guide which states problems to assign for Basic students, Average students, and Advanced students.	X **Meets** ____**Does Not Meet Insufficient Evidence**

Metric [illegible]F: **Materials relate course-level concepts explicitly to prior knowledge from earlier grades or courses. The materials are designed so that prior knowledge becomes reorganized and extended to accommodate the new knowledge.** **How to Find the Evidence:** Evaluate student and teacher materials, looking for problems that involve extending the knowledge learned in earlier grades and courses. NOTE: An example of evaluating this Criterion might be to look at whether materials connect the equation of a circle with the distance formula and the Pythagorean theorem. For context, read Criterion #3c in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** The lessons in the geometry text are designed so that prior knowledge becomes reorganized and extended to accommodate the new knowledge. Examples: most of the problems are algebra based such as solving for angles, sides, or probability. In previous grades students learn about angle names for the angles formed when two lines are cut by a transversal	X **Meets** ___ **Does Not Meet Insufficient Evidence**
Metric NN1G: **Materials include learning objectives that are visibly shaped by CCSSM cluster and domain headings.** **How to Find the Evidence:** Select several clusters from the course being evaluated. Evaluate teacher and student materials in relation to these clusters. For context, read Criterion #4a in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** The lessons in the geometry text provide opportunities for students to engage in the use of the CCSSM cluster and domain headings. The lessons contain examples in the Solve It! Concept Bytes, and Pull It All Together. Examples: Unit 3, Chapter 11, Unit 4 Chapter 5 and 12.	X **Meets** ___ **Does Not Meet Insufficient Evidence**
Metric NN1H: **Materials include problems and activities that serve to connect two or more clusters in a domain, or two or more domains in a category, or two or more categories, in cases where these connections are natural and important.** **How to Find the Evidence:** In the course being evaluated, choose two or more clusters, two or more domains, or two or more categories for which connections are natural and important. Evaluate the units, chapters, and lessons that deal with the chosen topics, looking for problems and activities that serve to connect the chosen clusters or domains. NOTE: An example of evaluating this Criterion might be to look at whether materials include problems in which students analyze a situation by building a function, graphing it, and using it to create and solve an equation. For context, read Criterion #4b in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** In Pearson geometry the materials make connections between and within the clusters and domains. Examples: Chapter 1 Lesson 3: G-CO and G-GPE Chapter 4 Lesson 5: G-CO and G-SRT	X **Meets** ___ **Does Not Meet Insufficient Evidence**

Non-Negotiable 1: Focus and Coherence- Materials must focus coherently on the Widely Applicable Prerequisites in a way that is consistent with the progressions in the Standards.

Metric NN 1: If all metrics 1A–1H were rated as Meets, then rate Non-Negotiable 1 as Meets. If one or more metrics were rated as Does Not Meet/Insufficient Evidence, then rate Non-Negotiable 1 as Does Not Meet. Check the final rating.
Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)**

Before moving to Alignment Criterion 1, record the final Meets or Does Not Meet rating in the Evaluation Summary.

X **Meets**

____ **Does Not Meet**

Strengths/Weaknesses

It does meet the Widely Applicable Prerequisites, but only slightly over half of the time. The text is aligned to the standards.

Now continue by evaluating Alignment Criterion 1 for Rigor and Balance.

Directions for Alignment Criterion 1

Rigor and Balance

Alignment Criterion 1:
Rigor and Balance- Materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.

The Standards set expectations for attention to all three aspects of rigor: conceptual understanding, procedural skill and fluency, and applications. Thus, materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.

The Standards set expectations for attention to all three aspects of rigor: conceptual understanding, procedural skill and fluency, and applications. Thus, materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.

- Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf)
- Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_HS_Spring_2013_FINAL1.pdf)
- Widely Applicable Prerequisites for College and Careers (http://achievethecore.org/prerequisites)
- From the materials being evaluated: teacher guides, student texts and workbooks

Rating this Criterion:

Alignment Criterion 1 is rated as Meets or Does Not Meet.

To rate Alignment Criterion 1, first rate metrics 1A, 1B, and 1C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). For each metric, guiding questions are provided to aid in gathering evidence.

Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 1 if the materials rate 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as rigor and balance, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.

AC Met A: **The materials support the development of students' conceptual understanding of key mathematical concepts, especially where called for in specific content Standards or cluster headings.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Widely Applicable Prerequisites that relate specifically to conceptual understanding to use throughout the questions associated with this metric. NOTE: Some examples of clusters or Standards that call for conceptual understanding include: N-RN.A.1, A-APR.B, A-REI.A.1, A-REI.D.10, A.REI.D.11, F.IF.A.1, F-LE.A.1, G.SRT.A.2, G-SRT.C.6, S-ID.C.7 For context, read Criterion #2a in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	• Choose a cluster/S ard from the Widely Applicable Prerequisites that is aligned to each aspect of rigor and use it to evaluate these metrics. It is most helpful if the same clusters and Standards are chosen for all of the programs being evaluated. (Guidance in choosing clusters/Standards is included in "How to Find the Evidence" below.)	**Use the questions for AC M 1A to evaluate Metric 1A. Record evidence for each question and rate Metric 1A.** ____**Meets (2)** X **Partially Meets (1)** ____**Does Not Meet (0)**
Is conceptual understanding attended to thoroughly where the Standards set explicit expectations for understanding or interpreting? Evaluate lessons, chapter/unit assessments and homework assignments, paying attention to work aligned to Standards that explicitly call for understanding or interpreting.	**Evidence-** The geometry text contains conceptual understanding is attended to where the standards set explicit expectations for understanding or interpreting Examples: 7.1 7.4	
Do the materials feature high-quality conceptual problems and conceptual discussion questions? Evaluate lessons, chapter/unit assessments, and homework assignments. NOTE: Examples of conceptual problems might include such questions as "What is the maximum value of the function f(t) = 5 – t2 ?" or "Is √2 a polynomial? How about ½(x + √2)+ ½ (-x + √2)?"	**Evidence-** The teachers edition has discussion questions, the homework section has apply and challenge problems which are conceptual problems.	
Do the materials feature opportunities to identify correspondences across mathematical representations? Evaluate lessons, chapter/unit assessments and homework assignments. NOTE: An example of evaluating this metric might include looking at whether materials support students in identifying correspondences among the expression that defines a function, the graph that shows the relationship, and the behavior of the phenomenon being modeled (if any).	**Evidence-** Somewhat, some of the performance tasks and apply what you know sections require students to use or evaluate multiple representations.	

AC Metric 1B: **The materials are designed so that students attain the fluencies and procedural skills required by the Standards.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Widely Applicable Prerequisites that relate specifically to fluency and procedural skill to use throughout the questions associated with this metric. NOTE: Some examples of Standards that call for procedural skill and fluency include: A-SSE.A.1b, A-SSE.2, A-APR.A.1, A-APR.C.6, F-BF.B.3, G-GPE.B.4, G-GPE.B.5, G-GPE.B.7, G-CO.A.1, G-SRT.B.5 For context, read Criterion #2b in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).		**Use the questions for AC Metric 1B to evaluate Metric 1B. Record evidence for each question and rate Metric 1B.** X **Meets (2)** ____ **Partially Meets (1)** ____ **Does Not Meet (0)**
Is progress toward fluency and procedural skill interwoven with the student's developing conceptual understanding of the skills in question? Evaluate lessons, chapter/unit assessments, daily routines, and homework assignments for evidence that the development of fluency and procedural skill is supported by conceptual understanding.	**Evidence-** Yes the homework sections addresses fluency, and procedural skills in the practice and apply sections. the tasks and apply what you know sections address developing conceptual understanding.	
Are purely procedural problems and exercises present that include cases in which opportunistic strategies are valuable and generic cases that require efficient and general procedures present? Evaluate lessons, chapter/unit assessments, daily routines, and homework assignments. NOTE: Problems in which opportunistic strategies are valuable might include such examples as solving x2 + 5 = 49 + 5 or (3x – 2)2 = 6x – 4. Generic cases that require efficient and general procedures might include such problems as solving c + 8 – c2 = 3(c – 1)2 – 5).	**Evidence-** The lessons and Concept Bytes in the geometry text provide opportunistic strategies which are valuable and generic cases that require efficient and general procedures present.	
AC Metric 1C: **The materials are designed so that teachers and students spend sufficient time working with engaging applications, without losing focus on the Widely Applicable Prerequisites.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Widely Applicable Prerequisites that relate specifically to application to use throughout the questions associated with this metric. NOTE: Some examples of clusters or Standards that call for application include: N-Q.A, A-SSE.B.3, A-REI.D.11, F-IF.B, F-IF.C.7, F-BF.A.1, G-SRT.C.8, S-ID.A.2, S-IC.A.1 For context, read Criterion #2c in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).		**Use the questions for AC Metric 1C to evaluate Metric 1C. Record evidence for each question and rate Metric 1C.** X **Meets (2)** ____ **Partially Meets (1)** ____ **Does Not Meet (0)**
Are there single- and multi-step contextual problems, including non-routine problems, that develop the mathematics of the course, afford opportunities for practice, and engage students in problem solving? Do the problems attend thoroughly to those places in the content Standards where expectations for multi-step and real-world problems are explicit? Evaluate lessons, chapter/unit assessments, and homework assignmen	**Evidence-** The lessons in the geometry text are structured to include single and multi-step problems, including non-routine problems that engage students in problem solving. Ex: See performance tasks and concept bytes.	

Do applic problems particularly stress applying the Widely Applicable Prerequisites? Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** throughout the geometry text problems stress applying the Widely Applicable Prerequisites. Ex: The application problems focus and address these standards	
Are there ample opportunities for students to engage with modeling problems? Do materials require students to use both individual parts of the modeling cycle as well as the full modeling cycle? Read the pages on High School—Modeling in the Standards for Mathematics (pp. 72 and 73). Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** yes, the modeling cycle is applied, but the text scaffolds the process. Examples: 8.2 #13 the text tells students where to look for the answer (see #3).	
Alignment Criterion 1: Materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations. **AC 1:** Materials must earn at least 5 of 6 points to meet this Alignment Criterion. If materials earn less than 5 points, the Criterion has not been met. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)** **Before moving to Alignment Criterion 2, record the final Meets or Does Not Meet rating in the Evaluation Summary.**		X **Meets** ____ **Does Not Meet** **Strengths/Weaknesses:** There are problems that are rigorous but like other textbooks students are told where to look for the answer or a step by step process. The standards are not,
Alignment Criterion 2: **Standards for Mathematical Practice- Materials must demonstrate authentic connections between content Standards and practice Standards.** The Standards require that designers of instructional materials connect the mathematical practices to mathematical content in instruction. Thus, materials must demonstrate authentic connections between content Standards and practice Standards.	The Standards require that designers of instructional materials connect the mathematical practices to mathematical content in instruction. Thus, materials must demonstrate authentic connections between content Standards and practice Standards. **Required Materials**: • Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_HS_Spring_2013_FINAL1.pdf) • Widely Applicable Prerequisites for College and Careers (http://achievethecore.org/prerequisites) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion:** Alignment Criterion 2 is rated as Meets or Does Not Meet. To rate Alignment Criterion 2, first rate metrics 2A, 2B, and 2C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). For each metric, guiding questions are provided to aid in gathering evidence. Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 2 if the materials rate 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as mathematical practices, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.

AC Metric 2A: **Materials address the practice Standards in such a way as to enrich the Widely Applicable Prerequisites; practices strengthen the focus of the course instead of detracting from it, in both teacher and student materials.** **How to Find the Evidence:** Familiarize yourself with the Widely Applicable Prerequisites. Evaluate teacher and student materials for evidence that the mathematical practices support and connect to the focus of the course. NOTE: An example of evaluating this Criterion might include looking at whether materials use regularity in repeated reasoning to illuminate formal algebra as well as functions, particularly recursive definitions of functions. For context, read Criterion #6 in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** the textbook is well organized and the structure of each lesson is consistent. Ex: The solve It, concept Byte, and pull it all together sections focus on the mathematical practices.	X Meets (2) ___ Partially Meets (1) ___ Does Not Meet (0)
AC Metric 2B: **Materials attend to the full meaning of each practice Standard.** **How to Find the Evidence:** For context, read Criterion #7 in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).		**Use the questions for AC Metric 2B to evaluate Metric 2B. Record evidence for each question and rate Metric 2B.** X Meets (2) ___ Partially Meets (1) ___ Does Not Meet (0)
Over the course of any given year of instruction, is each mathematical practice Standard meaningfully present in the form of assignments, activities, or problems that stimulate students to develop the habits of mind described in the practice Standard? Evaluate lessons, chapter/ unit assessments, and homework assignments for evidence of each mathematical practice being meaningfully present in instruction.	**Evidence-** All 8 mathematical practices are addressed throughout the course. See standards sections for each lesson.	
Are teacher-directed materials that explain the role of the practice Standards in the classroom and in students' mathematical development included? Are alignments to practice Standards accurate? Evaluate teacher materials, paying attention to explanations of the role of the practice Standards in the classroom and in students' mathematical development. Evaluate documents aligning lessons to practice Standards for accuracy. NOTE: Examples to look for when evaluating this metric might include the following: a highly scaffolded problem should not be aligned to MP.1; or a problem that directs a student to use a calculator should not be aligned to MP.5; or a problem about merely extending a pattern should not be aligned to MP.8.	**Evidence-** Yes. see front cover of the teacher's edition. (T30) the lessons structure and how to apply the mathematical standards are outlines for the teacher at the beginning of each unit. (T3)	

AC Met 2C: **Materials support the Standards' emphasis on mathematical reasoning.** **How to Find the Evidence:** For context, read Criterion #8 in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).		**Use the questions for AC Me 2C to evaluate Metric 2C. Record evidence for each question and rate Metric 2C.** X **Meets (2)** ____ **Partially Meets (1)** ____ **Does Not Meet (0)**
Do the materials support students in constructing viable arguments and critiquing the arguments of others concerning course-level mathematics that is detailed in the content Standards? Read Standard for Mathematical Practice 3. Evaluate teacher and student materials to ensure that students are given opportunities to reason with grade-level mathematics.	**Evidence-** The geometry text contains exercises and activities that have students explain or produce an argument to support their solution. Exercises and activities also may contain different outputs.	
Do the materials support students in producing not only answers and solutions, but also, in a course-appropriate way, arguments, explanations, diagrams, mathematical models, etc., especially in the Widely Applicable Prerequisites? Familiarize yourself with the Widely Applicable Prerequisites. Evaluate teacher and student materials to understand the types of work students are expected to produce.	**Evidence-** Yes, each lesson has problems that require students to go beyond just the answer. See Reasoning, Error Analysis sections.	
Do materials explicitly attend to the specialized language of mathematics? Is the language of argument, problem solving, and mathematical explanations taught rather than assumed? Evaluate teacher and student materials, paying attention to how mathematical language is taught. NOTE: An example of evaluating this Criterion might include looking at whether students are supported in: basing arguments on definitions; using the method of providing a counter example; or recognizing that examples alone do not establish a general statement.	**Evidence-** The lessons in the geometry text explicitly to the specialized language of mathematics. Each lesson teaches the language of argument, problem solving, and mathematical explanation	
Alignment Criterion 2: Materials must demonstrate authentic connections between content Standards and practice Standards. **AC 2:** Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 points, the Criterion has not been met. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewers only.)** **Before moving to Alignment Criterion 3, record the final Meets or Does Not Meet rating in the Evaluation Summary.**		X **Meets** ____ **Does Not Meet** **Strengths/Weaknesses:** The teacher edition has a lot of resources for addressing the mathematical practices

Alignment Criterion 3: **Access to the Standards for All Students- Materials must provide supports for English Language Learners and other special populations.** Because Standards are for all students, alignment requires thoughtful support to ensure all students are able to meet the Standards. Thus, aligned materials must provide supports for English Language Learners and other special populations.	Because Standards are for all students, alignment requires thoughtful support to ensure all students are able to meet the Standards. Thus, aligned materials must provide supports for English Language Learners and other special populations. **Required Materials:** • Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math Publishers_Criteria_HS_Spring_2013_FINAL1.pdf) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion:** Alignment Criterion 3 is rated as Meets or Does Not Meet. To rate Alignment Criterion 3, first rate metrics 3A, 3B, and 3C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 3 if the materials rate 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as support for special population, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.
AC Metric 3A: **Support for English Language Learners and other special populations is thoughtful and helps those students meet the same Standards as all other students. The language in which problems are posed is carefully considered.** **How to Find the Evidence:** Evaluate teacher and student materials, paying attention to supports offered for special populations.	**Evidence-** The textbook incorporates lots of visuals to help ELL students as well as the ELL Support, Additional Vocabulary Support, and Reaching Materials. Many of these resources can be used for all struggling students.	X **Meets (2)** ____ **Partially Meets (1)** ____ **Does Not Meet (0)**
AC Metric 3B: **Materials provide appropriate level and type of scaffolding, differentiation, intervention, and support for a broad range of learners with gradual removal of supports, when needed, to allow students to demonstrate their mathematical understanding independently.** **How to Find the Evidence:** Evaluate teacher and student materials, paying attention to whether materials provide differentiation that will lead all learners to engage with on-grade-level content.	**Evidence-** The teachers edition has differentiation and interventions in the margins. There are also Additional Vocabulary Support, and Reaching Materials Available.	X **Meets (2)** ____ **Partially Meets (1)** ____ **Does Not Meet (0)**
AC Metric 3C: **Design of lessons recommends and facilitates a mix of instructional approaches for a variety of learners such as using multiple representations (e.g., including models, using a range of questions, checking for understanding, flexible grouping, pair-share).** **How to Find the Evidence:** Evaluate teacher materials, noting instructional approaches suggested for whole class and differentiated lessons and activities.	**Evidence-** Yes, multiple teaching strategies in the teachers edition. The lesson resources in each lesson of the TE facilitates a mix of instructional approaches for a variety of learners.	X **Meets (2)** ____ **Partially Meets (1)** ____ **Does Not Meet (0)**

Alignment Criterion 3: Materials must provide supports for English Language Learners and other special populations. **AC 3** Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 points, the Criterion has not been met. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewers only.)** **Move to the Evaluation Summary and record the final Meets or Does Not Meet rating .**	X **Meets** ____ **Does Not Meet** **Strengths/Weaknesses:** The glossary addresses Spanish learners. There are resources for ELL learners to help them succeed in the class. No separate honors program

Once an evaluation for alignment to the Shifts and major features of the CCSS has been conducted using Sections 1-3, it's important to evaluate for overall quality and best practices. A starting list of Indicators of Quality are suggested below. States, districts and others evaluating instructional materials are encouraged to add to this list to ensure materials reflect local contexts. For background information on some of the Indicators of Quality in this section, refer to pp.16–18 in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).

Indicators of Quality	**Evidence- Give specific examples.**	**Rating: (Reviewer only.)**
1. Lessons are thoughtfully structured and support the teacher in leading the class through the learning paths at hand, with active participation by all students in their own learning and in the learning of their classmates.	**Evidence-** The lessons are well structured. The structure of the lessons make it easy to distinguish between problems and exercises. The Practice and Problem-Solving Exercises provide problems that provide students opportunity to apply concepts presented within the lesson.	**(Reviewer only.)** _X_ **Yes** ____ **No**
2. The underlying design of the materials includes both problems and exercises. (In solving problems, students learn new mathematics, whereas in working exercises, students apply what they have already learned to build mastery.) Each problem or exercise has a purpose. **NOTE: This Criterion does not require that the problems and exercises be labeled as such.**	**Evidence-** the Practice and Problem-Solving Exercises contain problems with increasing level of difficulty as well as challenging problems that work into the next lesson. there are performance tasks throughout the lessons, which have the Students justify strategies they have used to solve the problems.	**(Reviewer only.)** _X_ **Yes** ____ **No**

3. Design of assignments is not haphazard: exercises are given in intentional sequences in order to strengthen students' mathematical understanding.	**Evidence-** There is a section called "Math Background" which offers teachers explanations of the mathematics	(Reviewer only.) X Yes ____ No
4. There are separate teacher materials that support and reward teacher study including, but not limited to: discussion of the mathematics of the units and the mathematical point of each lesson as it relates to the organizing concepts of the unit, discussion on student ways of thinking and anticipating a variety of students responses, guidance on lesson flow, guidance on questions that prompt students thinking, and discussion of desired mathematical behaviors being elicited among students.	**Evidence-** Each chapter includes Math Background that explains the mathematics of the chapter. Each chapter contains Pacing and Assignment Guides. Each lesson provides additional resources that can be used in addition to those in the text.	(Reviewer only.) X Yes ____ No
5. Manipulatives suggested in the materials are faithful representations of the mathematical objects they represent and are connected to written methods.	**Evidence-** this curriculum requires students to use a protractor, compass, ruler, graphing utilities and algebra tiles	(Reviewer only.) X Yes ____ No
6. Materials include a variety of curriculum-embedded assessments. Examples include pre-, formative, summative, and self-assessment resources.	**Evidence-** The geometry curriculum has a variety of assessments embedded throughout in the form of Get Ready, Common Core Performance Task, Apply what you've learned, Standards Test Prep, Mid Chapter Quiz, Chapter Tests and Common Core Curriculum Standard Review	(Reviewer only.) X Yes ____ No
7. Assessments contain aligned rubrics, answer keys, and scoring guidelines that provide sufficient guidance for interpreting student performance.	**Evidence-** The geometry text provides answer Keys for teachers that provide guidance when assessing student work.	(Reviewer only.) X Yes ____ No
8. Materials assess student proficiency using methods that are accessible and unbiased, including the use of course-level language in student prompts.	**Evidence-** Assessment problems reflect content taught. Language is on grade level.	(Reviewer only.) X Yes ____ No

9. Materials are carefully evaluated by qualified individuals, whose names are listed, in an effort to ensure freedom from mathematical errors and course-level appropriateness.	**Evidence-** The geometry materials are carefully evaluated by qualified individuals whose names are listed T4, T5, T6	**(Reviewer only.)** X **Yes** ____ **No**
10. The visual design supports students in engaging thoughtfully with the subject. Navigation through the text is clear.	**Evidence-** Visual design is interesting and the text is easy to navigate.	**(Reviewer only.)** X **Yes** ____ **No**

Reviewer IMET Evaluation Summary **Title/Level:** Pearson Geometry, Common Core Edition

Publisher: Pearson Education, Inc. **Copyright:** 2015 **ISBN:** 978-0-13315363

Reviewer ID # JHWTG **Date Review Completed:** 3/7/16

Non-Negotiable Criteria-The Non-Negotiable must be met in order for the Non-Negotiable Alignment Criteria to be met overall.

Non- Negotiable 1: Focus and Coherence

X **Meets**

____ **Does Not Meet**

Non-Negotiable Overall:

X **Meets** _____ **Does Not Meet**

Alignment Criteria- Each Alignment Criterion must be met with a sufficient number of points in order for Alignment Criteria to be labeled as "Meets" overall. The more points the materials receive on the Alignment Criteria, the better they are aligned.

Alignment Criterion 1: Rigor and Balance	Alignment Criterion 2: Standards of Mathematical Practice	Alignment Criterion 3: Access to Standards for All Learners
Points: 5 **of 6 possible.** **(Materials must receive at least 5 of 6 points to align.)**	**Points:** 6 **of 6 possible.** **(Materials must receive at least 5 of 6 points to align.)**	**Points:** 6 **of 6 possible.** **(Materials must receive at least 5 of 6 points to align.)**
X **Meets**	X **Meets**	X **Meets**
_____ **Does Not Meet**	_____ **Does Not Meet**	_____ **Does Not Meet**

Alignment Criteria Overall:

X **Meets** _____ **Does Not Meet**

If the materials meet the Non-Negotiable Criterion and each Alignment Criterion, they are aligned to the Shifts and major features of the Core Standards. **Do the materials meet every Non-Negotiable and Alignment Criterion?** X **Yes** ____ **No**

What are the specific areas of strength and weakness based on this evaluation? Publishers or others modifying or developing assessments can use this information to make improvements and/or to remedy gaps in the alignment of assessment materials.

Strengths:

Multiple Resources

Common Core Aligned

Easy to follow the lessons and curriculum

good Assessments

Current Content.

Weakness:

Not task based oriented- traditional

2015-16 Mathematics Interim Review Recommendation & Summary

Publisher Name:	Pearson Education, Inc
Title:	Precalculus
ISBN #	9780133132106
Grade Level(s) or Course:	Fourth Course
Reviewer ID:	DN MF

RECOMMENDED AS:

__X__ **Core Mathematics Program-** a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials. Substantial evidence clearly supports the designation of this program as Core.

_____ **Other Mathematics Program-** a program that substantially, but partially, meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for supplemental materials. Substantial evidence clearly supports the designation of this program as Other.

_____ **Component Mathematics Program-** a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs. Substantial evidence clearly supports the designation of this program as Component.

_____ **Intervention Program-** a program designed and intended to target and support students' specific needs. Substantial evidence clearly supports the designation of this program as Intervention.

_____ **Does not meet criteria** for recommendation as a Curricular Material or Online Resource for Mathematics.

EVIDENCE SUMMARY:

FOCUS-
The text spends the majority of its time focusing ~~of~~ on functions and the corresponding standards.

COHERENCE-
Materials flow logically and use previous skills to build knowledge of new concepts.

RIGOR-
The course is set up so that level appropriate exercises are present. A spectrum of difficulty is presented for proper rigor.

CONCEPTUAL UNDERSTANDING-
Conceptual understanding is most often demonstrated through a "great question" section and a "writing in math" section where students construct and critique arguments.

MATHEMATICAL PRACTICES-
Mathematical practices are demonstrated throughout the text though not explicitly defined.

ACCESSIBILITY OF STANDARDS TO ALL STUDENTS-
There is not differentiation built in or supports for special populations.

OTHER:

This is a good traditionally taught text that adheres to the CCSS. The exercises and lessons demonstrate a level of rigor consistent with a collegiate level course. We noticed a lack in teacher support and student collaboration.

2015-1 Interim Mathematics Review

Mathematics Evaluation Tool – High School

Publisher: Pearson Education, Inc.

Title of Material: Precalculus

Author: Blitzer

ISBN #: 9780133132106 **Copyright** 2014

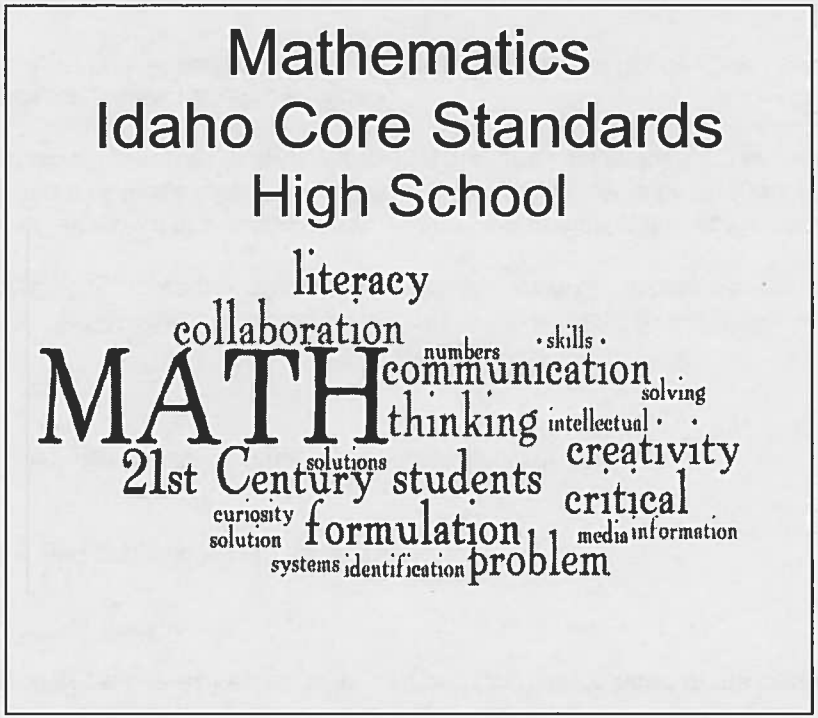
Reviewer ID: DN MF

Core Mathematics Program- a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Core.

Other Mathematics Program- a program that substantially, but partially, meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Other.

Component Mathematics Program- a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs.
Substantial evidence clearly supports the designation of this program as Component.

Intervention Program- a program designed and intended to target and support students' specific needs.
Substantial evidence clearly supports the designation of this program as Intervention.



- Evaluation Form adapted from Instructional Materials Evaluation Toolkit (IMET).

The IMET was developed by Student Achievement Partners. Educators may use or adapt. http://creativecommons.org/licenses/by/3.0/ Download this tool at http://achievethecore.org/IMET

Instructional Materials Evaluation Tool

Mathematics, High School

What Are the Purposes of the IMET?

This Math IMET is designed to help educators determine whether instructional materials are aligned to the Shifts and major features of the Common Core State Standards (CCSS). The substantial instructional Shifts (http://www.corestandards.org/other-resources/key-shifts-in-mathematics/) at the heart of the Common Core State Standards are:

- **Focus** strongly where the Standards focus
- **Coherence**: Think across grades and link to major topics within the grade
- **Rigor**: In major topics, pursue conceptual understanding, procedural skill and fluency, and application with equal intensity.

The IMET draws directly from the following documents:

- Common Core State Standards for Mathematics (www.corestandards.org/Math)
- Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013) (http://www. corestandards.org/wp-content/uploads/Math_Publishers_Criteria_ HS_Spring_2013_FINAL1.pdf)

When to use the IMET

1. Purchasing materials: Many factors go into local purchasing decisions. Alignment to the Standards is a critical factor to consider. This tool is designed to evaluate alignment of instructional materials to the Shifts and the major features of the CCSS. It also provides suggestions of additional indicators to consider in the materials evaluation and purchasing process
2. Evaluating materials currently in use: The IMET can be used to analyze the degree of alignment of existing materials and help to highlight specific, concrete flaws in alignment. Even where materials and tools currently in use fail to meet one or more of these criteria, the pattern of failure is likely to be informative. States and districts can use the evaluation to create a thoughtful plan to modify or combine existing resources in such a way that students' actual learning experiences approach the focus, coherence, and rigor of the Standards.
3. Developing programs: Those developing new programs can use this tool as guidance for creating aligned curricula.

Please note this tool was designed for evaluating comprehensive curricula (including any supplemental or ancillary materials), but it was not designed for the evaluation of standalone supplemental materials.

Who Uses the IMET?

Evaluating instructional materials requires both subject-matter and pedagogical expertise. Evaluators should be well versed in the Standards (www.corestandards.org/Math) for all grades in which materials are being evaluated. This includes understanding the Widely Applicable Prerequisites (www.achievethecore.org/prerequisites), how the content fits into the progressions in the Standards (www. achievethecore.org/progressions), and the expectations of the Standards with respect to conceptual understanding, procedural skill and fluency, and application. Evaluators also should be familiar with the substantial instructional Shifts (http://www.corestandards.org/other-resources/key-shifts-in-mathematics/) of Focus, Coherence and Rigor that are listed above.

Getting Started

Prior to Evaluation

Assemble all of the materials necessary for the evaluation. It is essential for evaluators to have materials for all grades covered by the program, as some criteria cannot be rated without having access to each grade. In addition, each evaluator should have a reference copy of the Common Core State Standards for Mathematics (CCSSM) and the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).

Before conducting the evaluation itself, it is important to develop a protocol for the evaluation process. The protocol should include having evaluators study the Publishers' Criteria and the IMET. It will also be helpful for evaluators to get a sense of each program overall before beginning the process. At a minimum, this would include reading the front matter of the text, looking at the table of contents and paging through multiple chapters.

Sections 1-3 below should be completed to produce a comprehensive picture of the strengths and weaknesses of the materials under evaluation. Information about areas in need of improvement or supplementation should be shared with internal and external stakeholders.

Navigating the Tool

Begin with Section 1: Non-Negotiable Alignment Criteria

- The Non-Negotiable Alignment Criteria must each be met in full for materials to be considered aligned to the Shifts and the major features of the Common Core State Standards. Each Non-Negotiable Alignment Criterion has one or more metrics associated with it; every one of these metrics must be met in order for the criterion as a whole to be met.

- Examine the relevant materials and use evidence to rate the materials against each criterion and its associated metric(s).

- Record and explain the evidence upon which the rating is based.

Continue to Section 2: Alignment Criteria

- The Alignment Criteria must each be met for materials to be considered aligned to the Shifts and the major features of the Common Core State Standards. Each Alignment Criterion has one or more metric associated with it; a specific number of these metrics must be met or partially met in order for the criterion as a whole to be met.

- Examine the materials in relation to these criteria, assigning each metric a point value. Rate the criterion as "Meets" or "Does Note Meet" based on the number of points assigned. The more points the materials receive on the alignment Criteria, the better they are aligned.

- Record and explain the evidence upon which the rating is based.

Proceed to Section 4: Indicators of Quality

- Indicators of Quality are important considerations that will help evaluators better understand the overall quality of instructional materials. These considerations are not criteria for alignment to the CCSS, but they provide valuable information about additional program characteristics. Evaluators may want to add their own indicators to the examples provided.

Directions for Non-Negotiable 1 **Focus and Coherence**		
Criterion	**Evidence- Give specific examples.**	**Rating: (Reviewer only.)**
Non-Negotiable 1: Focus and Coherence- Materials must focus coherently on the Widely Applicable Prerequisites in a way that is consistent with the progressions in the Standards. Focus and coherence are the two major evidence-based design principles of the Common Core State Standards for Mathematics (CCSSM, p. 3). Focus is necessary in order to fulfill the ambitious promise the states have made to their students by adopting the Standards: greater achievement at the college and career-ready level; greater depth of understanding of mathematics; and a rich classroom environment in which reasoning, sense-making, applications, and a range of mathematical practices flourish. In high school courses, narrowing and deepening the curriculum creates a structure that ties topics together. Thus, materials must focus coherently on the Widely Applicable Prerequisites in a way that is consistent with the progressions in the Standards.	Focus and coherence are the two major evidence-based design principles of the Common Core State Standards for Mathematics (CCSSM, p. 3). Focus is necessary in order to fulfill the ambitious promise the states have made to their students by adopting the Standards: greater achievement at the college and career-ready level; greater depth of understanding of mathematics; and a rich classroom environment in which reasoning, sense-making, applications, and a range of mathematical practices flourish. In high school courses, narrowing and deepening the curriculum creates a structure that ties topics together. Thus, materials must focus coherently on the Widely Applicable Prerequisites in a way that is consistent with the progressions in the Standards. **Required Materials:** • Common Core State Standards for Mathematics (www.corestandards.org/wpcontent/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_HS_Spring_2013_FINAL1.pdf) • Widely Applicable Prerequisites for College and Careers (http://achievethecore.org/prerequisites) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion:** Non-Negotiable 1 is rated as Meets or Does Not Meet. To rate Non-Negotiable 1, first rate Metrics 1A–1H. Each of these eight metrics must be rated as Meets in order for Non-Negotiable 1 to be rated as Meets. Rate each metric 1A–1H as Meets or Does Not Meet/Insufficient Evidence. If the evidence examined shows that the Criterion is met, then mark the Criterion as Meets. If the evidence examined shows that the Criterion is not met—or if there is insufficient evidence to make a determination—then mark the Criterion as Does Not Meet/Insufficient Evidence. Support all ratings with evidence.

Metric NN1A: **In any single course, students spend at least 50% of their time on Widely Applicable Prerequisites.** **How to Find the Evidence:** Familiarize yourself with the Widely Applicable Prerequisites. Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, lessons, homework assignments, and assessments. (Evaluate both student and teacher materials.) Consider time spent on the Widely Applicable Prerequisites and judge qualitatively whether students and teachers using the materials as designed will devote the majority of time to the Widely Applicable Prerequisites For context, read Criterion #1 in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** ~~We do~~ These concepts are taught and reinforced throughout the text. Specific examples include 2.6, 1.7, 8.1, and 8.4.	X **Meets** ____**Does Not Meet Insufficient Evidence**
Metric NN1B: **Student work in Geometry involves significant work with applications/modeling and problems that use algebra skills.** **How to Find the Evidence:** Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, lessons, homework assignments, and assessments. (Evaluate both student and teacher materials. NOTE: Since Geometry contains relatively fewer Widely Applicable Prerequisites, this Criterion is important to help foster students' college and career readiness. Problems that use algebra skills might include, for example, algebraic geometry problems in a coordinate setting, or problems of measurement involving unknown quantities.	**Evidence-** Application exercises address modeling. Seen in chapters 4 and 5 especially. These two chapters deal with trig, in which algebra skills are used to manipulate and solve.	X **Meets** ____**Does Not Meet Insufficient Evidence**

Metric NN1C: **There are problems at a level of sophistication appropriate to high school (beyond mere review of middle school topics) that involve the application of knowledge and skills from grades 6-8.** **How to Find the Evidence:** Evaluate lessons, chapter/unit assessments, and homework assignments. NOTE: Problems should include application of the following topics from grades 6-8: • Ratios and proportional relationships. • Percentage and unit conversions, e.g., in the context of complex measurement problems involving quantities with derived or compound units (such as mg/mL, kg/ m3, acre-feet, etc.). • Basic function concepts, e.g., by interpreting the features of a graph in the context of an applied problem. • Concepts and skills of geometric measurement e.g., when analyzing a diagram or schematic. • Concepts and skills of basic statistics and probability (see grades 6–8.SP) • Performing rational number arithmetic fluently. For context, read Table 1 on Page 8 of the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** Appropriate applications can be found throughout the text. A few examples are Ratios and Proportional Relationships - Chapter 4 (trig) Percentage and unit conversions - Chapter 1 Basic Function concepts - Chapter 1 Basic Statistics - Chapter 10 Rational number arithmetic - P3	X **Meets** ____**Does Not Meet Insufficient Evidence**
Metric NN1D: **Materials base courses on the content specified in the Standards.** **How to Find the Evidence:** Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, and lessons in both student and teacher materials. For context, read Criterion #3a in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** The correlation packet contains an accurate mapping of standards to curriculum.	X **Meets** ____**Does Not Meet Insufficient Evidence**
Metric NN1E: **Materials give all students extensive work with course-level problems.** **How to Find the Evidence:** Evaluate both student and teacher materials. If the materials provide resources for differentiated learning, consider whether lower-performing students have opportunities to engage with course-level problems. Also consider whether higher-performing students are given opportunities to learn current course-level content in greater depth. For context, read Criterion #3b in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** Ample problems are provided ranging from simple to complex in each lesson.	X **Meets** ____**Does Not Meet Insufficient Evidence**

Metric NN1F: **Materia late course-level concepts explicitly to prior knowledge from earlier grades or courses. The materials are designed so that prior knowledge becomes reorganized and extended to accommodate the new knowledge.** **How to Find the Evidence:** Evaluate student and teacher materials, looking for problems that involve extending the knowledge learned in earlier grades and courses. NOTE: An example of evaluating this Criterion might be to look at whether materials connect the equation of a circle with the distance formula and the Pythagorean theorem. For context, read Criterion #3c in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** This book tains a prerequisites chapter that is to review and then build on previous courses. It gradually introduces new material in each lesson by reviewing previous knowledge then giving examples of new content.	X **Meets** ___ **Does Not Meet Insufficient Evidence**
Metric NN1G: **Materials include learning objectives that are visibly shaped by CCSSM cluster and domain headings.** **How to Find the Evidence:** Select several clusters from the course being evaluated. Evaluate teacher and student materials in relation to these clusters. For context, read Criterion #4a in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** They are easy to find and show where they are being applied and they use common vocabulary to CCSSM.	X **Meets** ___ **Does Not Meet Insufficient Evidence**
Metric NN1H: **Materials include problems and activities that serve to connect two or more clusters in a domain, or two or more domains in a category, or two or more categories, in cases where these connections are natural and important.** **How to Find the Evidence:** In the course being evaluated, choose two or more clusters, two or more domains, or two or more categories for which connections are natural and important. Evaluate the units, chapters, and lessons that deal with the chosen topics, looking for problems and activities that serve to connect the chosen clusters or domains. NOTE: An example of evaluating this Criterion might be to look at whether materials include problems in which students analyze a situation by building a function, graphing it, and using it to create and solve an equation. For context, read Criterion #4b in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** Connections are throughout, but an example is functions. In 2.3 it is doing functions and their graphs, then in 3.1 it goes into exponential functions, then in 3.5 it uses growth and decay problems tieing together several clusters.	X **Meets** ___ **Does Not Meet Insufficient Evidence**

Non-Negotiable 1: Focus and Coherence- Materials must focus coherently on the Widely Applicable Prerequisites in a way that is consistent with the progressions in the Standards.

Metric NN 1: If all metrics 1A–1H were rated as Meets, then rate Non-Negotiable 1 as Meets. If one or more metrics were rated as Does Not Meet/Insufficient Evidence, then rate Non-Negotiable 1 as Does Not Meet. Check the final rating.
Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)**

Before moving to Alignment Criterion 1, record the final Meets or Does Not Meet rating in the Evaluation Summary.

X **Meets**

____ **Does Not Meet**

Strengths/Weaknesses
They addressed the necessary standards.

Now continue by evaluating Alignment Criterion 1 for Rigor and Balance.

Directions for Alignment Criterion 1

Rigor and Balance

Alignment Criterion 1:
Rigor and Balance- Materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.

The Standards set expectations for attention to all three aspects of rigor: conceptual understanding, procedural skill and fluency, and applications. Thus, materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.

The Standards set expectations for attention to all three aspects of rigor: conceptual understanding, procedural skill and fluency, and applications. Thus, materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.

- Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf)
- Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_HS_Spring_2013_FINAL1.pdf)
- Widely Applicable Prerequisites for College and Careers (http://achievethecore.org/prerequisites)
- From the materials being evaluated: teacher guides, student texts and workbooks

Rating this Criterion:

Alignment Criterion 1 is rated as Meets or Does Not Meet.

To rate Alignment Criterion 1, first rate metrics 1A, 1B, and 1C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). For each metric, guiding questions are provided to aid in gathering evidence.

Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 1 if the materials rate 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as rigor and balance, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.

AC Metric 1A: **The materials support the development of students' conceptual understanding of key mathematical concepts, especially where called for in specific content Standards or cluster headings.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Widely Applicable Prerequisites that relate specifically to conceptual understanding to use throughout the questions associated with this metric. NOTE: Some examples of clusters or Standards that call for conceptual understanding include: N-RN.A.1, A-APR.B, A-REI.A.1, A-REI.D.10, A.REI.D.11, F.IF.A.1, F-LE.A.1, G.SRT.A.2, G-SRT.C.6, S-ID.C.7 For context, read Criterion #2a in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	• Choose a cluster/Standard from the Widely Applicable Prerequisites that is related to each aspect of rigor and use it to evaluate these metrics. It is most helpful if the same clusters and Standards are chosen for all of the programs being evaluated. (Guidance in choosing clusters/Standards is included in "How to Find the Evidence" below.)	**Use the questions for AC Metric 1A to evaluate Metric 1A. Record evidence for each question and rate Metric 1A.** **X Meets (2)** **____ Partially Meets (1)** **____ Does Not Meet (0)**
Is conceptual understanding attended to thoroughly where the Standards set explicit expectations for understanding or interpreting? Evaluate lessons, chapter/unit assessments and homework assignments, paying attention to work aligned to Standards that explicitly call for understanding or interpreting.	**Evidence-** They are expected to apply knowledge in the exercises throughout the text.	
Do the materials feature high-quality conceptual problems and conceptual discussion questions? Evaluate lessons, chapter/unit assessments, and homework assignments. NOTE: Examples of conceptual problems might include such questions as "What is the maximum value of the function f(t) = 5 – t2 ?" or "Is √2 a polynomial? How about ½(x + √2)+ ½ (-x + √2)?"	**Evidence-** The critical thinking sections, "Great Question" pieces, and "Writing in Math" allow for students to practice high-quality conceptual problems/ discussions.	
Do the materials feature opportunities to identify correspondences across mathematical representations? Evaluate lessons, chapter/unit assessments and homework assignments. NOTE: An example of evaluating this metric might include looking at whether materials support students in identifying correspondences among the expression that defines a function, the graph that shows the relationship, and the behavior of the phenomenon being modeled (if any).	**Evidence-** Exercise questions often have diagrams which need interpretation. Example: pg. 571 #109	

AC Metric 1B: **The materials are designed so that students attain the fluencies and procedural skills required by the Standards.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Widely Applicable Prerequisites that relate specifically to fluency and procedural skill to use throughout the questions associated with this metric. NOTE: Some examples of Standards that call for procedural skill and fluency include: A-SSE.A.1b, A-SSE.2, A-APR.A.1, A-APR.C.6, F-BF.B.3, G-GPE.B.4, G-GPE.B.5, G-GPE.B.7, G-CO.A.1, G-SRT.B.5 For context, read Criterion #2b in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).		**Use the questions for AC Metric 1B to evaluate Metric 1B. Record evidence for each question and rate Metric 1B.** X **Meets (2)** ____ **Partially Meets (1)** ____ **Does Not Meet (0)**
Is progress toward fluency and procedural skill interwoven with the student's developing conceptual understanding of the skills in question? Evaluate lessons, chapter/unit assessments, daily routines, and homework assignments for evidence that the development of fluency and procedural skill is supported by conceptual understanding.	**Evidence-** Conceptual understanding is developed through many procedural problems in exercise section.	
Are purely procedural problems and exercises present that include cases in which opportunistic strategies are valuable and generic cases that require efficient and general procedures present? Evaluate lessons, chapter/unit assessments, daily routines, and homework assignments. NOTE: Problems in which opportunistic strategies are valuable might include such examples as solving x2 + 5 = 49 + 5 or (3x – 2)2 = 6x – 4. Generic cases that require efficient and general procedures might include such problems as solving c + 8 – c2 = 3(c – 1)2 – 5).	**Evidence-** Generic cases include exercise problems. Example on pg. 331. Opportunistic strategies are presented in application and critical thinking sections.	
AC Metric 1C: **The materials are designed so that teachers and students spend sufficient time working with engaging applications, without losing focus on the Widely Applicable Prerequisites.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Widely Applicable Prerequisites that relate specifically to application to use throughout the questions associated with this metric. NOTE: Some examples of clusters or Standards that call for application include: N-Q.A, A-SSE.B.3, A-REI.D.11, F-IF.B, F-IF.C.7, F-BF.A.1, G-SRT.C.8, S-ID.A.2, S-IC.A.1 For context, read Criterion #2c in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).		**Use the questions for AC Metric 1C to evaluate Metric 1C. Record evidence for each question and rate Metric 1C.** X **Meets (2)** ____ **Partially Meets (1)** ____ **Does Not Meet (0)**
Are there single- and multi-step contextual problems, including non-routine problems, that develop the mathematics of the course, afford opportunities for practice, and engage students in problem solving? Do the problems attend thoroughly to those places in the content Standards where expectations for multi-step and real-world problems are explicit? Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** Application exercises and critical thinking exercises use problem solving. Single and multi step including non-routine fall into the vocabulary and concept understanding.	

Do application problems particularly stress applying the Widely Applicable Prerequisites? Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** They are applied on deeper levels throughout. Lessons show applications, and exercises contain problems that require those standards.	
Are there ample opportunities for students to engage with modeling problems? Do materials require students to use both individual parts of the modeling cycle as well as the full modeling cycle? Read the pages on High School—Modeling in the Standards for Mathematics (pp. 72 and 73). Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** There is a lot of abstract modeling throughout this text. More concrete modeling can be found in exercise sets.	
Alignment Criterion 1: Materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations. **AC 1:** Materials must earn at least 5 of 6 points to meet this Alignment Criterion. If materials earn less than 5 points, the Criterion has not been met. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)** **Before moving to Alignment Criterion 2, record the final Meets or Does Not Meet rating in the Evaluation Summary.**		X **Meets** 6 ____ **Does Not Meet** **Strengths/Weaknesses:**
Alignment Criterion 2: **Standards for Mathematical Practice- Materials must demonstrate authentic connections between content Standards and practice Standards.** The Standards require that designers of instructional materials connect the mathematical practices to mathematical content in instruction. Thus, materials must demonstrate authentic connections between content Standards and practice Standards.	The Standards require that designers of instructional materials connect the mathematical practices to mathematical content in instruction. Thus, materials must demonstrate authentic connections between content Standards and practice Standards. **Required Materials**: • Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_HS_Spring_2013_FINAL1.pdf) • Widely Applicable Prerequisites for College and Careers (http://achievethecore.org/prerequisites) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion:** Alignment Criterion 2 is rated as Meets or Does Not Meet. To rate Alignment Criterion 2, first rate metrics 2A, 2B, and 2C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). For each metric, guiding questions are provided to aid in gathering evidence. Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 2 if the materials rate 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as mathematical practices, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.

AC Metric 2A: **Materials address the practice Standards in such a way as to enrich the Widely Applicable Prerequisites; practices strengthen the focus of the course instead of detracting from it, in both teacher and student materials.** **How to Find the Evidence:** Familiarize yourself with the Widely Applicable Prerequisites. Evaluate teacher and student materials for evidence that the mathematical practices support and connect to the focus of the course. NOTE: An example of evaluating this Criterion might include looking at whether materials use regularity in repeated reasoning to illuminate formal algebra as well as functions, particularly recursive definitions of functions. For context, read Criterion #6 in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** Functions are regularly present as a widely applicable prerequisite and the mathematical practices serve to enrich them where present. Refer to correlation if necessary.	X **Meets (2)** ____ **Partially Meets (1)** ____ **Does Not Meet (0)**
AC Metric 2B: **Materials attend to the full meaning of each practice Standard.** **How to Find the Evidence:** For context, read Criterion #7 in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).		**Use the questions for AC Metric 2B to evaluate Metric 2B. Record evidence for each question and rate Metric 2B.** ____ **Meets (2)** X **Partially Meets (1)** ____ **Does Not Meet (0)**
Over the course of any given year of instruction, is each mathematical practice Standard meaningfully present in the form of assignments, activities, or problems that stimulate students to develop the habits of mind described in the practice Standard? Evaluate lessons, chapter/ unit assessments, and homework assignments for evidence of each mathematical practice being meaningfully present in instruction.	**Evidence-** Different standards of practice appear throughout the text and would throughout the year.	
Are teacher-directed materials that explain the role of the practice Standards in the classroom and in students' mathematical development included? Are alignments to practice Standards accurate? Evaluate teacher materials, paying attention to explanations of the role of the practice Standards in the classroom and in students' mathematical development. Evaluate documents aligning lessons to practice Standards for accuracy. NOTE: Examples to look for when evaluating this metric might include the following: a highly scaffolded problem should not be aligned to MP.1; or a problem that directs a student to use a calculator should not be aligned to MP.5; or a problem about merely extending a pattern should not be aligned to MP.8.	**Evidence-** No practice standards mentioned in the teacher's edition. The correlation contains them and where they appear. They appear to be accurate in the correlation.	

AC Metric 2C: **Materials support the Standards' emphasis on mathematical reasoning.** **How to Find the Evidence:** For context, read Criterion #8 in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).		**Use the questions for AC Metric 2C to evaluate Metric 2C. Record evidence for each question and rate Metric 2C.** X **Meets (2)** ____ **Partially Meets (1)** ____ **Does Not Meet (0)**
Do the materials support students in constructing viable arguments and critiquing the arguments of others concerning course-level mathematics that is detailed in the content Standards? Read Standard for Mathematical Practice 3. Evaluate teacher and student materials to ensure that students are given opportunities to reason with grade-level mathematics.	**Evidence-** The great question and writing in mathematics sections allow students to analyze and critique common errors of questions.	
Do the materials support students in producing not only answers and solutions, but also, in a course-appropriate way, arguments, explanations, diagrams, mathematical models, etc., especially in the Widely Applicable Prerequisites? Familiarize yourself with the Widely Applicable Prerequisites. Evaluate teacher and student materials to understand the types of work students are expected to produce.	**Evidence-** The great question section addresses arguments, and in the lesson they model what solutions mean, then students interpret answers in exercises. pg. 478	
Do materials explicitly attend to the specialized language of mathematics? Is the language of argument, problem solving, and mathematical explanations taught rather than assumed? Evaluate teacher and student materials, paying attention to how mathematical language is taught. NOTE: An example of evaluating this Criterion might include looking at whether students are supported in: basing arguments on definitions; using the method of providing a counter example; or recognizing that examples alone do not establish a general statement.	**Evidence-** They give vocabulary definitions and explanations. The text models explanations and arguments but they are not teaching students how to explain and argue explicitly.	
Alignment Criterion 2: Materials must demonstrate authentic connections between content Standards and practice Standards. **AC 2:** Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 points, the Criterion has not been met. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewers only.)** **Before moving to Alignment Criterion 3, record the final Meets or Does Not Meet rating in the Evaluation Summary.**		X **Meets** 5 ____ **Does Not Meet** **Strengths/Weaknesses:** Weak in defining mathematical practices for teacher.

Alignment Criterion 3: **Access to the Standards for All Students- Materials must provide supports for English Language Learners and other special populations.** Because Standards are for all students, alignment requires thoughtful support to ensure all students are able to meet the Standards. Thus, aligned materials must provide supports for English Language Learners and other special populations.	Because Standards are for all students, alignment requires thoughtful support to ensure all students are able to meet the Standards. Thus, aligned materials must provide supports for English Language Learners and other special populations. **Required Materials:** • Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math Publishers_Criteria_HS_Spring_2013_FINAL1.pdf) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion:** Alignment Criterion 3 is rated as Meets or Does Not Meet. To rate Alignment Criterion 3, first rate metrics 3A, 3B, and 3C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 3 if the materials rate 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as support for special population, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.
AC Metric 3A: **Support for English Language Learners and other special populations is thoughtful and helps those students meet the same Standards as all other students. The language in which problems are posed is carefully considered.** **How to Find the Evidence:** Evaluate teacher and student materials, paying attention to supports offered for special populations.	**Evidence-** Based on the level of vocabulary used and exercises (words used in exercises) and mymathlab, this is somewhat addressed, but not heavily	X **Meets (2)** ___ **Partially Meets (1)** ___ **Does Not Meet (0)**
AC Metric 3B: **Materials provide appropriate level and type of scaffolding, differentiation, intervention, and support for a broad range of learners with gradual removal of supports, when needed, to allow students to demonstrate their mathematical understanding independently.** **How to Find the Evidence:** Evaluate teacher and student materials, paying attention to whether materials provide differentiation that will lead all learners to engage with on-grade-level content.	**Evidence-** The level of this course indicates this isn't as necessary although teachers could select from a broad range of problems.	X **Meets (2)** ___ **Partially Meets (1)** ___ **Does Not Meet (0)**
AC Metric 3C: **Design of lessons recommends and facilitates a mix of instructional approaches for a variety of learners such as using multiple representations (e.g., including models, using a range of questions, checking for understanding, flexible grouping, pair-share).** **How to Find the Evidence:** Evaluate teacher materials, noting instructional approaches suggested for whole class and differentiated lessons and activities.	**Evidence-** The level of this course indicates this isn't as necessary. A range of questions is still used in exercises though.	X **Meets (2)** ___ **Partially Meets (1)** ___ **Does Not Meet (0)**

Alignment Criterion 3: Materials must provide supports for English Language Learners and other special populations. AC 3 Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 points, the Criterion has not been met. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewers only.)** **Move to the Evaluation Summary and record the final Meets or Does Not Meet rating .**	X **Meets** 5 ____ **Does Not Meet** **Strengths/Weaknesses:** Not intended for a lot of differentiation. Weak in support for ELL.

Once an evaluation for alignment to the Shifts and major features of the CCSS has been conducted using Sections 1-3, it's important to evaluate for overall quality and best practices. A starting list of Indicators of Quality are suggested below. States, districts and others evaluating instructional materials are encouraged to add to this list to ensure materials reflect local contexts. For background information on some of the Indicators of Quality in this section, refer to pp.16–18 in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).

Indicators of Quality	**Evidence- Give specific examples.**	**Rating: (Reviewer only.)**
1. Lessons are thoughtfully structured and support the teacher in leading the class through the learning paths at hand, with active participation by all students in their own learning and in the learning of their classmates.	**Evidence-** Lessons are laid out in a thoughtful and supporting manner.	**(Reviewer only.)** X **Yes** ____ **No**
2. The underlying design of the materials includes both problems and exercises. (In solving problems, students learn new mathematics, whereas in working exercises, students apply what they have already learned to build mastery.) Each problem or exercise has a purpose. **NOTE: This Criterion does not require that the problems and exercises be labeled as such.**	**Evidence-** Both problem solving and exercises are included in text through lessons guided step by step and exercise sections.	**(Reviewer only.)** X **Yes** ____ **No**

3. Design of assignments is not haphazard: exercises are given in intentional sequences in order to strengthen students' mathematical understanding.	**Evidence-** ~~Section~~ Exercises are broken down into different sections which emphasize the understanding of the topics.	**(Reviewer only.)** X **Yes** ____ **No**
4. There are separate teacher materials that support and reward teacher study including, but not limited to: discussion of the mathematics of the units and the mathematical point of each lesson as it relates to the organizing concepts of the unit, discussion on student ways of thinking and anticipating a variety of students responses, guidance on lesson flow, guidance on questions that prompt students thinking, and discussion of desired mathematical behaviors being elicited among students.	**Evidence-** Only answer solutions are included. No discussion topics.	**(Reviewer only.)** ____ **Yes** X **No**
5. Manipulatives suggested in the materials are faithful representations of the mathematical objects they represent and are connected to written methods.	**Evidence-** No manipulatives are suggested. There is modeling abstractly.	**(Reviewer only.)** ____ **Yes** X **No**
6. Materials include a variety of curriculum-embedded assessments. Examples include pre-, formative, summative, and self-assessment resources.	**Evidence-** Mid chapter assessments, chapter tests and mymathLab are provided.	**(Reviewer only.)** X **Yes** ____ **No**
7. Assessments contain aligned rubrics, answer keys, and scoring guidelines that provide sufficient guidance for interpreting student performance.	**Evidence-** The answer keys are easy to find in the course, for the teacher.	**(Reviewer only.)** X **Yes** ____ **No**
8. Materials assess student proficiency using methods that are accessible and unbiased, including the use of course-level language in student prompts.	**Evidence-** The text is easy to read and a teacher could use different evaluation methods	**(Reviewer only.)** X **Yes** ____ **No**

9. Materials are carefully evaluated by qualified individuals whose names are listed, in an effort to ensure freedom from mathematical errors and course-level appropriateness.	**Evidence-** Listed in the front section of book.	**(Reviewer only.)** X **Yes** ____ **No**
10. The visual design supports students in engaging thoughtfully with the subject. Navigation through the text is clear.	**Evidence-** The text follows a pattern so navigation is clear. Visual Design is appropriate.	**(Reviewer only.)** X **Yes** ____ **No**

Reviewer IMET Evaluation Summary **Title/Level:** Precalculus

Publisher: Pearson Education, Inc **Copyright:** 2014 **ISBN:** 9780133132106

Reviewer ID # DN MF **Date Review Completed:** 3/7/16

Non-Negotiable Criteria-The Non-Negotiable must be met in order for the Non-Negotiable Alignment Criteria to be met overall.

Non- Negotiable 1: Focus and Coherence

X **Meets**

____ **Does Not Meet**

Non-Negotiable Overall:

__X__ **Meets** _____ **Does Not Meet**

Alignment Criteria- Each Alignment Criterion must be met with a sufficient number of points in order for Alignment Criteria to be labeled as "Meets" overall. The more points the materials receive on the Alignment Criteria, the better they are aligned.

Alignment Criterion 1: Rigor and Balance	Alignment Criterion 2: Standards of Mathematical Practice	Alignment Criterion 3: Access to Standards for All Learners
Points: 6 **of 6 possible.** **(Materials must receive at least 5 of 6 points to align.)**	**Points:** 5 **of 6 possible.** **(Materials must receive at least 5 of 6 points to align.)**	**Points:** 5 **of 6 possible.** **(Materials must receive at least 5 of 6 points to align.)**
X **Meets**	X **Meets**	X **Meets**
_____ **Does Not Meet**	_____ **Does Not Meet**	_____ **Does Not Meet**

Alignment Criteria Overall:

__X__ **Meets** _____ **Does Not Meet**

If the materials meet the Non-Negotiable Criterion and each Alignment Criterion, they are aligned to the Shifts and major features of the Core Standards. **Do the materials meet every Non-Negotiable and Alignment Criterion?** ___ **Yes** ___ **No**

What are the specific areas of strength and weakness based on this evaluation? Publishers or others modifying or developing assessments can use this information to make improvements and/or to remedy gaps in the alignment of assessment materials.

Strengths

- Standards for Idaho core are met
- Mathematical Practices are met and regularly implemented.
- Students can make use of technology through myMathLab.
- The level of rigor and exercise are comparable to a college level course.

Weaknesses

- Teacher supports for instruction
- Not exploratory, very traditional
- Not supports for ELL population or differentiation.
- Repeatitive style
- Student collaboration not emphasized.

IDAHO STATE DEPARTMENT OF EDUCATION

Advanced Placement Course: Calculus AB & BC

Content Area: AP Mathematics

Course Title: AP Calculus BC

Title of Material: Calculus AP

Author: BRIGGS

Publisher: PEARSON

ISBN #: 9780133498349 **Copyright** 2014

Reviewers: SO + CM

Meets Content Standards Alignment: X **Yes** _____ **No**

Meets Materials Analysis Evaluation: X **Yes** _____ **No**

967 **Core Program**

_____ **Other Program**

_____ **Resource/Supplemental**

_____ **Not Recommended**

Advanced Placement:

- ☐ **AP Capstone**
- ☐ **Arts**
- ☐ **English**
- ☐ **History & Social Science**
- ☐ **Math & Computer Science**
- ☐ **Sciences**
- ☐ **World Languages & Cultures**

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Standards Alignment Evaluation Rubric

0 = No Alignment– **Not Evident:** Content as described in the Standards is **not evident.**

.5 = Partial Alignment- **Partially Evident:** Content as described in the Standards is **partially evident** and there are few gaps.

1 = High Alignment – **Clearly Evident:** Content is fully aligned as described in the Standards and repeatedly included to guarantee extensive opportunities for students to work with the content. Alignment is **clearly evident.**

N/A = Not applicable for standard

Note: In the Concept Outline, subject matter that is included only in the BC course is indicated with blue shading.

Advanced Placement			**Calculus AB & BC**	
Standards and Learning Indicators			**Publisher/Provider: List units/lessons with specific examples of where standards are Introduced/Taught/Assessed.**	**Point Value 0/.5/1 (Reviewer)**
Big Idea 1: Limits Many calculus concepts are developed by first considering a discrete model and then the consequences of a limiting case. Therefore, the idea of limits is essential for discovering and developing important ideas, definitions, formulas, and theorems in calculus. Students must have a solid, intuitive understanding of limits and be able to compute various limits, including one-sided limits, limits at infinity, the limit of a sequence, and infinite limits. They should be able to work with tables and graphs in order to estimate the limit of a function at a point. Students should know the algebraic properties of limits and techniques for finding limits of indeterminate forms, and they should be able to apply limits to understand the behavior of a function near a point. Students must also understand how limits are used to determine continuity, a fundamental property of functions.				
Enduring Understandings (Students will understand that…)	**Learning Objectives** (Students will be able to…)	**Essential Knowledge** (Students will know that…)		

Standards Alignment Evaluation Rubric

0 = No Alignment– **Not Evident:** Content as described in the Standards is **not evident**.

.5 = Partial Alignment- **Partially Evident:** Content as described in the Standards is **partially evident** and there are few gaps.

1 = High Alignment – **Clearly Evident:** Content is fully aligned as described in the Standards and repeatedly included to guarantee extensive opportunities for students to work with the content. Alignment is **clearly evident**.

N/A = Not applicable for standard

Note: In the Concept Outline, subject matter that is included only in the BC course is indicated with blue shading.

Advanced Placement			**Calculus AB & BC**	
Standards and Learning Indicators			**Publisher/Provider: List units/lessons with specific examples of where standards are Introduced/Taught/Assessed.**	**Point Value 0/.5/1 (Reviewer)**
Big Idea 1: Limits Many calculus concepts are developed by first considering a discrete model and then the consequences of a limiting case. Therefore, the idea of limits is essential for discovering and developing important ideas, definitions, formulas, and theorems in calculus. Students must have a solid, intuitive understanding of limits and be able to compute various limits, including one-sided limits, limits at infinity, the limit of a sequence, and infinite limits. They should be able to work with tables and graphs in order to estimate the limit of a function at a point. Students should know the algebraic properties of limits and techniques for finding limits of indeterminate forms, and they should be able to apply limits to understand the behavior of a function near a point. Students must also understand how limits are used to determine continuity, a fundamental property of functions.				
Enduring Understandings (Students will understand that…)	**Learning Objectives** (Students will be able to…)	**Essential Knowledge** (Students will know that…)		

1.1: The concept of a [illegible] can be used to understand the behavior of functions.	**LO 1.1A (a):** Express limits symbolically using correct notation. **LO 1.1A (b):** Interpret limits expressed symbolically.	**EK 1.1A1:** Given a function f, the limit of $f(x)$ as x approaches c is a real number R if $f($[illegible]$)$ can be made arbitrarily close to R by taking x sufficiently close to c (but not equal to c). If the limit exists and is a real number, then the common notation is $\lim_{x \to c} f(x) = R$. **EXCLUSION STATEMENT (EK 1.1A1):** The epsilon-delta definition of a limit is not assessed on the AP Calculus AB or BC Exam. However, teachers may include this topic in the course if time permits.	**Lesson 2.2** **Epsilon Delta can be found on p. 12[illegible]23**	1
		EK 1.1A2: The concept of a limit can be extended to include one-sided limits, limits at infinity, and infinite limits.	**Lesson 2.2** **Infinite limits Lesson 2.5**	1
		EK 1.1A3: A limit might not exist for some functions at particular values of . Some ways that the limit might not exist are if the function is unbounded, if the function is oscillating near this value, or if the limit from the left does not equal the limit from the right. **EXAMPLES OF LIMITS THAT DO NOT EXIST:** $\lim_{x \to 0} \frac{1}{x^2} = \infty$ $\lim_{x \to 0} \sin\left(\frac{1}{x}\right)$ *does not exist* $\lim_{x \to 0} \frac{\lvert x \rvert}{x}$ *does not exist* $\lim_{x \to 0} \frac{1}{x}$ *does not exist*	**Lesson 2.3**	1
	LO 1.1B: Estimate limits of functions	**EK 1.1B1:** Numerical and graphical information can be used to estimate limits.	**Lesson 2.1**	1

	LO 1.1C: Determine limits of functions.	**EK 1.1C1:** Limits of sums, differences, products, quotients, and composite functions can be found using the basic theorems of limits and algebraic rules.	**Lesson 2.6 see figure 2.44**	**1**
		EK 1.1C2: The limit of a function may be found by using algebraic manipulation, alternate forms of trigonometric functions, or the squeeze theorem.	**Lesson 2.3, 2.6**	**1**
		EK 1.1C3: Limits of the indeterminate forms $\frac{0}{0}$ and $\frac{\infty}{\infty}$ may be evaluated using L'Hospital's Rule.	**Lesson 4.7**	**1**
	LO 1.1D: Deduce and interpret behavior of functions using limits.	**EK 1.1D1:** Asymptotic and unbounded behavior of functions can be explained and described using limits.	**Lesson 2.4, 2.5**	**1**
		EK 1.1D2: Relative magnitudes of functions and their rates of change can be compared using limits.	**Lesson 4.7 p. 316**	**1**
EU 1.2: Continuity is a key property of functions that is defined using limits	**LO 1.2A:** Analyze functions for intervals of continuity or points of discontinuity.	**EK 1.2A1:** A function f is continuous at $x = c$ provided that $f(c)$ exists, $\lim_{x \to c} f(x)$ exists, and $\lim_{x \to c} f(x) = f(c)$.	**Lesson 2.6**	**1**
		EK 1.2A2: Polynomial, rational, power, exponential, logarithmic, and trigonometric functions are continuous at all points in their domains.	**Lesson 2.6**	**1**

		EK 1.2A3: Types of discontinuities include removable discontinuities, jump discontinuities, and discontinuities due to vertical asymptotes.	**Lesson 2.6 see figure 2.44**	**1**
	LO 1.2B: Determine the applicability of important calculus theorems using continuity.	**EK 1.2B1:** Continuity is an essential condition for theorems such as the Intermediate Value Theorem, the Extreme Value Theorem, and the Mean Value Theorem.	**Lesson 2.6, 4.1, 4.6**	**1**

Standards and Learning Indicators			Publisher/Provider: List units/lessons with specific examples of where standards Introduced/Taught/Assessed.	Point Value 0/.5/1 (Reviewer)
Big Idea 2: Derivatives Using derivatives to describe the rate of change of one variable with respect to another variable allows students to understand change in a variety of contexts. In AP Calculus, students build the derivative using the concept of limits and use the derivative primarily to compute the instantaneous rate of change of a function. Applications of the derivative include finding the slope of a tangent line to a graph at a point, analyzing the graph of a function (for example, determining whether a function is increasing or decreasing and finding concavity and extreme values), and solving problems involving rectilinear motion. Students should be able to use different definitions of the derivative, estimate derivatives from tables and graphs, and apply various derivative rules and properties. In addition, students should be able to solve separable differential equations, understand and be able to apply the Mean Value Theorem, and be familiar with a variety of real-world applications, including related rates, optimization, and growth and decay models.				
Enduring Understandings (Students will understand that…)	**Learning Objectives** (Students will be able to…)	**Essential Knowledge** (Students will know that…)		
EU 2.1: The derivative of a function is defined as the limit of a difference quotient and can be determined using a variety of strategies.	**LO 2.1A:** Identify the derivative of a function as the limit of a difference quotient.	**EK 2.1A1:** The difference quotients $\frac{f(a+h)-f(a)}{h}$ and $\frac{f(x)-f(a)}{x-a}$ express the average rate of change of a function over an interval.	**Lesson 3.1** **Very well addressed**	1

		EK 2.1A2: The instantaneous rate of change of a function at a point can be expressed by $\lim_{h\to 0}\frac{f(a+h)-f(a)}{h}$ or $\lim_{x\to a}\frac{f(x)-f(a)}{x-a}$, provided that the limit exists. These are common forms of the definition of the derivative and are denoted $f'(a)$.	**Lesson 3.1**	**1**
		EK 2.1A3: The derivative of f is the function whose value at x is $\lim_{h\to 0}\frac{f(x+h)-f(x)}{h}$ provided this limit exists.	**Lesson 3.1**	**1**
		EK 2.1A4: For $y=f(x)$, notations for the derivative include $\frac{dy}{dx}$, $f'(x)$, and y'.	**Lesson 3.1** **Additional notation included**	**1**
		EK 2.1A5: The derivative can be represented graphically, numerically, analytically, and verbally.	**Lesson 3.1**	**1**
	LO 2.1B: Estimate derivatives.	**EK 2.1B1:** The derivative at a point can be estimated from information given in tables or graphs.	**Lesson 3.1**	**1**
	LO 2.1C: Calculate derivatives.	**EK 2.1C1:** Direct application of the definition of the derivative can be used to find the derivative for selected functions, including polynomial, power, sine, cosine, exponential, and logarithmic functions.	**Lesson 3.1, 3.2**	**1**
		EK 2.1C2: Specific rules can be used to calculate derivatives for classes of functions, including polynomial, rational, power, exponential, logarithmic, trigonometric, and inverse trigonometric.	**Lesson 3.3, 3.5, 3,9, 3.10**	**1**

		EK 2.1C3: Sums, differences, products, and quotients of functions can be differentiated using derivative rules.	**Lesson 3.3, 3.4 no explicit difference rule reference**	**.5**
		EK 2.1C4: The chain rule provides a way to differentiate composite functions.	**Lesson 3.7**	**1**
		EK 2.1C5: The chain rule is the basis for implicit differentiation.	**Lesson 3.8**	**1**
		EK 2.1C6: The chain rule can be used to find the derivative of an inverse function, provided the derivative of that function exists.	**Lesson 3.10 the formula is given, but the relationship is not explicitly stated**	**.5**
		EK 2.1C7: (BC) Methods for calculating derivatives of realvalued functions can be extended to vector-valued functions, parametric functions, and functions in polar coordinates.	**Lesson 11.2,11.4,11.6**	**1**

	LO 2.1D: Determine higher order derivatives.	**EK 2.1D1:** Differentiating f' produces the second derivative f'', provided the derivative of f' exists; repeating this process produces higher order derivatives of f.	**Lesson 3.3**	**1**
		EK 2.1D2: Higher order derivatives are represented with a variety of notations. For $y = f(x)$, notations for the second derivative include $\frac{d^2y}{dx^2}$, $f''(x)$, and y''. Higher order derivatives can be denoted $\frac{d^n y}{dx^n}$ or $f^{(n)}(x)$.	**Lesson 3.3** **Nice display of a variety of noation**	**1**
EU 2.2: A function's derivative, which is itself a function, can be used to understand the behavior of the function.	**LO 2.2A:** Use derivatives to analyze properties of a function.	**EK 2.2A1:** First and second derivatives of a function can provide information about the function and its graph including intervals of increase or decrease, local (relative) and global (absolute) extrema, intervals of upward or downward concavity, and points of inflection.	**Lesson 4.1, 4.2**	**1**
		EK 2.2A2: Key features of functions and their derivatives can be identified and related to their graphical, numerical, and analytical representations.	**Lesson 4.2, 4.3**	**1**
		EK 2.2A3: Key features of the graphs of f, f', and f'' are related to one another.	**Lesson 4.3**	**1**
		EK 2.2A4: (BC) For a curve given by a polar equation $r = f(\theta)$, derivatives of r, x, and y with respect to θ and first and second derivatives of y with respect to x can provide information about the curve.	**Lesson 11.4 no second derivative formula or application**	**.5**

	LO 2.2B: Recognize the connection between differentiability and continuity.	**EK 2.2B1:** A continuous function may fail to be differentiable at a point in its domain.	**Lesson 3.2**	**1**
		EK 2.2B2: If a function is differentiable at a point, then it is continuous at that point.	**Lesson 3.2**	**1**
EU 2.3: The derivative has multiple interpretations and applications including those that involve instantaneous rates of change.	**LO 2.3A:** Interpret the meaning of a derivative within a problem.	**EK 2.3A1:** The unit for $f'(x)$ is the unit for f divided by the unit for x.	**Lesson 3.11**	**1**
		EK 2.3A2: The derivative of a function can be interpreted as the instantaneous rate of change with respect to its independent variable.	**Lesson 3.11**	**1**
	LO 2.3B: Solve problems involving the slope of a tangent line.	**EK 2.3B1:** The derivative at a point is the slope of the line tangent to a graph at that point on the graph.	**Lesson 3.1 nice pictures**	**1**
		EK 2.3B2: The tangent line is the graph of a locally linear approximation of the function near the point of tangency.	**Lesson 4.5**	**1**
	LO 2.3C: Solve problems involving related rates, optimization, rectilinear motion, **(BC)** and planar motion.	**EK 2.3C1:** The derivative can be used to solve rectilinear motion problems involving position, speed, velocity, and acceleration.	**Lesson 3.6**	**1**

		EK 2.3C2: The derivative can be used to solve related rates problems, that is, finding a rate at which one quantity is changing by relating it to other quantities whose rates of change are known.	**Lesson 3.11**	**1**
		EK 2.3C3: The derivative can be used to solve optimization problems, that is, finding a maximum or minimum value of a function over a given interval.	**Lesson 4.4 guidelines on p. 283 very nicely done**	**1**
		EK 2.3C4: (BC) Derivatives can be used to determine velocity, speed, and acceleration for a particle moving along curves given by parametric or vector-valued functions.	**Lesson 11.3, 11.5**	**1**
	LO 2.3D: Solve problems involving rates of change in applied contexts.	**EK 2.3D1:** The derivative can be used to express information about rates of change in applied contexts.	**Lesson 3.11, 4.4 and Chapter 8**	**1**
	LO 2.3E: Verify solutions to differential equations.	**EK 2.3E1:** Solutions to differential equations are functions or families of functions.	**Lesson 8.1**	**1**
		EK 2.3E2: Derivatives can be used to verify that a function is a solution to a given differential equation.	**Lesson 8.1**	**1**
	LO 2.3F: Estimate solutions to differential equations.	**EK 2.3F1:** Slope fields provide visual clues to the behavior of solutions to first order differential equations.	**Lesson 8.2**	**1**

		EK 2.3F2: (BC) For differential equations, Euler's method provides a procedure for approximating a solution or a point on a solution curve.	**Lesson 8.2**	1
EU 2.4: The Mean Value Theorem connects the behavior of a differentiable function over an interval to the behavior of the derivative of that function at a particular point in the interval.	**LO 2.4A:** Apply the Mean Value Theorem to describe the behavior of a function over an interval.	**EK 2.4A1:** If a function f is continuous over the interval $[a, b]$ and differentiable over the interval (a, b), the Mean Value Theorem guarantees a point within that open interval where the instantaneous rate of change equals the average rate of change over the interval.	**Lesson 5.5**	1

Standards and Learning Indicators			Publisher/Provider: List units/lessons with specific examples of where standards are Introduced/Taught/Assessed.	Point Value 0/.5/1 (Reviewer)
Big Idea 3: Integrals and the Fundamental Theorem of Calculus Integrals are used in a wide variety of practical and theoretical applications. AP Calculus students should understand the definition of a definite integral involving a Riemann sum, be able to approximate a definite integral using different methods, and be able to compute definite integrals using geometry. They should be familiar with basic techniques of integration and properties of integrals. The interpretation of a definite integral is an important skill, and students should be familiar with area, volume, and motion applications, as well as with the use of the definite integral as an accumulation function. It is critical that students grasp the relationship between integration and differentiation as expressed in the Fundamental Theorem of Calculus — a central idea in AP Calculus. Students should be able to work with and analyze functions defined by an integral.				
Enduring Understandings (Students will understand that...)	**Learning Objectives** (Students will be able to...)	**Essential Knowledge** (Students will know that...)		
EU 3.1: Antidifferentiation is the inverse process of differentiation.	**LO 3.1A:** Recognize antiderivatives of basic functions.	**EK 3.1A1:** An antiderivative of a function f is a function g whose derivative is f.	**Lesson 5.1**	**1**
		EK 3.1A2: Differentiation rules provide the foundation for finding antiderivatives.	**Lesson 5.1**	**1**
EU 3.2: The definite integral of a function over an interval is the limit of a Riemann sum over that interval and can be calculated using a variety of strategies	**LO 3.2A(a):** Interpret the definite integral as the limit of a Riemann sum.	**EK 3.2A1:** A Riemann sum, which requires a partition of an interval , is the sum of products, each of which is the value of the function at a point in a subinterval multiplied by the length of that subinterval of the partition.	**Lesson 4.1, 4.2 Nice pictures showing LRAM, RRAM and MRAM**	**1**

	LO 3.2A(b): Express the limit of a Riemann sum in integral notation.	**EK 3.2A2:** The definite integral of a continuous function f over the interval $[a, b]$, denoted by $\int_a^b f(x)dx$, is the limit of Riemann sums as the widths of the subintervals approach 0. That is, $\int_a^b f(x)dx = \lim_{\max \Delta x_i \to 0} \sum_{i=1}^{n} f(x_i^*)\Delta x_i$ where x_i^* is a value in the ith subinterval, Δx_i is the width of the ith subinterval, n is the number of subintervals, and $\max \Delta x_i$ is the width of the largest subinterval. Another form of the definition is $\int_a^b f(x)dx = \lim_{n \to \infty} \sum_{i=1}^{n} f(x_i^*)\Delta x_i$, where $\Delta x_i = \frac{b-a}{n}$ and x_i^* is a value in the ith subinterval.	**Lesson 5.3**	**1**
		EK 3.2A3: The information in a definite integral can be translated into the limit of a related Riemann sum, and the limit of a Riemann sum can be written as a definite integral.	**Lesson 5.3**	**1**
	LO 3.2B: Approximate a definite integral.	**EK 3.2B1:** Definite integrals can be approximated for functions that are represented graphically, numerically, algebraically, and verbally.	**Lesson 5.3**	**1**
		EK 3.2B2: Definite integrals can be approximated using a left Riemann sum, a right Riemann sum, a midpoint Riemann sum, or a trapezoidal sum; approximations can be computed using either uniform or nonuniform partitions.	**Lesson 5.2, 5.7**	**1**

	LO 3.2C: Calculate a definite integral using areas and properties of definite integrals.	**EK 3.2C1:** In some cases, a definite integral can be evaluated by using geometry and the connection between the definite integral and area.	**Lesson 5.3**	1
		EK 3.2C2: Properties of definite integrals include the integral of a constant times a function, the integral of the sum of two functions, reversal of limits of integration, and the integral of a function over adjacent intervals.	**Lesson 5.1, 5.3**	1
		EK 3.2C3: The definition of the definite integral may be extended to functions with removable or jump discontinuities.	**Lesson 5.3 figure 5.29**	1
	LO 3.2D: (BC) Evaluate an improper integral or show that an improper integral diverges.	**EK 3.2D1:** (BC) An improper integral is an integral that has one or both limits infinite or has an integrand that is unbounded in the interval of integration.	**Lesson 7.4**	1
		EK 3.2D2: (BC) Improper integrals can be determined using limits of definite integrals.	**Lesson 7.4**	1

EU 3.3: The Fundamental Theorem of Calculus, which has two distinct formulations, connects differentiation and integration.	**LO 3.3A:** Analyze functions defined by an integral.	**EK 3.3A1:** The definite integral can be used to define new functions; for example, $f(x)=\int_a^x e^{-t^2}dt$.	**Lesson 5.4**	**1**
		EK 3.3A2: If f is a continuous function on the interval $[a, b]$, then $\frac{d}{dx}\left(\int_a^x f(t)dt\right)=f(x)$, where x is between a and b.	**Lesson 5.4**	**1**
		EK 3.3A3: Graphical, numerical, analytical, and verbal representations of a function f provide information about the function g defined as $g(x)=\int_a^x f(t)dt$.	**Lesson 5.4**	**1**
	LO 3.3B(a): Calculate antiderivatives.	**EK 3.3B1:** The function defined by $F(x)=\int_a^x f(t)dt$ is an antiderivative of f.	**Lesson 5.4**	**1**
	LO 3.3B(b): Evaluate definite integrals.	**EK 3.3B2:** If f is continuous on the interval $[a, b]$ and F is an antiderivative of f, then $\int_a^b f(x)dx=F(b)-F(a)$.	**Lesson 5.4**	**1**
		EK 3.3B3: The notation $\int f(x)dx=F(x)+C$ means that $F'(x)=f(x)$, and $\int f(x)dx$ is called an indefinite integral of the function f.	**Lesson 5.1 don't see notation, concept is represented**	**.5**
		EK 3.3B4: Many functions do not have closed form antiderivatives.	**Lesson 5.1**	**1**

		EK 3.3B5: Techniques for finding antiderivatives include algebraic manipulation such as long division and completing the square, substitution of variables, (BC) integration by parts, and nonrepeating linear partial fractions.	**Lesson 5.6, 7.1,7.2,7.3**	**1**
EU 3.4: The definite integral of a function over an interval is a mathematical tool with many interpretations and applications involving accumulation.	**LO 3.4A:** Interpret the meaning of a definite integral within a problem.	**EK 3.4A1:** A function defined as an integral represents an accumulation of a rate of change.	**Lesson 6.1**	**1**
		EK 3.4A2: The definite integral of the rate of change of a quantity over an interval gives the net change of that quantity over that interval.	**Lesson 6.1**	**1**
		EK 3.4A3: The limit of an approximating Riemann sum can be interpreted as a definite integral.	**Lesson 5.3**	**1**
	LO 3.4B: Apply definite integrals to problems involving the average value of a function.	**EK 3.4B1:** The average value of a function f over an interval $[a, b]$ is $\frac{1}{b-a}\int_a^b f(x)dx$.	**Lesson 5.5**	**1**
	LO 3.4C: Apply definite integrals to problems involving motion.	**EK 3.4C1:** For a particle in rectilinear motion over an interval of time, the definite integral of velocity represents the particle's displacement over the interval of time, and the definite integral of speed represents the particle's total distance traveled over the interval of time.	**Lesson 6.1**	**1**

		EK 3.4C2: (BC) The definite integral can be used to determine displacement, distance, and positi[illegible]f a particle moving along a curve given by parametric or vector-valued functions.	**Lesson 11.6, 11.7**	**.5**
	LO 3.4D: Apply definite integrals to problems involving area, volume, **(BC)** and length of a curve.	**EK 3.4D1:** Areas of certain regions in the plane can be calculated with definite integrals. (BC) Areas bounded by polar curves can be calculated with definite integrals	**Lesson 6.2** **Lesson 11.4 polar**	**1**
		EK 3.4D2: Volumes of solids with known cross sections, including discs and washers, can be calculated with definite integrals.	**Lesson 6.3, 6.4**	**1**
		EK 3.4D3: (BC) The length of a planar curve defined by a function or by a parametrically defined curve can be calculated using a definite integral.	**Lesson 11.2**	**1**
	LO 3.4E: Use the definite integral to solve problems in various contexts.	**EK 3.4E1:** The definite integral can be used to express information about accumulation and net change in many applied contexts.	**Lesson 6.1**	**1**

EU 3.5: Antidifferentiation is an underlying concept involved in solving separable differential equations. Solving separable differential equations involves determining a function or relation given its rate of change.	**LO 3.5A:** Analyze differential equations to obtain general and specific solutions.	**EK 3.5A1:** Antidifferentiation can be used to find specific solutions to differential equations with given initial conditions, including applications to motion along a line, exponential growth and decay, **(BC)** and logistic growth.	**Lesson 5.2, 8.1**	**1**
		EK 3.5A2: Some differential equations can be solved by separation of variables.	**Lesson 8.3**	**1**
		EK 3.5A3: Solutions to differential equations may be subject to domain restrictions.	**Did not see explicit treatment of this topic**	**0**
		EK 3.5A4: The function F defined by $F(x)=c+\int_a^x f(t)dt$ is a general solution to the differential equation $\frac{dy}{dx}=f(x)$, and $F(x)=y_0+\int_a^x f(t)dt$ is a particular solution to the differential equation $\frac{dy}{dx}=f(x)$ satisfying $F(a)=y_0$.	**Lesson 6.1**	**1**
	LO 3.5B: Interpret, create and solve differential equations from problems in context.	**EK 3.5B1:** The model for exponential growth and decay that arises from the statement "The rate of change of a quantity is proportional to the size of the quantity" is $\frac{dy}{dt}=ky$.	**Lesson 8.4** **Verbal statements are weak, examples are present**	**.5**
		EK 3.5B2: (BC) The model for logistic growth that arises from the statement "The rate of change of a quantity is jointly proportional to the size of the quantity and the difference between the quantity and the carrying capacity" is $\frac{dy}{dt}=ky(a-y)$.	**Lesson 8.3** **Verbal statements are weak, examples are present**	**.5**

Standards and Learning Indicators			Publisher/Provider: List units/lessons with specific examples of where standards Introduced/Taught/Assessed.	Point Value 0/.5/1 (Reviewer)
Big Idea 4: Series (BC) The AP Calculus BC curriculum includes the study of series of numbers, power series, and various methods to determine convergence or divergence of a series. Students should be familiar with Maclaurin series for common functions and general Taylor series representations. Other topics include the radius and interval of convergence and operations on power series. The technique of using power series to approximate an arbitrary function near a specific value allows for an important connection to the tangent-line problem and is a natural extension that helps achieve a better approximation. The concept of approximation is a common theme throughout AP Calculus, and power series provide a unifying, comprehensive conclusion.				
Enduring Understandings (Students will understand that…)	**Learning Objectives** (Students will be able to…)	**Essential Knowledge** (Students will know that…)		
EU 4.1: The sum of an infinite number of real numbers may converge.	**LO 4.1A:** Determine whether a series converges or diverges.	**EK 4.1A1:** The nth partial sum is defined as the sum of the first n terms of a sequence.	**Lesson 9.1**	**1**
		EK 4.1A2: An infinite series of numbers converges to a real number S (or has sum S), if and only if the limit of its sequence of partial sums exists and equals S.	**Lesson 9.1**	**1**
		EK 4.1A3: Common series of numbers include geometric series, the harmonic series, and p-series.	**Lesson 9.3, 9.4**	**1**
		EK 4.1A4: A series may be absolutely convergent, conditionally convergent, or divergent.	**Lesson 9.6**	**1**
		EK 4.1A5: If a series converges absolutely, then it converges.	**Lesson 9.6**	**1**

		EK 4.1A6: In addition to examining the limit of the sequence of partial sums of the series, methods for determining whether a series of numbers converges or diverges are the nth term test, the comparison test, the limit comparison test, the integral test, the ratio test, and the alternating series test. **EXCLUSION STATEMENT (EK 4.1A6):** *Other methods for determining convergence or divergence of a series of numbers are not assessed on the AP Calculus AB or BC Exam. However, teachers may include these topics in the course if time permits.*	**Lesson 9.3, 9.4, 9.5**	**1**
	LO 4.1B: Determine or estimate the sum of a series.	**EK 4.1B1:** If a is a real number and r is a real number such that $\lvert r\rvert < 1$, then the geometric series $\sum_{n=0}^{\infty} ar^n = \frac{a}{1-r}$.	**Lesson 9.3**	**1**
		EK 4.1B2: If an alternating series converges by the alternating series test, then the alternating series error bound can be used to estimate how close a partial sum is to the value of the infinite series.	**Lesson 9.6**	**1**
		EK 4.1B3: If a series converges absolutely, then any series obtained from it by regrouping or rearranging the terms has the same value.	**Lesson 9.3 (telescoping), 9.6**	**1**

EU 4.2: A function can be represented by an associated power series over the interval of convergence for the power series.	**LO 4.2A:** Construct and use Taylor polynomials.	**EK 4.2A1:** The coefficient of the nth-degree term in a Taylor polynomial centered at $x = a$ for the function f is $\frac{f^{(n)}(a)}{n!}$.	**Lesson 10.1**	**1**
		EK 4.2A2: Taylor polynomials for a function f centered at $x = a$ can be used to approximate function values of f near $x = a$.	**Lesson 10.1**	**1**
		EK 4.2A3: In many cases, as the degree of a Taylor polynomial increases, the nth-degree polynomial will converge to the original function over some interval.	**Lesson 10.1**	**1**
		EK 4.2A4: The Lagrange error bound can be used to bound the error of a Taylor polynomial approximation to a function.	**Lesson 10.1**	**1**
		EK 4.2A5: In some situations where the signs of a Taylor polynomial are alternating, the alternating series error bound can be used to bound the error of a Taylor polynomial approximation to the function.	**Lesson 10.1 small note at bottom of p. 675**	**1**
	LO 4.2B: Write a power series representing a given function.	**EK 4.2B1:** A power series is a series of the form $\sum_{n=0}^{\infty} a_n(x-r)^n$ where n is a non-negative integer, $\{a_n\}$ is a sequence of real numbers, and r is a real number.	**Lesson 10.2**	**1**
		EK 4.2B2: The Maclaurin series for $\sin(x)$, $\cos(x)$, and e^x provide the foundation for constructing the Maclaurin series for other functions.	**Lesson 10.3**	**1**

		EK 4.2B3: The Maclaurin s for $\frac{1}{1-x}$ is a geometric series.	**Lesson 10.3**	**1**
		EK 4.2B4: A Taylor polynomial for $f(x)$ is a partial sum of the Taylor series for $f(x)$.	**Lesson 10.2**	**1**
		EK 4.2B5: A power series for a given function can be derived by various methods (e.g., algebraic processes, substitutions, using properties of geometric series, and operations on known series such as term-byterm integration or term-by-term differentiation).	**Lesson 10.2**	**1**
	LO 4.2C: Determine the radius and interval of convergence of a power series.	**EK 4.2C1:** If a power series converges, it either converges at a single point or has an interval of convergence.	**Lesson 10.2**	**1**
		EK 4.2C2: The ratio test can be used to determine the radius of convergence of a power series.	**Lesson 10.2**	**1**
		EK 4.2C3: If a power series has a positive radius of convergence, then the power series is the Taylor series of the function to which it converges over the open interval.	**Lesson 10.3**	**1**
		EK 4.2C4: The radius of convergence of a power series obtained by term-by-term differentiation or term-by-term integration is the same as the radius of convergence of the original power series.	**Lesson 10.2, 10.4**	**1**

Indicators of Quality:

Indicators of Quality	Evidence- Give specific examples.	Rating: (Reviewer only.)
1. Lessons are thoughtfully structured and support the teacher in leading the class through the learning paths at hand, with active participation by all students in their own learning and in the learning of their classmates.	Evidence- The table of contents and learning objective lists allow teachers to prepare a learning path that meets all of the objectives. The relative levels of the problems in the text allow the instructor to differentiate the level of problem to meet student needs and allow for all students to master the work at an appropriate level.	(Reviewer only.) _____x_ Yes _____ No
2. The underlying design of the materials includes both problems and exercises. (In solving problems, students learn new mathematics, whereas in working exercises, students apply what they have already learned to build mastery.) Each problem or exercise has a purpose. NOTE: This Criterion does not require that the problems and exercises be labeled as such.	Evidence- Skills built in early chapters are applied in later sections. Limits are reapplied for derivatives, Reimann sums and in lesson 4.7. Skills move from simpler at the beginning of the book to more complex by chapter 11. Chapter 11 reuses ideas from Chapter 3 and 4.	(Reviewer only.) ____x__ Yes _____ No
3. Design of assignments is not haphazard: exercises are given in intentional sequences in order to strengthen students' mathematical understanding.	Evidence- Exercises start with mechanical problems, move to applications, more difficult problems and in some sections like 5.1 explorations. Topics in chapters seem to be arranged to allow logical flow of concepts. Guided projects also allow for the expansion of student learning.	(Reviewer only.) ____x__ Yes _____ No
4. There are separate teacher materials that support and reward teacher study including, but not limited to: discussion of the mathematics of the units and the mathematical point of each lesson as it relates to the organizing concepts of the unit, discussion on student ways of thinking and anticipating a variety of students responses, guidance on lesson flow, guidance on questions that prompt students thinking, and discussion of desired mathematical behaviors being elicited among students.	Evidence- Pretty weak here. The teacher guide has some remarks and activities listed in the margins. The notes suggest places where the teacher should introduce new topics and suggests activities for students. EX p. 322 Newton's method prediction activitiy	(Reviewer only.) ___x___ Yes _____ No

5. Manipulatives suggested in the materials are faithful representations of the mathematical objects they represent and are connected to written methods.	**Evidence-** **The book's choice of manipulatives is largely the graphing calculator. Simulations like the one on p. 322 show students the trend of a problem more quickly than hand calculations.**	**(Reviewer only.)** **___x___ Yes** **_____ No**
6. Materials include a variety of curriculum-embedded assessments. Examples include pre-, formative, summative, and self-assessment resources.	**Evidence-** **Each book section has a quick check for students with answers at the end of the section and practice tests at the end of each chapter. The book comes with TESTGEN to create classroom assessments. Projects also can form another type of student assessment**	**(Reviewer only.)** **___x___ Yes** **_____ No**
7. Assessments contain aligned rubrics, answer keys, and scoring guidelines that provide sufficient guidance for interpreting student performance.	**Evidence-** **Do not see rubrics, but the tests and other assessments have answer keys.**	**(Reviewer only.)** **_____ Yes** **__x____ No**
8. Materials assess student proficiency using methods that are accessible and unbiased, including the use of course-level language in student prompts.	**Evidence-** **Students are tested on taught content using vocabulary in practice problems.**	**(Reviewer only.)** **____x__ Yes** **_____ No**
9. Materials are carefully evaluated by qualified individuals, whose names are listed, in an effort to ensure freedom from mathematical errors and course-level appropriateness.	**Evidence- p. xvi and xvii in preface**	**(Reviewer only.)** **____x__ Yes** **_____ No**
10. The visual design supports students in engaging thoughtfully with the subject. Navigation through the text is clear.	**Evidence-** **Nice page layout. Each page in not too busy. Important words are bolded. Important concepts are heading and important formulas and rules are boxed**	**(Reviewer only.)** **____x__ Yes** **_____ No**

COMMENTS:

STRENGTHS	WEAKNESSES
• Ideas are presented in a logical and deep manner. • Plenty of built in AP practice problems. • Integration of online content. • Covers all AP topics – most of them very well.	• Some verbage is difficult to locate mostly on variation problems • The book is more traditional

IDAHO STATE DEPARTMENT OF EDUCATION

Advanced Placement Course: Calculus AB & BC

Content Area: AP Mathematics

Course Title: Calculus AB & BC

Title of Material: Calculus: Graphic, Numerical, Algebraic

Author: Finney, Demana, Waits, Kennedy, Bressoud

Publisher: Pearson

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Reviewers: JHW, CJ

Meets Content Standards Alignment: X Yes ____ No

Meets Materials Analysis Evaluation: X Yes ____ No

98% Core Program

____ Other Program

____ Resource/Supplemental

____ Not Recommended

Advanced Placement:

- ☐ AP Capstone
- ☐ Arts
- ☐ English
- ☐ History & Social Science
- ☐ Math & Computer Science
- ☐ Sciences
- ☐ World Languages & Cultures

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Standards Alignment Evaluation Rubric

0 = No Alignment– **Not Evident:** Content as described in the Standards is **not evident.**

.5 = Partial Alignment- **Partially Evident:** Content as described in the Standards is **partially evident** and there are few gaps.

1 = High Alignment – **Clearly Evident:** Content is fully aligned as described in the Standards and repeatedly included to guarantee extensive opportunities for students to work with the content. Alignment is **clearly evident.**

N/A = Not applicable for standard

Note: In the Concept Outline, subject matter that is included only in the BC course is indicated with blue shading.

<table>
<tr><td colspan="3">Advanced Placement</td><td>Calculus AB & BC</td><td></td></tr>
<tr><td colspan="3">Standards and Learning Indicators</td><td>Publisher/Provider: List units/lessons with specific examples of where standards are Introduced/Taught/Assessed.</td><td>Point Value 0/.5/1 (Reviewer)</td></tr>
<tr><td colspan="5">Big Idea 1: Limits
Many calculus concepts are developed by first considering a discrete model and then the consequences of a limiting case. Therefore, the idea of limits is essential for discovering and developing important ideas, definitions, formulas, and theorems in calculus. Students must have a solid, intuitive understanding of limits and be able to compute various limits, including one-sided limits, limits at infinity, the limit of a sequence, and infinite limits. They should be able to work with tables and graphs in order to estimate the limit of a function at a point. Students should know the algebraic properties of limits and techniques for finding limits of indeterminate forms, and they should be able to apply limits to understand the behavior of a function near a point. Students must also understand how limits are used to determine continuity, a fundamental property of functions.</td></tr>
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</table>

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Standards Alignment Evaluation Rubric

0 = No Alignment– **Not Evident:** Content as described in the Standards is **not evident**.

.5 = Partial Alignment- **Partially Evident:** Content as described in the Standards is **partially evident** and there are few gaps.

1 = High Alignment – **Clearly Evident:** Content is fully aligned as described in the Standards and repeatedly included to guarantee extensive opportunities for students to work with the content. Alignment is **clearly evident**.

N/A = Not applicable for standard

Note: In the Concept Outline, subject matter that is included only in the BC course is indicated with blue shading.

Advanced Placement			**Calculus AB & BC**	
Standards and Learning Indicators			**Publisher/Provider: List units/lessons with specific examples of where standards are introduced/Taught/Assessed.**	**Point Value 0/.5/1 (Reviewer)**
Big Idea 1: Limits Many calculus concepts are developed by first considering a discrete model and then the consequences of a limiting case. Therefore, the idea of limits is essential for discovering and developing important ideas, definitions, formulas, and theorems in calculus. Students must have a solid, intuitive understanding of limits and be able to compute various limits, including one-sided limits, limits at infinity, the limit of a sequence, and infinite limits. They should be able to work with tables and graphs in order to estimate the limit of a function at a point. Students should know the algebraic properties of limits and techniques for finding limits of indeterminate forms, and they should be able to apply limits to understand the behavior of a function near a point. Students must also understand how limits are used to determine continuity, a fundamental property of functions.				
Enduring Understandings (Students will understand that…)	**Learning Objectives** (Students will be able to…)	**Essential Knowledge** (Students will know that…)		

EU 1.1: The concept of a limit can be used to understand the behavior of functions.	**LO 1.1A (a):** Express limits symbolically using correct notation. **LO 1.1A (b):** Interpret limits expressed symbolically.	**EK 1.1A1:** Given a function f, the limit of $f(x)$ as x approaches c is a real number R if $f(x)$ can be made arbitrarily close to R by taking x sufficiently close to c (but not equal to c). If the limit exists and is a real number, then the common notation is $\lim_{x \to c} f(x) = R$. **EXCLUSION STATEMENT (EK 1.1A1):** The epsilon-delta definition of a limit is not assessed on the AP Calculus AB or BC Exam. However, teachers may include this topic in the course if time permits.	p. 60 Epsilon-Delta definition is included in appendix A (583-589)	1
		EK 1.1A2: The concept of a limit can be extended to include one-sided limits, limits at infinity, and infinite limits.	pp. 63-64 (One-Sided Limit) pp.72-73 (Infinite Limits) p. 73 (Limits at Infinity)	1
		EK 1.1A3: A limit might not exist for some functions at particular values of . Some ways that the limit might not exist are if the function is unbounded, if the function is oscillating near this value, or if the limit from the left does not equal the limit from the right. **EXAMPLES OF LIMITS THAT DO NOT EXIST:** $\lim_{x \to 0} \frac{1}{x^2} = \infty$ $\lim_{x \to 0} \sin\left(\frac{1}{x}\right)$ *does not exist* $\lim_{x \to 0} \frac{\lvert x \rvert}{x}$ *does not exist* $\lim_{x \to 0} \frac{1}{x}$ *does not exist*	p.63 (Examples 5-6 and reinforced by exercises)	1
	LO 1.1B: Estimate limits of functions	**EK 1.1B1:** Numerical and graphical information can be used to estimate limits.	pp. 60-65 pp. 70-71 (figures and reasoning associated with examples 1 and 2)	1

	LO 1.1C: Determine limits of functions.	**EK 1.1C1:** Limits of sums, differences, products, quotients, and composite functions can be found using the basic theorems of limits and algebraic rules.	pp. 61-69 (Properties of Limits)	1
		EK 1.1C2: The limit of a function may be found by using algebraic manipulation, alternate forms of trigonometric functions, or the squeeze theorem.	pp. 64-65 (Squeeze Theorem) pp. 71 (Squeeze Theorem revisited for limits at infinity) Algebraic methods and alternate forms of trigonometric functions used throughout. For instance, example 6 on p. 73)	1
		EK 1.1C3: Limits of the indeterminate forms $\frac{0}{0}$ and $\frac{\infty}{\infty}$ may be evaluated using L'Hospital's Rule.	pp. 452-460 (L'Hopital's Rule)	1
	LO 1.1D: Deduce and interpret behavior of functions using limits.	**EK 1.1D1:** Asymptotic and unbounded behavior of functions can be explained and described using limits.	pp. 63-65 (one-sided limits at asymptotes) pp. 70-73 (Asymptotes) pp.73-77 (End Behavior Models)	1
		EK 1.1D2: Relative magnitudes of functions and their rates of change can be compared using limits.	pp. 59-60 (Rates of Change) pp. 461-464 (Relative Rates of Growth)	1
EU 1.2: Continuity is a key property of functions that is defined using limits	**LO 1.2A:** Analyze functions for intervals of continuity or points of discontinuity.	**EK 1.2A1:** A function f is continuous at $x = c$ provided that $f(c)$ exists, $\lim_{x \to c} f(x)$ exists, and $\lim_{x \to c} f(x) = f(c)$.	pp. 78-84 (Continuity)	1
		EK 1.2A2: Polynomial, rational, power, exponential, logarithmic, and trigonometric functions are continuous at all points in their domains.	pp.78-80 (Continuity) p. 81 (paragraph at bottom of page)	1

		EK 1.2A3: Types of discontinuities include removable discontinuities, jump discontinuities, and discontinuities due to vertical asymptotes.	pp. 78-81 (Continuity at a Point, graphical exploration on p. 80)	1
	LO 1.2B: Determine the applicability of important calculus theorems using continuity.	**EK 1.2B1:** Continuity is an essential condition for theorems such as the Intermediate Value Theorem, the Extreme Value Theorem, and the Mean Value Theorem.	p. 115 (Theorem 2, Intermediate Value Theorem) p. 194 (Theorem 1, Extreme Value Theorem) pp. 202-210 (Mean Value Theorem)	1

Standards and Learning Indicators			Publisher/Provider: List units/lessons with specific examples of where standards are Introduced/Taught/Assessed.	Point Value 0/.5/1 (Reviewer)
Big Idea 2: Derivatives Using derivatives to describe the rate of change of one variable with respect to another variable allows students to understand change in a variety of contexts. In AP Calculus, students build the derivative using the concept of limits and use the derivative primarily to compute the instantaneous rate of change of a function. Applications of the derivative include finding the slope of a tangent line to a graph at a point, analyzing the graph of a function (for example, determining whether a function is increasing or decreasing and finding concavity and extreme values), and solving problems involving rectilinear motion. Students should be able to use different definitions of the derivative, estimate derivatives from tables and graphs, and apply various derivative rules and properties. In addition, students should be able to solve separable differential equations, understand and be able to apply the Mean Value Theorem, and be familiar with a variety of real-world applications, including related rates, optimization, and growth and decay models.				
Enduring Understandings (Students will understand that...)	**Learning Objectives** (Students will be able to...)	**Essential Knowledge** (Students will know that...)		
EU 2.1: The derivative of a function is defined as the limit of a difference quotient and can be determined using a variety of strategies.	**LO 2.1A:** Identify the derivative of a function as the limit of a difference quotient.	**EK 2.1A1:** The difference quotients $\frac{f(a+h)-f(a)}{h}$ and $\frac{f(x)-f(a)}{x-a}$ express the average rate of change of a function over an interval.	pp. 59-60 (Rates of Change) pp. 87-90 (Difference quotient introduced and explored) pp. 101-102 (The Derivatives as a Function)	1

		EK 2.1A2: The instantaneous rate of change of a function at a point can be expressed by $\lim_{h\to 0}\frac{f(a+h)-f(a)}{h}$ or $\lim_{x\to a}\frac{f(x)-f(a)}{x-a}$, provided that the limit exists. These are common forms of the definition of the derivative and are denoted $f'(a)$.	pp. 59-60 (Rates of Change) pp. 101-102 (The Derivatives as a Function) p. 129 (Instantaneous rate of change) f'(a) notation used throughout	1
		EK 2.1A3: The derivative of f is the function whose value at x is $\lim_{h\to 0}\frac{f(x+h)-f(x)}{h}$ provided this limit exists.	p. 101 (Derivative)	1
		EK 2.1A4: For $y=f(x)$, notations for the derivative include $\frac{dy}{dx}$, $f'(x)$, and y'.	p. 103 (Notations) Table includes verbalizations and rationale for each notation. Examples use different notations throughout.	1
		EK 2.1A5: The derivative can be represented graphically, numerically, analytically, and verbally.	pp. 87-96 (Rates of Change, Tangent Lines, and Sensitivity) pp. 101-106 (multiple representations used throughout)	1
	LO 2.1B: Estimate derivatives.	**EK 2.1B1:** The derivative at a point can be estimated from information given in tables or graphs.	pp. 88-91 (Tangent to a Curve) p. 105 (example 5)	1
	LO 2.1C: Calculate derivatives.	**EK 2.1C1:** Direct application of the definition of the derivative can be used to find the derivative for selected functions, including polynomial, power, sine, cosine, exponential, and logarithmic functions.	pp. 180-187 (Derivatives of Exponents and Logarithmic Functions) pp. ~~121~~118-123 (Direct application of the definition of the derivative to find derivative rule, Products and Quotient Rules)	1
		EK 2.1C2: Specific rules can be used to calculate derivatives for classes of functions, including polynomial, rational, power, exponential, logarithmic, trigonometric, and inverse trigonometric.	pp. 180-187 (Derivatives of Exponents and Logarithmic Functions) pp. 121-123 (Products and Quotient Rules) pp. 143-153 (Derivatives of Trigonometric Functions)	1

		EK 2.1C3: Sums, differences, products, and quotients of functions can be differentiated using derivative rules.	pp. 119-123 (The Sum and Difference Rule, The Product Rule, The Quotient Rule)	1
		EK 2.1C4: The chain rule provides a way to differentiate composite functions.	pp. 155-163 (The Chain Rule)	1
		EK 2.1C5: The chain rule is the basis for implicit differentiation.	pp. 164-172 (Implicit Differentiation)	1
		EK 2.1C6: The chain rule can be used to find the derivative of an inverse function, provided the derivative of that function exists.	pp. 173-179 (Derivatives of Inverse Trigonometric Functions)	1
		EK 2.1C7: (BC) Methods for calculating derivatives of realvalued functions can be extended to vector-valued functions, parametric functions, and functions in polar coordinates.	pp. 543-549 (Parametric Functions) pp. 550-560 (Vectors in a plane) pp. 561-574 (Polar Functions)	1

	LO 2.1D: Determine higher order derivatives.	**EK 2.1D1:** Differentiating f' produces the second derivative f'', provided the derivative of f' exists; repeating this process produces higher order derivatives of f.	pp. 124-125 (Second and Higher Order Derivatives) p. 167 (Derivatives of Higher Order, Finding a Second Derivative Implicitly) pp. 211-222 (Connection f' and f'' with the Graph of f)	1
		EK 2.1D2: Higher order derivatives are represented with a variety of notations. For $y = f(x)$, notations for the second derivative include $\frac{d^2y}{dx^2}$, $f''(x)$, and y''. Higher order derivatives can be denoted $\frac{d^ny}{dx^n}$ or $f^{(n)}(x)$.	p. 124 (Introduction to notation) pp. 216-219 (Second Derivative Test for Local Extrema)	1
EU 2.2: A function's derivative, which is itself a function, can be used to understand the behavior of the function.	**LO 2.2A:** Use derivatives to analyze properties of a function.	**EK 2.2A1:** First and second derivatives of a function can provide information about the function and its graph including intervals of increase or decrease, local (relative) and global (absolute) extrema, intervals of upward or downward concavity, and points of inflection.	pp. 204-205 (Increasing and Decreasing Functions) pp. 211-216 (First Derivative Test for Local Extrema) pp. 216-219 (Second Derivative Test for Local Extrema) pp. 213-214 (Concavity) pp. 214-216 (Point of Inflection)	1
		EK 2.2A2: Key features of functions and their derivatives can be identified and related to their graphical, numerical, and analytical representations.	pp. 204-205 (Increasing and Decreasing Functions) pp. 211-216 (First Derivative Test for Local Extrema) pp. 216-219 (Second Derivative Test for Local Extrema) pp. 213-214 (Concavity) pp. 214-216 (Point of Inflection)	1
		EK 2.2A3: Key features of the graphs of f, f', and f'' are related to one another.	pp. 204-205 (Increasing and Decreasing Functions) pp. 211-216 (First Derivative Test for Local Extrema) pp. 216-219 (Second Derivative Test for Local Extrema) pp. 213-214 (Concavity) pp. 214-216 (Point of Inflection, for example: figure 5.30)	1
		EK 2.2A4: (BC) For a curve given by a polar equation $r = f(\theta)$, derivatives of r, x, and y with respect to θ and first and second derivatives of y with respect to x can provide information about the curve.	pp. 563-566 (Polar Curves)	1

	LO 2.2B: Recognize the connection between differentiability and continuity.	**EK 2.2B1:** A continuous function may fail to be differentiable at a point in its domain.	pp. 111-112 (How f'(a) Might Fail to Exist)	1
		EK 2.2B2: If a function is differentiable at a point, then it is continuous at that point.	p. 115 (Differentiability Implies Continuity)	1
EU 2.3: The derivative has multiple interpretations and applications including those that involve instantaneous rates of change.	**LO 2.3A:** Interpret the meaning of a derivative within a problem.	**EK 2.3A1:** The unit for $f'(x)$ is the unit for f divided by the unit for x.	Implicitly reinforced throughout, but not included in instruction. See example 1 © on p. 129.	1
		EK 2.3A2: The derivative of a function can be interpreted as the instantaneous rate of change with respect to its independent variable.	pp. 59-60 (Rate of Change) p. 129 (Definition for instantaneous rate of change)	1
	LO 2.3B: Solve problems involving the slope of a tangent line.	**EK 2.3B1:** The derivative at a point is the slope of the line tangent to a graph at that point on the graph.	pp. 88-89 (Tangent)	1
		EK 2.3B2: The tangent line is the graph of a locally linear approximation of the function near the point of tangency.	pp. 88-89 (Tangent) pp. 238-240 (linear approximation)	1
	LO 2.3C: Solve problems involving related rates, optimization, rectilinear motion, **(BC)** and planar motion.	**EK 2.3C1:** The derivative can be used to solve rectilinear motion problems involving position, speed, velocity, and acceleration.	pp. 130-131 (Velocity) Examples included throughout text (chapters 3-5) BC: pp. 553-557 (Modeling Planar Motion)	1

		EK 2.3C2: The derivative can be used to solve related rates problems, that is, finding a rate at which one quantity is changing by relating it to other quantities whose rates of change are known.	pp. 252-260 (Related Rates)	1
		EK 2.3C3: The derivative can be used to solve optimization problems, that is, finding a maximum or minimum value of a function over a given interval.	pp. 224-237 (Modeling and Optimization)	1
		EK 2.3C4: (BC) Derivatives can be used to determine velocity, speed, and acceleration for a particle moving along curves given by parametric or vector-valued functions.	pp. 554-~~556~~ 567 (Velocity, Acceleration, and Speed)	
	LO 2.3D: Solve problems involving rates of change in applied contexts.	**EK 2.3D1:** The derivative can be used to express information about rates of change in applied contexts.	pp. 59-60 (Rate of Change) pp. 358-368 (Exponential Growth and Decay) pp. 252-261 (Related Rates)	1
	LO 2.3E: Verify solutions to differential equations.	**EK 2.3E1:** Solutions to differential equations are functions or families of functions.	pp. 329-333 (Differential Equations)	1
		EK 2.3E2: Derivatives can be used to verify that a function is a solution to a given differential equation.	pp. 329-333 (Differential Equations) p. 339 (exercises 75-76)	1
	LO 2.3F: Estimate solutions to differential equations.	**EK 2.3F1:** Slope fields provide visual clues to the behavior of solutions to first order differential equations.	pp. 331-338 (Slope Fields)	1

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		EK 2.3F2: (BC) For differential equations, Euler's method provides a procedure for approximating a solution or a point on a solution curve.	pp. 329-339 (Slope Fields and Euler's Method)	1
EU 2.4: The Mean Value Theorem connects the behavior of a differentiable function over an interval to the behavior of the derivative of that function at a particular point in the interval.	**LO 2.4A:** Apply the Mean Value Theorem to describe the behavior of a function over an interval.	**EK 2.4A1:** If a function f is continuous over the interval $[a, b]$ and differentiable over the interval (a, b), the Mean Value Theorem guarantees a point within that open interval where the instantaneous rate of change equals the average rate of change over the interval.	pp. 295-296 (Mean Value Theorem for Definite Integrals)	1

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Big Idea 3: Integrals and the Fundamental Theorem of Calculus Integrals are used in a wide variety of practical and theoretical applications. AP Calculus students should understand the definition of a definite integral involving a Riemann sum, be able to approximate a definite integral using different methods, and be able to compute definite integrals using geometry. They should be familiar with basic techniques of integration and properties of integrals. The interpretation of a definite integral is an important skill, and students should be familiar with area, volume, and motion applications, as well as with the use of the definite integral as an accumulation function. It is critical that students grasp the relationship between integration and differentiation as expressed in the Fundamental Theorem of Calculus — a central idea in AP Calculus. Students should be able to work with and analyze functions defined by an integral.				
Enduring Understandings (Students will understand that...)	**Learning Objectives** (Students will be able to...)	**Essential Knowledge** (Students will know that...)		
EU 3.1: Antidifferentiation is the inverse process of differentiation.	**LO 3.1A:** Recognize antiderivatives of basic functions.	**EK 3.1A1:** An antiderivative of a function f is a function g whose derivative is f.	pp. 206-207 (Antiderivative) pp. 296-298 (Connecting Differential and Integral Calculus	1
		EK 3.1A2: Differentiation rules provide the foundation for finding antiderivatives.	pp. 206-207 (Antiderivative) pp. 296-298	1
EU 3.2: The definite integral of a function over an interval is the limit of a Riemann sum over that interval and can be calculated using a variety of strategies	**LO 3.2A(a):** Interpret the definite integral as the limit of a Riemann sum.	**EK 3.2A1:** A Riemann sum, which requires a partition of an interval , is the sum of products, each of which is the value of the function at a point in a subinterval multiplied by the length of that subinterval of the partition.	pp. 281-283 (Riemann Sums)	1

	LO 3.2A(b): Express the limit of a Riemann sum in integral notation.	**EK 3.2A2:** The definite integral of a continuous function f over the interval $[a, b]$, denoted by $\int_a^b f(x)dx$, is the limit of Riemann sums as the widths of the subintervals approach 0. That is, $\int_a^b f(x)dx = \lim_{\max \Delta x_i \to 0} \sum_{i=1}^{n} f(x_i^*)\Delta x_i$ where x_i^* is a value in the ith subinterval, Δx_i is the width of the ith subinterval, n is the number of subintervals, and $\max \Delta x_i$ is the width of the largest subinterval. Another form of the definition is $\int_a^b f(x)dx = \lim_{n \to \infty} \sum_{i=1}^{n} f(x_i^*)\Delta x_i$, where $\Delta x_i = \frac{b-a}{n}$ and x_i^* is a value in the ith subinterval.	pp. 281-292 (Definite Integrals) p. 283 (definition without integral notation and definition of delta x sub i) p. 284 (Evaluating Integrals)	1
		EK 3.2A3: The information in a definite integral can be translated into the limit of a related Riemann sum, and the limit of a Riemann sum can be written as a definite integral.	pp. 284-285 (Example 1)	1
	LO 3.2B: Approximate a definite integral.	**EK 3.2B1:** Definite integrals can be approximated for functions that are represented graphically, numerically, algebraically, and verbally.	pp. 281-292 (Definite Integrals) pp. 293-294 (Properties of Definite Integrals)	1
		EK 3.2B2: Definite integrals can be approximated using a left Riemann sum, a right Riemann sum, a midpoint Riemann sum, or a trapezoidal sum; approximations can be computed using either uniform or nonuniform partitions.	pp. 285-286 (Example 2) pp. 272-273 (Rectangular Approximation Method) p. 326 (#53) pp. 293-294 (Properties of Definite Integrals) pp. 314-319 (Trapezoidal Rule)	1

	LO 3.2C: Calculate a definite integral using areas and properties of definite integrals.	**EK 3.2C1:** In some cases, a definite integral can be evaluated by using geometry and the connection between the definite integral and area.	pp. 281-292 (Definite Integral) pp. 293-300 (Definite Integral and Antiderivatives)	1
		EK 3.2C2: Properties of definite integrals include the integral of a constant times a function, the integral of the sum of two functions, reversal of limits of integration, and the integral of a function over adjacent intervals.	pp. 293-294 (Properties of Definite Integrals) pp. 349-352 (Integration by Part Formula)	1
		EK 3.2C3: The definition of the definite integral may be extended to functions with removable or jump discontinuities.	pp. 289-290 (Exploration using numerical integration on a calculator) --Lack of instructional support within text	0
	LO 3.2D: (BC) Evaluate an improper integral or show that an improper integral diverges.	**EK 3.2D1:** (BC) An improper integral is an integral that has one or both limits infinite or has an integrand that is unbounded in the interval of integration.	pp. 467-477 (Improper Integrals)	1
		EK 3.2D2: (BC) Improper integrals can be determined using limits of definite integrals.	pp. 467-477 (Improper Integrals)	1

EU 3.3: The Fundamental Theorem of Calculus, which has two distinct formulations, connects differentiation and integration.	**LO 3.3A:** Analyze functions defined by an integral.	**EK 3.3A1:** The definite integral can be used to define new functions; for example, $f(x)=\int_b^x e^{-t^2}dt$.	p. 288 (Accumulator function introduces this notation) pp. 302-313 (Fundamental Theorem of Calculus) pp. 385-388 (as part of linear motion discussion)	1
		EK 3.3A2: If f is a continuous function on the interval $[a, b]$, then $\frac{d}{dx}\left(\int_a^x f(t)dt\right)=f(x)$, where x is between a and b.	pp. 296-297 (Connecting Differential and Integral Calculus) pp. 302-307 (Fundamental Theorem of Calculus, Antiderivatives)	1
		EK 3.3A3: Graphical, numerical, analytical, and verbal representations of a function f provide information about the function g defined as $g(x)=\int_a^x f(t)dt$.	pp. 302-313 (Fundamental Theorem of Calculus) Especially 309-310 (Analyzing Antiderivatives)	1
	LO 3.3B(a): Calculate antiderivatives.	**EK 3.3B1:** The function defined by $F(x)=\int_a^x f(t)dt$ is an antiderivative of f.	pp. 302-313 (Fundamental Theorem of Calculus)	1
	LO 3.3B(b): Evaluate definite integrals.	**EK 3.3B2:** If f is continuous on the interval $[a, b]$ and F is an antiderivative of f, then $\int_a^b f(x)dx=F(b)-F(a)$.	pp. 307-310 (Fundamental Theorem of Calculus, Evaluation Part)	1
		EK 3.3B3: The notation $\int f(x)dx=F(x)+C$ means that $F'(x)=f(x)$, and $\int f(x)dx$ is called an indefinite integral of the function f.	p. 340p. (Indefinite Integrals)	1
		EK 3.3B4: Many functions do not have closed form antiderivatives.	Not explicit anywhere in text.	0

		EK 3.3B5: Techniques for finding antiderivatives include algebraic manipulation such as long division and completing the square, substitution of variables, (BC) integration by parts, and nonrepeating linear partial fractions.	pp. 302-313 (The Fundamental Theorem of Calculus) pp. 340-348 (Antiderivatives by Substitution) p. 487 (Term-by-Term Integration) BC: pp. 349-354 (Integration by Parts) pp. 369-372 (Partial Fractions)	1
EU 3.4: The definite integral of a function over an interval is a mathematical tool with many interpretations and applications involving accumulation.	**LO 3.4A:** Interpret the meaning of a definite integral within a problem.	**EK 3.4A1:** A function defined as an integral represents an accumulation of a rate of change.	pp. 385-392 (Accumulation and Net Change)	1
		EK 3.4A2: The definite integral of the rate of change of a quantity over an interval gives the net change of that quantity over that interval.	p. 390 (Net Change)	1
		EK 3.4A3: The limit of an approximating Riemann sum can be interpreted as a definite integral.	pp. 281-292 (The Definite Integral), especially 283	1
	LO 3.4B: Apply definite integrals to problems involving the average value of a function.	**EK 3.4B1:** The average value of a function f over an interval $[a, b]$ is $\frac{1}{b-a}\int_a^b f(x)dx$.	pp. 294-295 (Average Value of a Function)	1
	LO 3.4C: Apply definite integrals to problems involving motion.	**EK 3.4C1:** For a particle in rectilinear motion over an interval of time, the definite integral of velocity represents the particle's displacement over the interval of time, and the definite integral of speed represents the particle's total distance traveled over the interval of time.	pp. 385-387 (Linear Motion Revisited) pp. 390-392 (Net Change, Density, Work)	1

		EK 3.4C2: (BC) The definite integral can be used to determine displacement, distance, and position of a particle moving along a curve given by parametric or vector-valued functions.	pp. 550-560 (Vectors in the Plane) p. 576 (Exercises 47-49)	1
	LO 3.4D: Apply definite integrals to problems involving area, volume, **(BC)** and length of a curve.	**EK 3.4D1:** Areas of certain regions in the plane can be calculated with definite integrals. (BC) Areas bounded by polar curves can be calculated with definite integrals	pp. 397-399 (Area Between Curves) BC: pp. 566-568 (areas bounded by polar curves)	1
		EK 3.4D2: Volumes of solids with known cross sections, including discs and washers, can be calculated with definite integrals.	pp. 406-418 (Volumes) p. 411 (Volume Using Cylindrical Shell, Example 6)	1
		EK 3.4D3: (BC) The length of a planar curve defined by a function or by a parametrically defined curve can be calculated using a definite integral.	pp. 544- 545 (Arc Length) p. 548 (Examples 43-44)	1
	LO 3.4E: Use the definite integral to solve problems in various contexts.	**EK 3.4E1:** The definite integral can be used to express information about accumulation and net change in many applied contexts.	pp. 385-396 (Accumulation and Net Change) pp. 427-433 (Applications from Science and Statistics)	1

EU 3.5: Antidifferentiation is an underlying concept involved in solving separable differential equations. Solving separable differential equations involves determining a function or relation given its rate of change.	**LO 3.5A:** Analyze differential equations to obtain general and specific solutions.	**EK 3.5A1:** Antidifferentiation can be used to find specific solutions to differential equations with given initial conditions, including applications to motion along a line, exponential growth and decay, **(BC)** and logistic growth.	p. 393 (Differential equations with initial conditions) pp. 358-363 (Exponential Growth and Decay) BC: pp. 369-378 (Logistic Growth)	1
		EK 3.5A2: Some differential equations can be solved by separation of variables.	p. 358 (Separable Differential Equations)	1
		EK 3.5A3: Solutions to differential equations may be subject to domain restrictions.	p. 339 (Exercises 75-76) pp. 369-378 (Logistic Growth)	1
		EK 3.5A4: The function F defined by $F(x) = c + \int_a^x f(t)dt$ is a general solution to the differential equation $\frac{dy}{dx} = f(x)$, and $F(x) = y_0 + \int_a^x f(t)dt$ is a particular solution to the differential equation $\frac{dy}{dx} = f(x)$ satisfying $F(a) = y_0$.	pp. 329-331 (Differential Equations)	1
	LO 3.5B: Interpret, create and solve differential equations from problems in context.	**EK 3.5B1:** The model for exponential growth and decay that arises from the statement "The rate of change of a quantity is proportional to the size of the quantity" is $\frac{dy}{dt} = ky$.	pp. 369-378 (Logistic Growth) pp. 358-367 (Exponential Growth and Decay)	1
		EK 3.5B2: (BC) The model for logistic growth that arises from the statement "The rate of change of a quantity is jointly proportional to the size of the quantity and the difference between the quantity and the carrying capacity" is $\frac{dy}{dt} = ky(a - y)$.	pp. 374-375 (Logistic Growth Models)	1

Standards and Learning Indicators			Publisher/Provider: List units/lessons with specific examples of where standards are Introduced/Taught/Assessed.	Point Value 0/.5/1 (Reviewer)
Big Idea 4: Series (BC) The AP Calculus BC curriculum includes the study of series of numbers, power series, and various methods to determine convergence or divergence of a series. Students should be familiar with Maclaurin series for common functions and general Taylor series representations. Other topics include the radius and interval of convergence and operations on power series. The technique of using power series to approximate an arbitrary function near a specific value allows for an important connection to the tangent-line problem and is a natural extension that helps achieve a better approximation. The concept of approximation is a common theme throughout AP Calculus, and power series provide a unifying, comprehensive conclusion.				
Enduring Understandings (Students will understand that…)	**Learning Objectives** (Students will be able to…)	**Essential Knowledge** (Students will know that…)		
EU 4.1: The sum of an infinite number of real numbers may converge.	**LO 4.1A:** Determine whether a series converges or diverges.	**EK 4.1A1:** The nth partial sum is defined as the sum of the first n terms of a sequence.	pp. 482-483 (Partial Sum)	1
		EK 4.1A2: An infinite series of numbers converges to a real number S (or has sum S), if and only if the limit of its sequence of partial sums exists and equals S.	pp. 482-483 (Partial Sum)	1
		EK 4.1A3: Common series of numbers include geometric series, the harmonic series, and p-series.	p. 483 (Example 3) p. 524 (Harmonic Series and P-Series)	1
		EK 4.1A4: A series may be absolutely convergent, conditionally convergent, or divergent.	p. 516 (Absolute Convergence) pp. 528-529 (Absolute and Conditional Convergence) p. 533 (flowchart: procedure for determining convergence) p. 482 (Divergent Series-Example 1)	1
		EK 4.1A5: If a series converges absolutely, then it converges.	pp. 516-517 (Theorem 8)	1

		EK 4.1A6: In addition to examining the limit of the sequence of partial sums of the series, methods for determining whether a series of numbers converges or diverges are the nth term test, the comparison test, the limit comparison test, the integral test, the ratio test, and the alternating series test. **EXCLUSION STATEMENT (EK 4.1A6):** *Other methods for determining convergence or divergence of a series of numbers are not assessed on the AP Calculus AB or BC Exam. However, teachers may include these topics in the course if time permits.*	p. 523 (Integral Test) p. 515 (nth-Term Test) p. 515 (Comparison Test, Direct) pp. 525-526 (Limit Comparison Test) pp. 527-528 (Alternating Series) pp. 516-518 (The Ratio Test)	1
	LO 4.1B: Determine or estimate the sum of a series.	**EK 4.1B1:** If a is a real number and r is a real number such that $\lvert r\rvert < 1$, then the geometric series $\sum_{n=0}^{\infty} ar^n = \frac{a}{1-r}$.	pp. 481-484 (Geometric Series)	1
		EK 4.1B2: If an alternating series converges by the alternating series test, then the alternating series error bound can be used to estimate how close a partial sum is to the value of the infinite series.	p. 504 (Alternating Series Error Bound) p. 528 (Alternating Series Error Bound Theorem)	1
		EK 4.1B3: If a series converges absolutely, then any series obtained from it by regrouping or rearranging the terms has the same value.	pp. 528-529 (Rearrangements)	1

EU 4.2: A function can be represented by an associated power series over the interval of convergence for the power series.	**LO 4.2A:** Construct and use Taylor polynomials.	**EK 4.2A1:** The coefficient of the nth-degree term in a Taylor polynomial centered at $x=a$ for the function f is $\frac{f^{(n)}(a)}{n!}$.	pp. 495-498 (Maclaurin and Taylor Series)	1
		EK 4.2A2: Taylor polynomials for a function f centered at $x=a$ can be used to approximate function values of f near $x=a$.	Examples and explorations on pp. 496-497 build to definition. pp. 503-509 (Taylor's Theorem)	1
		EK 4.2A3: In many cases, as the degree of a Taylor polynomial increases, the nth-degree polynomial will converge to the original function over some interval.	pp. 503-509 (Taylor's Theorem)	1
		EK 4.2A4: The Lagrange error bound can be used to bound the error of a Taylor polynomial approximation to a function.	p. 505 (Lagrange Error Bound)	1
		EK 4.2A5: In some situations where the signs of a Taylor polynomial are alternating, the alternating series error bound can be used to bound the error of a Taylor polynomial approximation to the function.	p. 504 (Alternating Series Error Bound)	1
	LO 4.2B: Write a power series representing a given function.	**EK 4.2B1:** A power series is a series of the form $\sum_{n=0}^{\infty} a_n(x-r)^n$ where n is a non-negative integer, $\{a_n\}$ is a sequence of real numbers, and r is a real number.	p. 484 (Power Series-Definition)	1
		EK 4.2B2: The Maclaurin series for $\sin(x)$, $\cos(x)$, and e^x provide the foundation for constructing the Maclaurin series for other functions.	pp. 493-494 (Series for sinx and cosx) p. 499 (e^x used in example)	1

		EK 4.2B3: The Maclaurin series for $\frac{1}{1-x}$ is a geometric series.	p. 499 (Table) p. 504 (Example 2)	
		EK 4.2B4: A Taylor polynomial for $f(x)$ is a partial sum of the Taylor series for $f(x)$.	p. 482 (Partial Sum) pp. 495-496 (Maclaurin and Taylor Series, definition at top of 496)	1
		EK 4.2B5: A power series for a given function can be derived by various methods (e.g., algebraic processes, substitutions, using properties of geometric series, and operations on known series such as term-byterm integration or term-by-term differentiation).	p. 484-4885 (Representing Functions by Series, includes examples using integration and differentiation)	1
	LO 4.2C: Determine the radius and interval of convergence of a power series.	**EK 4.2C1:** If a power series converges, it either converges at a single point or has an interval of convergence.	p. 483 pp. 485-488 (Intro to convergence and interval of convergence) p. 514 (Radius of Convergence and Interval of Convergence)	1
		EK 4.2C2: The ratio test can be used to determine the radius of convergence of a power series.	p. 516-518 (Ratio Test)	1
		EK 4.2C3: If a power series has a positive radius of convergence, then the power series is the Taylor series of the function to which it converges over the open interval.	pp. 492-502 (Taylor's Series)	1
		EK 4.2C4: The radius of convergence of a power series obtained by term-by-term differentiation or term-by-term integration is the same as the radius of convergence of the original power series.	pp. 492-502 (Taylor's Series) pp. 518-520 (Examples 4-7)	1

Formatted Table

Please double check the material's alignment to standards.

Advanced Placement Standards: _____%-98% correlation

If the material aligns with at least an 80%, move on to: **Material Analysis. If the material has less than an 80% alignment, please notify your team leader.

Indicators of Quality:

Indicators of Quality	Evidence- Give specific examples.	Rating: (Reviewer only.)
1. Lessons are thoughtfully structured and support the teacher in leading the class through the learning paths at hand, with active participation by all students in their own learning and in the learning of their classmates.	Evidence- This text is aligned to College Board standards for calculus AB/BC. The scope and sequence of the content is well organized and comprehensive. It allows students to build on prior knowledge, to be successful in AP Calculus, and to prepare for future math courses. The objectives covered require students to use higher level cognitive skills. This includes analyzing problems (and found solutions) for reasonability, completing exercises in a step-by-step manner, and applying knowledge and skills to real-world applications.	(Reviewer only.) X Yes _____ No
2. The underlying design of the materials includes both problems and exercises. (In solving problems, students learn new mathematics, whereas in working exercises, students apply what they have already learned to build mastery.) Each problem or exercise has a purpose. NOTE: This Criterion does not require that the problems and exercises be labeled as such.	Evidence- Instructional plans and teaching suggestions provide for efficient adaptation of materials to a variety of learning styles. Examples, explorations, and exercises support student learning. Examples and explorations provide scaffolded support for working through new mathematics, and in applying previously learned skills. Exercises at the end of each lesson provide students an opportunity to apply new knowledge and build mastery, attending to the concept of "problem" and "exercise" defined to the left. The program supports students as they learn. Additional support is available for students, if required. Concepts are presented in a clear manner, which allow students to refer back to previous lessons to reinforce learning.	(Reviewer only.) X Yes _____ No
3. Design of assignments is not haphazard: exercises are given in intentional sequences in order to strengthen students' mathematical understanding.	Evidence- The exercise sets are exhaustive, and the sequencing is purposeful. The text provides current practice that successfully prepares students for the AP examination.	(Reviewer only.) X Yes _____ No

4. There are separate teacher materials that support and reward teacher study including, but not limited to: discussion of the mathematics of the units and the mathematical point of each lesson as it relates to the organizing concepts of the unit, discussion on student ways of thinking and anticipating a variety of students responses, guidance on lesson flow, guidance on questions that prompt students thinking, and discussion of desired mathematical behaviors being elicited among students.	Evidence- A separate and complete teacher edition is provided for this text. The notes, worked exercises, and teacher notes provide guidance, and reward teacher study in preparation for each unit.	(Reviewer only.) X Yes _____ No
5. Manipulatives suggested in the materials are faithful representations of the mathematical objects they represent and are connected to written methods.	Evidence- Not applicable to this course.	(Reviewer only.) _____ Yes X No
6. Materials include a variety of curriculum-embedded assessments. Examples include pre-, formative, summative, and self-assessment resources.	Evidence- The text includes review assignments and quick checks, usually at the end of each unit. Summative assessments are not included, although this curriculum adoption does include TestGen support for full adopters. Students can self asses with selected answers available for each unit.	(Reviewer only.) X Yes _____ No
7. Assessments contain aligned rubrics, answer keys, and scoring guidelines that provide sufficient guidance for interpreting student performance.	Evidence- Not included.	(Reviewer only.) _____ Yes X No
8. Materials assess student proficiency using methods that are accessible and unbiased, including the use of course-level language in student prompts.	Evidence- Throught the text, vocabulary is in bold print, which helps students develop background knowledge. Language used throughout the text is high school appropriate. Exercises progress in skill level through each set of problems. The real world problems in the text are written to provide background knowledge for learners, supporting those that may not have context. The text features examples, exercises, and marginalia that highlight accomplishments and contributions by mathematicians from a variety of backgrounds.	(Reviewer only.) X Yes _____ No

9. Materials are carefully evaluated by qualified individuals, whose names are listed, in an effort to ensure freedom from mathematical errors and course-level appropriateness.	**Evidence- Yes. Indicated in the front of the text.**	**(Reviewer only.)** **X Yes** **_____ No**
10. The visual design supports students in engaging thoughtfully with the subject. Navigation through the text is clear.	**Evidence- The overall design supports student learning. Emphasized text, judicious use of color, and clear representations of mathematics exist throughout.**	**(Reviewer only.)** **X Yes** **_____ No**

COMMENTS: Perason: Calculus: Graphical, Numerical, Algebraic Fifth Edition is a complete curriculum that will help teachers prepare students for mastery in college level mathematics, and on the AP examination (AB/BC).

Strengths:

-Logical, consistent, thorough
-Designed for AP success on both the AB and BC calculus exams
-Optional MathXL is very good for providing additional practice with limited computer tutoring

Weakness:

-Does not explore or highlight technology that does not require institutional or student purchase (features graphing calculators, but not tools like Desmos or Geogebra)

2015-16 Mathematics Interim Review Recommendation & Summary

Publisher Name:	Pearson Education Inc
Title:	Elementary Statistics: Picturing The World
ISBN #	9780133541441
Grade Level(s) or Course:	9-12
Reviewer ID:	CG, KD

RECOMMENDED AS:

___X___**Core Mathematics Program-** a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials. Substantial evidence clearly supports the designation of this program as Core.

_____**Other Mathematics Program-** a program that substantially, but partially, meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for supplemental materials. Substantial evidence clearly supports the designation of this program as Other.

_____**Component Mathematics Program-** a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs. Substantial evidence clearly supports the designation of this program as Component.

_____**Intervention Program-** a program designed and intended to target and support students' specific needs. Substantial evidence clearly supports the designation of this program as Intervention.

_____ **Does not meet criteria** for recommendation as a Curricular Material or Online Resource for Mathematics.

EVIDENCE SUMMARY:

FOCUS-

The text hits all HS Statistics and Probability CCSS, plus the following WAP from previous courses: N.Q.1, 2, 3, A.CED.1, 2, 3, 4, A.REI. 1, 2, 3, 4. Student work in Geometry does involve a large amount of work with graphs, geometric representation of functions and distributions, and geometric probability. All content in the text is based on the content specified in the CCSS.

COHERENCE-

The content within this text extends students knowledge through HS appropriate problems of topics covered in grades 6-8. (Mean, Median, Mode) There is a logical and typical progression: It first introduces data and its collecting techniques, then moves into classification of data, from there it progresses to the distribution of data and the graphs. Then using those graphs and distributions, students evaluate and analyze the data. Next they introduce students to probability and how to determine basic independence, then developing a conceptual understanding of probability distributions. Using the probability distributions, the text relates correlation and regression. Each chapter provides review tests, data sets, technology use, and different types of questions in a logical progression. Domain and clusters from the CCSS are connected throughout text.

RIGOR-

The text features examples and practice problems that are aligned to an appropriate level of rigor for a HS statistics level course. Procedural fluency is attained by the guidelines and examples given in each lesson. Homework follows the format of building vocab and necessary skills for fluency, then moves into interpreting concepts to build a conceptual understanding, and then into extending concepts to cement a conceptual understanding. The text focuses heavily on contextual problems (Uses and Abuses) to help students gain a conceptual understanding of the WAP. The text does include non-routine problems designed to develop the mathematics of the course.

CONCEPTUAL UNDERSTANDING-

Each chapter/lesson builds on the development of student's conceptual understanding of the CCSS for statistics and probability. The text builds vocabulary throughout with real world modeling and applications of mathematical reasoning to enhance learning on a deeper level. Every section has interpreting results and extending concepts. The application problems are designed to connect what students have learned in that section, as well as connecting to previously learned concepts earlier in the text/previous courses.

MATHEMATICAL PRACTICES-

The text meets all mathematical practice standards; however the text does not explicitly ask students to critique the work of other students in their class. Students are asked to critique the work of statistics of the real world. See AC Metric 2A for specific examples of how each practice standard is met.

ACCESSIBILITY OF STANDARDS TO ALL STUDENTS-

Learning objectives are written in student language that is visibly shaped by the CCSM cluster and domain headings. There is no explicit help for ELL students. There is scaffolding built in to help all learners and videos of extra problems are provided. The text provides many strategies worked out to solve problems. Many graphs and visuals are used in the book to help all learners.

OTHER:

This text is being recommended as a core program. The text covers all required standards for HS Statistics and Probability. Lessons are thoughtfully structured. Each lesson builds on previous knowledge. This text does not explicitly allow for students to critique the work of other students in the class. The text is heavily based on individual work. Students must read the text for information. The text assumes that students have strong reading and reasoning skills. The text comes with a provided DVD and one year subscription for students to MyMathXLlab. These subscription are compatible with iPads and tablets, each student is required to have their own subscription. MathXL allows teachers to create test and quizzes from a bank of questions.

2015-16 Interim Mathematics Review

Mathematics Evaluation Tool – High School

Publisher: Pearson Education, Inc.

Title of Material: Elementary Statistics picturing the world

Author: Larson, Farber

ISBN #: 9780133541441 **Copyright** 2015

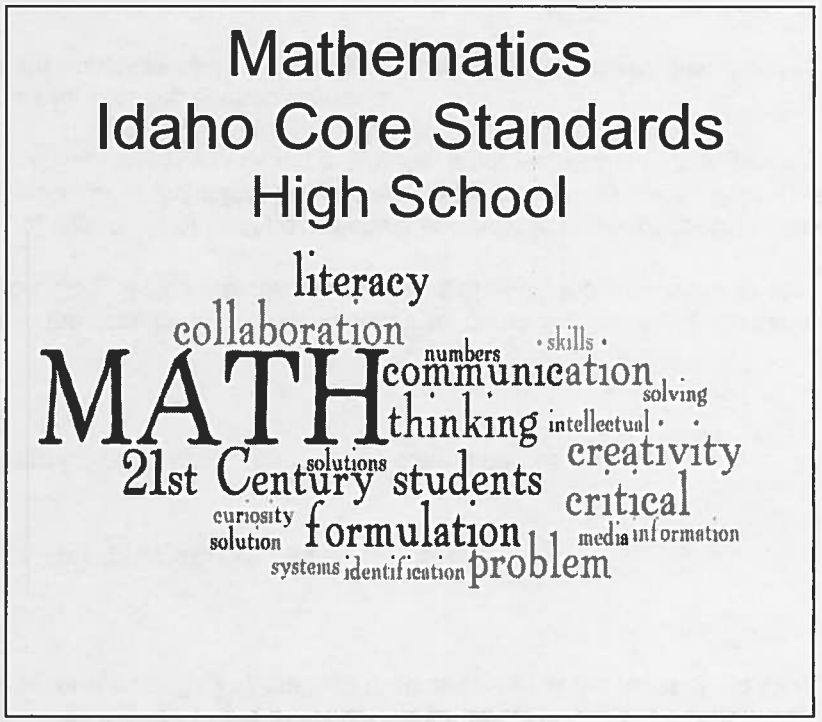
Reviewer ID: KD, CG

Core Mathematics Program- a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Core.

Other Mathematics Program- a program that substantially, but partially, meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Other.

Component Mathematics Program- a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs.
Substantial evidence clearly supports the designation of this program as Component.

Intervention Program- a program designed and intended to target and support students' specific needs.
Substantial evidence clearly supports the designation of this program as Intervention.



- Evaluation Form adapted from Instructional Materials Evaluation Toolkit (IMET).

The IMET was developed by Student Achievement Partners. Educators may use or adapt. http://creativecommons.org/licenses/by/3.0/ Download this tool at http://achievethecore.org/IMET

Instructional Materials Evaluation Tool
Mathematics, High School

What Are the Purposes of the IMET?
This Math IMET is designed to help educators determine whether instructional materials are aligned to the Shifts and major features of the Common Core State Standards (CCSS). The substantial instructional Shifts (http://www.corestandards.org/other-resources/key-shifts-in-mathematics/) at the heart of the Common Core State Standards are:
- **Focus** strongly where the Standards focus
- **Coherence**: Think across grades and link to major topics within the grade
- **Rigor**: In major topics, pursue conceptual understanding, procedural skill and fluency, and application with equal intensity.

The IMET draws directly from the following documents:
- Common Core State Standards for Mathematics (www.corestandards.org/Math)
- Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013) (http://www. corestandards.org/wp-content/uploads/Math_Publishers_Criteria_ HS_Spring_2013_FINAL1.pdf)

When to use the IMET
1. Purchasing materials: Many factors go into local purchasing decisions. Alignment to the Standards is a critical factor to consider. This tool is designed to evaluate alignment of instructional materials to the Shifts and the major features of the CCSS. It also provides suggestions of additional indicators to consider in the materials evaluation and purchasing process
2. Evaluating materials currently in use: The IMET can be used to analyze the degree of alignment of existing materials and help to highlight specific, concrete flaws in alignment. Even where materials and tools currently in use fail to meet one or more of these criteria, the pattern of failure is likely to be informative. States and districts can use the evaluation to create a thoughtful plan to modify or combine existing resources in such a way that students' actual learning experiences approach the focus, coherence, and rigor of the Standards.
3. Developing programs: Those developing new programs can use this tool as guidance for creating aligned curricula.

Please note this tool was designed for evaluating comprehensive curricula (including any supplemental or ancillary materials), but it was not designed for the evaluation of standalone supplemental materials.

Who Uses the IMET?
Evaluating instructional materials requires both subject-matter and pedagogical expertise. Evaluators should be well versed in the Standards (www.corestandards.org/Math) for all grades in which materials are being evaluated. This includes understanding the Widely Applicable Prerequisites (www.achievethecore.org/prerequisites), how the content fits into the progressions in the Standards (www. achievethecore.org/progressions), and the expectations of the Standards with respect to conceptual understanding, procedural skill and fluency, and application. Evaluators also should be familiar with the substantial instructional Shifts (http://www.corestandards.org/other-resources/key-shifts-in-mathematics/) of Focus, Coherence and Rigor that are listed above.

Getting Started
Prior to Evaluation

Assemble all of the materials necessary for the evaluation. It is essential for evaluators to have materials for all grades covered by the program, as some criteria cannot be rated without having access to each grade. In addition, each evaluator should have a reference copy of the Common Core State Standards for Mathematics (CCSSM) and the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).

Before conducting the evaluation itself, it is important to develop a protocol for the evaluation process. The protocol should include having evaluators study the Publishers' Criteria and the IMET. It will also be helpful for evaluators to get a sense of each program overall before beginning the process. At a minimum, this would include reading the front matter of the text, looking at the table of contents and paging through multiple chapters.

Sections 1-3 below should be completed to produce a comprehensive picture of the strengths and weaknesses of the materials under evaluation. Information about areas in need of improvement or supplementation should be shared with internal and external stakeholders.

Navigating the Tool

Begin with Section 1: Non-Negotiable Alignment Criteria

- The Non-Negotiable Alignment Criteria must each be met in full for materials to be considered aligned to the Shifts and the major features of the Common Core State Standards. Each Non-Negotiable Alignment Criterion has one or more metrics associated with it; every one of these metrics must be met in order for the criterion as a whole to be met.

- Examine the relevant materials and use evidence to rate the materials against each criterion and its associated metric(s).

- Record and explain the evidence upon which the rating is based.

Continue to Section 2: Alignment Criteria

- The Alignment Criteria must each be met for materials to be considered aligned to the Shifts and the major features of the Common Core State Standards. Each Alignment Criterion has one or more metric associated with it; a specific number of these metrics must be met or partially met in order for the criterion as a whole to be met.

- Examine the materials in relation to these criteria, assigning each metric a point value. Rate the criterion as "Meets" or "Does Note Meet" based on the number of points assigned. The more points the materials receive on the alignment Criteria, the better they are aligned.

- Record and explain the evidence upon which the rating is based.

Proceed to Section 4: Indicators of Quality

- Indicators of Quality are important considerations that will help evaluators better understand the overall quality of instructional materials. These considerations are not criteria for alignment to the CCSS, but they provide valuable information about additional program characteristics. Evaluators may want to add their own indicators to the examples provided.

Directions for Non-Negotiable 1

Focus and Coherence

Criterion	Evidence- Give specific examples.	Rating: (Reviewer only.)
Non-Negotiable 1: Focus and Coherence- Materials must focus coherently on the Widely Applicable Prerequisites in a way that is consistent with the progressions in the Standards. Focus and coherence are the two major evidence-based design principles of the Common Core State Standards for Mathematics (CCSSM, p. 3). Focus is necessary in order to fulfill the ambitious promise the states have made to their students by adopting the Standards: greater achievement at the college and career-ready level; greater depth of understanding of mathematics; and a rich classroom environment in which reasoning, sense-making, applications, and a range of mathematical practices flourish. In high school courses, narrowing and deepening the curriculum creates a structure that ties topics together. Thus, materials must focus coherently on the Widely Applicable Prerequisites in a way that is consistent with the progressions in the Standards.	Focus and coherence are the two major evidence-based design principles of the Common Core State Standards for Mathematics (CCSSM, p. 3). Focus is necessary in order to fulfill the ambitious promise the states have made to their students by adopting the Standards: greater achievement at the college and career-ready level; greater depth of understanding of mathematics; and a rich classroom environment in which reasoning, sense-making, applications, and a range of mathematical practices flourish. In high school courses, narrowing and deepening the curriculum creates a structure that ties topics together. Thus, materials must focus coherently on the Widely Applicable Prerequisites in a way that is consistent with the progressions in the Standards. **Required Materials:** • Common Core State Standards for Mathematics (www.corestandards.org/wpcontent/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_HS_Spring_2013_FINAL1.pdf) • Widely Applicable Prerequisites for College and Careers (http://achievethecore.org/prerequisites) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion:** Non-Negotiable 1 is rated as Meets or Does Not Meet. To rate Non-Negotiable 1, first rate Metrics 1A–1H. Each of these eight metrics must be rated as Meets in order for Non-Negotiable 1 to be rated as Meets. Rate each metric 1A–1H as Meets or Does Not Meet/Insufficient Evidence. If the evidence examined shows that the Criterion is met, then mark the Criterion as Meets. If the evidence examined shows that the Criterion is not met—or if there is insufficient evidence to make a determination—then mark the Criterion as Does Not Meet/Insufficient Evidence. Support all ratings with evidence.

Metric NN1A: **In any s e course, students spend at least 50% of their time on Widely Applicable Prerequisites.** **How to Find the Evidence:** Familiarize yourself with the Widely Applicable Prerequisites. Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, lessons, homework assignments, and assessments. (Evaluate both student and teacher materials.) Consider time spent on the Widely Applicable Prerequisites and judge qualitatively whether students and teachers using the materials as designed will devote the majority of time to the Widely Applicable Prerequisites For context, read Criterion #1 in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** Hits all HS Sta cs and Probability CCSS plus the following WAP from previous courses: N.Q.1,2, and 3, A.CED.1, 2, 3, and 4, A.REI.1, 2, 3 and 4. This can be seen in the following sections: 1.1, 2.3, 2.4, 6.1, 6.2, 7.5, 8.1, 8.2, 8.3	**__X__Meets** **____Does Not Meet Insufficient Evidence**
Metric NN1B: **Student work in Geometry involves significant work with applications/modeling and problems that use algebra skills.** **How to Find the Evidence:** Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, lessons, homework assignments, and assessments. (Evaluate both student and teacher materials. NOTE: Since Geometry contains relatively fewer Widely Applicable Prerequisites, this Criterion is important to help foster students' college and career readiness. Problems that use algebra skills might include, for example, algebraic geometry problems in a coordinate setting, or problems of measurement involving unknown quantities.	**Evidence-** Student work in geometry does involve a large amount of work with graphs, geometric representation of functions and distributions, and geometric probability. This can be seen in the following sections: 2.1- Histograms, frequency polygons 2.2- Stem and Leaf Plots, Dot Plots, Pareto Chart, Scatter Plots 4.1- Histograms 4.3 Geometric Distribution 5.1/2/3/4/5- Graphical representation of distributions 9.1- Correlation with scatter plots 9.2- Linear Regression 9.4- Multiple Regression Lines	**__X__Meets** **____Does Not Meet Insufficient Evidence**

Metric NN1C: **There are problems at a level of sophistication appropriate to high school (beyond mere review of middle school topics) that involve the application of knowledge and skills from grades 6-8.** **How to Find the Evidence:** Evaluate lessons, chapter/unit assessments, and homework assignments. NOTE: Problems should include application of the following topics from grades 6-8: • Ratios and proportional relationships. • Percentage and unit conversions, e.g., in the context of complex measurement problems involving quantities with derived or compound units (such as mg/mL, kg/ m3, acre-feet, etc.). • Basic function concepts, e.g., by interpreting the features of a graph in the context of an applied problem. • Concepts and skills of geometric measurement e.g., when analyzing a diagram or schematic. • Concepts and skills of basic statistics and probability (see grades 6–8.SP) • Performing rational number arithmetic fluently. For context, read Table 1 on Page 8 of the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** There are problems that extend students knowledge through high school appropriate problems of topics covered in grades 6-8. This can be seen as follows: Ratios and Proportional Relationships: Chap. 3, 4, 5 Percentage and Unit Conversions: All Chapters Basic Function Concepts: Chap. 2, 5 Geometric Measurement: Chap. 2, 4, 5, 9 Basic Statistics and Probability: Chap. 2, 3, 4, 5 Rational Number Arithmetic Fluency: All chapters except chapter 1.	**__X__Meets** **____Does Not Meet Insufficient Evidence**
Metric NN1D: **Materials base courses on the content specified in the Standards.** **How to Find the Evidence:** Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, and lessons in both student and teacher materials. For context, read Criterion #3a in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** The standards covered in this course are aligned to the content specified in the CCSS for Statistics and Probability. There is a logical and typical progression: It first introduces data and its collecting techniques, then moves into classification of data, from there it progresses to the distribution of data and the graphs. Then using those graphs and distributions, students evaluate and analyze the data. Next they introduce students to probability and how to determine basic independence, then developing a conceptual understanding of probability distributions. Using the probability distributions, the text relates correlation and regression.	**__X__Meets** **____Does Not Meet Insufficient Evidence**

Metric NN1E: **Materials give all students extensive work with course-level problems.** **How to Find the Evidence:** Evaluate both student and teacher materials. If the materials provide resources for differentiated learning, consider whether lower-performing students have opportunities to engage with course-level problems. Also consider whether higher-performing students are given opportunities to learn current course-level content in greater depth. For context, read Criterion #3b in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** Each chapter provides review tests, data sets, technology use, and different types of questions in a logical progression. Differentiation can be seen in guidelines given in each chapter to help all students access the content. For higher performing students each section has an "Extending Concepts" to allow them to delve deeper into the material.	**__X__Meets** **____Does Not Meet Insufficient Evidence**
Metric NN1F: **Materials relate course-level concepts explicitly to prior knowledge from earlier grades or courses. The materials are designed so that prior knowledge becomes reorganized and extended to accommodate the new knowledge.** **How to Find the Evidence:** Evaluate student and teacher materials, looking for problems that involve extending the knowledge learned in earlier grades and courses. NOTE: An example of evaluating this Criterion might be to look at whether materials connect the equation of a circle with the distance formula and the Pythagorean theorem. For context, read Criterion #3c in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** The text does explicitly relate prior knowledge from grades 6-8 about mean, median and mode as seen in section 2.3 of the text.	**__X_Meets** **____Does Not Meet Insufficient Evidence**
Metric NN1G: **Materials include learning objectives that are visibly shaped by CCSSM cluster and domain headings.** **How to Find the Evidence:** Select several clusters from the course being evaluated. Evaluate teacher and student materials in relation to these clusters. For context, read Criterion #4a in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** Learning objectives are written in student language that is visibly shaped by the CCSM cluster and domain heading. This can be seen as follows Cluster 1- 1.2, 1.3, 2.1, 2.2, 2.3, 5.5, 6.1, 6.2, 9.1, 9.3, 10.2 Cluster 2- 1.1, 1.2, 1.3, pg. 187 Cluster 3- 3.2, 3.3, pg 245 Cluster 4- 4.1 (2.1), 3.1, 5.1, 5.2	**__X__Meets** **____Does Not Meet Insufficient Evidence**

Metric NN1H: **Materials include problems and activities that serve to connect two or more clusters in a domain, or two or more domains in a category, or two or more categories, in cases where these connections are natural and important.** **How to Find the Evidence:** In the course being evaluated, choose two or more clusters, two or more domains, or two or more categories for which connections are natural and important. Evaluate the units, chapters, and lessons that deal with the chosen topics, looking for problems and activities that serve to connect the chosen clusters or domains. NOTE: An example of evaluating this Criterion might be to look at whether materials include problems in which students analyze a situation by building a function, graphing it, and using it to create and solve an equation. For context, read Criterion #4b in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** Cluster S.ID.2 s in chapter 1 indentifying classification of data through grouping and graphing. This then connects to cluster S.IC.1 in chapter 2. It uses data to find the mean, median, and mode, range of population, and creating graphs to show data. This can be seen in activity 2.3: Measures of Variation, and Interpreting Standard Deviation.	**__X__Meets** **____Does Not Meet Insufficient Evidence**
Non-Negotiable 1: Focus and Coherence- Materials must focus coherently on the Widely Applicable Prerequisites in a way that is consistent with the progressions in the Standards. **Metric NN 1:** If all metrics 1A–1H were rated as Meets, then rate Non-Negotiable 1 as Meets. If one or more metrics were rated as Does Not Meet/Insufficient Evidence, then rate Non-Negotiable 1 as Does Not Meet. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)** **Before moving to Alignment Criterion 1, record the final Meets or Does Not Meet rating in the Evaluation Summary.**		**__X__Meets** **____Does Not Meet** **Strengths/Weaknesses**

Now continue by evaluating Alignment Criterion 1 for Rigor and Balance.

Directions for Alignment Criterion 1

Rigor and Balance

Alignment Criterion 1: **Rigor and Balance- Materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.** The Standards set expectations for attention to all three aspects of rigor: conceptual understanding, procedural skill and fluency, and applications. Thus, materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.	The Standards set expectations for attention to all three aspects of rigor: conceptual understanding, procedural skill and fluency, and applications. Thus, materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations. • Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_HS_Spring_2013_FINAL1.pdf) • Widely Applicable Prerequisites for College and Careers (http://achievethecore.org/prerequisites) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion:** Alignment Criterion 1 is rated as Meets or Does Not Meet. To rate Alignment Criterion 1, first rate metrics 1A, 1B, and 1C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). For each metric, guiding questions are provided to aid in gathering evidence. Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 1 if the materials rate 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as rigor and balance, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.
AC Metric 1A: **The materials support the development of students' conceptual understanding of key mathematical concepts, especially where called for in specific content Standards or cluster headings.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Widely Applicable Prerequisites that relate specifically to conceptual understanding to use throughout the questions associated with this metric. NOTE: Some examples of clusters or Standards that call for conceptual understanding include: N-RN.A.1, A-APR.B, A-REI.A.1, A-REI.D.10, A.REI.D.11, F.IF.A.1, F-LE.A.1, G.SRT.A.2, G-SRT.C.6, S-ID.C.7 For context, read Criterion #2a in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	• Choose a cluster/Standard from the Widely Applicable Prerequisites that is aligned to each aspect of rigor and use it to evaluate these metrics. It is most helpful if the same clusters and Standards are chosen for all of the programs being evaluated. (Guidance in choosing clusters/Standards is included in "How to Find the Evidence" below.)	**Use the questions for AC Metric 1A to evaluate Metric 1A. Record evidence for each question and rate Metric 1A.** **__X__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Is conceptual understanding attended to thoroughly where the Standards set explicit expectations for understanding or interpreting? Evaluate lessons, chapter/unit assessments and homework assignments, paying attention to work aligned to Standards that explicitly call for understanding or interpreting.	**Evidence-** Each chapter/lesson builds on the development of student's conceptual understanding of the CCSS for statistics and probability. The text builds vocabulary throughout with real world modeling and applications of mathematical reasoning to enhance learning on a deeper level. Every section has interpreting results and extending concepts. This can be seen in 1.1 pg 6, 2.4 pg 93, chapter 7 pg. 412, 2.5 pg 109, 3.1 pg 145.	

Dò the materials feature high-quality conceptual problems and conceptu[illegible]cussion questions? Evaluate lessons, chapter/unit assessments, and homework assignments. NOTE: Examples of conceptual problems might include such questions as "What is the maximum value of the function f(t) = 5 – t2 ?" or "Is √2 a polynomial? How about ½(x + √2)+ ½ (-x + √2)?"	**Evidence-** Every section [illegible] interpreting results and extending concepts. This can be seen in 2.5 pg 109, 3.1 pg 145 and pg 412.	
Do the materials feature opportunities to identify correspondences across mathematical representations? Evaluate lessons, chapter/unit assessments and homework assignments. NOTE: An example of evaluating this metric might include looking at whether materials support students in identifying correspondences among the expression that defines a function, the graph that shows the relationship, and the behavior of the phenomenon being modeled (if any).	**Evidence-** The materials do feature opportunities to identify correspondences across mathematical representations. This can be seen as follows: 3.1- Apply probability 3.4- sudoku, permutations, combinations, pie graphs 4.1- Apply probability to tree diagrams and binomial distribution 5.5- Normal approximation to binomial distribution 6.1 to 6.2 confidence intervals for mean in normal approximations	
AC Metric 1B: **The materials are designed so that students attain the fluencies and procedural skills required by the Standards.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Widely Applicable Prerequisites that relate specifically to fluency and procedural skill to use throughout the questions associated with this metric. NOTE: Some examples of Standards that call for procedural skill and fluency include: A-SSE.A.1b, A-SSE.2, A-APR.A.1, A-APR.C.6, F-BF.B.3, G-GPE.B.4, G-GPE.B.5, G-GPE.B.7, G-CO.A.1, G-SRT.B.5 For context, read Criterion #2b in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).		**Use the questions for AC Metric 1B to evaluate Metric 1B. Record evidence for each question and rate Metric 1B.** **__X__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Is progress toward fluency and procedural skill interwoven with the student's developing conceptual understanding of the skills in question? Evaluate lessons, chapter/unit assessments, daily routines, and homework assignments for evidence that the development of fluency and procedural skill is supported by conceptual understanding.	**Evidence-** Procedural fluency is attained by the guidelines and examples given in each lesson. Homework follows the format of building vocab and necessary skills for fluency, then moves into interpreting concepts to build a conceptual understanding, and then into extending conecpts to cement a conceptual understanding.	

Are purely procedural problems and exercises present that include cases in which opportunistic strategies are valuable and generic cases that require efficient and general procedures present? Evaluate lessons, chapter/unit assessments, daily routines, and homework assignments. NOTE: Problems in which opportunistic strategies are valuable might include such examples as solving $x2 + 5 = 49 + 5$ or $(3x - 2)2 = 6x - 4$. Generic cases that require efficient and general procedures might include such problems as solving $c + 8 - c2 = 3(c - 1)2 - 5)$.	**Evidence-** Purely procedural problems exist in the examples with "Try it Yourself" problems and as seen in homework assignments aligned to the core lessons.	
AC Metric 1C: **The materials are designed so that teachers and students spend sufficient time working with engaging applications, without losing focus on the Widely Applicable Prerequisites.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Widely Applicable Prerequisites that relate specifically to application to use throughout the questions associated with this metric. NOTE: Some examples of clusters or Standards that call for application include: N-Q.A, A-SSE.B.3, A-REI.D.11, F-IF.B, F-IF.C.7, F-BF.A.1, G-SRT.C.8, S-ID.A.2, S-IC.A.1 For context, read Criterion #2c in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).		**Use the questions for AC Metric 1C to evaluate Metric 1C. Record evidence for each question and rate Metric 1C.** **__X__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Are there single- and multi-step contextual problems, including non-routine problems, that develop the mathematics of the course, afford opportunities for practice, and engage students in problem solving? Do the problems attend thoroughly to those places in the content Standards where expectations for multi-step and real-world problems are explicit? Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** The text focuses heavily on contextual problems (Uses and Abuses) to help students gain a conceptual understanding of the WAP. The text does include non-routine problems designed to develop the mathematics of the course. The real world connections (case studies) engage students in problem solving. These can be seen in 1.2, 4.1, 5.2, 6.3, 6.4, 8.1, 8.2, 10.2.	
Do application problems particularly stress applying the Widely Applicable Prerequisites? Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** The application problems are designed to connect what students have learned in that section, as well as connecting to previously learned concepts earlier in the text/previous courses. The text meets the WAP for the course and these are seen in the application problems present in each lesson and homework assignment.	

Are there ample opportunities for students to engage with modeling problems? Do materials require students to use both individual parts of the modeling cycle as well as the full modeling cycle? Read the pages on High School—Modeling in the Standards for Mathematics (pp. 72 and 73). Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** The text connects students to the modeling cycle through real world problems, case studies, data samples, and use of technology. These can be seen in the picturing the world sections (See 2.5, 3.2, 3.3, 4.2), Real Statistics- Real Decisions.	
Alignment Criterion 1: Materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations. **AC 1:** Materials must earn at least 5 of 6 points to meet this Alignment Criterion. If materials earn less than 5 points, the Criterion has not been met. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)** **Before moving to Alignment Criterion 2, record the final Meets or Does Not Meet rating in the Evaluation Summary.**		**__X__Meets** **____Does Not Meet** **Strengths/Weaknesses:**
Alignment Criterion 2: **Standards for Mathematical Practice- Materials must demonstrate authentic connections between content Standards and practice Standards.** The Standards require that designers of instructional materials connect the mathematical practices to mathematical content in instruction. Thus, materials must demonstrate authentic connections between content Standards and practice Standards.	The Standards require that designers of instructional materials connect the mathematical practices to mathematical content in instruction. Thus, materials must demonstrate authentic connections between content Standards and practice Standards. **Required Materials**: • Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_HS_Spring_2013_FINAL1.pdf) • Widely Applicable Prerequisites for College and Careers (http://achievethecore.org/prerequisites) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion:** Alignment Criterion 2 is rated as Meets or Does Not Meet. To rate Alignment Criterion 2, first rate metrics 2A, 2B, and 2C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). For each metric, guiding questions are provided to aid in gathering evidence. Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 2 if the materials rate 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as mathematical practices, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.

AC Metric 2A: **Materials address the practice Standards in such a way as to enrich the Widely Applicable Prerequisites; practices strengthen the focus of the course instead of detracting from it, in both teacher and student materials.** **How to Find the Evidence:** Familiarize yourself with the Widely Applicable Prerequisites. Evaluate teacher and student materials for evidence that the mathematical practices support and connect to the focus of the course. NOTE: An example of evaluating this Criterion might include looking at whether materials use regularity in repeated reasoning to illuminate formal algebra as well as functions, particularly recursive definitions of functions. For context, read Criterion #6 in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** MP #1- Every example in a lesson has a "Try it Yourself" that guides them in persevering to check their answers and make sure that their answers make sense. The text includes study tips to help students. MP#2- The text includes numerous story problems that ask students to reason abstractly and quantatively. This is seen in Real Statistics- Real Decisions on pg. 522. MP#3- This standard can be seen in the test through Real Statistics- Real Decisions Pg. 122, 412 MP#4- This can be seen in every section of the text. MP#5- Students are asked to use technology such as calculators, online minitab, and MyMathXLLab. MP#6- Students are required to provide exact answers and labels in every problem. They are required to provide clear explanations and descriptions with pictures and diagrams. MP#7- Students are asked to create tree diagrams to create a visual model and structure to a given problem. See Chapter 3 of the text. MP#8- Students are asked to repeatedly use a logical process. This can be seen in "Extending Concepts" sections of the text. Students are asked to explain their reasoning in these sections.	**__X__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
AC Metric 2B: **Materials attend to the full meaning of each practice Standard.** **How to Find the Evidence:** For context, read Criterion #7 in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).		**Use the questions for AC Metric 2B to evaluate Metric 2B. Record evidence for each question and rate Metric 2B.** **__X__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**

Over the course of any given year of instruction, is each mathematical practice Standard meaningfully present in the form of assignments, activities, or problems that stimulate students to develop the habits of mind described in the practice Standard? Evaluate lessons, chapter/ unit assessments, and homework assignments for evidence of each mathematical practice being meaningfully present in instruction.	**Evidence-** See evidence AC Metric 2A.	
Are teacher-directed materials that explain the role of the practice Standards in the classroom and in students' mathematical development included? Are alignments to practice Standards accurate? Evaluate teacher materials, paying attention to explanations of the role of the practice Standards in the classroom and in students' mathematical development. Evaluate documents aligning lessons to practice Standards for accuracy. NOTE: Examples to look for when evaluating this metric might include the following: a highly scaffolded problem should not be aligned to MP.1; or a problem that directs a student to use a calculator should not be aligned to MP.5; or a problem about merely extending a pattern should not be aligned to MP.8.	**Evidence-** The teacher text has many insightful hints, clues, and deep conceptual understanding discussion questions. The teacher text comes with students answer text, online software, and DVD for videos/PowerPoints.	
AC Metric 2C: **Materials support the Standards' emphasis on mathematical reasoning.** **How to Find the Evidence:** For context, read Criterion #8 in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).		**Use the questions for AC Metric 2C to evaluate Metric 2C. Record evidence for each question and rate Metric 2C.** **__X__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Do the materials support students in constructing viable arguments and critiquing the arguments of others concerning course-level mathematics that is detailed in the content Standards? Read Standard for Mathematical Practice 3. Evaluate teacher and student materials to ensure that students are given opportunities to reason with grade-level mathematics.	**Evidence-** Students construct viable arguments and critique the work of others as seen in Real Statistics- Real Decisions and the Uses and Abuses sections of the text. The instructor text contains tips on how to support students in constructing viable arguments.	
Do the materials support students in producing not only answers and solutions, but also, in a course-appropriate way, arguments, explanations, diagrams, mathematical models, etc., especially in the Widely Applicable Prerequisites? Familiarize yourself with the Widely Applicable Prerequisites. Evaluate teacher and student materials to understand the types of work students are expected to produce.	**Evidence-** Students are asked to complete activities like "Draw Conclusions" (section 5.4) in order to produce arguments and explanations to their answers In Uses and Abuses students are asked to find examples related to the concepts and describe correct and incorrect ways for solving a problem. Students are asked to produce different graphs through out the text. (See section 1.2, 2.1, 2.3, 2.4, 3.1)	

Do materials explicitly attend to the specialized language of mathema[illegible]s the language of argument, problem solving, and mathematical explanations taught rather than assumed? Evaluate teacher and student materials, paying attention to how mathematical language is taught. NOTE: An example of evaluating this Criterion might include looking at whether students are supported in: basing arguments on definitions; using the method of providing a counter example; or recognizing that examples alone do not establish a general statement.	**Evidence-** Chapters 1, 2, [illegible] 3 set up mathematical reasoning and problem solving through appropriate vocabulary. For example, students are taught how to find the complement of an event (q = 1 – p). This can also be seen in Uses and Abuses of statistics in the real world (pg 336.)	
Alignment Criterion 2: Materials must demonstrate authentic connections between content Standards and practice Standards. **AC 2:** Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 points, the Criterion has not been met. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewers only.)** **Before moving to Alignment Criterion 3, record the final Meets or Does Not Meet rating in the Evaluation Summary.**		**__X__Meets** **____Does Not Meet** **Strengths/Weaknesses:**
Alignment Criterion 3: **Access to the Standards for All Students- Materials must provide supports for English Language Learners and other special populations.** Because Standards are for all students, alignment requires thoughtful support to ensure all students are able to meet the Standards. Thus, aligned materials must provide supports for English Language Learners and other special populations.	Because Standards are for all students, alignment requires thoughtful support to ensure all students are able to meet the Standards. Thus, aligned materials must provide supports for English Language Learners and other special populations. **Required Materials:** • Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math Publishers_Criteria_HS_Spring_2013_FINAL1.pdf) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion:** Alignment Criterion 3 is rated as Meets or Does Not Meet. To rate Alignment Criterion 3, first rate metrics 3A, 3B, and 3C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 3 if the materials rate 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as support for special population, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.
AC Metric 3A: **Support for English Language Learners and other special populations is thoughtful and helps those students meet the same Standards as all other students. The language in which problems are posed is carefully considered.** **How to Find the Evidence:** Evaluate teacher and student materials, paying attention to supports offered for special populations.	**Evidence-** No explicit help for ELL. There is scaffolding built to help all learners and videos of extra problems are provided. Again, no specific ELL supports.	**____Meets (2)** **__X__Partially Meets (1)** **____Does Not Meet (0)**

AC Metric 3B: **Materials provide appropriate level and type of scaffolding, differentiation, intervention, and support for a broad range of learners with gradual removal of supports, when needed, to allow students to demonstrate their mathematical understanding independently.** **How to Find the Evidence:** Evaluate teacher and student materials, paying attention to whether materials provide differentiation that will lead all learners to engage with on-grade-level content.	**Evidence-** Not applicable to a statics course due to average students typically not enrolling in a statistics course. The text provides many strategies worked out to solve problems. Many graphs and visuals are used in the book to help all learners (Real World Application pg 193 and pg 311.)	**__X__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
AC Metric 3C: **Design of lessons recommends and facilitates a mix of instructional approaches for a variety of learners such as using multiple representations (e.g., including models, using a range of questions, checking for understanding, flexible grouping, pair-share).** **How to Find the Evidence:** Evaluate teacher materials, noting instructional approaches suggested for whole class and differentiated lessons and activities.	**Evidence-** Not applicable to a statics course due to average students typically not enrolling in a statistics course. The text provides teacher notes, emphasis of vocabulary (pg 83), discussions (pg 207), simple activities (pg 136), use of technology (pg 137), differing lessons (pg 549) and visualizing (pg 471.)	**__X__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Alignment Criterion 3: Materials must provide supports for English Language Learners and other special populations. AC 3 Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 points, the Criterion has not been met. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewers only.)** **Move to the Evaluation Summary and record the final Meets or Does Not Meet rating .**		**__X__Meets** **____Does Not Meet** **Strengths/Weaknesses:**

Once an evaluation for alignment to the Shifts and major features of the CCSS has been conducted using Sections 1-3, it's important to evaluate for overall quality and best practices. A starting list of Indicators of Quality are suggested below. States, districts and others evaluating instructional materials are encouraged to add to this list to ensure materials reflect local contexts. For background information on some of the Indicators of Quality in this section, refer to pp.16–18 in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).

Indicators of Quality	Evidence- Give specific examples.	Rating: (Reviewer only.)
1. Lessons are thoughtfully structured and support the teacher in leading the class through the learning paths at hand, with active participation by all students in their own learning and in the learning of their classmates.	**Evidence-** Lessons are thoughtfully structured. Each lesson builds on previous knowledge. The text gives explicit notes to aid in teacher explanation of concepts to students. (pg 252) Many examples are provided. This can be seen in "Interpretations" (pg 256) to help build vocabulary and use of appropriate vocabulary in each section.	**(Reviewer only.)** **___X___ Yes** **_____ No**
2. The underlying design of the materials includes both problems and exercises. (In solving problems, students learn new mathematics, whereas in working exercises, students apply what they have already learned to build mastery.) Each problem or exercise has a purpose. **NOTE: This Criterion does not require that the problems and exercises be labeled as such.**	**Evidence-** Every lesson walks students through problems in order to lead them to a deep understanding of the mathematical concepts. The chapter lessons also include homework exercises to help cement student understanding of mathematical concepts. Each section has progressive homework problems: 1st Building basic skills and vocabulary, 2nd Using and interpreting concepts and 3rd Extending concepts. Almost all 2nd and 3rd category problems are real world modeling problems.	**(Reviewer only.)** **___X___ Yes** **_____ No**
3. Design of assignments is not haphazard: exercises are given in intentional sequences in order to strengthen students' mathematical understanding.	**Evidence-** The design of the text is not haphazard. The text works to build student skills and vocabulary in each lesson that they will need to be successful in the next lesson. All lessons build on each other and the text explicitly starts each chapter by telling students what they have learned in the previous section ("Where You've Been") and what they will learn in the next section (Where You're Going.") Within each section and each provided example is "Try it yourself" to strengthen understanding of applications of story problems. This flows into the layout of the homework problems, see #2. As extra supports there "Picturing the world" Problems (pg. 172-173).	**(Reviewer only.)** **__X____ Yes** **_____ No**

4. There are separate teacher materials that support and reward teacher study including, but not limited to: discussion of the mathematics of the units and the mathematical point of each lesson as it relates to the organizing concepts of the unit, discussion on student ways of thinking and anticipating a variety of students responses, guidance on lesson flow, guidance on questions that prompt students thinking, and discussion of desired mathematical behaviors being elicited among students.	**Evidence-** The teacher text has many insightful hints, clues, and deep conceptual understanding discussion questions to help the teacher guide students through a thoughtful discussion of the mathematics related to the text. The teacher text comes with students answer text, online software, and DVD for videos/PowerPoints. The teacher text contains tips on how to support students in constructing viable arguments.	**(Reviewer only.)** **___X___ Yes** **_____ No**
5. Manipulatives suggested in the materials are faithful representations of the mathematical objects they represent and are connected to written methods.	**Evidence-** Not applicable as there are no manipulatives suggested in the text.	**(Reviewer only.)** **_____ Yes** **___X___ No**
6. Materials include a variety of curriculum-embedded assessments. Examples include pre-, formative, summative, and self-assessment resources.	**Evidence-** Students can access my MathMyXL where there are summative assessments available for students to complete. Every section has review HW. Every chapter has review and Quizzes. Each Chapter tells students where they have been and where they are going along with sections informing of what students will learn. Each lesson has students self-assess their skills during examples with "Try it Yourself" problems. There is a test question generator for instructors to access.	**(Reviewer only.)** **___X___ Yes** **_____ No**
7. Assessments contain aligned rubrics, answer keys, and scoring guidelines that provide sufficient guidance for interpreting student performance.	**Evidence-** The text includes answers to all homework problems that students will complete. The text set includes a student solutions manual. No rubrics or scoring guidelines are provided.	**(Reviewer only.)** **___X___ Yes** **_____ No**

8. Materials assess student proficiency using methods that are accessible and unbiased, including the use of course-level language in student prompts.	**Evidence-** The materials assess student learning/proficiency using different methods through out the test. There is no bias and consistent language is used through out the text.	**(Reviewer only.)** **___X___ Yes** **_____ No**
9. Materials are carefully evaluated by qualified individuals, whose names are listed, in an effort to ensure freedom from mathematical errors and course-level appropriateness.	**Evidence-** The text was written and evaluated by two professors from Penn State. The authors credentials can be found in the front of the text. The text was reviewed by 8 different people from colleges and universities and the previous editions have been reviewed by many people as well.	**(Reviewer only.)** **___X___ Yes** **_____ No**
10. The visual design supports students in engaging thoughtfully with the subject. Navigation through the text is clear.	**Evidence-** The text highlights important formulas and definitions consistently through out to make note taking easy and allow navigation through the text to be clear and easy. The text has a table of contents with headings bolded and all sections of the text are color-coded. The index and odd answers are easily accessible due to color-coding.	**(Reviewer only.)** **___X___ Yes** **_____ No**

Reviewer IMET Evaluation Summary **Title/Level:** _____

Publisher: _____ **Copyright:** _____ **ISBN:**_____

Reviewer ID # _____ **Date Review Completed:**_____

Non-Negotiable Criteria-The Non-Negotiable must be met in order for the Non-Negotiable Alignment Criteria to be met overall.

Non- Negotiable 1: Focus and Coherence

___X__ Meets

_____ Does Not Meet

Non-Negotiable Overall:

__X___ Meets **_____ Does Not Meet**

Alignment Criteria- Each Alignment Criterion must be met with a sufficient number of points in order for Alignment Criteria to be labeled as "Meets" overall. The more points the materials receive on the Alignment Criteria, the better they are aligned.

Alignment Criterion 1: Rigor and Balance	Alignment Criterion 2: Standards of Mathematical Practice	Alignment Criterion 3: Access to Standards for All Learners
Points: ___6__ of 6 possible. **(Materials must receive at least 5 of 6 points to align.)**	**Points: __6___ of 6 possible.** **(Materials must receive at least 5 of 6 points to align.)**	**Points: __5___ of 6 possible.** **(Materials must receive at least 5 of 6 points to align.)**
___X____ Meets	**___X____ Meets**	**_____ Meets**
_____ Does Not Meet	**_____ Does Not Meet**	**_____ Does Not Meet**

Alignment Criteria Overall:

__X__ Meets **_____ Does Not Meet**

If the materials meet the Non-Negotiable Criterion and each Alignment Criterion, they are aligned to the Shifts and major features of the Co. Standards. **Do the materials meet every Non-Negoti and Alignment Criterion? __X__ Yes _____ No**

What are the specific areas of strength and weakness based on this evaluation? Publishers or others modifying or developing assessments can use this information to make improvements and/or to remedy gaps in the alignment of assessment materials.

Strengths:

- Objectives are written in student friendly language and easy to understand.
- Pacing of lessons allows students to build a foundation.
- Text connects to many real world situations.

Weaknesses:

- There are no explicit opportunities for students to critique the work of their classmates.
- Text is heavily based on individual work.
- No ELL supports.

2015-16 Mathematics Interim Review Recommendation & Summary

Publisher Name:	Pearson
Title:	Precalculus Enhanced graphing Utilities 6th Edition
ISBN #	9780132854351
Grade Level(s) or Course:	9-12
Reviewer ID:	LTE, PVP

RECOMMENDED AS:

___X_____**Core Mathematics Program-** a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials. Substantial evidence clearly supports the designation of this program as Core.

_____**Other Mathematics Program-** a program that substantially, but partially, meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for supplemental materials. Substantial evidence clearly supports the designation of this program as Other.

_____**Component Mathematics Program-** a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs. Substantial evidence clearly supports the designation of this program as Component.

_____**Intervention Program-** a program designed and intended to target and support students' specific needs. Substantial evidence clearly supports the designation of this program as Intervention.

_____ **Does not meet criteria** for recommendation as a Curricular Material or Online Resource for Mathematics.

EVIDENCE SUMMARY:

FOCUS-
The text met all of the widely applicable prerequisites and covered the (+) Idaho Core Standards. Because this is a fourth year course, the widely applicable prerequisites were covered in previous courses and extended in this course.

COHERENCE-
The text presented the concepts and standards in a logical manner. Within each section, and within each chapter, and throughout the book the authors presented concepts and developed them with each building on the previous.

RIGOR-
This is a precalculus course and by its nature is very rigorous. The text includes multiple examples for each section and a problem set ranging from 50 to hundred and 20 problems are more. *The authors build the concepts from the procedural to the conceptual to the application* level in their examples and problem sets.

CONCEPTUAL UNDERSTANDING-
The authors provide enough examples within each section and numerous problems so that students can gain a deep conceptual understanding of the mathematics. Though there are many problems in a problem set, they are carefully crafted to address as many different cases as possible.

MATHEMATICAL PRACTICES-
Though the text does not specifically address the mathematical practices, it indirectly addresses all of the math practices throughout the text.

ACCESSIBILITY OF STANDARDS TO ALL STUDENTS-

This is a fourth year course and the students will have already taken many difficult prerequisites *to get to this point. The reviewers did not notice any specific resources to differentiate instruction* or assignments for students that were struggling. By this point in their mathematical progression, students should be at a level of sophistication such as they will not need too many interventions.

HER:

The strengths of this text were that it covers the standards and widely applicable prerequisites. Additionally the authors do a good job of introducing and developing concepts within each section and building upon them throughout the chapter. The student solutions manual is also a strength for this program.

No glaring weaknesses were identified.

2015-1 nterim Mathematics Review

Mathematics Evaluation Tool – High School

Publisher: PEARSON EDUCATION, INC

Title of Material: PRECALCULUS ENHANCED WITH GRAPHING UTILITIES

Author: SULLIVAN/SULLIVAN

ISBN #: 9780132854351 **Copyright** 2013

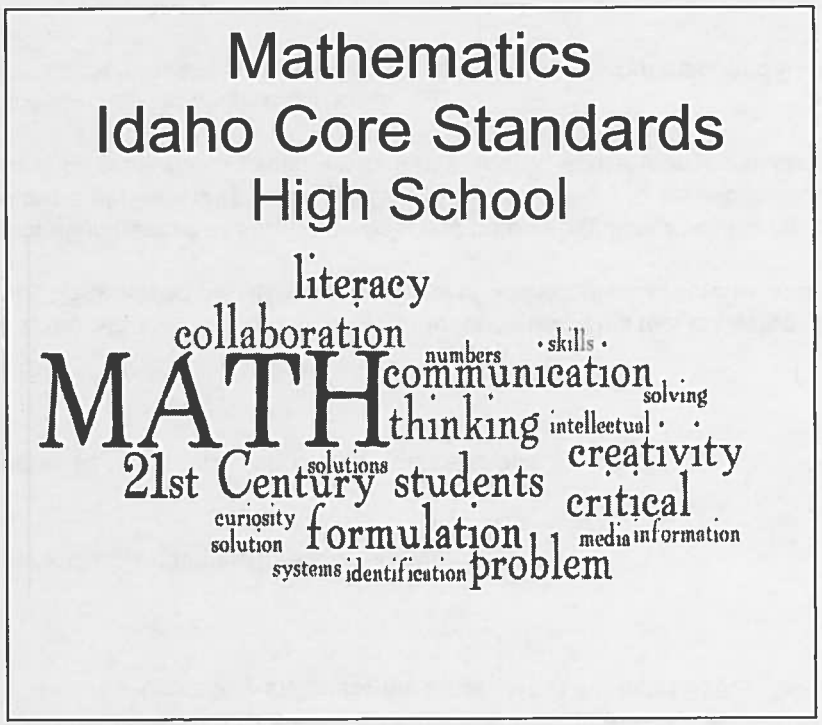
Reviewer ID: LTE & PVP

Core Mathematics Program- a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Core.

Other Mathematics Program- a program that substantially, but partially, meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Other.

Component Mathematics Program- a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs.
Substantial evidence clearly supports the designation of this program as Component.

Intervention Program- a program designed and intended to target and support students' specific needs.
Substantial evidence clearly supports the designation of this program as Intervention.



- Evaluation Form adapted from Instructional Materials Evaluation Toolkit (IMET).

The IMET was developed by Student Achievement Partners. Educators may use or adapt. http://creativecommons.org/licenses/by/3.0/ Download this tool at http://achievethecore.org/IMET

Instructional Materials Evaluation Tool

Mathematics, High School

What Are the Purposes of the IMET?

This Math IMET is designed to help educators determine whether instructional materials are aligned to the Shifts and major features of the Common Core State Standards (CCSS). The substantial instructional Shifts (http://www.corestandards.org/other-resources/key-shifts-in-mathematics/) at the heart of the Common Core State Standards are:

- **Focus** strongly where the Standards focus
- **Coherence**: Think across grades and link to major topics within the grade
- **Rigor**: In major topics, pursue conceptual understanding, procedural skill and fluency, and application with equal intensity.

The IMET draws directly from the following documents:

- Common Core State Standards for Mathematics (www.corestandards.org/Math)
- Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013) (http://www. corestandards.org/wp-content/uploads/Math_Publishers_Criteria_ HS_Spring_2013_FINAL1.pdf)

When to use the IMET

1. Purchasing materials: Many factors go into local purchasing decisions. Alignment to the Standards is a critical factor to consider. This tool is designed to evaluate alignment of instructional materials to the Shifts and the major features of the CCSS. It also provides suggestions of additional indicators to consider in the materials evaluation and purchasing process
2. Evaluating materials currently in use: The IMET can be used to analyze the degree of alignment of existing materials and help to highlight specific, concrete flaws in alignment. Even where materials and tools currently in use fail to meet one or more of these criteria, the pattern of failure is likely to be informative. States and districts can use the evaluation to create a thoughtful plan to modify or combine existing resources in such a way that students' actual learning experiences approach the focus, coherence, and rigor of the Standards.
3. Developing programs: Those developing new programs can use this tool as guidance for creating aligned curricula.

Please note this tool was designed for evaluating comprehensive curricula (including any supplemental or ancillary materials), but it was not designed for the evaluation of standalone supplemental materials.

Who Uses the IMET?

Evaluating instructional materials requires both subject-matter and pedagogical expertise. Evaluators should be well versed in the Standards (www.corestandards.org/Math) for all grades in which materials are being evaluated. This includes understanding the Widely Applicable Prerequisites (www.achievethecore.org/prerequisites), how the content fits into the progressions in the Standards (www. achievethecore.org/progressions), and the expectations of the Standards with respect to conceptual understanding, procedural skill and fluency, and application. Evaluators also should be familiar with the substantial instructional Shifts (http://www.corestandards.org/other-resources/key-shifts-in-mathematics/) of Focus, Coherence and Rigor that are listed above.

Getting Started

Prior to Evaluation

Assemble all of the materials necessary for the evaluation. It is essential for evaluators to have materials for all grades covered by the program, as some criteria cannot be rated without having access to each grade. In addition, each evaluator should have a reference copy of the Common Core State Standards for Mathematics (CCSSM) and the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).

2015- Interim Mathematics Review

Mathematics Evaluation Tool – High School

Publisher: Pearson

Title of Material: Precalculus: Enhanced Graphing Utilities

Author: Sullivan and Sullivan

ISBN #: 9780132854351 Copyright 2013

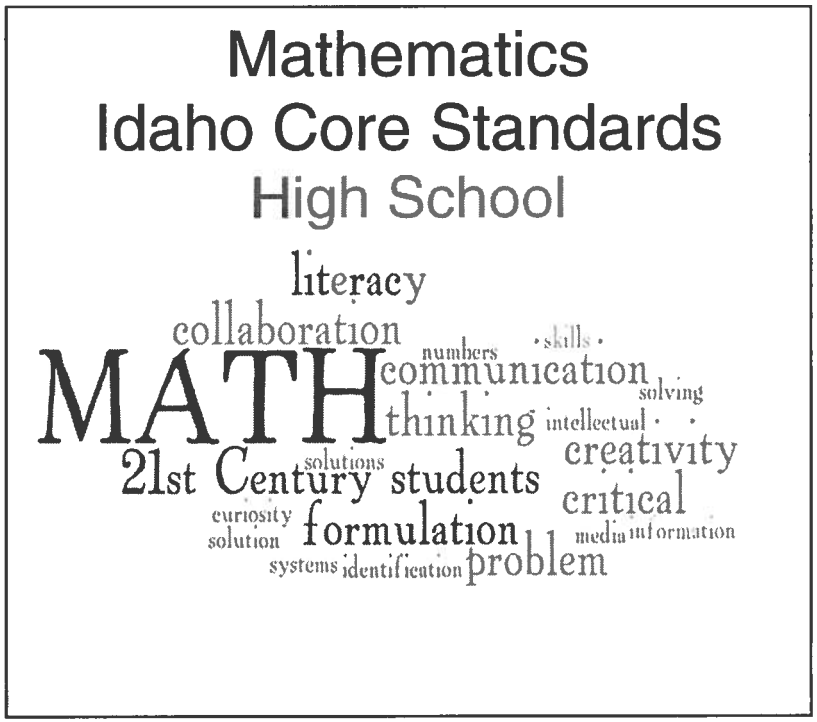
Reviewer ID: Lennart Erickson III

Core Mathematics Program- a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Core.

Other Mathematics Program- a program that substantially, but partially, meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Other.

Component Mathematics Program- a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs.
Substantial evidence clearly supports the designation of this program as Component.

Intervention Program- a program designed and intended to target and support students' specific needs.
Substantial evidence clearly supports the designation of this program as Intervention.



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- **Focus** strongly where the Standards focus
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3. Developing programs: Those developing new programs can use this tool as guidance for creating aligned curricula.

Please note this tool was designed for evaluating comprehensive curricula (including any supplemental or ancillary materials), but it was not designed for the evaluation of standalone supplemental materials.

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Evaluating instructional materials requires both subject-matter and pedagogical expertise. Evaluators should be well versed in the Standards (www.corestandards.org/Math) for all grades in which materials are being evaluated. This includes understanding the Widely Applicable Prerequisites (www.achievethecore.org/prerequisites), how the content fits into the progressions in the Standards (www. achievethecore.org/progressions), and the expectations of the Standards with respect to conceptual understanding, procedural skill and fluency, and application. Evaluators also should be familiar with the substantial instructional Shifts (http://www.corestandards.org/other-resources/key-shifts-in-mathematics/) of Focus, Coherence and Rigor that are listed above.

Getting Started

Prior to Evaluation

Assemble all of the materials necessary for the evaluation. It is essential for evaluators to have materials for all grades covered by the program, as some criteria cannot be rated without having access to each grade. In addition, each evaluator should have a reference copy of the Common Core State Standards for Mathematics (CCSSM) and the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).

Before conducting the evaluation itself, it is important to develop a protocol for the evaluation process. The protocol should include having evaluators study the Publishers' Criteria and the IMET. It will also be helpful for evaluators to get a sense of each program overall before beginning the process. At a minimum, this would include reading the front matter of the text, looking at the table of contents and paging through multiple chapters.

Sections 1-3 below should be completed to produce a comprehensive picture of the strengths and weaknesses of the materials under evaluation. Information about areas in need of improvement or supplementation should be shared with internal and external stakeholders.

Navigating the Tool

Begin with Section 1: Non-Negotiable Alignment Criteria

- The Non-Negotiable Alignment Criteria must each be met in full for materials to be considered aligned to the Shifts and the major features of the Common Core State Standards. Each Non-Negotiable Alignment Criterion has one or more metrics associated with it; every one of these metrics must be met in order for the criterion as a whole to be met.

- Examine the relevant materials and use evidence to rate the materials against each criterion and its associated metric(s).

- Record and explain the evidence upon which the rating is based.

Continue to Section 2: Alignment Criteria

- The Alignment Criteria must each be met for materials to be considered aligned to the Shifts and the major features of the Common Core State Standards. Each Alignment Criterion has one or more metric associated with it; a specific number of these metrics must be met or partially met in order for the criterion as a whole to be met.

- Examine the materials in relation to these criteria, assigning each metric a point value. Rate the criterion as "Meets" or "Does Note Meet" based on the number of points assigned. The more points the materials receive on the alignment Criteria, the better they are aligned.

- Record and explain the evidence upon which the rating is based.

Proceed to Section 4: Indicators of Quality

- Indicators of Quality are important considerations that will help evaluators better understand the overall quality of instructional materials. These considerations are not criteria for alignment to the CCSS, but they provide valuable information about additional program characteristics. Evaluators may want to add their own indicators to the examples provided.

Directions for Non-Negotiable 1

Focus and Coherence

Criterion	Evidence- Give specific examples.	Rating: (Reviewer only.)
Non-Negotiable 1: Focus and Coherence- Materials must focus coherently on the Widely Applicable Prerequisites in a way that is consistent with the progressions in the Standards. Focus and coherence are the two major evidence-based design principles of the Common Core State Standards for Mathematics (CCSSM, p. 3). Focus is necessary in order to fulfill the ambitious promise the states have made to their students by adopting the Standards: greater achievement at the college and career-ready level; greater depth of understanding of mathematics; and a rich classroom environment in which reasoning, sense-making, applications, and a range of mathematical practices flourish. In high school courses, narrowing and deepening the curriculum creates a structure that ties topics together. Thus, materials must focus coherently on the Widely Applicable Prerequisites in a way that is consistent with the progressions in the Standards.	Focus and coherence are the two major evidence-based design principles of the Common Core State Standards for Mathematics (CCSSM, p. 3). Focus is necessary in order to fulfill the ambitious promise the states have made to their students by adopting the Standards: greater achievement at the college and career-ready level; greater depth of understanding of mathematics; and a rich classroom environment in which reasoning, sense-making, applications, and a range of mathematical practices flourish. In high school courses, narrowing and deepening the curriculum creates a structure that ties topics together. Thus, materials must focus coherently on the Widely Applicable Prerequisites in a way that is consistent with the progressions in the Standards. **Required Materials:** • Common Core State Standards for Mathematics (www.corestandards.org/wpcontent/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_HS_Spring_2013_FINAL1.pdf) • Widely Applicable Prerequisites for College and Careers (http://achievethecore.org/prerequisites) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion:** Non-Negotiable 1 is rated as Meets or Does Not Meet. To rate Non-Negotiable 1, first rate Metrics 1A–1H. Each of these eight metrics must be rated as Meets in order for Non-Negotiable 1 to be rated as Meets. Rate each metric 1A–1H as Meets or Does Not Meet/Insufficient Evidence. If the evidence examined shows that the Criterion is met, then mark the Criterion as Meets. If the evidence examined shows that the Criterion is not met—or if there is insufficient evidence to make a determination—then mark the Criterion as Does Not Meet/Insufficient Evidence. Support all ratings with evidence.

Metric NN1A: **In any single course, students spend at least 50% of their time on Widely Applicable Prerequisites.** **How to Find the Evidence:** Familiarize yourself with the Widely Applicable Prerequisites. Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, lessons, homework assignments, and assessments. (Evaluate both student and teacher materials.) Consider time spent on the Widely Applicable Prerequisites and judge qualitatively whether students and teachers using the materials as designed will devote the majority of time to the Widely Applicable Prerequisites For context, read Criterion #1 in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** Because this is a fourth year course, its focus is above and beyond the Widely Applicable Prerequisites. The Idaho Core Standards on page 57 reference additional mathematics that students should learn in order to take advanced courses such as calculus advanced statistics, or discrete mathematics and are indicated with and (+) symbol. An extensive review of the text reveals that it covers all of the (+) standards. Additionally, in Appendix A the authors include a review of the algebra concepts needed for this course. The textbook includes 14 chapters and within those chapters 84 sections. Examples of where text covers the widely applicable prerequisites: A.REI.8 – Sections 11.1 and 11.3 A.REI.9 – Section 11.2 F.IF.7d - Sections 5.3, 5.4, 6.4,6.5, and 6.6 F.BF.1c – Sections 2.4, 2.5, and 2.6	**__X__Meets** **____Does Not Meet Insufficient Evidence**
Metric NN1B: **Student work in Geometry involves significant work with applications/modeling and problems that use algebra skills.** **How to Find the Evidence:** Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, lessons, homework assignments, and assessments. (Evaluate both student and teacher materials. NOTE: Since Geometry contains relatively fewer Widely Applicable Prerequisites, this Criterion is important to help foster students' college and career readiness. Problems that use algebra skills might include, for example, algebraic geometry problems in a coordinate setting, or problems of measurement involving unknown quantities.	**Evidence-** In Appendix A, the text reviews geometry concepts needed to be successful in a precalculus course. Additionally, those concepts are referenced throughout the text as they apply to each topic. The following represents a sampling of examples where the text addresses the geometry standards: graphing lines and circles (1.4 and 1.5), graphing functions (2.2), graphing techniques – transformations (2.5), graphing rational functions (4.5), Chapter 6 Trigonometric Functions, Chapter 7 Analytical Trigonometry, Chapter 8 Applications of Trigonometric Functions, Chapter 9 Polar Coordinates, and Chapter 10 Analytical Geomery.	**__X__Meets** **____Does Not Meet Insufficient Evidence**

Metric NN1C: **There are problems at a level of sophistication appropriate to high school (beyond mere review of middle school topics) that involve the application of knowledge and skills from grades 6-8.** **How to Find the Evidence:** Evaluate lessons, chapter/unit assessments, and homework assignments. NOTE: Problems should include application of the following topics from grades 6-8: • Ratios and proportional relationships. • Percentage and unit conversions, e.g., in the context of complex measurement problems involving quantities with derived or compound units (such as mg/mL, kg/ m3, acre-feet, etc.). • Basic function concepts, e.g., by interpreting the features of a graph in the context of an applied problem. • Concepts and skills of geometric measurement e.g., when analyzing a diagram or schematic. • Concepts and skills of basic statistics and probability (see grades 6–8.SP) • Performing rational number arithmetic fluently. For context, read Table 1 on Page 8 of the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** The problem sets include the following sections that scaffold the learning from procedural, to conceptual to application: "Are You Prepared?", "Concepts and Vocabulary", "Skill Building", "Mixed Practice", "Applications and Extensions", and "Explaining Concepts: Discussion and Writing." Additionally, the examples at the beginning of each section also refer to problems from the homework set. For example, on pages 292 and 293, Example 6 encourages the student to "Now Work problem 71." The vast majority of the examples also referred to problems from the problem sets so that the students can go back and look at examples if they are having troubles. - Ratios and proportional relationships: No examples identified. - Percentage and unit conversions: #101 on page 285, #75 on page 258 - Basic function concepts: #89 pg. 270, #72-73 pg. 258, #50 pg. 246 - Concepts and skills of geometric measurement: #66 pg. 257, #120 pg. 397, Chapter 9 vectors, Chapter 10 conics, Chapters 6-8 trigonometry - Concepts and skills of basic statistics and Probability: #107-108 pg. 286 - Performing rational number arithmetic fluently: examples contained in the application problems throughout the book	**_X___Meets** **____Does Not Meet Insufficient Evidence**

Metric NN1D: **Materials use courses on the content specified in the Standards.** **How to Find the Evidence:** Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, and lessons in both student and teacher materials. For context, read Criterion #3a in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** The course extends the concepts learned in Algebra I, Geometry, and Algebra II. An extensive review of the text, reveals that it covers the (+) standards in enough depth to provide students the opportunity to master the concepts. Additionally, the text also includes extensions that go beyond the (+) standards and prepare students for calculus. Examples: Number and Quality: Chapter 4 complex zeros and rational functions, Chapter 9 Vectors, Functions: Chapters 3 – 8 Statistics and Probability: Chapter 13 counting and probability Algebra: Chapter 4 polynomials, Chapter 11 systems of equations Geometry: Chapter 1 lines and circles, Chapter 10 analytical geometry	**__X__Meets** **____Does Not Meet Insufficient Evidence**
Metric NN1E: **Materials give all students extensive work with course-level problems.** **How to Find the Evidence:** Evaluate both student and teacher materials. If the materials provide resources for differentiated learning, consider whether lower-performing students have opportunities to engage with course-level problems. Also consider whether higher-performing students are given opportunities to learn current course-level content in greater depth. For context, read Criterion #3b in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** The problem sets begin with procedural skills needed to access the higher level questions later in the problem sets. The authors scaffold the problems from procedural, to conceptual, to application. The "Are You Prepared" section at the beginning of each problem set encourages the student to review key concepts needed to be successful with the following problem set. Additionally, if the student gets those questions wrong each problem references page numbers so that they can go back and review. Did not see any differentiated helps in the teacher's edition. However, at the level of precalculus students should have reached a level of sophistication with their mathematics that they do not need helps provided in lower levels.	**_X___Meets** **____Does Not Meet Insufficient Evidence**

Metric NN1F: **Materials relate course-level concepts explicitly to prior knowledge from earlier grades or courses. The materials are designed so that prior knowledge becomes reorganized and extended to accommodate the new knowledge.** **How to Find the Evidence:** Evaluate student and teacher materials, looking for problems that involve extending the knowledge learned in earlier grades and courses. NOTE: An example of evaluating this Criterion might be to look at whether materials connect the equation of a circle with the distance formula and the Pythagorean theorem. For context, read Criterion #3c in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** The "Are You Prepared" section at the beginning of each problem set encourages the student to review key concepts needed to be successful with the following problem set. The "Applications and Extensions" section of each problem set require the students to draw upon previously learned concepts to solve the problems. The following examples show that the text covers material supported by earlier work in previous courses: 1.1 distance and midpoint covered in geometry and extended in this section, sections 1.2 intercepts, symmetry graphing key equations and 1.3 solving equations using graphing utilities are introduced and developed in Algebra I, Geometry, and Algebra II, section 1.4 lines covered in Algebra I and II, section 1.5 circles introduced and developed in Geometry and Algebra II.	**__X__Meets** **____Does Not Meet Insufficient Evidence**
Metric NN1G: **Materials include learning objectives that are visibly shaped by CCSSM cluster and domain headings.** **How to Find the Evidence:** Select several clusters from the course being evaluated. Evaluate teacher and student materials in relation to these clusters. For context, read Criterion #4a in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** At the beginning of each section, there is a "Preparing For This Section" that reviews the concepts need to access the content of that section. It also includes page numbers where the students can go back and review if needed. Objectives of each section are included at the beginning. The objectives include page numbers that refer to where the objectives are introduced in the section. The following examples are a sampling of how the authors connect the language from the CCSSM with the learning objectives. Examples: Section 2.6 Build and Analyze Functions – F.BF and F.IF Section 3.1 Graph Linear Functions, Use average rates of change to identify linear functions, determine whether a linear function is increasing, decreasing, or constant – F.IF.4, build linear models from a written description – F.BF.2	**_X__Meets** **____Does Not Meet Insufficient Evidence**

Metric NN1H: **Materials include problems and activities that serve to connect two or more clusters in a domain, or two or more domains in a category, or two or more categories, in cases where these connections are natural and important.** **How to Find the Evidence:** In the course being evaluated, choose two or more clusters, two or more domains, or two or more categories for which connections are natural and important. Evaluate the units, chapters, and lessons that deal with the chosen topics, looking for problems and activities that serve to connect the chosen clusters or domains. NOTE: An example of evaluating this Criterion might be to look at whether materials include problems in which students analyze a situation by building a function, graphing it, and using it to create and solve an equation. For context, read Criterion #4b in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** An example of can be seen in section 11.4 Matrix Algebra, it covers HSN-VM.C.7 (+),HSN-VM.C.8 (+),HSN-VM.C.9 (+),HSN-VM.C.10 (+),HSN-VM.C.11 (+), and HSN-VM.C.12 (+). Another example of the authors connecting two or more clusters in a domain is in Section 9.4 Vectors: HSN-VM.B.4, HSN-VM.B.4a, HSN-VM.B.4b, HSN-VM.B.4c, HSN-VM.B.5, HSN-VM.B.5a, and HSN-VM.B.5b. Additionally, Chapter 3 connects functions to their graphs and looks at their properties and applies them to applications in business. The entire precalculus text links algebra concepts to practically apply and model logarithms to growth and decay problems and geometry concepts to trigonometry problems.	**__X__Meets** **____Does Not Meet Insufficient Evidence**
Non-Negotiable 1: Focus and Coherence- Materials must focus coherently on the Widely Applicable Prerequisites in a way that is consistent with the progressions in the Standards. **Metric NN 1:** If all metrics 1A–1H were rated as Meets, then rate Non-Negotiable 1 as Meets. If one or more metrics were rated as Does Not Meet/Insufficient Evidence, then rate Non-Negotiable 1 as Does Not Meet. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)** **Before moving to Alignment Criterion 1, record the final Meets or Does Not Meet rating in the Evaluation Summary.**		**_X___Meets** **____Does Not Meet** **Strengths/Weaknesses** **The widely applicable prerequisites are covered in earlier courses and this precalculus text builds upon and extends those concepts.**

Now continue by evaluating Alignment Criterion 1 for Rigor and Balance.

Directions for Alignment Criterion 1

Rigor and Balance

Alignment Criterion 1: **Rigor and Balance- Materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.** The Standards set expectations for attention to all three aspects of rigor: conceptual understanding, procedural skill and fluency, and applications. Thus, materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.	The Standards set expectations for attention to all three aspects of rigor: conceptual understanding, procedural skill and fluency, and applications. Thus, materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations. • Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_HS_Spring_2013_FINAL1.pdf) • Widely Applicable Prerequisites for College and Careers (http://achievethecore.org/prerequisites) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion:** Alignment Criterion 1 is rated as Meets or Does Not Meet. To rate Alignment Criterion 1, first rate metrics 1A, 1B, and 1C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). For each metric, guiding questions are provided to aid in gathering evidence. Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 1 if the materials rate 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as rigor and balance, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.
AC Metric 1A: **The materials support the development of students' conceptual understanding of key mathematical concepts, especially where called for in specific content Standards or cluster headings.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Widely Applicable Prerequisites that relate specifically to conceptual understanding to use throughout the questions associated with this metric. NOTE: Some examples of clusters or Standards that call for conceptual understanding include: N-RN.A.1, A-APR.B, A-REI.A.1, A-REI.D.10, A.REI.D.11, F.IF.A.1, F-LE.A.1, G.SRT.A.2, G-SRT.C.6, S-ID.C.7 For context, read Criterion #2a in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	• Choose a cluster/Standard from the Widely Applicable Prerequisites that is aligned to each aspect of rigor and use it to evaluate these metrics. It is most helpful if the same clusters and Standards are chosen for all of the programs being evaluated. (Guidance in choosing clusters/Standards is included in "How to Find the Evidence" below.)	**Use the questions for AC Metric 1A to evaluate Metric 1A. Record evidence for each question and rate Metric 1A.** **_X___Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**

Is conceptual understanding attended to thoroughly where the Standards set explicit expectations for understanding or interpreting? Evaluate lessons, chapter/unit assessments and homework assignments, paying attention to work aligned to Standards that explicitly call for understanding or interpreting.	**Evidence-** Each section includes multiple examples to assist the students with understanding the concepts at a deep level and from multiple perspectives. The examples include content specific vocabulary. Additionally, the examples review the topic from multiple perspectives and include a variety of problems. Additionally, students are asked to interpret graphs, real world applications, the composition of functions, etc. Many of the problems require students to interpret material applied to real world problems. Examples: In Section 4.1, polynomial functions and models, the problems go from concepts and vocabulary skill building, to applications and extensions which cements a conceptual understanding of the objectives of the section.	
Do the materials feature high-quality conceptual problems and conceptual discussion questions? Evaluate lessons, chapter/unit assessments, and homework assignments. NOTE: Examples of conceptual problems might include such questions as "What is the maximum value of the function $f(t) = 5 - t2$?" or "Is $\sqrt{2}$ a polynomial? How about $\frac{1}{2}(x + \sqrt{2}) + \frac{1}{2}(-x + \sqrt{2})$?"	**Evidence-** The "Skill Building" problems at the beginning of each section focus on procedural and conceptual understanding of the concepts. Additionally, include a variety of problems that extend the concepts to the application level. These problems can be found in the "Applications and Extensions" section of each problem set. The following are a few examples of higher level thinking problems: #'s 109 and 110 on page 196.	

Do the materials feature opportunities to identify correspondences across mathematical representations? Evaluate lessons, chapter/unit assessments and homework assignments. NOTE: An example of evaluating this metric might include looking at whether materials support students in identifying correspondences among the expression that defines a function, the graph that shows the relationship, and the behavior of the phenomenon being modeled (if any).	**Evidence-** An example of this can be found in Chapter 6 Trigonometric Functions. The first three sections of the chapter focus on the algebraic representation of the trigonometric functions and the remaining sections of the chapter relate to graphing the functions. Additionally, the chapter also includes applications of those functions. The students are asked to interpret the applications with respect to real-world problems. Problem 109 on page 196 has students: make a scatter plot, look at the type of relation, find the cubic function of best fit, and use the model to make predictions.	
AC Metric 1B: **The materials are designed so that students attain the fluencies and procedural skills required by the Standards.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Widely Applicable Prerequisites that relate specifically to fluency and procedural skill to use throughout the questions associated with this metric. NOTE: Some examples of Standards that call for procedural skill and fluency include: A-SSE.A.1b, A-SSE.2, A-APR.A.1, A-APR.C.6, F-BF.B.3, G-GPE.B.4, G-GPE.B.5, G-GPE.B.7, G-CO.A.1, G-SRT.B.5 For context, read Criterion #2b in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).		**Use the questions for AC Metric 1B to evaluate Metric 1B. Record evidence for each question and rate Metric 1B.** **__X__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Is progress toward fluency and procedural skill interwoven with the student's developing conceptual understanding of the skills in question? Evaluate lessons, chapter/unit assessments, daily routines, and homework assignments for evidence that the development of fluency and procedural skill is supported by conceptual understanding.	**Evidence-** In each section, the authors scaffold the concepts by introducing, developing, and eventually leading to a conceptual understanding. Additionally, the chapter also build conceptually. The examples and the problem sets increase in difficulty and complexity, building to a deep conceptual understanding with application level problems. A good example of the chaptersconceptually building can be found in Chapter 4.	

Are purely procedural problems and exercises present that include cases in which opportunistic strategies are valuable and generic cases that require efficient and general procedures present? Evaluate lessons, chapter/unit assessments, daily routines, and homework assignments. NOTE: Problems in which opportunistic strategies are valuable might include such examples as solving x2 + 5 = 49 + 5 or (3x – 2)2 = 6x – 4. Generic cases that require efficient and general procedures might include such problems as solving c + 8 – c2 = 3(c – 1)2 – 5).	**Evidence-** The problem sets include procedural exercises that require the students to draw upon previous knowledge and use multiple strategies to solve. Additionally, the problem sets include enough problems to address a variety of strategies. The students will need to use opportunistic strategies to solve the application level problems found in the "Applications and Extensions" section of each problem set. For example, in Section 4.1 problems 15 – 108 are procedural and come before the application problems, 109 – 126.	
AC Metric 1C: **The materials are designed so that teachers and students spend sufficient time working with engaging applications, without losing focus on the Widely Applicable Prerequisites.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Widely Applicable Prerequisites that relate specifically to application to use throughout the questions associated with this metric. NOTE: Some examples of clusters or Standards that call for application include: N-Q.A, A-SSE.B.3, A-REI.D.11, F-IF.B, F-IF.C.7, F-BF.A.1, G-SRT.C.8, S-ID.A.2, S-IC.A.1 For context, read Criterion #2c in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).		**Use the questions for AC Metric 1C to evaluate Metric 1C. Record evidence for each question and rate Metric 1C.** **__X__Meets (2)** **_____Partially Meets (1)** **_____Does Not Meet (0)**
Are there single- and multi-step contextual problems, including non-routine problems, that develop the mathematics of the course, afford opportunities for practice, and engage students in problem solving? Do the problems attend thoroughly to those places in the content Standards where expectations for multi-step and real-world problems are explicit? Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** The single step, or procedural exercises, are found at the beginning of each problem set. As the students work through the problem set, the exercises become increasingly more difficult to include the multi-step contextual problems. On problem #55 on page 226 students are asked to find function values at different points and interpreting answers. Also see, page 236 #54 and page 242 #79. The reviewers noticed that all of the sections seemed to have multiple levels of problems culminating with application level problems.	

Do application problems particularly stress applying the Widely Applicable Prerequisites? Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** The "Applications and Extensions" section of each problem set require the students to use previously acquired knowledge and the widely applicable prerequisites to solve. The widely applicable prerequisites have been covered in earlier courses and used to extend the concepts presented and developed in this text.	
Are there ample opportunities for students to engage with modeling problems? Do materials require students to use both individual parts of the modeling cycle as well as the full modeling cycle? Read the pages on High School—Modeling in the Standards for Mathematics (pp. 72 and 73). Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** The authors have included a symbol that looks like a globe that denotes the modeling problems. Examples of these problems can be found on pages: 301, 342, 343, 516, and throughout the text.	
Alignment Criterion 1: Materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations. **AC 1:** Materials must earn at least 5 of 6 points to meet this Alignment Criterion. If materials earn less than 5 points, the Criterion has not been met. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)** **Before moving to Alignment Criterion 2, record the final Meets or Does Not Meet rating in the Evaluation Summary.**	**_X___Meets** **____Does Not Meet** **Strengths/Weaknesses:** The authors do a good job of scaffolding the problems from procedural/skill building to the higher order application problems.	

Alignment Criterion 2: **Standards for Mathematical Practice- Materials must demonstrate authentic connections between content Standards and practice Standards.** The Standards require that designers of instructional materials connect the mathematical practices to mathematical content in instruction. Thus, materials must demonstrate authentic connections between content Standards and practice Standards.	The Standards require that designers of instructional materials connect the mathematical practices to mathematical content in instruction. Thus, materials must demonstrate authentic connections between content Standards and practice Standards. **Required Materials**: • Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_HS_Spring_2013_FINAL1.pdf) • Widely Applicable Prerequisites for College and Careers (http://achievethecore.org/prerequisites) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion:** Alignment Criterion 2 is rated as Meets or Does Not Meet. To rate Alignment Criterion 2, first rate metrics 2A, 2B, and 2C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). For each metric, guiding questions are provided to aid in gathering evidence. Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 2 if the materials rate 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as mathematical practices, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.

AC Metric 2A: **Materials address the practice Standards in such a way as to enrich the Widely Applicable Prerequisites; practices strengthen the focus of the course instead of detracting from it, in both teacher and student materials.** **How to Find the Evidence:** Familiarize yourself with the Widely Applicable Prerequisites. Evaluate teacher and student materials for evidence that the mathematical practices support and connect to the focus of the course. NOTE: An example of evaluating this Criterion might include looking at whether materials use regularity in repeated reasoning to illuminate formal algebra as well as functions, particularly recursive definitions of functions. For context, read Criterion #6 in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** Examples of problems related to the math practice standards: Standard 1: page 16 problem 108 page 79 problem 34 and page 299 problem 118 Standard 2: page 197 problem 114, page 568 problem 86, and page 656 problem 84 Standard 3: page 197 problem 119, page 368 problem 118, and page 677 problems 59 and 60 Standard 4: page 101 problem 49, page 113 problems 124 and 125, and page 345 problem number 10 Standard 5: page 235 problems 52 and 53, page 345 problems 11 and 12, and page 694 problems nine, 13, and 17 Standard 6: page 226 problem number 55, page 270 problem number 91, and page 365 problems 71 through 78 Standard 7: page 552 problems 58 and 59, page 714 problem 17 and 18, and page 809 problems 29 through 36 Standard 8: page 70 problem number 97, page 808 problems 11 through 16, and page 836 problem 17 through 28 These examples represent a small sampling of the problems that relate to each of the Math Practice Standards.	**__X__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
AC Metric 2B: **Materials attend to the full meaning of each practice Standard.** **How to Find the Evidence:** For context, read Criterion #7 in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).		**Use the questions for AC Metric 2B to evaluate Metric 2B. Record evidence for each question and rate Metric 2B.** **__X__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**

Over course of any given year of instruction, is each mathematical practice Standard meaningfully present in the form of assignments, activities, or problems that stimulate students to develop the habits of mind described in the practice Standard? Evaluate lessons, chapter/ unit assessments, and homework assignments for evidence of each mathematical practice being meaningfully present in instruction.	**Evidence-** By its nature precalculus requires students to persevere in solving problems, reason abstractly and quantitatively, attend to precision, and to look for and make use of structure. Additionally, the "Applications and Extensions" section of each problem set encourages students to construct viable arguments, model the mathematics learned in that section, and to use the appropriate tools to solve the problems.	
Are teacher-directed materials that explain the role of the practice Standards in the classroom and in students' mathematical development included? Are alignments to practice Standards accurate? Evaluate teacher materials, paying attention to explanations of the role of the practice Standards in the classroom and in students' mathematical development. Evaluate documents aligning lessons to practice Standards for accuracy. NOTE: Examples to look for when evaluating this metric might include the following: a highly scaffolded problem should not be aligned to MP.1; or a problem that directs a student to use a calculator should not be aligned to MP.5; or a problem about merely extending a pattern should not be aligned to MP.8.	**Evidence-** This text does not make specific reference to the math practice standards in the teacher's edition or the student's edition. A correlation of this course to the Idaho Core Standards was included in the materials from the publisher. The reviewers extensively checked for alignment between the documents provided by the publisher and the standards and we agree with the accuracy of the publisher's document.	

AC Metric 2C: **Materials support the Standards' emphasis on mathematical reasoning.** **How to Find the Evidence:** For context, read Criterion #8 in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).		**Use the questions for AC Metric 2C to evaluate Metric 2C. Record evidence for each question and rate Metric 2C.** **__X__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Do the materials support students in constructing viable arguments and critiquing the arguments of others concerning course-level mathematics that is detailed in the content Standards? Read Standard for Mathematical Practice 3. Evaluate teacher and student materials to ensure that students are given opportunities to reason with grade-level mathematics.	**Evidence-** The problem sets include a section towards the end "Explaining Concepts: Discussion and Writing" that encourages the students to write about and construct viable arguments regarding the concepts of that section. An example from page 520 problem number 81 is "Explain how you would measure the width of the Grand Canyon from a point on its Ridge." Another example from page 226 problem number 61 states "Can the graph of irrational function have both a horizontal and an oblique asymptote? Explain."	

Do the materials support students in producing not only answers and solutions, but also, in a course-appropriate way, arguments, explanations, diagrams, mathematical models, etc., especially in the Widely Applicable Prerequisites? Familiarize yourself with the Widely Applicable Prerequisites. Evaluate teacher and student materials to understand the types of work students are expected to produce.	**Evidence-** The problem sets in the text address the students creating arguments, explanations, diagrams, and mathematical models in the "Applications and Extensions" and "Explaining Concepts: Discussing and writing" sections of each problem set. See the following example, on pages 383-384 #129 is a multistep problem that students have to evaluate, graph, and answer a question. Most of the problem sets include multi step problems that require multiple representations to solve.	
Do materials explicitly attend to the specialized language of mathematics? Is the language of argument, problem solving, and mathematical explanations taught rather than assumed? Evaluate teacher and student materials, paying attention to how mathematical language is taught. NOTE: An example of evaluating this Criterion might include looking at whether students are supported in: basing arguments on definitions; using the method of providing a counter example; or recognizing that examples alone do not establish a general statement.	**Evidence-** When the authors introduce content specific vocabulary the terms are in bold face type. The authors introduce and develop the concepts of each section at the beginning of the section. Additionally, when they introduce a new definition it is accompanied by an explanation and often a derivation of a theorem or formula. Once introduced, the content specific vocabulary is used throughout the section and the students are expected to use the terms as they are answering the questions.	
Alignment Criterion 2: Materials must demonstrate authentic connections between content Standards and practice Standards. **AC 2:** Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 points, the Criterion has not been met. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewers only.)** **Before moving to Alignment Criterion 3, record the final Meets or Does Not Meet rating in the Evaluation Summary.**		**__X__Meets** **____Does Not Meet** **Strengths/Weaknesses:** **The widely applicable prerequisites are covered in other courses and this text builds upon students' prior learning.**

Alignment Criterion 3: **Access to the Standards for All Students- Materials must provide supports for English Language Learners and other special populations.** Because Standards are for all students, alignment requires thoughtful support to ensure all students are able to meet the Standards. Thus, aligned materials must provide supports for English Language Learners and other special populations.	Because Standards are for all students, alignment requires thoughtful support to ensure all students are able to meet the Standards. Thus, aligned materials must provide supports for English Language Learners and other special populations. **Required Materials:** • Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math Publishers_Criteria_HS_Spring_2013_FINAL1.pdf) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion:** Alignment Criterion 3 is rated as Meets or Does Not Meet. To rate Alignment Criterion 3, first rate metrics 3A, 3B, and 3C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 3 if the materials rate 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as support for special population, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.
AC Metric 3A: **Support for English Language Learners and other special populations is thoughtful and helps those students meet the same Standards as all other students. The language in which problems are posed is carefully considered.** **How to Find the Evidence:** Evaluate teacher and student materials, paying attention to supports offered for special populations.	**Evidence-** I was unable to find any specific reference to support for English language learners. However the text presents the vocabulary in such a way that it includes a clear and in many cases extensive explanation of the terms. However, when a student reaches the level of precalculus, they will have previously acquired much of the content specific vocabulary to be successful in the prerequisite courses. The My Math Lab Suite has some extra helps for students that are struggling in the course.	**____Meets (2)** **__X__Partially Meets (1)** **____Does Not Meet (0)**
AC Metric 3B: **Materials provide appropriate level and type of scaffolding, differentiation, intervention, and support for a broad range of learners with gradual removal of supports, when needed, to allow students to demonstrate their mathematical understanding independently.** **How to Find the Evidence:** Evaluate teacher and student materials, paying attention to whether materials provide differentiation that will lead all learners to engage with on-grade-level content.	**Evidence-** In each section, the authors develop the concepts related to that section throughout the examples and problem sets by scaffolding the concepts in a logical progression. The authors use multiple representations to help the students achieve a conceptual level of understanding. Problems in the sections start out with concepts and vocabulary, and then goes to skill building, mixed practice, and finally applications and extensions. There are some helps in the teacher resources and on the My Math Lab site.	**__X__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**

AC Metric 3C: **Design of lessons recommends and facilitates a mix of instructional approaches for a variety of learners such as using multiple representations (e.g., including models, using a range of questions, checking for understanding, flexible grouping, pair-share).** **How to Find the Evidence:** Evaluate teacher materials, noting instructional approaches suggested for whole class and differentiated lessons and activities.	**Evidence-** This textbook has a traditional approach. The teacher materials include PowerPoint lecture slides for some of the sections. The lessons and problem sets include a variety of instructional approaches. For example, on page 283 problems 25 through 32 give the students a list of ordered pairs and ask them to determine if the given function is linear, exponential, or neither; multiple problems throughout the text reference modeling with a globe icon; problem number 57 on page 350 gives the students a set of ordered pairs and asks them to use the graphing utility to predict how long it will take for the probe to reach a temperature of 110°F; on page 419 problem 17 through 40 the students are asked to graph trigonometric functions; on page 604 the students are asked to do application problems with polar coordinates and vectors. This is just a small sampling of the variety of approaches that the authors use to help the students master the concepts. The reviewer did not find any mention of flexible grouping or pair share.	**__X__Meets (2)** **_____Partially Meets (1)** **_____Does Not Meet (0)**
Alignment Criterion 3: Materials must provide supports for English Language Learners and other special populations. **AC 3** Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 points, the Criterion has not been met. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewers only.)** **Move to the Evaluation Summary and record the final Meets or Does Not Meet rating.**		**__X__Meets** **_____Does Not Meet** **Strengths/Weaknesses:** **By the time students reach this level of mathematics, they have the skills necessary to be successful in the course. However, the authors could have more supports for ELL students.**

Once an evaluation for alignment to the Shifts and major features of the CCSS has been conducted using Sections 1-3, it's important to evaluate for overall quality and best practices. A starting list of Indicators of Quality are suggested below. States, districts and others evaluating instructional materials are encouraged to add to this list to ensure materials reflect local contexts. For background information on some of the Indicators of Quality in this section, refer to pp.16–18 in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).

Indicators of Quality	Evidence- Give specific examples.	Rating: (Reviewer only.)
1. Lessons are thoughtfully structured and support the teacher in leading the class through the learning paths at hand, with active participation by all students in their own learning and in the learning of their classmates.	**Evidence-** The text is structured in a way that the examples and the problem sets increase in difficulty from procedural knowledge to the application level. Each section of the text includes multiple scaffolded examples that provide a step-by-step process and explanation for solving the problems. The example problems reference problems in the problem set that relate to the example. As the authors are introducing new concepts the examples are scaffolded by increasing difficulty. The latter examples use multiple or all of the concepts previously presented in the earlier examples.	**(Reviewer only.)** **__X____ Yes** **_____ No**
2. The underlying design of the materials includes both problems and exercises. (In solving problems, students learn new mathematics, whereas in working exercises, students apply what they have already learned to build mastery.) Each problem or exercise has a purpose. **NOTE: This Criterion does not require that the problems and exercises be labeled as such.**	**Evidence-** Each section provides "Applications and Extensions" and "Explaining Concepts: Discussion and Writing" that provide the learners the opportunity to gain a deeper level of understanding and a proficiency with the concepts and ideas. This pattern is evidenced in every section of the textbook.	**(Reviewer only.)** **___X___ Yes** **_____ No**
3. Design of assignments is not haphazard: exercises are given in intentional sequences in order to strengthen students' mathematical understanding.	**Evidence-** The problem sets have an intentional sequence from procedural to conceptual, to a deep mathematical understanding of the concepts. For example, in section 6.6 the "Skill Building" problems focus on the procedural concepts presented in this section. The "mixed practice" problems increase the difficulty and incorporate multiple concepts presented in this section to solve. The "applications and extensions" problems use all of the concepts presented in the section 2 model, and solve real-world problems.	**(Reviewer only.)** **___X___ Yes** **_____ No**

4. There are separate teacher materials that support and reward teacher study including, but not limited to: discussion of the mathematics of the units and the mathematical point of each lesson as it relates to the organizing concepts of the unit, discussion on student ways of thinking and anticipating a variety of students responses, guidance on lesson flow, guidance on questions that prompt students thinking, and discussion of desired mathematical behaviors being elicited among students.	**Evidence-** The teacher materials include a crosswalk of the Common Core State Standards including the math practice standards. As the authors present and develop the concepts at the beginning of each section, the text includes: how the students can prepare for the section, the objectives, notes for the teacher on how to present the content, common mistakes made by the students, multiple examples that cover the variety of problems that would be presented in the problem set. Teacher resource material includes fully worked out solutions to problems. The online program, My Math Lab, has fully editable PowerPoint lecture slides and mini lecture notes that align with the sections in the textbook.	**(Reviewer only.)** **__X____ Yes** **_____ No**
5. Manipulatives suggested in the materials are faithful representations of the mathematical objects they represent and are connected to written methods.	**Evidence-** The text provides the teacher with multiple representations of the concepts and ideas how to present the material. The reviewers did not find any mention of the use of manipulatives. Although many of the application problems are designed to connect with students real life experiences. See pages 342-345 (biology, chemistry, economics, marketing, population, and cable subscribers).	**(Reviewer only.)** **__X____ Yes** **_____ No**
6. Materials include a variety of curriculum-embedded assessments. Examples include pre-, formative, summative, and self-assessment resources.	**Evidence-** Aside from the assessment that the homework exercises provide students have chapter reviews and chapter test complete with test prep videos , available in the Video Resources DVD, MyMathLab electronic resources, or in this text's YouTube channel. The materials also come with a comprehensive test generator that allows the teacher to differentiate assessments based on the needs of the students as well as a Test Item File.	**(Reviewer only.)** **___X___ Yes** **_____ No**

7. Assessments contain aligned rubrics, answer keys, and scoring guidelines that provide sufficient guidance for interpreting student performance.	**Evidence-** The assessments from the test generator come with answer keys. Also included in the teacher resource materials is a worked out solution guide to the odd problems throughout the text as well as the chapter reviews and chapter tests at the end of the chapters.	**(Reviewer only.)** ___X___ **Yes** _____ **No**
8. Materials assess student proficiency using methods that are accessible and unbiased, including the use of course-level language in student prompts.	**Evidence-** The reviewers noticed that the authors use the same language on the assessments as they do on the assignments.	**(Reviewer only.)** ___X___ **Yes** _____ **No**
9. Materials are carefully evaluated by qualified individuals, whose names are listed, in an effort to ensure freedom from mathematical errors and course-level appropriateness.	**Evidence-** Pages xviii and xix include the names of those that contributed to and reviewed the text.	**(Reviewer only.)** ___X___ **Yes** _____ **No**
10. The visual design supports students in engaging thoughtfully with the subject. Navigation through the text is clear.	**Evidence-** Visual design makes it easy to navigate. The sections are distinctly headed with clearly stated objectives in each section.	**(Reviewer only.)** ___X___ **Yes** _____ **No**

Reviewer IMET Evaluation Summary Title/Level: Precalculus: Enhanced with Graphing Utilities 6th Edition

Publisher: Pearson Prentice Hall Copyright: 2013 ISBN: 9780132854351

Reviewer ID # Lennart Erickson III Date Review Completed: December 30, 2015

Non-Negotiable Criteria-The Non-Negotiable must be met in order for the Non-Negotiable Alignment Criteria to be met overall.

Non- Negotiable 1: Focus and Coherence

__X___ Meets

_____ Does Not Meet

Non-Negotiable Overall:

___X__ Meets _____ Does Not Meet

Alignment Criteria- Each Alignment Criterion must be met with a sufficient number of points in order for Alignment Criteria to be labeled as "Meets" overall. The more points the materials receive on the Alignment Criteria, the better they are aligned.

Alignment Criterion 1: Rigor and Balance	Alignment Criterion 2: Standards of Mathematical Practice	Alignment Criterion 3: Access to Standards for All Learners
Points: ___6__ of 6 possible. (Materials must receive at least 5 of 6 points to align.)	**Points: __6___ of 6 possible.** (Materials must receive at least 5 of 6 points to align.)	**Points: ___5__ of 6 possible.** (Materials must receive at least 5 of 6 points to align.)
____X___ Meets	**___X____ Meets**	**____X___ Meets**
_____ Does Not Meet	**_____ Does Not Meet**	**_____ Does Not Meet**

Alignment Criteria Overall:

__X___ Meets _____ Does Not Meet

If the materials meet the Non-Negotiable Criterion and each Alignment Criterion, they are aligned to the Shifts and major features of the Core Standards. **Do the materials meet every Non-Negotiable and Alignment Criterion? __X___ Yes _____ No**

What are the specific areas of strength and weakness based on this evaluation? Publishers or others modifying or developing assessments can use this information to make improvements and/or to remedy gaps in the alignment of assessment materials.

Strengths: The online My Math Lab program provides ample resources for the teacher to meet the students' needs. The test generator and the Student's Solution Manual.

Weaknesses: The teacher resources did not have any supports for ELL students

2015-16 Mathematics Interim Review Recommendation & Summary

Publisher Name:	Pearson
Title:	Precalculus Graphical, Numerical, Algebraic Common Core
ISBN #	9780133541342
Grade Level(s) or Course:	9-12
Reviewer ID:	*LE and SO*

RECOMMENDED AS:

x
_____**Core Mathematics Program-** a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials. Substantial evidence clearly supports the designation of this program as Core.

_____**Other Mathematics Program-** a program that substantially, but partially, meets the *focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for* supplemental materials. Substantial evidence clearly supports the designation of this program as Other.

_____**Component Mathematics Program-** a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs. Substantial evidence clearly supports the designation of this program as Component.

_____**Intervention Program-** a program designed and intended to target and support students' specific needs. Substantial evidence clearly supports the designation of this program as Intervention.

_____ **Does not meet criteria** for recommendation as a Curricular Material or Online Resource for Mathematics.

ACCESSIBILITY OF STANDARDS TO ALL STUDENTS-
AC-3

- Vocabulary is presented clearly
- Explorations allow students to learn ideas on their own

OTHER:
Strengths:
Publishers or others modifying or developing assessments can use this information to make improvements and/or to remedy gaps in the alignment of assessment materials.

The progression of the problem sets helps the students move from a conceptual understanding of the concepts to the application level. Most of the problem sets include "Explorations" and "Extending the Ideas" sections that assist the students with acquiring a deeper understanding of the concepts and a level of proficiency needed to move on to subsequent standards.

Weaknesses:
The text relies too much on integers in the practice problems and does not incorporate as much practice with fractions and decimals.

2015-1[illegible]terim Mathematics Review

Mathematics Evaluation Tool – High School

Publisher: Pearson

Title of Material: Precalculus, Graphical, Numerical, Algebraic Common Core

Author: Demana

ISBN #: 9780133541342 **Copyright** 2015

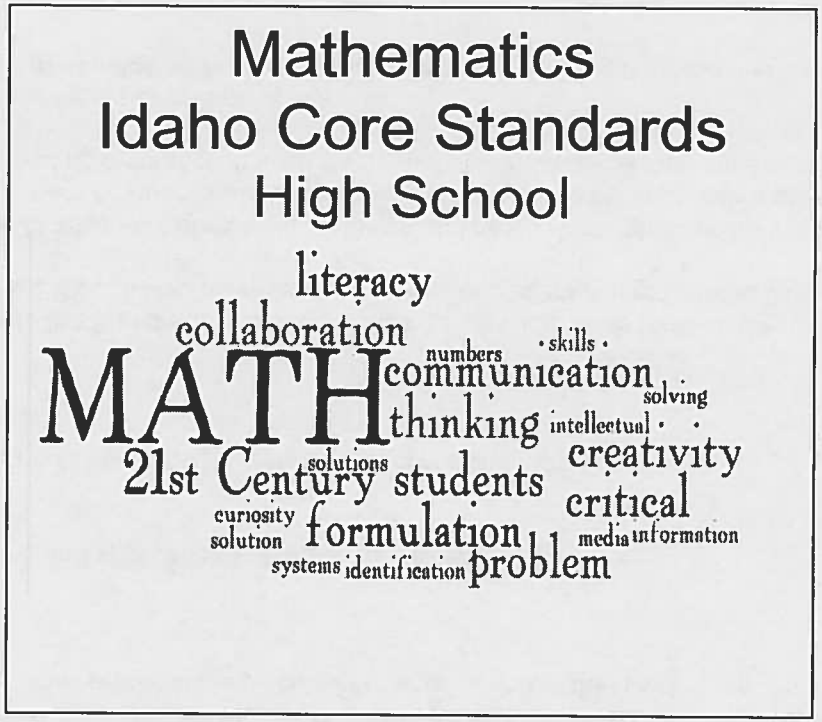
Reviewer ID: LE and SO

Core Mathematics Program- a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Core.

Other Mathematics Program- a program that substantially, but partially, meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Other.

Component Mathematics Program- a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs.
Substantial evidence clearly supports the designation of this program as Component.

Intervention Program- a program designed and intended to target and support students' specific needs.
Substantial evidence clearly supports the designation of this program as Intervention.



- Evaluation Form adapted from Instructional Materials Evaluation Toolkit (IMET).

The IMET was developed by Student Achievement Partners. Educators may use or adapt. http://creativecommons.org/licenses/by/3.0/ Download this tool at http://achievethecore.org/IMET

2015-16 Interim Mathematics Review

Mathematics Evaluation Tool – High School

Publisher: Pearson

Title of Material: Precalculus: Graphical, Numerical, Algebraic

Author: Demana, Waits, Foley, Kennedy, and Bock

ISBN #: 9780133541342 **Copyright:** 2015

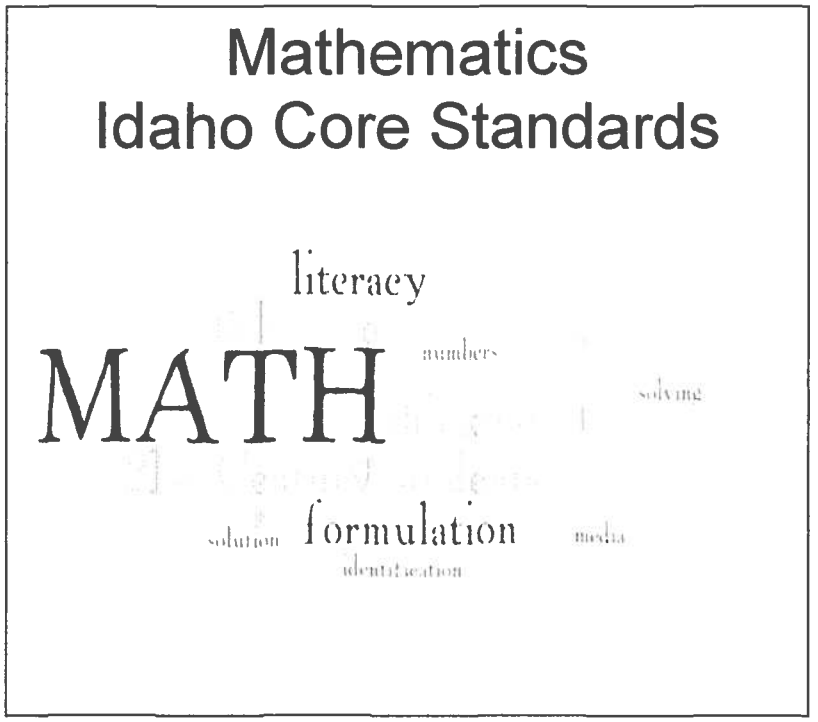
Reviewer ID: Lennart Erickson III, SO

Core Mathematics Program- a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Core.

Other Mathematics Program- a program that substantially, but partially, meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Other.

Component Mathematics Program- a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs.
Substantial evidence clearly supports the designation of this program as Component.

Intervention Program- a program designed and intended to target and support students' specific needs.
Substantial evidence clearly supports the designation of this program as Intervention.



- Evaluation Form adapted from Instructional Materials Evaluation Toolkit (IMET).

The IMET was developed by Student Achievement Partners. Educators may use or adapt. http://creativecommons.org/licenses/by/3.0/ Download this tool at

Instructional Materials Evaluation Tool
Mathematics, High School

What Are the Purposes of the IMET?
This Math IMET is designed to help educators determine whether instructional materials are aligned to the Shifts and major features of the Common Core State Standards (CCSS). The substantial instructional Shifts (http://www.corestandards.org/other-resources/key-shifts-in-mathematics/) at the heart of the Common Core State Standards are:
- **Focus** strongly where the Standards focus
- **Coherence**: Think across grades and link to major topics within the grade
- **Rigor**: In major topics, pursue conceptual understanding, procedural skill and fluency, and application with equal intensity.

The IMET draws directly from the following documents:
- Common Core State Standards for Mathematics (www.corestandards.org/Math)
- Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013) (http://www. corestandards.org/wp-content/uploads/Math_Publishers_Criteria_ HS_Spring_2013_FINAL1.pdf)

When to use the IMET
1. Purchasing materials: Many factors go into local purchasing decisions. Alignment to the Standards is a critical factor to consider. This tool is designed to evaluate alignment of instructional materials to the Shifts and the major features of the CCSS. It also provides suggestions of additional indicators to consider in the materials evaluation and purchasing process
2. Evaluating materials currently in use: The IMET can be used to analyze the degree of alignment of existing materials and help to highlight specific, concrete flaws in alignment. Even where materials and tools currently in use fail to meet one or more of these criteria, the pattern of failure is likely to be informative. States and districts can use the evaluation to create a thoughtful plan to modify or combine existing resources in such a way that students' actual learning experiences approach the focus, coherence, and rigor of the Standards.
3. Developing programs: Those developing new programs can use this tool as guidance for creating aligned curricula.

Please note this tool was designed for evaluating comprehensive curricula (including any supplemental or ancillary materials), but it was not designed for the evaluation of standalone supplemental materials.

Who Uses the IMET?
Evaluating instructional materials requires both subject-matter and pedagogical expertise. Evaluators should be well versed in the Standards (www.corestandards.org/Math) for all grades in which materials are being evaluated. This includes understanding the Widely Applicable Prerequisites (www.achievethecore.org/prerequisites), how the content fits into the progressions in the Standards (www. achievethecore.org/progressions), and the expectations of the Standards with respect to conceptual understanding, procedural skill and fluency, and application. Evaluators also should be familiar with the substantial instructional Shifts (http://www.corestandards.org/other-resources/key-shifts-in-mathematics/) of Focus, Coherence and Rigor that are listed above.

Getting Started
Prior to Evaluation

Assemble all of the materials necessary for the evaluation. It is essential for evaluators to have materials for all grades covered by the program, as some criteria cannot be rated without having access to each grade. In addition, each evaluator should have a reference copy of the Common Core State Standards for Mathematics (CCSSM) and the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).

Before conducting the evaluation itself, it is important to develop a protocol for the evaluation process. The protocol should include having evaluators study the Publishers' Criteria and the IMET. It will also be helpful for evaluators to get a sense of each program overall before beginning the process. At a minimum, this would include reading the front matter of the text, looking at the table of contents and paging through multiple chapters.

Sections 1-3 below should be completed to produce a comprehensive picture of the strengths and weaknesses of the materials under evaluation. Information about areas in need of improvement or supplementation should be shared with internal and external stakeholders.

Navigating the Tool

Begin with Section 1: Non-Negotiable Alignment Criteria

- The Non-Negotiable Alignment Criteria must each be met in full for materials to be considered aligned to the Shifts and the major features of the Common Core State Standards. Each Non-Negotiable Alignment Criterion has one or more metrics associated with it; every one of these metrics must be met in order for the criterion as a whole to be met.

- Examine the relevant materials and use evidence to rate the materials against each criterion and its associated metric(s).

- Record and explain the evidence upon which the rating is based.

Continue to Section 2: Alignment Criteria

- The Alignment Criteria must each be met for materials to be considered aligned to the Shifts and the major features of the Common Core State Standards. Each Alignment Criterion has one or more metric associated with it; a specific number of these metrics must be met or partially met in order for the criterion as a whole to be met.

- Examine the materials in relation to these criteria, assigning each metric a point value. Rate the criterion as "Meets" or "Does Note Meet" based on the number of points assigned. The more points the materials receive on the alignment Criteria, the better they are aligned.

- Record and explain the evidence upon which the rating is based.

Proceed to Section 4: Indicators of Quality

- Indicators of Quality are important considerations that will help evaluators better understand the overall quality of instructional materials. These considerations are not criteria for alignment to the CCSS, but they provide valuable information about additional program characteristics. Evaluators may want to add their own indicators to the examples provided.

Directions for Non-Negotiable 1

Focus and Coherence

Criterion	Evidence- Give specific examples.	Rating: (Reviewer only.)
Non-Negotiable 1: Focus and Coherence- Materials must focus coherently on the Widely Applicable Prerequisites in a way that is consistent with the progressions in the Standards. Focus and coherence are the two major evidence-based design principles of the Common Core State Standards for Mathematics (CCSSM, p. 3). Focus is necessary in order to fulfill the ambitious promise the states have made to their students by adopting the Standards: greater achievement at the college and career-ready level; greater depth of understanding of mathematics; and a rich classroom environment in which reasoning, sense-making, applications, and a range of mathematical practices flourish. In high school courses, narrowing and deepening the curriculum creates a structure that ties topics together. Thus, materials must focus coherently on the Widely Applicable Prerequisites in a way that is consistent with the progressions in the Standards.	Focus and coherence are the two major evidence-based design principles of the Common Core State Standards for Mathematics (CCSSM, p. 3). Focus is necessary in order to fulfill the ambitious promise the states have made to their students by adopting the Standards: greater achievement at the college and career-ready level; greater depth of understanding of mathematics; and a rich classroom environment in which reasoning, sense-making, applications, and a range of mathematical practices flourish. In high school courses, narrowing and deepening the curriculum creates a structure that ties topics together. Thus, materials must focus coherently on the Widely Applicable Prerequisites in a way that is consistent with the progressions in the Standards. **Required Materials:** • Common Core State Standards for Mathematics (www.corestandards.org/wpcontent/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_HS_Spring_2013_FINAL1.pdf) • Widely Applicable Prerequisites for College and Careers (http://achievethecore.org/prerequisites) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion**: Non-Negotiable 1 is rated as Meets or Does Not Meet. To rate Non-Negotiable 1, first rate Metrics 1A–1H. Each of these eight metrics must be rated as Meets in order for Non-Negotiable 1 to be rated as Meets. Rate each metric 1A–1H as Meets or Does Not Meet/Insufficient Evidence. If the evidence examined shows that the Criterion is met, then mark the Criterion as Meets. If the evidence examined shows that the Criterion is not met—or if there is insufficient evidence to make a determination—then mark the Criterion as Does Not Meet/Insufficient Evidence. Support all ratings with evidence.

Metric NN1A: **In any s[illegible]e course, students spend at least 50% of their time on Widely Applicable Prerequisites.** **How to Find the Evidence:** Familiarize yourself with the Widely Applicable Prerequisites. Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, lessons, homework assignments, and assessments. (Evaluate both student and teacher materials.) Consider time spent on the Widely Applicable Prerequisites and judge qualitatively whether students and teachers using the materials as designed will devote the majority of time to the Widely Applicable Prerequisites For context, read Criterion #1 in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** Generally, the fi[illegible]ew sections of each chapter cover the widely acceptable prerequisites for precalculus. Additionally, the entire first chapter of the book reviews prerequisites like real numbers, Cartesian coordinate system, linear equations and inequalities, lines in the plane, solving equations graphically, solving equations numerically, solving equations grew algebraically, complex numbers, and solving inequalities algebraically and graphically. The Idaho Core Standards on page 57 reference additional mathematics that students should learn in order to take advanced courses such as calculus advanced statistics, or discrete mathematics and are indicated with and (+) symbol. A cross referencing the advanced standards with the text shows that complex numbers are covered in P.6, 2.5, and 6.6; vectors are covered in sections 6.1, and 6.2. Widely applicable prerequisites: modeling and solving equations is covered in 1.1, functions and their properties is covered in 1.2, building functions from functions is covered in section 1.4, linear and quadratic functions and modeling in section 2.1, exponential logistic function section 3.1, exponential and logistic modeling 3.2, angles and their measures 4.1, fundamental trigonometric identities 5.1, basic combinatorics 9.1, and the binomial theorem in 9.2.	**__X__Meets** **____Does Not Meet Insufficient Evidence**
Metric NN1B: **Student work in Geometry involves significant work with applications/modeling and problems that use algebra skills.** **How to Find the Evidence:** Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, lessons, homework assignments, and assessments. (Evaluate both student and teacher materials. NOTE: Since Geometry contains relatively fewer Widely Applicable Prerequisites, this Criterion is important to help foster students' college and career readiness. Problems that use algebra skills might include, for example, algebraic geometry problems in a coordinate setting, or problems of measurement involving unknown quantities.	**Evidence-** The text does not cover Cavalieri's Principle. Sections 8.2 and 8.3 cover the derivation of the equations for ellipses and hyperbolas. Chapter 5 Analytic Trigonometry covers the advanced standards related to the section "apply trigonometry to general triangles."	**__X__Meets** **____Does Not Meet Insufficient Evidence**

Metric NN1C: **There are problems at a level of sophistication appropriate to high school (beyond mere review of middle school topics) that involve the application of knowledge and skills from grades 6-8.** **How to Find the Evidence:** Evaluate lessons, chapter/unit assessments, and homework assignments. NOTE: Problems should include application of the following topics from grades 6-8: • Ratios and proportional relationships. • Percentage and unit conversions, e.g., in the context of complex measurement problems involving quantities with derived or compound units (such as mg/mL, kg/ m3, acre-feet, etc.). • Basic function concepts, e.g., by interpreting the features of a graph in the context of an applied problem. • Concepts and skills of geometric measurement e.g., when analyzing a diagram or schematic. • Concepts and skills of basic statistics and probability (see grades 6–8.SP) • Performing rational number arithmetic fluently. For context, read Table 1 on Page 8 of the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** The problem sets for this text are extensive. The problem sets include 50 to more than 80 problems for each section the problem sets increase in difficulty. A nice feature of the problem sets is that the authors have distinguished problems that have been designed to be solved without a calculator. Additionally, the problem sets include subsections of problems for explorations, standardized test questions, and extending the ideas. The "extending the ideas" questions include problems that require the students to write and show the students the applications of the topics they are working on. These features are included in all problem sets creating consistency throughout the text.	**_X___Meets** **____Does Not Meet Insufficient Evidence**
Metric NN1D: **Materials base courses on the content specified in the Standards.** **How to Find the Evidence:** Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, and lessons in both student and teacher materials. For context, read Criterion #3a in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** The text included approximately 75 sections. Considering approximately 170 contact days throughout the school year with 20 days of testing and other interruptions that allows the teachers and students two full days per sections. The text also includes an algebra review I Appendix A. It appears that the text is set up to be able to get through the entire book in one school year.	**_X___Meets** **____Does Not Meet Insufficient Evidence**

Metric NN1E: **Materials give all students extensive work with course-level problems.** **How to Find the Evidence:** Evaluate both student and teacher materials. If the materials provide resources for differentiated learning, consider whether lower-performing students have opportunities to engage with course-level problems. Also consider whether higher-performing students are given opportunities to learn current course-level content in greater depth. For context, read Criterion #3b in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** The problem sets include 50 to over 80 problems. The problems increase in difficulty. The authors have highlighted problems that are designed to be solved without a calculator. One feature in some textbooks, that is absent in this text, is that the problem sets reference the examples that introduce the material. This helps students as they are working on homework to be able to easily look back at examples that will assist them with solving the homework problems. Each problem set includes problems that extends the understanding of the content of the section entitled "Extending the Ideas."	**_X___Meets** **____Does Not Meet Insufficient Evidence**
Metric NN1F: **Materials relate course-level concepts explicitly to prior knowledge from earlier grades or courses. The materials are designed so that prior knowledge becomes reorganized and extended to accommodate the new knowledge.** **How to Find the Evidence:** Evaluate student and teacher materials, looking for problems that involve extending the knowledge learned in earlier grades and courses. NOTE: An example of evaluating this Criterion might be to look at whether materials connect the equation of a circle with the distance formula and the Pythagorean theorem. For context, read Criterion #3c in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** The first chapter of the text "Prerequisites" reviews key concepts that will be needed to be successful in the course. The concepts are referenced throughout the text when they apply to the topic of study. For example, in section 5.1 Fundamental Identities, when discussing Pythagorean Identities related to trigonometry the text previously reviewed the Pythagorean Theorem on page 14. The text has an extensive Index to help students and teachers find the prerequisite skills easily.	**___X_Meets** **____Does Not Meet Insufficient Evidence**
Metric NN1G: **Materials include learning objectives that are visibly shaped by CCSSM cluster and domain headings.** **How to Find the Evidence:** Select several clusters from the course being evaluated. Evaluate teacher and student materials in relation to these clusters. For context, read Criterion #4a in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** On pages xxx to xlvi the text includes a crosswalk with the CCSS and the topics/sections in the text. The crosswalk also includes page numbers. The crosswalk includes the exact standards with reference to page numbers and problems. An example is standard N-VM.4.a (+), the crosswalk refers to pages 458-459 that review the concept and page 464 (#13 and #14) which includes problems that relate to the concept. The crosswalk is extensive and very helpful.	**_X___Meets** **____Does Not Meet Insufficient Evidence**

Metric NN1H: **Materials include problems and activities that serve to connect two or more clusters in a domain, or two or more domains in a category, or two or more categories, in cases where these connections are natural and important.** **How to Find the Evidence:** In the course being evaluated, choose two or more clusters, two or more domains, or two or more categories for which connections are natural and important. Evaluate the units, chapters, and lessons that deal with the chosen topics, looking for problems and activities that serve to connect the chosen clusters or domains. NOTE: An example of evaluating this Criterion might be to look at whether materials include problems in which students analyze a situation by building a function, graphing it, and using it to create and solve an equation. For context, read Criterion #4b in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** An example of can be seen in the Domain of Vector and Matrix Quantities. This domain has two clusters "Represent and model with vector quantities" and "Perform operations on vectors." Pages 458-464 connect both clusters in the domain. Additionally, section 6.1 Vectors in the Plane also references other prerequisite topics from other standards such as the distance formula. Throughout the text the authors connect multiple standards, domains, and clusters to present new concepts. The CCSS crosswalk extensively references the standards, domains, and clusters that relate to the chapters and sections in the text.	**__X__Meets** **____Does Not Meet Insufficient Evidence**
Non-Negotiable 1: Focus and Coherence- Materials must focus coherently on the Widely Applicable Prerequisites in a way that is consistent with the progressions in the Standards. **Metric NN 1:** If all metrics 1A–1H were rated as Meets, then rate Non-Negotiable 1 as Meets. If one or more metrics were rated as Does Not Meet/Insufficient Evidence, then rate Non-Negotiable 1 as Does Not Meet. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)** **Before moving to Alignment Criterion 1, record the final Meets or Does Not Meet rating in the Evaluation Summary.**		**_X__Meets** **____Does Not Meet** **Strengths/Weaknesses** **Strengths:** • **WAP throughout the text** • **Significant amount of student practice for mastery** • **Well organized** **Weaknesses:** • **Most problems use integers. Not enough practice using decimals and fractions**

Now continue by evaluating Alignment Criterion 1 for Rigor and Balance.

Directions for Alignment Criterion 1

Rigor and Balance

Alignment Criterion 1: **Rigor and Balance- Materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.** The Standards set expectations for attention to all three aspects of rigor: conceptual understanding, procedural skill and fluency, and applications. Thus, materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.	The Standards set expectations for attention to all three aspects of rigor: conceptual understanding, procedural skill and fluency, and applications. Thus, materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations. • Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_HS_Spring_2013_FINAL1.pdf) • Widely Applicable Prerequisites for College and Careers (http://achievethecore.org/prerequisites) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion:** Alignment Criterion 1 is rated as Meets or Does Not Meet. To rate Alignment Criterion 1, first rate metrics 1A, 1B, and 1C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). For each metric, guiding questions are provided to aid in gathering evidence. Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 1 if the materials rate 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as rigor and balance, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.
AC Metric 1A: **The materials support the development of students' conceptual understanding of key mathematical concepts, especially where called for in specific content Standards or cluster headings.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Widely Applicable Prerequisites that relate specifically to conceptual understanding to use throughout the questions associated with this metric. NOTE: Some examples of clusters or Standards that call for conceptual understanding include: N-RN.A.1, A-APR.B, A-REI.A.1, A-REI.D.10, A.REI.D.11, F.IF.A.1, F-LE.A.1, G.SRT.A.2, G-SRT.C.6, S-ID.C.7 For context, read Criterion #2a in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	• Choose a cluster/Standard from the Widely Applicable Prerequisites that is aligned to each aspect of rigor and use it to evaluate these metrics. It is most helpful if the same clusters and Standards are chosen for all of the programs being evaluated. (Guidance in choosing clusters/Standards is included in "How to Find the Evidence" below.)	**Use the questions for AC Metric 1A to evaluate Metric 1A. Record evidence for each question and rate Metric 1A.** **__X__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**

Is conceptual understanding attended to thoroughly where the Standards set explici[illegible]ctations for understanding or interpreting? Evaluate lessons, chapter/unit assessments and homework assignments, paying attention to work aligned to Standards that explicitly call for understanding or interpreting.	**Evidence-** Each section in[illegible]des multiple examples to assist the students with understanding the concepts at a deep level and from multiple perspectives. The examples include content specific vocabulary. Additionally, the examples review the topic from multiple perspectives and include a variety of problems. For example in section 3.6 students are asked to interpret functions that relate to the mathematics of finance.	
Do the materials feature high-quality conceptual problems and conceptual discussion questions? Evaluate lessons, chapter/unit assessments, and homework assignments. NOTE: Examples of conceptual problems might include such questions as "What is the maximum value of the function f(t) = 5 – t2 ?" or "Is √2 a polynomial? How about ½(x + √2)+ ½ (-x + √2)?"	**Evidence-** The problem sets include three sections: Exercises, Standardized Test Questions, and Explorations. The questions at the latter part of the Exercises problems require students to seek a deeper understanding of the concepts in the section. Additionally, the Explorations sections of the problem sets almost exclusively seek a deep conceptual understanding. A highlight is that many problem sets have problems that require students to write about the standards and concepts in the section and require students to reference concepts and standards in other sections of the text.	
Do the materials feature opportunities to identify correspondences across mathematical representations? Evaluate lessons, chapter/unit assessments and homework assignments. NOTE: An example of evaluating this metric might include looking at whether materials support students in identifying correspondences among the expression that defines a function, the graph that shows the relationship, and the behavior of the phenomenon being modeled (if any).	**Evidence-** By reviewing the examples for each section, it is evident that the authors represent each concept from multiple perspectives including algebraic, geometric, and graphically. Many sections (2.6, 3.3, 4.4, 4.5, 4.6) reference graphing functions and interpreting the graphs. This is just a small sampling of the many sections that link equations, graphing and interpreting.	

AC Metric 1B: **The materials are designed so that students attain the fluencies and procedural skills required by the Standards.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Widely Applicable Prerequisites that relate specifically to fluency and procedural skill to use throughout the questions associated with this metric. NOTE: Some examples of Standards that call for procedural skill and fluency include: A-SSE.A.1b, A-SSE.2, A-APR.A.1, A-APR.C.6, F-BF.B.3, G-GPE.B.4, G-GPE.B.5, G-GPE.B.7, G-CO.A.1, G-SRT.B.5 For context, read Criterion #2b in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).		**Use the questions for AC Metric 1B to evaluate Metric 1B. Record evidence for each question and rate Metric** **_X__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Is progress toward fluency and procedural skill interwoven with the student's developing conceptual understanding of the skills in question? Evaluate lessons, chapter/unit assessments, daily routines, and homework assignments for evidence that the development of fluency and procedural skill is supported by conceptual understanding.	**Evidence-** The first section "Exercise" of every problem set focus on fluency with the concepts/standards. The concepts are presented in a logical progression of difficulty.	
Are purely procedural problems and exercises present that include cases in which opportunistic strategies are valuable and generic cases that require efficient and general procedures present? Evaluate lessons, chapter/unit assessments, daily routines, and homework assignments. NOTE: Problems in which opportunistic strategies are valuable might include such examples as solving x2 + 5 = 49 + 5 or (3x – 2)2 = 6x – 4. Generic cases that require efficient and general procedures might include such problems as solving c + 8 – c2 = 3(c – 1)2 – 5).	**Evidence-** The problem sets included in the "Exercises" portion of each problem set problems that relate to procedural knowledge of the concepts/standards. The problem sets increase in difficulty and require "opportunistic strategies" to solve. The problems that eventually reach a level of application and in many cases modeling of the concepts to gain a deeper understanding.	
AC Metric 1C: **The materials are designed so that teachers and students spend sufficient time working with engaging applications, without losing focus on the Widely Applicable Prerequisites.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Widely Applicable Prerequisites that relate specifically to application to use throughout the questions associated with this metric. NOTE: Some examples of clusters or Standards that call for application include: N-Q.A, A-SSE.B.3, A-REI.D.11, F-IF.B, F-IF.C.7, F-BF.A.1, G-SRT.C.8, S-ID.A.2, S-IC.A.1 For context, read Criterion #2c in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).		**Use the questions for AC Metric 1C to evaluate Metric 1C. Record evidence for each question and rate Metric 1C.** **__X__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**

Are there single- and multi-step contextual problems, including non-routine problems, that develop the mathematics of the course, afford opportunities for practice, and engage students in problem solving? Do the problems attend thoroughly to those places in the content Standards where expectations for multi-step and real-world problems are explicit? Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** For example, in section 4.4 the first 34 problems address the conceptual understanding of "graphs of sine and cosine: sinusoids" problems 43 through 52 asked the students to "describe the transformations." Later in the problem set problems 72 through 80 relate to real world applications of the concepts. This pattern is evidenced in most of the problem sets throughout the text.	
Do application problems particularly stress applying the Widely Applicable Prerequisites? Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** The application problems require the students to use prior knowledge of the widely accepted prerequisites to solve. For example, section 5.5 The Law of Sines uses knowledge from geometry to present the concepts. The students need to use their prior learning from geometry to be able to understand and solve the application problems.	
Are there ample opportunities for students to engage with modeling problems? Do materials require students to use both individual parts of the modeling cycle as well as the full modeling cycle? Read the pages on High School—Modeling in the Standards for Mathematics (pp. 72 and 73). Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** Examples of modeling include: in section 3.2 using a regression to model population and exponential growth and decay section 3.5 Equation Solving and Modeling focuses on logarithmic models, section 4.4 includes modeling periodic behavior with sinusoids, and section 1.7 focuses on modeling with functions. Many sections in the text refer to modeling with the concepts presented in those sections.	

Alignment Criterion 1: Materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.

AC 1: Materials must earn at least 5 of 6 points to meet this Alignment Criterion. If materials earn less than 5 points, the Criterion has not been met. Check the final rating.
Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)**

Before moving to Alignment Criterion 2, record the final Meets or Does Not Meet rating in the Evaluation Summary.

__X__Meets

____Does Not Meet

Strengths/Weaknesses:
Strengths:

- Plenty of problems develop student skills for modeling
- Application problems and explanation problems add rigor.
- Explore problems increase student perseverance in problem solving.

Weaknesses:

- Problems not all identified in teacher materials.

Alignment Criterion 2: **Standards for Mathematical Practice- Materials must demonstrate authentic connections between content Standards and practice Standards.** The Standards require that designers of instructional materials connect the mathematical practices to mathematical content in instruction. Thus, materials must demonstrate authentic connections between content Standards and practice Standards.	The Standards require that designers of instructional materials connect the mathematical practices to mathematical content in instruction. Thus, materials must demonstrate authentic connections between content Standards and practice Standards. **Required Materials**: • Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_HS_Spring_2013_FINAL1.pdf) • Widely Applicable Prerequisites for College and Careers (http://achievethecore.org/prerequisites) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion:** Alignment Criterion 2 is rated as Meets or Does Not Meet. To rate Alignment Criterion 2, first rate metrics 2A, 2B, and 2C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). For each metric, guiding questions are provided to aid in gathering evidence. Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 2 if the materials rate 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as mathematical practices, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.

AC Metric 2A: **Materials address the practice Standards in such a way as to enrich the Widely Applicable Prerequisites; practices strengthen the focus of the course instead of detracting from it, in both teacher and student materials.** **How to Find the Evidence:** Familiarize yourself with the Widely Applicable Prerequisites. Evaluate teacher and student materials for evidence that the mathematical practices support and connect to the focus of the course. NOTE: An example of evaluating this Criterion might include looking at whether materials use regularity in repeated reasoning to illuminate formal algebra as well as functions, particularly recursive definitions of functions. For context, read Criterion #6 in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** Examples of problems related to the math practice standards: Standard number one: page 76 problem number 24, page 151 problem number 51, and page 272 problems 45 and 46. Standard number two: page 47 problems 57 and 58, page 184 problems 69 and 70, and page 427 problems 62 and 63. Standard number three: page 184 number 65, page 195 problem number 75, and page 376 problem 75 and 76. Standard number four: page 59 problems 47 and 48, page 149 problem 33, page 263 problem number 67, and page 359 problem 78 through 80. Standard number five: page 281 problems 47 through 52, page 359 problems 83 through 86, and page 472 problems 13 through 16. Standard number six: page 301 problems one through 10, page 311 problems 48 through 51, and page 183 problems 51 through 53. Standard number seven page 168 problems five through eight, page 539 problems 11 through 16, and page 671 problems 13 through 20. Standard number eight: page 418 problems 11 and 12, page 419 problems 41 and 42, and page 656 problems one through 10. These examples represent a small sampling of the problems that relate to each of the Math Practice Standards.	**_X___Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
AC Metric 2B: **Materials attend to the full meaning of each practice Standard.** **How to Find the Evidence:** For context, read Criterion #7 in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).		**Use the questions for AC Metric 2B to evaluate Metric 2B. Record evidence for each question and rate Metric 2B.** **_X___Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**

Over the course of any given year of instruction, is each mathematical practice Standard meaningfully present in the form of assignments, activities, or problems that stimulate students to develop the habits of mind described in the practice Standard? Evaluate lessons, chapter/ unit assessments, and homework assignments for evidence of each mathematical practice being meaningfully present in instruction.	**Evidence-** By its nature, Calculus requires students to persevere in solving problems, reason abstractly and quantitatively, attend to precision, and to look for and make use of structure. Additionally, the explorations portion of each problem set encourages students to construct viable arguments, model the mathematics learned in that section, and to use the appropriate tools to solve the problems.	
Are teacher-directed materials that explain the role of the practice Standards in the classroom and in students' mathematical development included? Are alignments to practice Standards accurate? Evaluate teacher materials, paying attention to explanations of the role of the practice Standards in the classroom and in students' mathematical development. Evaluate documents aligning lessons to practice Standards for accuracy. NOTE: Examples to look for when evaluating this metric might include the following: a highly scaffolded problem should not be aligned to MP.1; or a problem that directs a student to use a calculator should not be aligned to MP.5; or a problem about merely extending a pattern should not be aligned to MP.8.	**Evidence-** On pages xxv – xxix, the text presents the Math Practice Standards with an explanation of how each will be used throughout the text. The text has many problems that relate to the Math Practice Standards, however, the teacher's edition does not specifically point out which problems aligned with which Math Practice Standards.	
AC Metric 2C: **Materials support the Standards' emphasis on mathematical reasoning.** **How to Find the Evidence:** For context, read Criterion #8 in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).		**Use the questions for AC Metric 2C to evaluate Metric 2C. Record evidence for each question and rate Metric 2C.** **__X__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Do the materials support students in constructing viable arguments and critiquing the arguments of others concerning course-level mathematics that is detailed in the content Standards? Read Standard for Mathematical Practice 3. Evaluate teacher and student materials to ensure that students are given opportunities to reason with grade-level mathematics.	**Evidence-** Throughout the text, many problems require students to write about and construct viable arguments regarding the concepts in each section. For example, on problem 58 on page 273 the students are asked "which model – exponential or logistic – is more valid in this case? Justify your choice." The problem sets provide many opportunities for the students to write about and create viable arguments concerning the course level mathematics.	

Do the materials support students in producing not only answers and solutions, but also, in a course-appropriate way, arguments, explanations, diagrams, mathematical models, etc., especially in the Widely Applicable Prerequisites? Familiarize yourself with the Widely Applicable Prerequisites. Evaluate teacher and student materials to understand the types of work students are expected to produce.	**Evidence-** Throughout the problem sets the questions asked the students to "right", "consider", "explain", "describe", "prove", "interpret", etc. The problem sets increase in difficulty from conceptual knowledge to application with the students often being required to construct arguments and write about their understanding.	
Do materials explicitly attend to the specialized language of mathematics? Is the language of argument, problem solving, and mathematical explanations taught rather than assumed? Evaluate teacher and student materials, paying attention to how mathematical language is taught. NOTE: An example of evaluating this Criterion might include looking at whether students are supported in: basing arguments on definitions; using the method of providing a counter example; or recognizing that examples alone do not establish a general statement.	**Evidence-** Throughout the textbook it highlights the content specific vocabulary for each section and then uses that vocabulary throughout the examples and the problem sets. The vocabulary is clearly defined in each section. The text includes an especially nice feature throughout the text that refers to "Exploration." In the exploration sections of the textbook the authors logically present the material in a way that the students are able to explore and see the derivation of many of the concepts and formulas.	

Alignment Criterion 2: Materials must demonstrate authentic connections between content Standards and practice Standards.

AC 2: Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 points, the Criterion has not been met. Check the final rating.
Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewers only.)**

Before moving to Alignment Criterion 3, record the final Meets or Does Not Meet rating in the Evaluation Summary.

__X__Meets

____Does Not Meet

Strengths/Weaknesses:
Strengths:

- **All standards are represented well**
- **Plenty of practice problems are available to learn to construct viable arguments.**

Weaknesses:

- **Articles are not identified by standard in teacher's materials.**

Alignment Criterion 3:
Access to the Standards for All Students- Materials must provide supports for English Language Learners and other special populations.

Because Standards are for all students, alignment requires thoughtful support to ensure all students are able to meet the Standards. Thus, aligned materials must provide supports for English Language Learners and other special populations.

Because Standards are for all students, alignment requires thoughtful support to ensure all students are able to meet the Standards. Thus, aligned materials must provide supports for English Language Learners and other special populations.

Required Materials:

- Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf)
- Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math Publishers_Criteria_HS_Spring_2013_FINAL1.pdf)
- From the materials being evaluated: teacher guides, student texts and workbooks

Rating this Criterion:

Alignment Criterion 3 is rated as Meets or Does Not Meet.

To rate Alignment Criterion 3, first rate metrics 3A, 3B, and 3C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 3 if the materials rate 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as support for special population, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.

AC Metric 3A: **Support for English Language Learners and other special populations is thoughtful and helps those students meet the same Standards as all other students. The language in which problems are posed is carefully considered.** **How to Find the Evidence:** Evaluate teacher and student materials, paying attention to supports offered for special populations.	**Evidence-** I was unable to find any specific reference to support for English language learners. However the text presents the vocabulary in such a way that it includes a clear and in many cases extensive explanation of the terms. However, when a student reaches the level of precalculus, they will have previously acquired much of the content specific vocabulary to be successful in the prerequisite courses.	**__X__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
AC Metric 3B: **Materials provide appropriate level and type of scaffolding, differentiation, intervention, and support for a broad range of learners with gradual removal of supports, when needed, to allow students to demonstrate their mathematical understanding independently.** **How to Find the Evidence:** Evaluate teacher and student materials, paying attention to whether materials provide differentiation that will lead all learners to engage with on-grade-level content.	**Evidence-** The problem sets scaffold the concepts of each section from procedural to application. The authors use multiple representations to help the students achieve a level of proficiency that takes into account multiple representations of the concept.	**__X__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
AC Metric 3C: **Design of lessons recommends and facilitates a mix of instructional approaches for a variety of learners such as using multiple representations (e.g., including models, using a range of questions, checking for understanding, flexible grouping, pair-share).** **How to Find the Evidence:** Evaluate teacher materials, noting instructional approaches suggested for whole class and differentiated lessons and activities.	**Evidence-** The authors present the material in each section in a way that scaffolds the learning to help students gain a deeper understanding of the concepts. The authors derive the formulas, include explorations so that the students can discover the concepts for themselves, and include key definitions and formulas. The examples increase in difficulty and include a "now try exercise" that references specific problems from the problem set that go with each example. This structure is followed throughout the text.	**_X___Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**

Alignment Criterion 3: Materials must provide supports for English Language Learners and other special populations. AC 3 Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 points, the Criterion has not been met. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewers only.)** **Move to the Evaluation Summary and record the final Meets or Does Not Meet rating .All 6 points in this section.**	**_X___Meets** **____Does Not Meet** **Strengths/Weaknesses:** **Strengths:** • **Vocabulary is presented clearly** • **Explorations allow students to learn ideas on their own.** **Weaknesses:** • **No specific reference to materials for English language learners.**

Once an evaluation for alignment to the Shifts and major features of the CCSS has been conducted using Sections 1-3, it's important to evaluate for overall quality and best practices. A starting list of Indicators of Quality are suggested below. States, districts and others evaluating instructional materials are encouraged to add to this list to ensure materials reflect local contexts. For background information on some of the Indicators of Quality in this section, refer to pp.16–18 in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).

Indicators of Quality	**Evidence- Give specific examples.**	**Rating: (Reviewer only.)**
1. Lessons are thoughtfully structured and support the teacher in leading the class through the learning paths at hand, with active participation by all students in their own learning and in the learning of their classmates.	**Evidence-** The text is structured in a way that the examples and the problem sets increase in difficulty from procedural knowledge to the application level. Each section provides "Explorations" and "Extending the Ideas" that provide the learners the opportunity to gain a deeper level of understanding and a proficiency with the concepts and ideas. This pattern is evidenced in every section of the textbook.	**(Reviewer only.)** **___X___ Yes** **_____ No**

2. The underlying design of the materials includes both problems & exercises. (In solving problems, students learn new mathematics, whereas in working exercises, students apply what they have already learned to build mastery.) Each problem or exercise has a purpose. **NOTE: This Criterion does not require that the problems and exercises be labeled as such.**	**Evidence-** Each section of the text includes multiple examples that provide a step-by-step process and explanation for solving the problems. Many of the sections include examples that show the students how to work through the application problems found in the "extending the ideas" problems. As a student works through the problems, the authors have designed them in such a way that they build upon one another. For example, in section 5.5 the first 36 problems allow the student to work through a variety of scenarios was solving triangles. Problems 37 through 46 present the applications of the concepts and the problem set ins up with explorations and extending the idea problems that require them to draw upon previous knowledge to solve which eventually results in a deep understanding of the concept.	**(Reviewer only.)** __X____ **Yes** _____ **No**
3. Design of assignments is not haphazard: exercises are given in intentional sequences in order to strengthen students' mathematical understanding.	**Evidence-** The problem sets have an intentional sequence from procedural to a deep mathematical understanding of the concepts. For example, the problem set for section 8.2 has 12 different sections of problems for the students to solve. Each section of the problem set sequentially and intentionally builds upon the previous section leading to the most difficult problems that require the students to explore and extend the ideas.	**(Reviewer only.)** __X____ **Yes** _____ **No**
4. There are separate teacher materials that support and reward teacher study including, but not limited to: discussion of the mathematics of the units and the mathematical point of each lesson as it relates to the organizing concepts of the unit, discussion on student ways of thinking and anticipating a variety of students responses, guidance on lesson flow, guidance on questions that prompt students thinking, and discussion of desired mathematical behaviors being elicited among students.	**Evidence-** Each section of the teacher materials includes: objectives, ways to motivate the students, a lesson guide, general remarks, exploration extensions, notes on examples, teaching notes, follow-up ideas, and assignment guide, cooperative learning group activity suggestions, notes on exercises, and assessment suggestions.	**(Reviewer only.)** __X____ **Yes** _____ **No**

5. Manipulatives suggested in the materials are faithful representations of the mathematical objects they represent and are connected to written methods.	**Evidence-** The text provides teacher with multiple representations of the concepts and ideas how to present the material.	**(Reviewer only.)** **___X___ Yes** **_____ No**
6. Materials include a variety of curriculum-embedded assessments. Examples include pre-, formative, summative, and self-assessment resources.	**Evidence-** The text provides quick review sections that allow the students to review prerequisite knowledge for the upcoming section. The quick review sections also reference the sections in the text where the students can go back and review the concepts. The sections in the teacher's edition also make reference to specific assessments that can be used throughout the chapters.	**(Reviewer only.)** **___X___ Yes** **_____ No**
7. Assessments contain aligned rubrics, answer keys, and scoring guidelines that provide sufficient guidance for interpreting student performance.	**Evidence-** The assessments contain answer keys and guidelines that assist the instructor with effectively assessing student performance. Did not see rubrics.	**(Reviewer only.)** **___X___ Yes** **_____ No**
8. Materials assess student proficiency using methods that are accessible and unbiased, including the use of course-level language in student prompts.	**Evidence-** Student problems allow students to check understanding and build concept fluency. Assessments use language common in student problems and assess taught concepts.	**(Reviewer only.)** **__X____ Yes** **_____ No**
9. Materials are carefully evaluated by qualified individuals, whose names are listed, in an effort to ensure freedom from mathematical errors and course-level appropriateness.	**Evidence-** p. xiv - xv	**(Reviewer only.)** **__X____ Yes** **_____ No**
10. The visual design supports students in engaging thoughtfully with the subject. Navigation through the text is clear.	**Evidence-** The book is attractively laid out. Vocabulary and concepts are easy to find. Authors use colors, headings and boxes to make information accessible. The subject matter references WAP concepts and stretches student learning through applied problems and explorations.	**(Reviewer only.)** **___X___ Yes** **_____ No**

Reviewer IMET Evaluation Summary **Title/Level: Precalculus: Graphical, Numerical, Algebraic**

Publisher: Pearson Copyright: 2015 ISBN:9780133541342

Reviewer ID # Lennart Erickson III **Date Review Completed: January 15, 2016**

Non-Negotiable Criteria-The Non-Negotiable must be met in order for the Non-Negotiable Alignment Criteria to be met overall.
Non- Negotiable 1: Focus and Coherence **__X___ Meets** **_____ Does Not Meet**
Non-Negotiable Overall: **___X__ Meets** **_____ Does Not Meet**
Alignment Criteria- Each Alignment Criterion must be met with a sufficient number of points in order for Alignment Criteria to be labeled as "Meets" overall. The more points the materials receive on the Alignment Criteria, the better they are aligned.

Alignment Criterion 1: Rigor and Balance	Alignment Criterion 2: Standards of Mathematical Practice	Alignment Criterion 3: Access to Standards for All Learners
Points: __6___ of 6 possible. (Materials must receive at least 5 of 6 points to align.) __X_____ Meets _____ Does Not Meet	Points: ___6__ of 6 possible. (Materials must receive at least 5 of 6 points to align.) __X_____ Meets _____ Does Not Meet	Points: __6___ of 6 possible. (Materials must receive at least 5 of 6 points to align.) ___X____ Meets _____ Does Not Meet

Alignment Criteria Overall:

__X___ Meets _____ Does Not Meet

Problems 57 and 58 If the materials meet the Non-Negotiable Criterion and each Alignment Criterion, they are aligned to the Shifts and major features of the Core Standards. **Do the materials meet every Non-Negotiable and Alignment Criterion? _X_**
Yes _____ No

What are the specific areas of strength and weakness based on this evaluation?
Strengths:
Publishers or others modifying or developing assessments can use this information to make improvements and/or to remedy gaps in the alignment of assessment materials.

The progression of the problem sets helps the students move from a conceptual understanding of the concepts to the application level. Most of the problem sets include "Explorations" and "Extending the Ideas" sections that assist the students with acquiring a deeper understanding of the concepts and a level of proficiency needed to move on to subsequent standards.

Weaknesses:
The text relies too much on integers in the practice problems and does not incorporate as much practice with fractions and decimals.

2015-16 Mathematics Interim Review Recommendation & Summary

Publisher Name:	Pearson Education, Inc.
Title:	Stats in Your World
ISBN #	97801333995299
Grade Level(s) or Course:	9-12
Reviewer ID:	*JN & DQ*

RECOMMENDED AS:

____X____**Core Mathematics Program-** a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials. Substantial evidence clearly supports the designation of this program as Core.

_____**Other Mathematics Program-** a program that substantially, but partially, meets the *focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for* supplemental materials. Substantial evidence clearly supports the designation of this program as Other.

_____**Component Mathematics Program-** a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs. Substantial evidence clearly supports the designation of this program as Component.

_____**Intervention Program-** a program designed and intended to target and support students' specific needs. Substantial evidence clearly supports the designation of this program as Intervention.

_____ **Does not meet criteria** for recommendation as a Curricular Material or Online Resource for Mathematics.

EVIDENCE SUMMARY:

FOCUS- This is an upper level statistics course. Students are asked to build off of their prior knowledge. Connections across the standards are natural and unforced.

COHERENCE- The course flows from basic concepts, to step by step examples with calculator and technology integration to real world applications and contextual problems.

RIGOR- The rigor level of the text, assignments, assessments, and supplemental materials is appropriate for a higher level mathematics course. Appropriate academic vocabulary is introduced, used and required for students.

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CONCEPTUAL UNDERSTANDING- The book lends itself to a natural development of deep conceptual understanding of the statistical standards. Students are taught to take prior knowledge on data analysis and apply it to contextual problems of data collection, probability, inference, etc. The problems sets progress from:

A- Practice for skills
B- *Multi step problem using the skills*
C- Real world conceptual problems.

MATHEMATICAL PRACTICES- The materials support the students' mathematical reasoning. The practice standards are implemented appropriately for the upper level content of this course.

ACCESSIBILITY OF STANDARDS TO ALL STUDENTS- The text does lack ELL supports, but there are eTexts, multimedia, and video supports that can help with your ELL students. The visual design and academic language make the text and support material accessible and unbiased.

OTHER:

This course is very clear and well organized. There are many supplemental resources for the teacher that help guide the teacher through the course as well as assessment, extra practice, and resource support. The Think Show Tell section is an excellent source of individual to group exercises that includes the use of mathematical practices. The deep conceptual understanding is the basis of the statistical course. The students are given opportunities take statistical concepts from the beginning concept to a deep and full contextual analysis.

2015-1 Interim Mathematics Review

Mathematics Evaluation Tool – High School

Publisher: Pearson Education Inc

Title of Material: Stats in Your World

Author: Bock, Mariano, Craine, Velleman, DeVeaux

ISBN #: 9780133839944 **Copyright** 2016 9780133995299

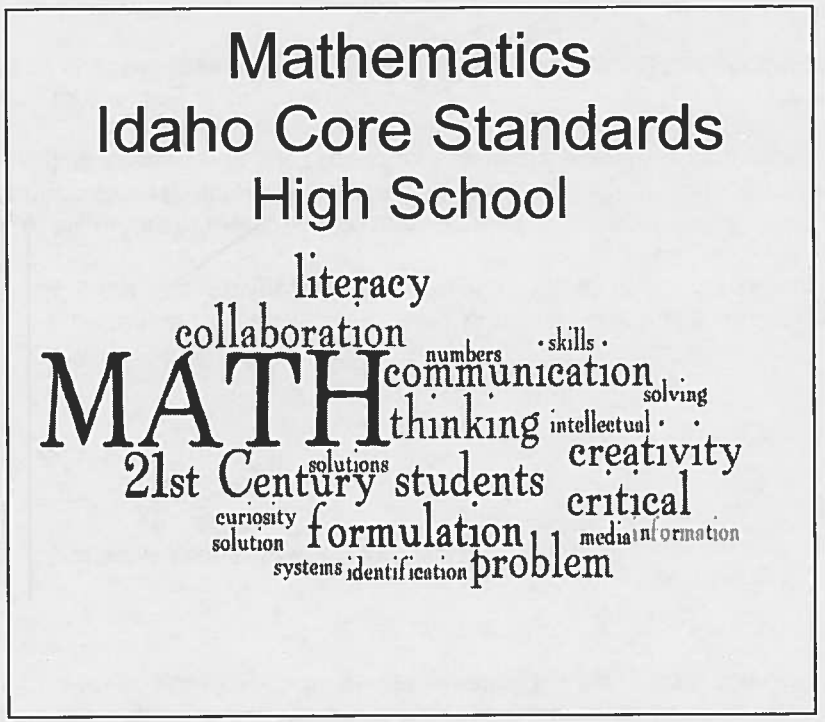
Reviewer ID: JN & DJQ

Core Mathematics Program- a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Core.

Other Mathematics Program- a program that substantially, but partially, meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Other.

Component Mathematics Program- a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs.
Substantial evidence clearly supports the designation of this program as Component.

Intervention Program- a program designed and intended to target and support students' specific needs.
Substantial evidence clearly supports the designation of this program as Intervention.



- Evaluation Form adapted from Instructional Materials Evaluation Toolkit (IMET).

The IMET was developed by Student Achievement Partners. Educators may use or adapt. http://creativecommons.org/licenses/by/3.0/ Download this tool at http://achievethecore.org/IMET

Before conducting the evaluation itself, it is important to develop a protocol for the evaluation process. The protocol should include having evaluators study the Publishers' Criteria and the IMET. It will also be helpful for evaluators to get a sense of each program overall before beginning the process. At a minimum, this would include reading the front matter of the text, looking at the table of contents and paging through multiple chapters.

Sections 1-3 below should be completed to produce a comprehensive picture of the strengths and weaknesses of the materials under evaluation. Information about areas in need of improvement or supplementation should be shared with internal and external stakeholders.

Navigating the Tool

Begin with Section 1: Non-Negotiable Alignment Criteria

- The Non-Negotiable Alignment Criteria must each be met in full for materials to be considered aligned to the Shifts and the major features of the Common Core State Standards. Each Non-Negotiable Alignment Criterion has one or more metrics associated with it; every one of these metrics must be met in order for the criterion as a whole to be met.

- Examine the relevant materials and use evidence to rate the materials against each criterion and its associated metric(s).

- Record and explain the evidence upon which the rating is based.

Continue to Section 2: Alignment Criteria

- The Alignment Criteria must each be met for materials to be considered aligned to the Shifts and the major features of the Common Core State Standards. Each Alignment Criterion has one or more metric associated with it; a specific number of these metrics must be met or partially met in order for the criterion as a whole to be met.

- Examine the materials in relation to these criteria, assigning each metric a point value. Rate the criterion as "Meets" or "Does Note Meet" based on the number of points assigned. The more points the materials receive on the alignment Criteria, the better they are aligned.

- Record and explain the evidence upon which the rating is based.

Instructional Materials Evaluation Tool

Mathematics, High School

What Are the Purposes of the IMET?

This Math IMET is designed to help educators determine whether instructional materials are aligned to the Shifts and major features of the Common Core State Standards (CCSS). The substantial instructional Shifts (http://www.corestandards.org/other-resources/key-shifts-in-mathematics/) at the heart of the Common Core State Standards are:

- **Focus** strongly where the Standards focus
- **Coherence**: Think across grades and link to major topics within the grade
- **Rigor**: In major topics, pursue conceptual understanding, procedural skill and fluency, and application with equal intensity.

The IMET draws directly from the following documents:

- Common Core State Standards for Mathematics (www.corestandards.org/Math)
- Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013) (http://www. corestandards.org/wp-content/uploads/Math_Publishers_Criteria_ HS_Spring_2013_FINAL1.pdf)

When to use the IMET

1. Purchasing materials: Many factors go into local purchasing decisions. Alignment to the Standards is a critical factor to consider. This tool is designed to evaluate alignment of instructional materials to the Shifts and the major features of the CCSS. It also provides suggestions of additional indicators to consider in the materials evaluation and purchasing process
2. Evaluating materials currently in use: The IMET can be used to analyze the degree of alignment of existing materials and help to highlight specific, concrete flaws in alignment. Even where materials and tools currently in use fail to meet one or more of these criteria, the pattern of failure is likely to be informative. States and districts can use the evaluation to create a thoughtful plan to modify or combine existing resources in such a way that students' actual learning experiences approach the focus, coherence, and rigor of the Standards.
3. Developing programs: Those developing new programs can use this tool as guidance for creating aligned curricula.

Please note this tool was designed for evaluating comprehensive curricula (including any supplemental or ancillary materials), but it was not designed for the evaluation of standalone supplemental materials.

Who Uses the IMET?

Evaluating instructional materials requires both subject-matter and pedagogical expertise. Evaluators should be well versed in the Standards (www.corestandards.org/Math) for all grades in which materials are being evaluated. This includes understanding the Widely Applicable Prerequisites (www.achievethecore.org/prerequisites), how the content fits into the progressions in the Standards (www. achievethecore.org/progressions), and the expectations of the Standards with respect to conceptual understanding, procedural skill and fluency, and application. Evaluators also should be familiar with the substantial instructional Shifts (http://www.corestandards.org/other-resources/key-shifts-in-mathematics/) of Focus, Coherence and Rigor that are listed above.

Getting Started

Prior to Evaluation

Assemble all of the materials necessary for the evaluation. It is essential for evaluators to have materials for all grades covered by the program, as some criteria cannot be rated without having access to each grade. In addition, each evaluator should have a reference copy of the Common Core State Standards for Mathematics (CCSSM) and the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).

Proceed to Section 4: Indicators of Quality

- Indicators of Quality are important considerations that will help evaluators better understand the overall quality of instructional materials. These considerations are not criteria for alignment to the CCSS, but they provide valuable information about additional program characteristics. Evaluators may want to add their own indicators to the examples provided.

Directions for Non-Negotiable 1

Focus and Coherence

Criterion	Evidence- Give specific examples.	Rating: (Reviewer only.)
Non-Negotiable 1: Focus and Coherence- Materials must focus coherently on the Widely Applicable Prerequisites in a way that is consistent with the progressions in the Standards. Focus and coherence are the two major evidence-based design principles of the Common Core State Standards for Mathematics (CCSSM, p. 3). Focus is necessary in order to fulfill the ambitious promise the states have made to their students by adopting the Standards: greater achievement at the college and career-ready level; greater depth of understanding of mathematics; and a rich classroom environment in which reasoning, sense-making, applications, and a range of mathematical practices flourish. In high school courses, narrowing and deepening the curriculum creates a structure that ties topics together. Thus, materials must focus coherently on the Widely Applicable Prerequisites in a way that is consistent with the progressions in the Standards.	Focus and coherence are the two major evidence-based design principles of the Common Core State Standards for Mathematics (CCSSM, p. 3). Focus is necessary in order to fulfill the ambitious promise the states have made to their students by adopting the Standards: greater achievement at the college and career-ready level; greater depth of understanding of mathematics; and a rich classroom environment in which reasoning, sense-making, applications, and a range of mathematical practices flourish. In high school courses, narrowing and deepening the curriculum creates a structure that ties topics together. Thus, materials must focus coherently on the Widely Applicable Prerequisites in a way that is consistent with the progressions in the Standards. **Required Materials:** • Common Core State Standards for Mathematics (www.corestandards.org/wpcontent/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_HS_Spring_2013_FINAL1.pdf) • Widely Applicable Prerequisites for College and Careers (http://achievethecore.org/prerequisites) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion**: Non-Negotiable 1 is rated as Meets or Does Not Meet. To rate Non-Negotiable 1, first rate Metrics 1A–1H. Each of these eight metrics must be rated as Meets in order for Non-Negotiable 1 to be rated as Meets. Rate each metric 1A–1H as Meets or Does Not Meet/Insufficient Evidence. If the evidence examined shows that the Criterion is met, then mark the Criterion as Meets. If the evidence examined shows that the Criterion is not met—or if there is insufficient evidence to make a determination—then mark the Criterion as Does Not Meet/Insufficient Evidence. Support all ratings with evidence.

Metric NN1A: **In any single course, students spend at least 50% of their time on Widely Applicable Prerequisites.** **How to Find the Evidence:** Familiarize yourself with the Widely Applicable Prerequisites. Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, lessons, homework assignments, and assessments. (Evaluate both student and teacher materials.) Consider time spent on the Widely Applicable Prerequisites and judge qualitatively whether students and teachers using the materials as designed will devote the majority of time to the Widely Applicable Prerequisites For context, read Criterion #1 in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** The lessons, assignments, assessments, and supplemental material that relate to the WAP are Chapters: 2, 3, 4, 7, 9, 10, which relate to the Widely Applicable Prerequisites that relate specifically to probability and statistics. This is only six out of twenty chapters. This is less than 50%, however this is an upper level course and the student should have mastery of the WAP by the time they take this elective. The standards are represented throughout.	**__X__Meets** **____Does Not Meet Insufficient Evidence**
Metric NN1B: **Student work in Geometry involves significant work with applications/modeling and problems that use algebra skills.** **How to Find the Evidence:** Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, lessons, homework assignments, and assessments. (Evaluate both student and teacher materials. NOTE: Since Geometry contains relatively fewer Widely Applicable Prerequisites, this Criterion is important to help foster students' college and career readiness. Problems that use algebra skills might include, for example, algebraic geometry problems in a coordinate setting, or problems of measurement involving unknown quantities.	**Evidence-** This is a statistics course at an upper level and focuses on the domains specific to statistics and probability. There are examples of geometric applications and modeling with reference to density curves and area. Chapter 3, 7, 8,	**__X__Meets** **____Does Not Meet Insufficient Evidence**

Metric NN1C: **There are problems at a level of sophistication appropriate to high school (beyond mere review of middle school topics) that involve the application of knowledge and skills from grades 6-8.** **How to Find the Evidence:** Evaluate lessons, chapter/unit assessments, and homework assignments. NOTE: Problems should include application of the following topics from grades 6-8: • Ratios and proportional relationships. • Percentage and unit conversions, e.g., in the context of complex measurement problems involving quantities with derived or compound units (such as mg/mL, kg/ m3, acre-feet, etc.). • Basic function concepts, e.g., by interpreting the features of a graph in the context of an applied problem. • Concepts and skills of geometric measurement e.g., when analyzing a diagram or schematic. • Concepts and skills of basic statistics and probability (see grades 6–8.SP) • Performing rational number arithmetic fluently. For context, read Table 1 on Page 8 of the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** While the course does involve the application of the knowledge and skills from grades 6-8, this is an upper level statistics course where the use and application of the problems is at an upper level. Students are asked to build off of their knowledge of quantitative data, data analysis, and inferences of measures of central tendency. Example: Ratios & Proportions, %, Basic Stats & Probability are evident in example on page 19 "Do the Math".	**_X___Meets** **____Does Not Meet Insufficient Evidence**
Metric NN1D: **Materials base courses on the content specified in the Standards.** **How to Find the Evidence:** Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, and lessons in both student and teacher materials. For context, read Criterion #3a in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** This is a complete statistics course that addresses all the standards on probability and statistics. The course is an upper level mathematics class. The content is based on the SID, SIC, SCP, SMD, NQ, NRN, AAPR, AREI & Modeling standards throughout.	**__X__Meets** **____Does Not Meet Insufficient Evidence**
Metric NN1E: **Materials give all students extensive work with course-level problems.** **How to Find the Evidence:** Evaluate both student and teacher materials. If the materials provide resources for differentiated learning, consider whether lower-performing students have opportunities to engage with course-level problems. Also consider whether higher-performing students are given opportunities to learn current course-level content in greater depth. For context, read Criterion #3b in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** This is a statistics course at an upper level. There are extra resources available through MathXL. Much of the differentiation & modifications are left to the teacher.	**__X__Meets** **____Does Not Meet Insufficient Evidence**

Metric NN1F: **Materia late course-level concepts explicitly to prior knowledge from earlier grades or courses. The materials are designed so that prior knowledge becomes reorganized and extended to accommodate the new knowledge.** **How to Find the Evidence:** Evaluate student and teacher materials, looking for problems that involve extending the knowledge learned in earlier grades and courses. NOTE: An example of evaluating this Criterion might be to look at whether materials connect the equation of a circle with the distance formula and the Pythagorean theorem. For context, read Criterion #3c in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** There are many e ples in the content that tie the students' prior knowledge and expand it to deepen the conceptual understanding of the standards. This is evidenced in Chapter 3, Boxplots and Histograms are reviewed and extended from spread to standard deviation.	**__X__Meets** **____Does Not Meet Insufficient Evidence**
Metric NN1G: **Materials include learning objectives that are visibly shaped by CCSSM cluster and domain headings.** **How to Find the Evidence:** Select several clusters from the course being evaluated. Evaluate teacher and student materials in relation to these clusters. For context, read Criterion #4a in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** The learning objectives for the course are shaped related to S-ID –Interpreting Categorical and Quantitative Data. This is evidenced in Chapter 2, 3, 4, and 5.	**__X__Meets** **____Does Not Meet Insufficient Evidence**
Metric NN1H: **Materials include problems and activities that serve to connect two or more clusters in a domain, or two or more domains in a category, or two or more categories, in cases where these connections are natural and important.** **How to Find the Evidence:** In the course being evaluated, choose two or more clusters, two or more domains, or two or more categories for which connections are natural and important. Evaluate the units, chapters, and lessons that deal with the chosen topics, looking for problems and activities that serve to connect the chosen clusters or domains. NOTE: An example of evaluating this Criterion might be to look at whether materials include problems in which students analyze a situation by building a function, graphing it, and using it to create and solve an equation. For context, read Criterion #4b in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** The content for this course continuously makes connections between S-ID: Interpreting Categorical and Quantitative Data and S-IC; Making Inferences and Justifying Conclusions and S-MD; Using Probability to Make Decisions. These connections are both natural and important and are presented as such.	**__X__Meets** **____Does Not Meet Insufficient Evidence**

Non-Negotiable 1: Focus and Coherence- Materials must focus coherently on the Widely Applicable Prerequisites in a way that is consistent with the progressions in the Standards. **Metric NN 1:** If all metrics 1A–1H were rated as Meets, then rate Non-Negotiable 1 as Meets. If one or more metrics were rated as Does Not Meet/Insufficient Evidence, then rate Non-Negotiable 1 as Does Not Meet. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)** **Before moving to Alignment Criterion 1, record the final Meets or Does Not Meet rating in the Evaluation Summary.**	**__X__Meets** **____Does Not Meet** **Strengths/Weaknesses** This is an upper level statistics course. Students are asked to build off of their prior knowledge. Connections across the standards are natural and unforced.

Now continue by evaluating Alignment Criterion 1 for Rigor and Balance.

Directions for Alignment Criterion 1

Rigor and Balance

Alignment Criterion 1: **Rigor and Balance- Materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.** The Standards set expectations for attention to all three aspects of rigor: conceptual understanding, procedural skill and fluency, and applications. Thus, materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.	The Standards set expectations for attention to all three aspects of rigor: conceptual understanding, procedural skill and fluency, and applications. Thus, materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations. • Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_HS_Spring_2013_FINAL1.pdf) • Widely Applicable Prerequisites for College and Careers (http://achievethecore.org/prerequisites) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion:** Alignment Criterion 1 is rated as Meets or Does Not Meet. To rate Alignment Criterion 1, first rate metrics 1A, 1B, and 1C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). For each metric, guiding questions are provided to aid in gathering evidence. Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 1 if the materials rate 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as rigor and balance, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.

AC Metric 1A: **The materials support the development of students' conceptual understanding of key mathematical concepts, especially where called for in specific content Standards or cluster headings.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Widely Applicable Prerequisites that relate specifically to conceptual understanding to use throughout the questions associated with this metric. NOTE: Some examples of clusters or Standards that call for conceptual understanding include: N-RN.A.1, A-APR.B, A-REI.A.1, A-REI.D.10, A.REI.D.11, F.IF.A.1, F-LE.A.1, G.SRT.A.2, G-SRT.C.6, S-ID.C.7 For context, read Criterion #2a in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	• Choose a cluster/Standard from the Widely Applicable Prerequisites that is applied to each aspect of rigor and use it to evaluate these metrics. It is most helpful if the same clusters and Standards are chosen for all of the programs being evaluated. (Guidance in choosing clusters/Standards is included in "How to Find the Evidence" below.)	**Use the questions for AC Metric 1A to evaluate Metric 1A. Record evidence for each question and rate Metric.** **__X__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Is conceptual understanding attended to thoroughly where the Standards set explicit expectations for understanding or interpreting? Evaluate lessons, chapter/unit assessments and homework assignments, paying attention to work aligned to Standards that explicitly call for understanding or interpreting.	**Evidence-** The "Think, Show, Tell" problem allows the students to work through their conceptual understanding by working independently and by analyzing. Students are required to determine the parameter of interest, identify the variables, analyze data and graphs, interpret the results, and discuss, explain and justify their results. This is used throughout.	
Do the materials feature high-quality conceptual problems and conceptual discussion questions? Evaluate lessons, chapter/unit assessments, and homework assignments. NOTE: Examples of conceptual problems might include such questions as "What is the maximum value of the function $f(t) = 5 - t2$?" or "Is $\sqrt{2}$ a polynomial? How about $\frac{1}{2}(x + \sqrt{2}) + \frac{1}{2}(-x + \sqrt{2})$?"	**Evidence-** The content focuses on a scaffolding approach that presents the concept but develops the conceptual understanding with the use of high-quality conceptual problems and discussion, explain, justify solutions. Students are required to explain and justify their results making connections across the different domain clusters.	
Do the materials feature opportunities to identify correspondences across mathematical representations? Evaluate lessons, chapter/unit assessments and homework assignments. NOTE: An example of evaluating this metric might include looking at whether materials support students in identifying correspondences among the expression that defines a function, the graph that shows the relationship, and the behavior of the phenomenon being modeled (if any).	**Evidence-** Students are exposed to different representations of statistical mathematics throughout the content. Students are required to interpret graphs, examine functions, and explain exponential growth all with multiple representations of math and statistics.	

Are there single- and multi-step contextual problems, including non-routine problems, that develop the mathematics of the course, afford opportunities for practice, and engage students in problem solving? Do the problems attend thoroughly to those places in the content Standards where expectations for multi-step and real-world problems are explicit? Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** . The problems sets progress from: A- Practice for skills B- Multi step problem using the skills C- Real world conceptual problems.	
Do application problems particularly stress applying the Widely Applicable Prerequisites? Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** Application problems rely on Widely Applicable Prerequisites with algebra skills, interpretation of slope, solving for variables, exponential growth, area under a curve, etc.	
Are there ample opportunities for students to engage with modeling problems? Do materials require students to use both individual parts of the modeling cycle as well as the full modeling cycle? Read the pages on High School—Modeling in the Standards for Mathematics (pp. 72 and 73). Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** There is ample opportunity for students to engage in modeling problems, both in assignments, assessments, and lessons. Students are often required to model their data in multiple forms (tables, graphs, linear representations, etc.). Students are also asked to use statistical simulation to model contextual problems.	

Alignment Criterion 1: Materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.

AC 1: Materials must earn at least 5 of 6 points to meet this Alignment Criterion. If materials earn less than 5 points, the Criterion has not been met. Check the final rating.
Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)**

Before moving to Alignment Criterion 2, record the final Meets or Does Not Meet rating in the Evaluation Summary.

__X__Meets

____Does Not Meet

Strengths/Weaknesses:
The "Think, Show, Tell" problem allows the students to work through their conceptual understanding by working independently and by analyzing. The problems sets progress from:

A- Practice for skills
B- Multi step problem using the skills
C- Real world conceptual problems.

Alignment Criterion 2: **Standards for Mathematical Practice- Materials must demonstrate authentic connections between content Standards and practice Standards.** The Standards require that designers of instructional materials connect the mathematical practices to mathematical content in instruction. Thus, materials must demonstrate authentic connections between content Standards and practice Standards.	The Standards require that designers of instructional materials connect the mathematical practices to mathematical content in instruction. Thus, materials must demonstrate authentic connections between content Standards and practice Standards. **Required Materials**: • Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_HS_Spring_2013_FINAL1.pdf) • Widely Applicable Prerequisites for College and Careers (http://achievethecore.org/prerequisites) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion:** Alignment Criterion 2 is rated as Meets or Does Not Meet. To rate Alignment Criterion 2, first rate metrics 2A, 2B, and 2C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). For each metric, guiding questions are provided to aid in gathering evidence. Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 2 if the materials rate 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as mathematical practices, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.
AC Metric 2A: **Materials address the practice Standards in such a way as to enrich the Widely Applicable Prerequisites; practices strengthen the focus of the course instead of detracting from it, in both teacher and student materials.** **How to Find the Evidence:** Familiarize yourself with the Widely Applicable Prerequisites. Evaluate teacher and student materials for evidence that the mathematical practices support and connect to the focus of the course. NOTE: An example of evaluating this Criterion might include looking at whether materials use regularity in repeated reasoning to illuminate formal algebra as well as functions, particularly recursive definitions of functions. For context, read Criterion #6 in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** The Mathematical Practices are used as a way to enrich the Widely Applicable Prerequisite as well as strengthening the focus of the course. Throughout the text the students are required to make sense of problems, reason abstractly and quantitatively, construct viable arguments, model the mathematics, use appropriate tools, and attend to precision.	**__X__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
AC Metric 2B: **Materials attend to the full meaning of each practice Standard.** **How to Find the Evidence:** For context, read Criterion #7 in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).		**Use the questions for AC Metric 2B to evaluate Metric 2B. Record evidence for each question and rate Metric 2B.** **__X__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**

Over the course of any given year of instruction, is each mathematical practice Standard meaningfully present in the form of assignments, activities, or problems that stimulate students to develop the habits of mind described in the practice Standard? Evaluate lessons, chapter/ unit assessments, and homework assignments for evidence of each mathematical practice being meaningfully present in instruction.	**Evidence-** In the units there is a section "Using Mathematical Models" that enhances the students conceptual understanding by allowing students to model, analyze, and reason. There are also simulation problems throughout the text that allow students to demonstrate and build on their mathematical practices. This is evidenced in the assessments, lessons, and assignments.	
Are teacher-directed materials that explain the role of the practice Standards in the classroom and in students' mathematical development included? Are alignments to practice Standards accurate? Evaluate teacher materials, paying attention to explanations of the role of the practice Standards in the classroom and in students' mathematical development. Evaluate documents aligning lessons to practice Standards for accuracy. NOTE: Examples to look for when evaluating this metric might include the following: a highly scaffolded problem should not be aligned to MP.1; or a problem that directs a student to use a calculator should not be aligned to MP.5; or a problem about merely extending a pattern should not be aligned to MP.8.	**Evidence-** The role of the practice standards is emphasized in the teacher materials. The alignment is accurate. There are scaffolding, assignments, and assessments. Teachers have access to an Online test bank and Teachers Resources Guide as well as MathXL for additional assessments and materials.	
AC Metric 2C: **Materials support the Standards' emphasis on mathematical reasoning.** **How to Find the Evidence:** For context, read Criterion #8 in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).		**Use the questions for AC Metric 2C to evaluate Metric 2C. Record evidence for each question and rate Metric 2C.** **__X__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Do the materials support students in constructing viable arguments and critiquing the arguments of others concerning course-level mathematics that is detailed in the content Standards? Read Standard for Mathematical Practice 3. Evaluate teacher and student materials to ensure that students are given opportunities to reason with grade-level mathematics.	**Evidence-** The material contains opportunities for students to construct their own arguments, self-assess, attend to precision, and reason abstractly. Students are continuously asked to justify their conclusions and communicate in non-statistical and statistical terms.	
Do the materials support students in producing not only answers and solutions, but also, in a course-appropriate way, arguments, explanations, diagrams, mathematical models, etc., especially in the Widely Applicable Prerequisites? Familiarize yourself with the Widely Applicable Prerequisites. Evaluate teacher and student materials to understand the types of work students are expected to produce.	**Evidence-** Students are required to not only provide solutions but to justify their answers with reasoning and mathematical models. Examples of answer questions appear in the "Do the Math" and "Just Checking" sections while the "Think Show Tell" and assignments ask students to go further and justify and critique.	

Do materials explicitly attend to the specialized language of mathematics the language of argument, problem solving, and mathematical explanations taught rather than assumed? Evaluate teacher and student materials, paying attention to how mathematical language is taught. NOTE: An example of evaluating this Criterion might include looking at whether students are supported in: basing arguments on definitions; using the method of providing a counter example; or recognizing that examples alone do not establish a general statement.	**Evidence-** There is specific a specialized statistical language introduced and used throughout the program in the student and instructional material. Particular attention is paid to using appropriate statistical vocabulary. Students are introduced to key vocabulary at the beginning of the unit and the vocabulary is bolded and highlighted through the lesson. There is a review of the vocabulary at the end of the unit.	
Alignment Criterion 2: Materials must demonstrate authentic connections between content Standards and practice Standards. **AC 2:** Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 points, the Criterion has not been met. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewers only.)** **Before moving to Alignment Criterion 3, record the final Meets or Does Not Meet rating in the Evaluation Summary.**		**__X__Meets** **____Does Not Meet** **Strengths/Weaknesses:** **The materials support the students' mathematical reasoning. The practice standards are implemented appropriately for the upper level content of this course.**
Alignment Criterion 3: **Access to the Standards for All Students- Materials must provide supports for English Language Learners and other special populations.** Because Standards are for all students, alignment requires thoughtful support to ensure all students are able to meet the Standards. Thus, aligned materials must provide supports for English Language Learners and other special populations.	Because Standards are for all students, alignment requires thoughtful support to ensure all students are able to meet the Standards. Thus, aligned materials must provide supports for English Language Learners and other special populations. **Required Materials:** • Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math Publishers_Criteria_HS_Spring_2013_FINAL1.pdf) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion:** Alignment Criterion 3 is rated as Meets or Does Not Meet. To rate Alignment Criterion 3, first rate metrics 3A, 3B, and 3C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 3 if the materials rate 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as support for special population, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.

AC Metric 3A: **Support for English Language Learners and other special populations is thoughtful and helps those students meet the same Standards as all other students. The language in which problems are posed is carefully considered.** **How to Find the Evidence:** Evaluate teacher and student materials, paying attention to supports offered for special populations.	**Evidence-** There are e-texts and videos and various multimedia resources that are helpful with ELL learners however there is not specific support for ELL analog or digitally.	____Meets (2) __X__Partially Meets (1) ____Does Not Meet (0)
AC Metric 3B: **Materials provide appropriate level and type of scaffolding, differentiation, intervention, and support for a broad range of learners with gradual removal of supports, when needed, to allow students to demonstrate their mathematical understanding independently.** **How to Find the Evidence:** Evaluate teacher and student materials, paying attention to whether materials provide differentiation that will lead all learners to engage with on-grade-level content.	**Evidence-** There is an appropriate level of scaffolding, differentiation, intervention, and support for this level of a mathematics course. There are reading narratives, step-by-step instructions on practice problems. The Teacher Resource guide includes end of chapter review sheets for three different levels of learners.	__X__Meets (2) ____Partially Meets (1) ____Does Not Meet (0)
AC Metric 3C: **Design of lessons recommends and facilitates a mix of instructional approaches for a variety of learners such as using multiple representations (e.g., including models, using a range of questions, checking for understanding, flexible grouping, pair-share).** **How to Find the Evidence:** Evaluate teacher materials, noting instructional approaches suggested for whole class and differentiated lessons and activities.	**Evidence-** The statistical concepts naturally use models and multiple representations to aide a variety of instructional approaches. This is an upper level course so this may appear more implicit.	__X__Meets (2) ____Partially Meets (1) ____Does Not Meet (0)
Alignment Criterion 3: Materials must provide supports for English Language Learners and other special populations. **AC 3** Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 points, the Criterion has not been met. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewers only.)** **Move to the Evaluation Summary and record the final Meets or Does Not Meet rating .**		_X__Meets ____Does Not Meet **Strengths/Weaknesses:** Because this is an upper level course this tends to be more implicit than explicit.

Once an evaluation for alignment to the Shifts and major features of the CCSS has been conducted using Sections 1-3, it's important to evaluate for overall quality and best practices. A starting list of Indicators of Quality are suggested below. States, districts and others evaluating instructional materials are encouraged to add to this list to ensure materials reflect local contexts. For background information on some of the Indicators of Quality in this section, refer to pp.16–18 in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).

Indicators of Quality	Evidence- Give specific examples.	Rating: (Reviewer only.)
1. Lessons are thoughtfully structured and support the teacher in leading the class through the learning paths at hand, with active participation by all students in their own learning and in the learning of their classmates.	**Evidence-** The lessons in the text and teacher supports are structured and organized in a way that is direct and easy to follow for both students and teachers. There are discussion prompts for whole group, Think Share and Tel for small groups and Individual practice.	**(Reviewer only.)** **___X___ Yes** **_____ No**
2. The underlying design of the materials includes both problems and exercises. (In solving problems, students learn new mathematics, whereas in working exercises, students apply what they have already learned to build mastery.) Each problem or exercise has a purpose. **NOTE: This Criterion does not require that the problems and exercises be labeled as such.**	**Evidence-.** . The problems sets progress from: A- Practice for skills **B-** Multi step problem using the skills **C-** Real world conceptual problems. On average there are sixty problems at the end of each chapter.	**(Reviewer only.)** **__X____ Yes** **_____ No**
3. Design of assignments is not haphazard: exercises are given in intentional sequences in order to strengthen students' mathematical understanding.	**Evidence-** The material is sequential and builds from lesson to lesson to develop and strengthen the student's conceptual understanding.	**(Reviewer only.)** **___X___ Yes** **_____ No**
4. There are separate teacher materials that support and reward teacher study including, but not limited to: discussion of the mathematics of the units and the mathematical point of each lesson as it relates to the organizing concepts of the unit, discussion on student ways of thinking and anticipating a variety of students responses, guidance on lesson flow, guidance on questions that prompt students thinking, and discussion of desired mathematical behaviors being elicited among students.	**Evidence-** The supplemental teacher materials support the instructor's role in facilitating student discussions. They also guide the teacher in anticipating areas of concern for the students, common misconceptions, etc.	**(Reviewer only.)** **___X___ Yes** **_____ No**
5. Manipulatives suggested in the materials are faithful representations of the mathematical objects they represent and are connected to written methods.	**Evidence-** There are very few manipulatives at this level of a math course, however there are several suggested simulations that are beneficial for student conceptual understating including the use of dice, cards, spinners, random number generators, random digit tables, etc. There are recommendations for Calculators and Statistical software.	**(Reviewer only.)** **__X____ Yes** **_____ No**

6. Materials include a variety of curriculum-embedded assessme Examples include pre-, formative, summative, and self-assessment resources.	**Evidence-** There are many s ssessment opportunities throughout the lessons. Formative assessments can be found in comprehension checks and various activities such as the lesson quizzes and scaffolded chapter reviews. There are summative assessments available in the test banks and Test Generator.	**(Reviewer only.)** ___X___ **Yes** _____ **No**
7. Assessments contain aligned rubrics, answer keys, and scoring guidelines that provide sufficient guidance for interpreting student performance.	**Evidence-** There are self assessment solutions contained in the Just Checking sections. Students can use Appendix C to check selected assignment questions. The Teacher supplemental material contains answer keys for all student assignments. There are assessment material and grading tools and rubrics provided in the Teacher Resource Library. No use of rubrics at this level.	**(Reviewer only.)** ___X___ **Yes** _____ **No**
8. Materials assess student proficiency using methods that are accessible and unbiased, including the use of course-level language in student prompts.	**Evidence-** There is appropriate use course level language throughout the text that is accessible and unbiased. Data for the Performance Tasks and questions is actual data that was collected by experts.	**(Reviewer only.)** ___X___ **Yes** _____ **No**
9. Materials are carefully evaluated by qualified individuals, whose names are listed, in an effort to ensure freedom from mathematical errors and course-level appropriateness.	**Evidence-** A list of evaluators is not present. The credentials of the authors is provided.	**(Reviewer only.)** _____ **Yes** ___X___ **No**
10. The visual design supports students in engaging thoughtfully with the subject. Navigation through the text is clear.	**Evidence-** The graphics and visual designs are engaging and appropriate to the course material. There is not much white space and may be distracting. The navigation of the unit is clear and engaging.	**(Reviewer only.)** ___X___ **Yes** _____ **No**

Reviewer IMET Evaluation Summary **Title/Level: _____Stats in Your World_____**

Publisher: __Pearson Education, Inc._____ Copyright: __2016___ ISBN:__9780133995299___

Reviewer ID # _____DQJN_____ Date Review Completed:_____3/9/2016_____

Non-Negotiable Criteria-The Non-Negotiable must be met in order for the Non-Negotiable Alignment Criteria to be met overall.

Non- Negotiable 1: Focus and Coherence

___X__ Meets

_____ Does Not Meet

Non-Negotiable Overall:

___X__ Meets _____ Does Not Meet

Alignment Criteria- Each Alignment Criterion must be met with a sufficient number of points in order for Alignment Criteria to be labeled as "Meets" overall. The more points the materials receive on the Alignment Criteria, the better they are aligned.

Alignment Criterion 1: Rigor and Balance	Alignment Criterion 2: Standards of Mathematical Practice	Alignment Criterion 3: Access to Standards for All Learners
Points: __6___ of 6 possible. (Materials must receive at least 5 of 6 points to align.)	**Points: __6___ of 6 possible.** (Materials must receive at least 5 of 6 points to align.)	**Points: _5___ of 6 possible.** (Materials must receive at least 5 of 6 points to align.)
___X___ Meets	**____X___ Meets**	**__X____ Meets**
_____ Does Not Meet	**_____ Does Not Meet**	**_____ Does Not Meet**

Alignment Criteria Overall:

___X__ Meets _____ Does Not Meet

If the materials meet the Non-Negotiable Criterion and each Alignment Criterion, they are aligned to the Shifts and major features of the Core Standards. **Do the materials meet every Non-Negotiable and Alignment Criterion? ___X__ Yes _____ No**

What are the specific areas of strength and weakness based on this evaluation? Publishers or others modifying or developing assessments can use this information to make improvements and/or to remedy gaps in the alignment of assessment materials.

This course is very clear and well organized. There are many supplemental resources for the teacher. These help guide the teacher through the course as well as assessment, extra practice, and resource support. The Think Show Tell section is an excellent source of individual to group exercises that includes the use of mathematical practices. The deep conceptual understanding is the basis of this statistical course. Students are given opportunities to take statistical concepts from the beginning concept to a deep and full conceptual analysis.

There are very little ELL supports built into the program. There are scaffolded assignments and reviews as well as additional exercises on MathXL that can be used to help the ELL student but additional supports would need to be provided by the instructor.

IDAHO STATE DEPARTMENT OF EDUCATION

Advanced Placement Course: Statistics

Content Area: Mathematics

Course Title: AP Statistics

Title of Material: Stats: Modeling the World

Author: Bock, et al.

Publisher: Pearson Education, Inc.

ISBN #: 9780133541250 **Copyright** 2015

Reviewers: CG and DJQ

Meets Content Standards Alignment: ✓ Yes _____ No

Meets ~~Materials Analysis Evaluation:~~ Indicators of Quality ✓ Yes _____ No

96.4% **Core Program**

_____ **Other Program**

_____ **Resource/Supplemental**

_____ **Not Recommended**

Advanced Placement:

- ☐ AP Capstone
- ☐ Arts
- ☐ English
- ☐ History & Social Science
- ☒ Math & Computer Science
- ☐ Sciences
- ☐ World Languages & Cultures

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Standards Alignment Evaluation Rubric

0 = No Alignment– **Not Evident:** Content as described in the Standards is **not evident**.

.5 = Partial Alignment- **Partially Evident:** Content as described in the Standards is **partially evident** and there are few gaps.

1 = High Alignment – **Clearly Evident:** Content is fully aligned as described in the Standards and repeatedly included to guarantee extensive opportunities for students to work with the content. Alignment is **clearly evident**.

N/A = Not applicable for standard

Advanced Placement		**Statistics**	
Standards and Learning Indicators		**Publisher/Provider: List units/lessons with specific examples of where standards are introduced/Taught/Assessed.**	**Point Value 0/.5/1 (Reviewer)**
Exploring Data			
Describing patterns and departures from patterns			
A. Constructing and interpreting graphical displays of distributions of univariate data (dotplot, stemplot, histogram, cumulative frequency plot)	1. Center and spread	Pg 43-72	1
	2. Clusters and gaps	Pg 44-72 Pg 287	1
	3. Outliers and other unusual features	Pg 50-72	1
	4. Shape	Pg 48-50	1

B. Summarizing distributions of univariate data	1. Measuring center: median, mean	Pg 51-58	1
	2. Measuring spread: range, interquartile range, standard deviation	Pg 53-72	1
	3. Measuring position: quartiles, percentiles, standardized scores (z-scores)	Pg 53-72, 108	1
	4. Using boxplots	Pg 55-72	1
	5. The effect of changing units on summary measures	Pg 111-130	1
C. Comparing distributions of univariate data (dotplots, back-to-back stemplots, parallel boxplots)	1. Comparing center and spread: within group, between group variation	Pg 84-96, 234-247, 606-624	1
	2. Comparing clusters and gaps	Pg 44, 287	1
	3. Comparing outliers and other unusual features	Pg 50-72	1
	4. Comparing shapes	Pg 48-72	1
D. Exploring bivariate data	1. Analyzing patterns in scatterplots	Pg 151-167	1
	2. Correlation and linearity	Pg 189-198, 154-167	1
	3. Least-squares regression line	Pg 177-197	1
	4. Residual plots, outliers and influential points	Pg 177-197	1
	5. Transformations to achieve linearity: logarithmic and power transformations	Pg 189-198	1

E. Exploring categorical data	1. Frequency tables and bar charts	Pg 16-32	1
	2. Marginal and joint frequencies for two-way tables	Pg 18-32	1
	3. Conditional relative frequencies and association	Pg 20-32	1
	4. Comparing distributions using bar charts	Pg 17-32	1
Sampling and Experimentation			
Planning and conducting a study			
A. Overview of methods of data collection	1. Census	Pg 283-299	1
	2. Sample survey	Pg 280-299	1
	3. Experiment	Pg 305-325	1
	4. Observational study	Pg 305-325, 27	1
B. Planning and conducting surveys	1. Characteristics of a well-designed and well-conducted survey	Not Explicit. Pg 291-299	1/2
	2. Populations, samples and random selection	Pg 280-299	1
	3. Sources of bias in sampling and surveys	Pg 280-299, 487	1
	4. Sampling methods, including simple random sampling, stratified random sampling and cluster sampling	Pg 280-325	1

C. Planning and conducting experiments	1. Characteristics of a well-designed and well-conducted experiment	Pg. 308-312	1
	2. Treatments, control groups, experimental units, random assignments and replication	Pg 306-314	1
	3. Sources of bias and confounding, including placebo effect and blinding	Pg 294-319	1
	4. Completely randomized design	Pg 308-309	1
	5. Randomized block design, including matched pairs design	Pg 309, 317-318	1
D. Generalizability of results and types of conclusions that can be drawn from observational studies, experiments and surveys		Pg 312-313, 296-297, 324-329	1
Anticipating Patterns			
Exploring random phenomena using probability and simulation			
A. Probability	1. Interpreting probability, including long-run relative frequency interpretation	Pg 343-383	1
	2. "Law of Large Numbers" concept	Pg 345-356	1
	3. Addition rule, multiplication rule, conditional probability and independence	Pg 363-374	1
	4. Discrete random variables and their probability distributions, including binomial and geometric	Pg 389-391, 415-423	1
	5. Simulation of random behavior and probability distributions	Pg 269-276	1
	6. Mean (expected value) and standard deviation of a random variable, and linear transformation of a random variable	Pg 389-407	1
B. Combining independent random variables	1. Notion of independence versus dependence	Pg 369-373	1

	2. Mean and standard deviation for sums and differences of independent random variables	Pg 304-400	1
C. The normal distribution	1. Properties of the normal distribution	Pg 448-449	1
	2. Using tables of the normal distribution	Implicit. Pg 107-121	1/2
	3. The normal distribution as a model for measurements	Pg 107-121, 423-425	1
D. Sampling distributions	1. Sampling distribution of a sample proportion	Pg 445-464	1
	2. Sampling distribution of a sample mean	Pg 445-464	1
	3. Central Limit Theorem	Pg 445-464	1
	4. Sampling distribution of a difference between two independent sample proportions	Pg 445-464	1
	5. Sampling distribution of a difference between two independent sample means	Pg 445-464	1
	6. Simulation of sampling	Pg 445-464	1
	7. T-distribution	Pg 605-624, 576-579	1
	8. Chi-square distribution	Pg 675-697	1

Statistical Inference			
Estimating population parameters and testing hypotheses			
A. Estimation (point estimators and confidence intervals)	1. Estimating population parameters and margins of error	Pg 284-285, 477-479	1
	2. Properties of point estimators, including unbiasedness and variability	Implicit. Pg 474-476	1/2
	3. Logic of confidence intervals, meaning of confidence level and confidence intervals, and properties of confidence intervals	Pg 473-488	1
	4. Large sample confidence interval for a proportion	Terms not used. Pg 473-488	1/2
	5. Large sample confidence interval for a difference between two proportions	Pg 544-547	1
	6. Confidence interval for a mean	Pg 578-586	1
	7. Confidence interval for a difference between two means (unpaired and paired)	Implicit for unpaired. Pg 605-624, 634-648	1/2
	8. Confidence interval for the slope of a least-squares regression line	Pg 706-729	1
B. Tests of significance	1. Logic of significance testing, null and alternative hypotheses; p-values; one- and two-sided tests; concepts of Type I and Type II errors; concept of power	Pg 493-535	1
	2. Large sample test for a proportion	Pg 541-556	1
	3. Large sample test for a difference between two proportions	Pg 541-556	1
	4. Test for a mean	Pg 574-597	1
	5. Test for a difference between two means (unpaired and paired)	Pg 614-618	1

	6. Chi-square test for goodness of fit, homogeneity of proportions, and independence (one- and two-way tables)	Pg 672-697	1
	7. Test for the slope of a least-squares regression line	Pg 706-729	1

this list to ensure materials reflect local contexts. For background information on some of the Indicators of Quality in this section, refer to pp.16–18 in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).

Indicators of Quality	Evidence- Give specific examples.	Rating: (Reviewer only.)
1. Lessons are thoughtfully structured and support the teacher in leading the class through the learning paths at hand, with active participation by all students in their own learning and in the learning of their classmates.	**Evidence-** Lessons are structured at a level necessary for students to be successful on the AP exam. The lessons are organized in a way that students must actively work with the data to gain the knowledge present in the lessons. Students are required to read the text in addition to class discussions and lectures. On mymathlab, teachers are provided with podcasts to support teaching concepts and skills.	**(Reviewer only.)** ✓ **Yes** ____ **No**
2. The underlying design of the materials includes both problems and exercises. (In solving problems, students learn new mathematics, whereas in working exercises, students apply what they have already learned to build mastery.) Each problem or exercise has a purpose. NOTE: This Criterion does not require that the problems and exercises be labeled as such.	**Evidence-** Each section has guided checks to provide reflection on what they learned "Just Checking." These sections also provide practice using "Step-by-step examples" i.e. Think, Show, Tell. Homework is implicitly divided into practice for learning and applying skills using deeper thinking.	**(Reviewer only.)** ✓ **Yes** ____ **No**
3. Design of assignments is not haphazard: exercises are given in intentional sequences in order to strengthen students' mathematical understanding.	**Evidence-** Homework is implicitly divided into practice for learning and applying skills using deeper thinking. Every problem has a purpose, not just busy work.	**(Reviewer only.)** ✓ **Yes** ____ **No**
4. There are separate teacher materials that support and reward teacher study including, but not limited to: discussion of the mathematics of the units and the mathematical point of each lesson as it relates to the organizing concepts of the unit, discussion on student ways of thinking and anticipating a variety of students responses, guidance on lesson flow, guidance on questions that prompt students thinking, and discussion of desired mathematical behaviors being elicited among students.	**Evidence-** Mymathlab provides teacher podcasts to focus on key points for lessons Testgen provided to make assessments for learning easy. PowerPoint lecture slides available for download. Free companion website. Provided AP Stats Test Prep The TE provided a DVD review to support teachers: - ActivStats for data desk providing videos, data sets, activities, etc.	**(Reviewer only.)** ✓ **Yes** ____ **No**

	- Two additional chapters for added learning - Data [illegible]ed in the text for easy access	
5. Manipulatives suggested in the materials are faithful representations of the mathematical objects they represent and are connected to written methods.	**Evidence-** Provided online "Mymathlab" that helps graph distributions and is faithful to correct mathematical representation. Available for purchase: Pearson Education AP Test prep Graphing Calculator Manual Study card (includes important formulas, definitions and tables) Videos on DVD	**(Reviewer only.)** ✓ **Yes** ____ **No**
6. Materials include a variety of curriculum-embedded assessments. Examples include pre-, formative, summative, and self-assessment resources.	**Evidence-** Each section has guided checks to provide self-assessments on what they learned "Just Checking." These sections also provide practice using "Step-by-step examples" i.e. Think, Show, Tell. Homework is implicitly divided into practice for learning and applying skills using deeper thinking. Testgen is provided to make summative tests easy for the teacher.	**(Reviewer only.)** ✓ **Yes** ____ **No**
7. Assessments contain aligned rubrics, answer keys, and scoring guidelines that provide sufficient guidance for interpreting student performance.	**Evidence-** Text provided answer keys in the back of the book for teachers. Odd answers are provided for students. No rubrics or scoring guidelines.	**(Reviewer only.)** ✓ **Yes** ____ **No**
8. Materials assess student proficiency using methods that are accessible and unbiased, including the use of course-level language in student prompts.	**Evidence-** Different methods are provided throughout. No biased language, due to it being an AP level course.	**(Reviewer only.)** ✓ **Yes** ____ **No**
9. Materials are carefully evaluated by qualified individuals, whose names are listed, in an effort to ensure freedom from mathematical errors and course-level appropriateness.	**Evidence-** This edition was evaluated by many people (professors and high school teacher said from various state) see page xvii.	**(Reviewer only.)** ✓ **Yes** ____ **No**
10. The visual design supports students in engaging thoughtfully with the subject. Navigation through the text is clear.	**Evidence-** Color coordination throughout the textbook is consistent I.e. "What have we learned?", "what can go wrong", "what if", "Just checking," etc. Important vocabulary is highlighted and bold constantly throughout. Navigation is clear, especially with provided index and chapter summaries.	**(Reviewer only.)** ✓ **Yes** ____ **No**

COMMENTS:

STRENGTHS	WEAKNESSES
+ Teacher resources are well developed and extensive in supporting the teacher. + Use of Real Data [Real world App] + Scope and sequence flawed + Visual design is consistant and helps navigate the material (without distracting).	+ No Glossary + Some inconsistant Language – see • Planning and conducting... B1 • Exploring random... C2 • Estimate population... A2, A4, and A7 • Math XL for schools must be purchased for every student, every year.

2015-16 Mathematics Interim Review Recommendation & Summary

Publisher Name:	Pearson
Title:	TRIGONOMETRY
ISBN #	9780132832588
Grade Level(s) or Course:	9-12
Reviewer ID:	JHJN

RECOMMENDED AS:

✓ **Core Mathematics Program-** a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials. Substantial evidence clearly supports the designation of this program as Core.

_____ **Other Mathematics Program-** a program that substantially, but partially, meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for supplemental materials. Substantial evidence clearly supports the designation of this program as Other.

_____ **Component Mathematics Program-** a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs. Substantial evidence clearly supports the designation of this program as Component.

_____ **Intervention Program-** a program designed and intended to target and support students' specific needs. Substantial evidence clearly supports the designation of this program as Intervention.

_____ **Does not meet criteria** for recommendation as a Curricular Material or Online Resource for Mathematics.

EVIDENCE SUMMARY:

FOCUS- Materials focus on the Widely applicable Prerequisites in such a way that it is consistent with the progression of the Standards at an appropriate level for this course.

COHERENCE- The content provides an opportunity for students to apply their previous knowledge of Algebra, functions & Geometry Standards and apply them to modeling and applications while making connections across clusters and domains.

RIGOR- The content is appropriate in rigor for this level of course to build conceptual understanding while building off Widely applicable Prerequisites.

CONCEPTUAL UNDERSTANDING- The content is heavy in conceptual checks but is weak in discussion and Verbal prompts. There are opportunities for students to develop fluency in conceptualizing and solving problems There are procedural problems to be solved & exercises to apply concepts.

MATHEMATICAL PRACTICES- Limited evidence of clear mathematical practices They are present in application, modeling, mathematical reasoning but no evidence of critiquing the reasoning of others

ACCESSIBILITY OF STANDARDS TO ALL STUDENTS- No direct ELL translation tools but their are aides/supports in place such as multimedia, animations, MyMathLab. The level of scaffolding is appropriate for this level of a course.

OTHER: The strengths throughout Trigonometry, include that the lessons, and units, and helps in the student edition and teacher edition, are clearly and easily organized. There are extra practice problems with many opportunities for modeling and application in every lesson. The weaknesses are the lack of a pacing guide, discussion prompts, and little

discussion or critiquing of student process work.

2015-1[illegible]terim Mathematics Review

Mathematics Evaluation Tool – High School

Publisher: Pearson

Title of Material: Trigonometry

Author: Lial Hornsby Schneider Daniels

ISBN #: 9780132832588 **Copyright** 2013

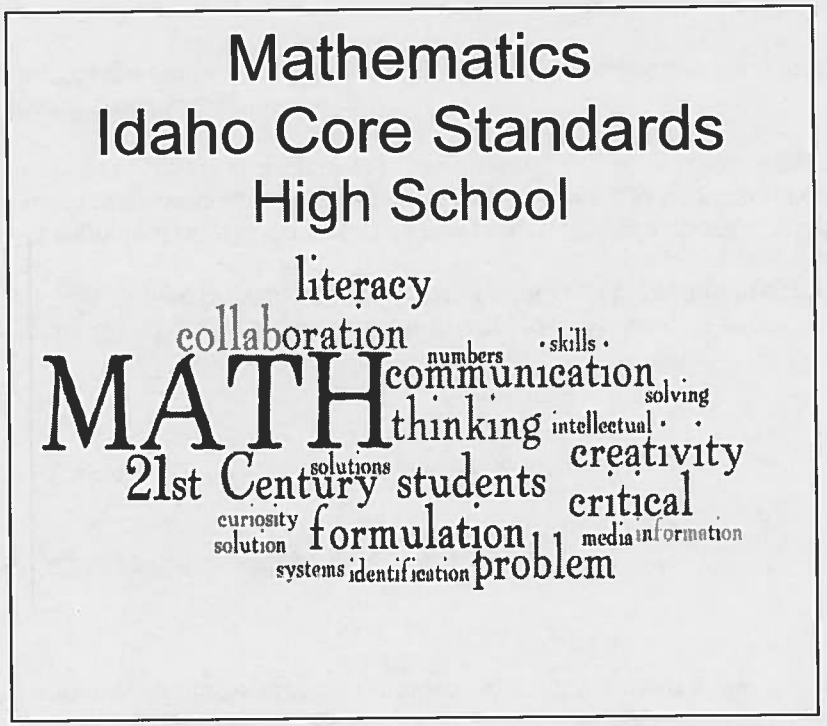
Reviewer ID: JHJN

Core Mathematics Program- a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Core.

Other Mathematics Program- a program that substantially, but partially, meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Other.

Component Mathematics Program- a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs.
Substantial evidence clearly supports the designation of this program as Component.

Intervention Program- a program designed and intended to target and support students' specific needs.
Substantial evidence clearly supports the designation of this program as Intervention.



- Evaluation Form adapted from Instructional Materials Evaluation Toolkit (IMET).

The IMET was developed by Student Achievement Partners. Educators may use or adapt. http://creativecommons.org/licenses/by/3.0/ Download this tool at http://achievethecore.org/IMET

Instructional Materials Evaluation Tool

Mathematics, High School

What Are the Purposes of the IMET?

This Math IMET is designed to help educators determine whether instructional materials are aligned to the Shifts and major features of the Common Core State Standards (CCSS). The substantial instructional Shifts (http://www.corestandards.org/other-resources/key-shifts-in-mathematics/) at the heart of the Common Core State Standards are:

- **Focus** strongly where the Standards focus
- **Coherence**: Think across grades and link to major topics within the grade
- **Rigor**: In major topics, pursue conceptual understanding, procedural skill and fluency, and application with equal intensity.

The IMET draws directly from the following documents:

- Common Core State Standards for Mathematics (www.corestandards.org/Math)
- Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013) (http://www. corestandards.org/wp-content/uploads/Math_Publishers_Criteria_ HS_Spring_2013_FINAL1.pdf)

When to use the IMET

1. Purchasing materials: Many factors go into local purchasing decisions. Alignment to the Standards is a critical factor to consider. This tool is designed to evaluate alignment of instructional materials to the Shifts and the major features of the CCSS. It also provides suggestions of additional indicators to consider in the materials evaluation and purchasing process
2. Evaluating materials currently in use: The IMET can be used to analyze the degree of alignment of existing materials and help to highlight specific, concrete flaws in alignment. Even where materials and tools currently in use fail to meet one or more of these criteria, the pattern of failure is likely to be informative. States and districts can use the evaluation to create a thoughtful plan to modify or combine existing resources in such a way that students' actual learning experiences approach the focus, coherence, and rigor of the Standards.
3. Developing programs: Those developing new programs can use this tool as guidance for creating aligned curricula.

Please note this tool was designed for evaluating comprehensive curricula (including any supplemental or ancillary materials), but it was not designed for the evaluation of standalone supplemental materials.

Who Uses the IMET?

Evaluating instructional materials requires both subject-matter and pedagogical expertise. Evaluators should be well versed in the Standards (www.corestandards.org/Math) for all grades in which materials are being evaluated. This includes understanding the Widely Applicable Prerequisites (www.achievethecore.org/prerequisites), how the content fits into the progressions in the Standards (www. achievethecore.org/progressions), and the expectations of the Standards with respect to conceptual understanding, procedural skill and fluency, and application. Evaluators also should be familiar with the substantial instructional Shifts (http://www.corestandards.org/other-resources/key-shifts-in-mathematics/) of Focus, Coherence and Rigor that are listed above.

Getting Started

Prior to Evaluation

Assemble all of the materials necessary for the evaluation. It is essential for evaluators to have materials for all grades covered by the program, as some criteria cannot be rated without having access to each grade. In addition, each evaluator should have a reference copy of the Common Core State Standards for Mathematics (CCSSM) and the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).

Before conducting the evaluation itself, it is important to develop a protocol for the evaluation process. The protocol should include having evaluators study the Publishers' Criteria and the IMET. It will also be helpful for evaluators to get a sense of each program overall before beginning the process. At a minimum, this would include reading the front matter of the text, looking at the table of contents and paging through multiple chapters.

Sections 1-3 below should be completed to produce a comprehensive picture of the strengths and weaknesses of the materials under evaluation. Information about areas in need of improvement or supplementation should be shared with internal and external stakeholders.

Navigating the Tool

Begin with Section 1: Non-Negotiable Alignment Criteria

- The Non-Negotiable Alignment Criteria must each be met in full for materials to be considered aligned to the Shifts and the major features of the Common Core State Standards. Each Non-Negotiable Alignment Criterion has one or more metrics associated with it; every one of these metrics must be met in order for the criterion as a whole to be met.

- Examine the relevant materials and use evidence to rate the materials against each criterion and its associated metric(s).

- Record and explain the evidence upon which the rating is based.

Continue to Section 2: Alignment Criteria

- The Alignment Criteria must each be met for materials to be considered aligned to the Shifts and the major features of the Common Core State Standards. Each Alignment Criterion has one or more metric associated with it; a specific number of these metrics must be met or partially met in order for the criterion as a whole to be met.

- Examine the materials in relation to these criteria, assigning each metric a point value. Rate the criterion as "Meets" or "Does Note Meet" based on the number of points assigned. The more points the materials receive on the alignment Criteria, the better they are aligned.

- Record and explain the evidence upon which the rating is based.

Proceed to Section 4: Indicators of Quality

- Indicators of Quality are important considerations that will help evaluators better understand the overall quality of instructional materials. These considerations are not criteria for alignment to the CCSS, but they provide valuable information about additional program characteristics. Evaluators may want to add their own indicators to the examples provided.

Directions for Non-Negotiable 1

Focus and Coherence

Criterion	Evidence- Give specific examples.	Rating: (Reviewer only.)
Non-Negotiable 1: Focus and Coherence- Materials must focus coherently on the Widely Applicable Prerequisites in a way that is consistent with the progressions in the Standards. Focus and coherence are the two major evidence-based design principles of the Common Core State Standards for Mathematics (CCSSM, p. 3). Focus is necessary in order to fulfill the ambitious promise the states have made to their students by adopting the Standards: greater achievement at the college and career-ready level; greater depth of understanding of mathematics; and a rich classroom environment in which reasoning, sense-making, applications, and a range of mathematical practices flourish. In high school courses, narrowing and deepening the curriculum creates a structure that ties topics together. Thus, materials must focus coherently on the Widely Applicable Prerequisites in a way that is consistent with the progressions in the Standards.	Focus and coherence are the two major evidence-based design principles of the Common Core State Standards for Mathematics (CCSSM, p. 3). Focus is necessary in order to fulfill the ambitious promise the states have made to their students by adopting the Standards: greater achievement at the college and career-ready level; greater depth of understanding of mathematics; and a rich classroom environment in which reasoning, sense-making, applications, and a range of mathematical practices flourish. In high school courses, narrowing and deepening the curriculum creates a structure that ties topics together. Thus, materials must focus coherently on the Widely Applicable Prerequisites in a way that is consistent with the progressions in the Standards. **Required Materials:** • Common Core State Standards for Mathematics (www.corestandards.org/wpcontent/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_HS_Spring_2013_FINAL1.pdf) • Widely Applicable Prerequisites for College and Careers (http://achievethecore.org/prerequisites) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion:** Non-Negotiable 1 is rated as Meets or Does Not Meet. To rate Non-Negotiable 1, first rate Metrics 1A–1H. Each of these eight metrics must be rated as Meets in order for Non-Negotiable 1 to be rated as Meets. Rate each metric 1A–1H as Meets or Does Not Meet/Insufficient Evidence. If the evidence examined shows that the Criterion is met, then mark the Criterion as Meets. If the evidence examined shows that the Criterion is not met—or if there is insufficient evidence to make a determination—then mark the Criterion as Does Not Meet/Insufficient Evidence. Support all ratings with evidence.

Metric NN1A: **In any single course, students spend at least 50% of their time on Widely Applicable Prerequisites.** **How to Find the Evidence:** Familiarize yourself with the Widely Applicable Prerequisites. Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, lessons, homework assignments, and assessments. (Evaluate both student and teacher materials.) Consider time spent on the Widely Applicable Prerequisites and judge qualitatively whether students and teachers using the materials as designed will devote the majority of time to the Widely Applicable Prerequisites For context, read Criterion #1 in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** The content of this material encompasses the Widely Applicable Prerequisits in Algebra, Functions, and Geometry. This is evidenced in lessons 1.1, 1.3, 2.1, 2.4, 3.3, 3.4, 4.1, 4.3, 5.1, 5.2, 5.3, 6.1, 6.4, 7.1, 7.2, and 7.3.	✓ **Meets** ___ **Does Not Meet Insufficient Evidence**
Metric NN1B: **Student work in Geometry involves significant work with applications/modeling and problems that use algebra skills.** **How to Find the Evidence:** Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, lessons, homework assignments, and assessments. (Evaluate both student and teacher materials. NOTE: Since Geometry contains relatively fewer Widely Applicable Prerequisites, this Criterion is important to help foster students' college and career readiness. Problems that use algebra skills might include, for example, algebraic geometry problems in a coordinate setting, or problems of measurement involving unknown quantities.	**Evidence-** The content provides an opportunity for students to apply and model their geometry and algebra skills. This is evidenced in all 8 of the units including 1.4, 2.4, 3.3, 4.1, 5.5, 6.4, 7.2, 8.2	✓ **Meets** ___ **Does Not Meet Insufficient Evidence**

Metric NN1C: **There are problems at a level of sophistication appropriate to high school (beyond mere review of middle school topics) that involve the application of knowledge and skills from grades 6-8.** **How to Find the Evidence:** Evaluate lessons, chapter/unit assessments, and homework assignments. NOTE: Problems should include application of the following topics from grades 6-8: • Ratios and proportional relationships. • Percentage and unit conversions, e.g., in the context of complex measurement problems involving quantities with derived or compound units (such as mg/mL, kg/ m3, acre-feet, etc.). • Basic function concepts, e.g., by interpreting the features of a graph in the context of an applied problem. • Concepts and skills of geometric measurement e.g., when analyzing a diagram or schematic. • Concepts and skills of basic statistics and probability (see grades 6–8.SP) • Performing rational number arithmetic fluently. For context, read Table 1 on Page 8 of the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** This trigonometry course does utilize the knowledge and skills students aquired in previous courses. A student must already have a full understanding of functions, Geometry, and Algebra I in order to incorporate the new materials presented in this course.	✓ **Meets** ____ **Does Not Meet Insufficient Evidence**
Metric NN1D: **Materials base courses on the content specified in the Standards.** **How to Find the Evidence:** Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, and lessons in both student and teacher materials. For context, read Criterion #3a in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** Lack of a pacing guide could be a disadvantage to a teacher teaching it for the first time. However, it does address the algebra, geometry, and a function content specified in the standards.	✓ **Meets** ____ **Does Not Meet Insufficient Evidence**
Metric NN1E: **Materials give all students extensive work with course-level problems.** **How to Find the Evidence:** Evaluate both student and teacher materials. If the materials provide resources for differentiated learning, consider whether lower-performing students have opportunities to engage with course-level problems. Also consider whether higher-performing students are given opportunities to learn current course-level content in greater depth. For context, read Criterion #3b in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** ~~The content offers students~~ Examples, Exercises, quizzes, quick review and test prep at an appropriate level in each unit.	✓ **Meets** ____ **Does Not Meet Insufficient Evidence**

Metric NN1F: **Materials relate course-level concepts explicitly to prior knowledge from earlier grades or courses. The materials are designed so that prior knowledge becomes reorganized and extended to accommodate the new knowledge.** **How to Find the Evidence:** Evaluate student and teacher materials, looking for problems that involve extending the knowledge learned in earlier grades and courses. NOTE: An example of evaluating this Criterion might be to look at whether materials connect the equation of a circle with the distance formula and the Pythagorean theorem. For context, read Criterion #3c in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** While the content is not explicitly evident with specific reference to previous courses it is apparent in the problems and applications presented to the students. Students are required to use previous knowledge and build off them for more in depth conceptual understanding	✓ **Meets** **___Does Not Meet Insufficient Evidence**
Metric NN1G: **Materials include learning objectives that are visibly shaped by CCSSM cluster and domain headings.** **How to Find the Evidence:** Select several clusters from the course being evaluated. Evaluate teacher and student materials in relation to these clusters. For context, read Criterion #4a in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** Objectives are met on the topics of number quantity, algebra, functions, modeling, and geometry. The topics in Trigonometry build upon concepts and standards learned in previous courses. Seen in lessons 1.1, 2.4, 3.3, 6.3, 7.2, 8.4	✓ **Meets** **___Does Not Meet Insufficient Evidence**
Metric NN1H: **Materials include problems and activities that serve to connect two or more clusters in a domain, or two or more domains in a category, or two or more categories, in cases where these connections are natural and important.** **How to Find the Evidence:** In the course being evaluated, choose two or more clusters, two or more domains, or two or more categories for which connections are natural and important. Evaluate the units, chapters, and lessons that deal with the chosen topics, looking for problems and activities that serve to connect the chosen clusters or domains. NOTE: An example of evaluating this Criterion might be to look at whether materials include problems in which students analyze a situation by building a function, graphing it, and using it to create and solve an equation. For context, read Criterion #4b in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** In this trigonometry course, connections between Algebra and Geometry, or between Geometry and Functions are made extensively throughout the content presented. This is evident in lessons 1.2, 1.3, 2.1, 2.5, 4.1, 4.3, 5.5, 6.1, 7.5	✓ **Meets** **___Does Not Meet Insufficient Evidence**

Non-Negotiable 1: Focus and Coherence- Materials must focus coherently on the Widely Applicable Prerequisites in a way that is consistent with the progressions in the Standards.

Metric NN 1: If all metrics 1A–1H were rated as Meets, then rate Non-Negotiable 1 as Meets. If one or more metrics were rated as Does Not Meet/Insufficient Evidence, then rate Non-Negotiable 1 as Does Not Meet. Check the final rating.
Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)**

Before moving to Alignment Criterion 1, record the final Meets or Does Not Meet rating in the Evaluation Summary.

✓ **Meets**

____ **Does Not Meet**

Strengths/Weaknesses

Now continue by evaluating Alignment Criterion 1 for Rigor and Balance.

Directions for Alignment Criterion 1

Rigor and Balance

Alignment Criterion 1:
Rigor and Balance- Materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.

The Standards set expectations for attention to all three aspects of rigor: conceptual understanding, procedural skill and fluency, and applications. Thus, materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.

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- Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf)
- Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_HS_Spring_2013_FINAL1.pdf)
- Widely Applicable Prerequisites for College and Careers (http://achievethecore.org/prerequisites)
- From the materials being evaluated: teacher guides, student texts and workbooks

Rating this Criterion:

Alignment Criterion 1 is rated as Meets or Does Not Meet.

To rate Alignment Criterion 1, first rate metrics 1A, 1B, and 1C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). For each metric, guiding questions are provided to aid in gathering evidence.
Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 1 if the materials rate 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as rigor and balance, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.

AC ric 1A: **The ma ls support the development of students' conceptual understanding of key mathematical concepts, especially where called for in specific content Standards or cluster headings.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Widely Applicable Prerequisites that relate specifically to conceptual understanding to use throughout the questions associated with this metric. NOTE: Some examples of clusters or Standards that call for conceptual understanding include: N-RN.A.1, A-APR.B, A-REI.A.1, A-REI.D.10, A.REI.D.11, F.IF.A.1, F-LE.A.1, G.SRT.A.2, G-SRT.C.6, S-ID.C.7 For context, read Criterion #2a in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	• Choose a clus tandard from the Widely Applicable Prerequisites that is ed to each aspect of rigor and use it to evaluate these metrics. It is n helpful if the same clusters and Standards are chosen for all of the programs being evaluated. (Guidance in choosing clusters/Standards is included in "How to Find the Evidence" below.)	**Use the questions for A tric 1A to evaluate Metric 1A. Record ence for each question and rate Met A.** ✓ **Meets (2)** ____ **Partially Meets (1)** ____ **Does Not Meet (0)**
Is conceptual understanding attended to thoroughly where the Standards set explicit expectations for understanding or interpreting? Evaluate lessons, chapter/unit assessments and homework assignments, paying attention to work aligned to Standards that explicitly call for understanding or interpreting.	**Evidence-** There is conceptual understanding throughout the lessons, evidenced by assignments applications, etc. There is a more direct approach rather than a conceptual understanding. Content is weak in relating concepts	
Do the materials feature high-quality conceptual problems and conceptual discussion questions? Evaluate lessons, chapter/unit assessments, and homework assignments. NOTE: Examples of conceptual problems might include such questions as "What is the maximum value of the function f(t) = 5 – t2 ?" or "Is √2 a polynomial? How about ½(x + √2)+ ½ (-x + √2)?"	**Evidence-** The curriculum is heavy in conceptual checks but is weak in any discussion or verbal prompts. There are written Conceptual checks in each lesson.	
Do the materials feature opportunities to identify correspondences across mathematical representations? Evaluate lessons, chapter/unit assessments and homework assignments. NOTE: An example of evaluating this metric might include looking at whether materials support students in identifying correspondences among the expression that defines a function, the graph that shows the relationship, and the behavior of the phenomenon being modeled (if any).	**Evidence-** Clearly evident across all lessons	

AC Metric 1B: **The materials are designed so that students attain the fluencies and procedural skills required by the Standards.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Widely Applicable Prerequisites that relate specifically to fluency and procedural skill to use throughout the questions associated with this metric. NOTE: Some examples of Standards that call for procedural skill and fluency include: A-SSE.A.1b, A-SSE.2, A-APR.A.1, A-APR.C.6, F-BF.B.3, G-GPE.B.4, G-GPE.B.5, G-GPE.B.7, G-CO.A.1, G-SRT.B.5 For context, read Criterion #2b in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).		**Use the questions for AC Metric 1B to evaluate Metric 1B. Record evidence for each question and rate Metric 1B.** ✓ **Meets (2)** **Partially Meets (1)** **Does Not Meet (0)**
Is progress toward fluency and procedural skill interwoven with the student's developing conceptual understanding of the skills in question? Evaluate lessons, chapter/unit assessments, daily routines, and homework assignments for evidence that the development of fluency and procedural skill is supported by conceptual understanding.	**Evidence-** Opportunity for students to develop fluency in conceptualizing and solving problems related to trigonometry, is evident throughout. 1.1, 1.2, 1.5, 2.3, 3.4, 4.2, 5.2, 6.3, 7.2	
Are purely procedural problems and exercises present that include cases in which opportunistic strategies are valuable and generic cases that require efficient and general procedures present? Evaluate lessons, chapter/unit assessments, daily routines, and homework assignments. NOTE: Problems in which opportunistic strategies are valuable might include such examples as solving x2 + 5 = 49 + 5 or (3x − 2)2 = 6x − 4. Generic cases that require efficient and general procedures might include such problems as solving c + 8 – c2 = 3(c – 1)2 – 5).	**Evidence-** This course does include procedural problems to be solved and excersizes to apply concepts Students use strategies to aid in solving and conceptualizing problems. Evident in lessons 1.2, 1.4, 2.3, 5.1, 6.4, 7.4, 8.3, and 8.6.	
AC Metric 1C: **The materials are designed so that teachers and students spend sufficient time working with engaging applications, without losing focus on the Widely Applicable Prerequisites.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Widely Applicable Prerequisites that relate specifically to application to use throughout the questions associated with this metric. NOTE: Some examples of clusters or Standards that call for application include: N-Q.A, A-SSE.B.3, A-REI.D.11, F-IF.B, F-IF.C.7, F-BF.A.1, G-SRT.C.8, S-ID.A.2, S-IC.A.1 For context, read Criterion #2c in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).		**Use the questions for AC Metric 1C to evaluate Metric 1C. Record evidence for each question and rate Metric 1C.** ✓ **Meets (2)** **Partially Meets (1)** **Does Not Meet (0)**
Are there single- and multi-step contextual problems, including non-routine problems, that develop the mathematics of the course, afford opportunities for practice, and engage students in problem solving? Do the problems attend thoroughly to those places in the content Standards where expectations for multi-step and real-world problems are explicit? Evaluate lessons, chapter/unit assessments, and homework assig[illegible]	**Evidence-** Real World problems are evident throughout the units.	

Do app[illegible]n problems particularly stress applying the Widely Applicabl[illegible]equisites? Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** These are evidenced with modeling, connection, and concept check problems throughout the units	
Are there ample opportunities for students to engage with modeling problems? Do materials require students to use both individual parts of the modeling cycle as well as the full modeling cycle? Read the pages on High School—Modeling in the Standards for Mathematics (pp. 72 and 73). Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence** Modeling problems build as the unit and concepts develop	
Alignment Criterion 1: Materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations. **AC 1:** Materials must earn at least 5 of 6 points to meet this Alignment Criterion. If materials earn less than 5 points, the Criterion has not been met. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)** **Before moving to Alignment Criterion 2, record the final Meets or Does Not Meet rating in the Evaluation Summary.**		✓ **Meets** **____Does Not Meet** **Strengths/Weaknesses:**
Alignment Criterion 2: **Standards for Mathematical Practice- Materials must demonstrate authentic connections between content Standards and practice Standards.** The Standards require that designers of instructional materials connect the mathematical practices to mathematical content in instruction. Thus, materials must demonstrate authentic connections between content Standards and practice Standards.	The Standards require that designers of instructional materials connect the mathematical practices to mathematical content in instruction. Thus, materials must demonstrate authentic connections between content Standards and practice Standards. **Required Materials**: • Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_HS_Spring_2013_FINAL1.pdf) • Widely Applicable Prerequisites for College and Careers (http://achievethecore.org/prerequisites) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion:** Alignment Criterion 2 is rated as Meets or Does Not Meet. To rate Alignment Criterion 2, first rate metrics 2A, 2B, and 2C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). For each metric, guiding questions are provided to aid in gathering evidence. Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 2 if the materials rate 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as mathematical practices, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.

AC Metric 2A: **Materials address the practice Standards in such a way as to enrich the Widely Applicable Prerequisites; practices strengthen the focus of the course instead of detracting from it, in both teacher and student materials.** **How to Find the Evidence:** Familiarize yourself with the Widely Applicable Prerequisites. Evaluate teacher and student materials for evidence that the mathematical practices support and connect to the focus of the course. NOTE: An example of evaluating this Criterion might include looking at whether materials use regularity in repeated reasoning to illuminate formal algebra as well as functions, particularly recursive definitions of functions. For context, read Criterion #6 in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** Mathematical practices and supports are not clearly evident throughout all units. They are present in the application and modeling mathematical problems in some of the units	___Meets (2) __/__Partially Meets (1) ___Does Not Meet (0)
AC Metric 2B: **Materials attend to the full meaning of each practice Standard.** **How to Find the Evidence:** For context, read Criterion #7 in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).		**Use the questions for AC Metric 2B to evaluate Metric 2B. Record evidence for each question and rate Metric 2B.** __✓__Meets (2) ___Partially Meets (1) ___Does Not Meet (0)
Over the course of any given year of instruction, is each mathematical practice Standard meaningfully present in the form of assignments, activities, or problems that stimulate students to develop the habits of mind described in the practice Standard? Evaluate lessons, chapter/ unit assessments, and homework assignments for evidence of each mathematical practice being meaningfully present in instruction.	**Evidence-** The content supports the mathematical practices with the exception of critiquing the reasoning of others	
Are teacher-directed materials that explain the role of the practice Standards in the classroom and in students' mathematical development included? Are alignments to practice Standards accurate? Evaluate teacher materials, paying attention to explanations of the role of the practice Standards in the classroom and in students' mathematical development. Evaluate documents aligning lessons to practice Standards for accuracy. NOTE: Examples to look for when evaluating this metric might include the following: a highly scaffolded problem should not be aligned to MP.1; or a problem that directs a student to use a calculator should not be aligned to MP.5; or a problem about merely extending a pattern should not be aligned to MP.8.	**Evidence-** Teachers annotated edition aides in mathematical practices. The supplemental resources are appropriate for this level of a course.	

AC Metric 2C: **Materials support the Standards' emphasis on mathematical reasoning.** **How to Find the Evidence:** For context, read Criterion #8 in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).		**Use the questions for AC Metric 2C to evaluate Metric 2C. Record evidence for each question and rate Metric 2C.** ✓ **Meets (2)** **Partially Meets (1)** **Does Not Meet (0)**
Do the materials support students in constructing viable arguments and critiquing the arguments of others concerning course-level mathematics that is detailed in the content Standards? Read Standard for Mathematical Practice 3. Evaluate teacher and student materials to ensure that students are given opportunities to reason with grade-level mathematics.	**Evidence-** "Explain the meaning", "How is this" "Explain How". These conceptual checks allow students an opportunity to demonstrate conceptual understanding.	
Do the materials support students in producing not only answers and solutions, but also, in a course-appropriate way, arguments, explanations, diagrams, mathematical models, etc., especially in the Widely Applicable Prerequisites? Familiarize yourself with the Widely Applicable Prerequisites. Evaluate teacher and student materials to understand the types of work students are expected to produce.	**Evidence-** Each unit includes opportunities for students to demonstrate their conceptual understanding with answers, modeling, graphics, writing and other methods of interpretations	
Do materials explicitly attend to the specialized language of mathematics? Is the language of argument, problem solving, and mathematical explanations taught rather than assumed? Evaluate teacher and student materials, paying attention to how mathematical language is taught. NOTE: An example of evaluating this Criterion might include looking at whether students are supported in: basing arguments on definitions; using the method of providing a counter example; or recognizing that examples alone do not establish a general statement.	**Evidence-** Mathematical vocabulary is apparent in each lesson. Appropriate Mathematical vocabulary is introduced and then used in examples & assignments.	

Alignment Criterion 2: Materials must demonstrate authentic connections between content Standards and practice Standards. **AC 2:** Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 points, the Criterion has not been met. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewers only.)** **Before moving to Alignment Criterion 3, record the final Meets or Does Not Meet rating in the Evaluation Summary.**	**____Meets** **____Does Not Meet** **Strengths/Weaknesses:**

Alignment Criterion 3: **Access to the Standards for All Students- Materials must provide supports for English Language Learners and other special populations.** Because Standards are for all students, alignment requires thoughtful support to ensure all students are able to meet the Standards. Thus, aligned materials must provide supports for English Language Learners and other special populations.	Because Standards are for all students, alignment requires thoughtful support to ensure all students are able to meet the Standards. Thus, aligned materials must provide supports for English Language Learners and other special populations. **Required Materials:** • Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math Publishers_Criteria_HS_Spring_2013_FINAL1.pdf) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion:** Alignment Criterion 3 is rated as Meets or Does Not Meet. To rate Alignment Criterion 3, first rate metrics 3A, 3B, and 3C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 3 if the materials rate 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as support for special population, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.
AC Metric 3A: **Support for English Language Learners and other special populations is thoughtful and helps those students meet the same Standards as all other students. The language in which problems are posed is carefully considered.** **How to Find the Evidence:** Evaluate teacher and student materials, paying attention to supports offered for special populations.	**Evidence-** There are no language Conversion aides specifically but there are supports in the form of videos, animations, and multi-media.	✓ **Meets (2)** **Partially Meets (1)** **Does Not Meet (0)**
AC Metric 3B: **Materials provide appropriate level and type of scaffolding, differentiation, intervention, and support for a broad range of learners with gradual removal of supports, when needed, to allow students to demonstrate their mathematical understanding independently.** **How to Find the Evidence:** Evaluate teacher and student materials, paying attention to whether materials provide differentiation that will lead all learners to engage with on-grade-level content.	**Evidence-** The level of scaffolding is appropriate for this level of course.	✓ **Meets (2)** **Partially Meets (1)** **Does Not Meet (0)**
AC Metric 3C: **Design of lessons recommends and facilitates a mix of instructional approaches for a variety of learners such as using multiple representations (e.g., including models, using a range of questions, checking for understanding, flexible grouping, pair-share).** **How to Find the Evidence:** Evaluate teacher materials, noting instructional approaches suggested for whole class and differentiated lessons and activities.	**Evidence-** There is graphical, analytical, numerical and written representations, appropriate at this level of a course	✓ **Meets (2)** **Partially Meets (1)** **Does Not Meet (0)**

Alignment Criterion 3: Materials must provide supports for English Language Learners and other special populations. AC 3 Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 points, the Criterion has not been met. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewers only.)** **Move to the Evaluation Summary and record the final Meets or Does Not Meet rating .**	✓ **Meets** ____ **Does Not Meet** **Strengths/Weaknesses:**

Once an evaluation for alignment to the Shifts and major features of the CCSS has been conducted using Sections 1-3, it's important to evaluate for overall quality and best practices. A starting list of Indicators of Quality are suggested below. States, districts and others evaluating instructional materials are encouraged to add to this list to ensure materials reflect local contexts. For background information on some of the Indicators of Quality in this section, refer to pp.16–18 in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).

Indicators of Quality	**Evidence- Give specific examples.**	**Rating: (Reviewer only.)**
1. Lessons are thoughtfully structured and support the teacher in leading the class through the learning paths at hand, with active participation by all students in their own learning and in the learning of their classmates.	**Evidence-** lessons do lead students through a structured learning path of introduction, examples, practice and checks for understanding.	**(Reviewer only.)** ✓ **Yes** ____ **No**
2. The underlying design of the materials includes both problems and exercises. (In solving problems, students learn new mathematics, whereas in working exercises, students apply what they have already learned to build mastery.) Each problem or exercise has a purpose. **NOTE: This Criterion does not require that the problems and exercises be labeled as such.**	**Evidence-** This course does include problems and excersizes in the design of the lessons.	**(Reviewer only.)** ✓ **Yes** ____ **No**

3. Design of assignments is not haphazard: exercises are given in intentional sequences in order to strengthen students' mathematical understanding.	**Evidence-** Design of lessons are not haphazard, but are predictable and easy to follow example problems.	**(Reviewer only.)** ✓ **Yes** ____ **No**
4. There are separate teacher materials that support and reward teacher study including, but not limited to: discussion of the mathematics of the units and the mathematical point of each lesson as it relates to the organizing concepts of the unit, discussion on student ways of thinking and anticipating a variety of students responses, guidance on lesson flow, guidance on questions that prompt students thinking, and discussion of desired mathematical behaviors being elicited among students.	**Evidence-** Teacher resources include additional examples, Calculator tips, Teaching tips for various lessons. Power point presentations are also useful for guidance on lesson flow.	**(Reviewer only.)** ✓ **Yes** ____ **No**
5. Manipulatives suggested in the materials are faithful representations of the mathematical objects they represent and are connected to written methods.	**Evidence-** Physical Manipulatives are not used with this text.	**(Reviewer only.)** ____ **Yes** X **No**
6. Materials include a variety of curriculum-embedded assessments. Examples include pre-, formative, summative, and self-assessment resources.	**Evidence-** Test Prep, Chapter quizzes, Summary Exercises. No pre/post assessments of self assessments	**(Reviewer only.)** ✓ **Yes** ____ **No**
7. Assessments contain aligned rubrics, answer keys, and scoring guidelines that provide sufficient guidance for interpreting student performance.	**Evidence-** Selected answers in Student text. Solutions manual for teacher, assessment tools for teacher, testing manual, TestGen.	**(Reviewer only.)** ✓ **Yes** ____ **No**
8. Materials assess student proficiency using methods that are accessible and unbiased, including the use of course-level language in student prompts.	**Evidence-** Test Prep, Review Exercises, Chapter Tests are unbiased and accessible	**(Reviewer only.)** ✓ **Yes** ____ **No**

9. Mate[illegible] are carefully evaluated by qualified individual[illegible] hose names are listed, in an effort to ensure freedom from mathematical errors and course-level appropriateness.	**Evidence-** Li[illegible] Hornsby, Schneider, Daniels are all listed in the beginning of the text.	**(Reviewer only.)** ✓ **Yes** ____ **No**
10. The visual design supports students in engaging thoughtfully with the subject. Navigation through the text is clear.	**Evidence-** Clear and organized with an appropriate level of visual supports	**(Reviewer only.)** ✓ **Yes** ____ **No**

Reviewer IMET Evaluation Summary **Title/Level:** TRIGONOMETRY

Publisher: Pearson **Copyright:** 2013 **ISBN:** 978 01328 32588

Reviewer ID # JHJN **Date Review Completed:** 3/7/16

Non-Negotiable Criteria-The Non-Negotiable must be met in order for the Non-Negotiable Alignment Criteria to be met overall.

Non- Negotiable 1: Focus and Coherence

✓ **Meets**

____ **Does Not Meet**

Non-Negotiable Overall:

✓ **Meets** _____ **Does Not Meet**

Alignment Criteria- Each Alignment Criterion must be met with a sufficient number of points in order for Alignment Criteria to be labeled as "Meets" overall. The more points the materials receive on the Alignment Criteria, the better they are aligned.

Alignment Criterion 1: Rigor and Balance	Alignment Criterion 2: Standards of Mathematical Practice	Alignment Criterion 3: Access to Standards for All Learners
Points: 6 **of 6 possible.** **(Materials must receive at least 5 of 6 points to align.)**	**Points:** 5 **of 6 possible.** **(Materials must receive at least 5 of 6 points to align.)**	**Points:** 6 **of 6 possible.** **(Materials must receive at least 5 of 6 points to align.)**
✓ **Meets**	✓ **Meets**	✓ **Meets**
_____ **Does Not Meet**	_____ **Does Not Meet**	_____ **Does Not Meet**

Alignment Criteria Overall:

✓ **Meets** _____ **Does Not Meet**

If the terials meet the Non-Negotiable Criterion and each Alig ent Criterion, they are aligned to the Shifts and major ures of the Co tandards. **Do the materials meet every Non-Negoti and Alignment Criterion?** ✓ **Yes** ____ **N**

What are the specific areas of strength and weakness based on this evaluation? Publishers or others modifying or developing assessments can use this information to make improvements and/or to remedy gaps in the alignment of assessment materials.

Pacing guide lacking is a weakness, as well as discussion prompts for students to verbalize their thinking process. Some mathematical practices were not seen, such as approaching concepts from concrete thinking to abstract process. It is appropriate for this level of math, though these would drastically improve student conceptual understanding if they were present. The lessons and units throughout, are clearly and appropriately organized. There is ample and extra practice and it gives opportunity for modeling in every lesson. At appropriate topics, there are extensive modeling problems.

2015-16 Mathematics Interim Review Recommendation & Summary

Publisher Name:	SMC
Title:	Core Focus on Math
ISBN #	978-1-938801-84-6
Grade Level(s) or Course:	6th grade
Reviewer ID:	TS JL

RECOMMENDED AS:

✓ **Core Mathematics Program-** a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials. Substantial evidence clearly supports the designation of this program as Core.

_____ **Other Mathematics Program-** a program that substantially, but partially, meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for supplemental materials. Substantial evidence clearly supports the designation of this program as Other.

_____ **Component Mathematics Program-** a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs. Substantial evidence clearly supports the designation of this program as Component.

_____ **Intervention Program-** a program designed and intended to target and support students' specific needs. Substantial evidence clearly supports the designation of this program as Intervention.

_____ **Does not meet criteria** for recommendation as a Curricular Material or Online Resource for Mathematics.

EVIDENCE SUMMARY:

FOCUS-

Focus is on the major + supporting works of 6th grade. Supporting work enhances major work ie. decimals/fractions enhances multiply/dive fractions.

COHERENCE-

Materials give students opportunities to do extensive work with on grade level standards. Learning progressions supported Throughout. Previous grade content supports 6th grade standards.

RIGOR-

Progression from conceptual understanding through procedural skills and fluency to application is present consistently throughout skills.

CONCEPTUAL UNDERSTANDING-

Students begin with basic models and work towards, standard algorithms. with opportunities to explore concepts and use of mathematical thinking.

MATHEMATICAL PRACTICES-

MP standards are clearly stated and embedded in each lesson.

ACCESSIBILITY OF STANDARDS TO ALL STUDENTS-

CCSS are apparent and available in multiple models and activities Throughout each lesson. Differentiated activities are available as well as parent help/support.

OTHER:

2015-1 nterim Mathematics Review

Mathematics Evaluation Tool – High School

Publisher: SMC

Title of Material: Core Focus on Math

Author: McCow et al

ISBN #: 978-1-938801 **Copyright** 2014

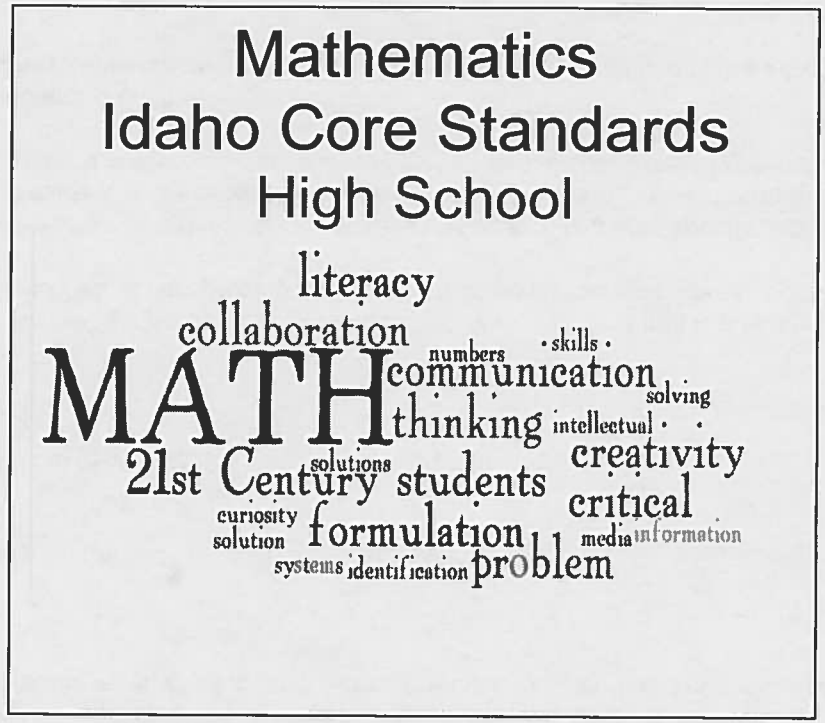
Reviewer ID: TS JL

Core Mathematics Program- a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Core.

Other Mathematics Program- a program that substantially, but partially, meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Other.

Component Mathematics Program- a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs.
Substantial evidence clearly supports the designation of this program as Component.

Intervention Program- a program designed and intended to target and support students' specific needs.
Substantial evidence clearly supports the designation of this program as Intervention.



- Evaluation Form adapted from Instructional Materials Evaluation Toolkit (IMET).

The IMET was developed by Student Achievement Partners. Educators may use or adapt. http://creativecommons.org/licenses/by/3.0/ Download this tool at http://achievethecore.org/IMET

Instructional Materials Evaluation Tool

Mathematics, High School

What Are the Purposes of the IMET?

This Math IMET is designed to help educators determine whether instructional materials are aligned to the Shifts and major features of the Common Core State Standards (CCSS). The substantial instructional Shifts (http://www.corestandards.org/other-resources/key-shifts-in-mathematics/) at the heart of the Common Core State Standards are:

- **Focus** strongly where the Standards focus
- **Coherence**: Think across grades and link to major topics within the grade
- **Rigor**: In major topics, pursue conceptual understanding, procedural skill and fluency, and application with equal intensity.

The IMET draws directly from the following documents:

- Common Core State Standards for Mathematics (www.corestandards.org/Math)
- Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013) (http://www. corestandards.org/wp-content/uploads/Math_Publishers_Criteria_ HS_Spring_2013_FINAL1.pdf)

When to use the IMET

1. Purchasing materials: Many factors go into local purchasing decisions. Alignment to the Standards is a critical factor to consider. This tool is designed to evaluate alignment of instructional materials to the Shifts and the major features of the CCSS. It also provides suggestions of additional indicators to consider in the materials evaluation and purchasing process
2. Evaluating materials currently in use: The IMET can be used to analyze the degree of alignment of existing materials and help to highlight specific, concrete flaws in alignment. Even where materials and tools currently in use fail to meet one or more of these criteria, the pattern of failure is likely to be informative. States and districts can use the evaluation to create a thoughtful plan to modify or combine existing resources in such a way that students' actual learning experiences approach the focus, coherence, and rigor of the Standards.
3. Developing programs: Those developing new programs can use this tool as guidance for creating aligned curricula.

Please note this tool was designed for evaluating comprehensive curricula (including any supplemental or ancillary materials), but it was not designed for the evaluation of standalone supplemental materials.

Who Uses the IMET?

Evaluating instructional materials requires both subject-matter and pedagogical expertise. Evaluators should be well versed in the Standards (www.corestandards.org/Math) for all grades in which materials are being evaluated. This includes understanding the Widely Applicable Prerequisites (www.achievethecore.org/prerequisites), how the content fits into the progressions in the Standards (www. achievethecore.org/progressions), and the expectations of the Standards with respect to conceptual understanding, procedural skill and fluency, and application. Evaluators also should be familiar with the substantial instructional Shifts (http://www.corestandards.org/other-resources/key-shifts-in-mathematics/) of Focus, Coherence and Rigor that are listed above.

Getting Started

Prior to Evaluation

Assemble all of the materials necessary for the evaluation. It is essential for evaluators to have materials for all grades covered by the program, as some criteria cannot be rated without having access to each grade. In addition, each evaluator should have a reference copy of the Common Core State Standards for Mathematics (CCSSM) and the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).

015-16 Interim Mathematics Review

Mathematics Evaluation Tool Grades K-8

Publisher: Curriculum LLC

Title of Material: Core Focus on Math

Author: McCaw, Armstrong, McCaw, Schuhl, Terry, ValwaY

ISBN #: _____ **Copyright** 2014

Reviewer ID: _____

Core Mathematics Program- a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Core.

Other Mathematics Program- a program that substantially, but partially, meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Other.

Component Mathematics Program- a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs.
Substantial evidence clearly supports the designation of this program as Component.

Intervention Program- a program designed and intended to target and support students' specific needs.
Substantial evidence clearly supports the designation of this program as Intervention.

- Evaluation Form adapted from Instructional Materials Evaluation Toolkit (IMET).

The IMET was developed by Student Achievement Partners. Educators may use or adapt. http://creativecommons.org/licenses/by/3.0/ Download this tool at http://achievethecore.org/IMET

Instructional Materials Evaluation Tool

Mathematics, Grades K-8

What Are the Purposes of the IMET?

This Math IMET is designed to help educators determine whether instructional materials are aligned to the Shifts and major features of the Common Core State Standards (CCSS). The substantial instructional Shifts (http://www.corestandards.org/other-resources/key-shifts-inmathematics/) at the heart of the Common Core State Standards are:

- **Focus** strongly where the Standards focus
- **Coherence**: Think across grades and link to major topics within the grade
- **Rigor**: In major topics, pursue conceptual understanding, procedural skill and fluency, and application with equal intensity.

The IMET draws directly from the following documents:

- Common Core State Standards for Mathematics (www.corestandards.org/Math)
- Publishers' Criteria for the Common Core State Standards in Mathematics grade K-8 (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)

When to use the IMET

1. Purchasing materials: Many factors go into local purchasing decisions. Alignment to the Standards is a critical factor to consider. This tool is designed to evaluate alignment of instructional materials to the Shifts and the major features of the CCSS. It also provides suggestions of additional indicators to consider in the materials evaluation and purchasing process.

2. Evaluating materials currently in use: The IMET can be used to analyze the degree of alignment of existing materials and help to highlight specific, concrete flaws in alignment. Even where materials and tools currently in use fail to meet one or more of these criteria, the pattern of failure is likely to be informative. States and districts can use the evaluation to create a thoughtful plan to modify or combine existing resources in such a way that students' actual learning experiences approach the focus, coherence, and rigor of the Standards.

3. Developing programs: Those developing new programs can use this tool as guidance for creating aligned curricula.
Please note this tool was designed for evaluating comprehensive curricula (including any supplemental or ancillary materials), but it was not designed for the evaluation of standalone supplemental materials.

Who Uses the IMET?

Evaluating instructional materials requires both subject-matter and pedagogical expertise. Evaluators should be well versed in the Standards (www.corestandards.org/Math) for all grades in which materials are being evaluated. This includes understanding the Major Work of the grade (www.achievethecore/focus), the Supporting and Additional work, how the content fits into the progressions in the Standards (www.achievethecore.org/progressions), and the expectations of the Standards with respect to conceptual understanding, procedural skill and fluency, and application. Evaluators also should be familiar with the substantial instructional Shifts (http:// www.corestandards.org/other-resources/key-shifts-in-mathematics/) of Focus, Coherence and Rigor that are listed above.

Getting Started

Prior to Evaluation

Assemble all of the materials necessary for the evaluation. It is essential for evaluators to have materials for all grades covered by the program, as some criteria cannot be rated without having access to each grade. In addition, each evaluator should have a reference copy of the Common Core State Standards for Mathematics (CCSSM) and the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013).

Before conducting the evaluation itself, it is important to develop a protocol for the evaluation process. The protocol should include having evaluators study the Publishers' Criteria and the IMET. It will also be helpful for evaluators to get a sense of each program overall before beginning the process. At a minimum, this would include reading the front matter of the text, looking at the table of contents and paging through multiple chapters.

Sections 1-3 below should be completed to produce a comprehensive picture of the strengths and weaknesses of the materials under evaluation. Information about areas in need of improvement or supplementation should be shared with internal and external stakeholders.

Navigating the Tool

Begin with Section 1: Non-Negotiable Alignment Criteria

- The Non-Negotiable Alignment Criteria must each be met in full for materials to be considered aligned to the Shifts and the major features of the Common Core State Standards. Each Non-Negotiable Alignment Criterion has one or more metrics associated with it; every one of these metrics must be met in order for the criterion as a whole to be met.

- Examine the relevant materials and use evidence to rate the materials against each criterion and its associated metric(s).

- Record and explain the evidence upon which the rating is based.

Continue to Section 2: Alignment Criteria

- The Alignment Criteria must each be met for materials to be considered aligned to the Shifts and the major features of the Common Core State Standards. Each Alignment Criterion has one or more metric associated with it; a specific number of these metrics must be met or partially met in order for the criterion as a whole to be met.

- Examine the materials in relation to these criteria, assigning each metric a point value. Rate the criterion as "Meets" or "Does Note Meet" based on the number of points assigned. The more points the materials receive on the alignment Criteria, the better they are aligned.

- **Record and explain the evidence upon which the rating is based.**

Proceed to Section 4: Indicators of Quality

- **Indicators of Quality are important considerations that will help evaluators better understand the overall quality of instructional materials. These considerations are not criteria for alignment to the CCSS, but they provide valuable information about additional program characteristics. Evaluators may want to add their own indicators to the examples provided.**

Directions for Non-Negotiable 1 **Freedom from Obstacles to Focus**		
Criterion	**Evidence- Give specific examples.**	**Rating: (Reviewer only.)**
Non-Negotiable 1: **Freedom from Obstacles to Focus** **Materials must reflect the content architecture of the Standards by not assessing the topics named before the grade level where they first appear in the Standards.** The Standards foster students' progress to algebra by focusing strongly on arithmetic. Consistent with this focus, certain topics from outside of arithmetic appear only in later grades. Thus, to be aligned, materials must reflect the content architecture of the Standards by not assessing the topics named before the grade level where they first appear in the Standards. In this criterion, "topics named" means the topics that are explicitly named in Metric 1A. No other topics should be added to the list in Metric 1A. (Note that other topics in the standards are addressed in criterion NN2.)	**Required Materials** • Common Core State Standards for Mathematics (www.corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf) • From the materials being evaluated: teacher guides and all assessment components	**Rating this Criterion:** Non-Negotiable 1 is rated as Meets or Does Not Meet. To rate Non-Negotiable 1, begin by rating Metric 1A. Since Metric 1A is the only metric for Non-Negotiable 1, the rating for Non-Negotiable 1 is the same as the rating for Metric 1A. If Metric 1A is rated as Does Not Meet, include evidence of when the named topic(s) is/are assessed. If the metric is rated as Meets, list the grade(s) examined in the evaluation.

Metric N[illegible]: **Materials reflect the basic architecture of the Standards by not assessing the listed topics before the grade level indicated.** • Probability, including chance, likely outcomes, probability models. (Introduced in the CCSSM in grade 7) • Statistical distributions, including center, variation, clumping, outliers, mean, median, mode, range, quartiles; and statistical association or trends, including two-way tables, bivariate measurement data, scatter plots, trend line, line of best fit, correlation. (Introduced in the CCSSM in grade 6) • Similarity, congruence, or geometric transformations. (Introduced in the CCSSM in grade 8) • Symmetry of shapes, including line/ reflection symmetry, rotational symmetry. (Introduced in the CCSSM in grade 4) **How to Find the Evidence:** Evaluate the table of contents, all chapter tests, all unit tests, and other such assessment components (including rubrics). For context, read Criterion #2 from the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013). NOTE: Grade alignments of other topics are addressed in Non-Negotiable 2, Focus and Coherence.) In this criterion, "topics named" means the topics that are explicitly named in Metric 1A. No other topics should be added to the list in Metric 1A. (Note that other topics in the standards are addressed in criterion NN2.)	**Evidence-** - **Standards are aligned within the 6th grade level CCSS** **Some future standards are addressed but are marked with "Future Grade Level Content" and as an extension of learning** **-See stage 1- Standards Correlation by Lesson on pg: xviii of TM** **Scope and Sequence also follows a pattern of red, yellow and green – anything not in the CCSSM for is denoted with Yellow – prior grade level, or Green – Future grade level** **Probability lessons are included but marked with "Future Grade Level" and are assessed separately** * Probability is on one version of test (2 tests available) Tests are editable and can include ONLY grade level standards	**(Reviewer only.)** X **Meets** ____**Does Not Meet**
Non-Negotiable 1: Materials must reflect the content architecture of the Standards by not assessing the topics named* before the grade level where they first appear in the Standards. **NN 1** If Metric 1A was rated as Meets, then rate Non-Negotiable 1 as Meets. If Metric 1A was rated as Does Not Meet, then rate Non- Negotiable 1 as Does Not Meet. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion.**(Reviewer only.)** **Before moving to Non-Negotiable 2, record the final Meets or Does Not Meet rating in the Evaluation Summary.**		**(Reviewer only.)** X **Meets** ____**Does Not Meet** **Strengths/Weaknesses:**

Directions for Non-Negotiable 2

Focus and Coherence

Non-Negotiable 2:

Focus and Coherence

Materials must focus coherently on the Major Work of the grade in a way that is consistent with the progressions in the Standards.

Focus and coherence are the two major evidence-based design principles of the Common Core State Standards for Mathematics (CCSSM, p. 3). Focus is necessary in order to fulfill the ambitious promise the states have made to their students by adopting the Standards: greater achievement at the college and career ready level; greater depth of understanding of mathematics; and a rich classroom environment in which reasoning, sense-making, applications, and a range of mathematical practices flourish. In simpler terms, a mile-wide, inch-deep curriculum translates to less time per topic. Less time means less depth and moving on without many students. Thus, materials must focus coherently on the Major Work of the grade in a way that is consistent with the progressions in the Standards.

Required Materials

- Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf)
- Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)
- Focus by Grade Level for the grade being evaluated (www.achievethecore.org/focus)
- From the materials being evaluated: teacher guides, student texts and workbooks

Rating this Criterion:

Non-Negotiable 2 is rated as Meets or Does Not Meet.

To rate Non-Negotiable 2, first rate metrics 2A–2H. Each of these eight metrics must be rated as Meets in order for Non-Negotiable 2 to be rated as Meets. Rate each metric 2A-2H as Meets or Does Not Meet/Insufficient Evidence. If the evidence examined shows that the Criterion is met, then mark the Criterion Meets. If the evidence examined shows that the Criterion is not met—or if there is insufficient evidence to make a determination—then mark the Criterion as Does Not Meet/Insufficient Evidence. Support all ratings with evidence.

Metric NN2A:
In each grade K–8, students and teachers using the materials as designed devote the large majority of time to the Major Work of the grade.

How to Find the Evidence:

Familiarize yourself with the Major Work of the grade being evaluated (see the Focus by Grade Level documents.)

Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, lessons, homework assignments, and assessments. (Evaluate both student and teacher materials.)

Consider time spent on the Major Work of the grade and judge qualitatively whether students and teachers using the materials as designed will devote the large majority of time to the Major Work of the grade.

For context, read Criterion #1 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013)

Evidence-
Major works of the grade are covered

- **They are divided into different smaller books**
- **Decimals & Fractions**
- **Introductory Algebra**
- **Ratios, Rates, Stats**

Each overview is marked with major clusters, supporting clusters, and additional clusters, see TE xiii for
Pacing guide on pg. xix shows time spent on major concepts and majority of time is spent on Major work

Unit 1 - 28% lessons on major works
½ lessons are review skills
Unit 2 - 97%
Unit 3 - 50% and above grade level

(Reviewer only.)

__x__Meets

____Does Not Meet/

Insufficient Evidence

Metric N[illegible]: **Supporting Work, where present, enhances focus and coherence simultaneously by also engaging students in the Major Work of the grade.** **How to Find the Evidence:** Familiarize yourself with the Major Work and Supporting Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate chapters and lessons that focus on Supporting Work. NOTE: Example of evaluating this Criterion might include looking at whether materials for K–5 generally treat data displays as an occasion for solving grade-level word problems using the four operations (e.g., see 3.MD.B.3); or whether materials for grade 7 take advantage of opportunities to use probability to support ratios, proportions, and percentages. For context, read Criterion #3 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** **Supporting work is directly linked to Major work** **See overview: pg. xiii (R&P)** **Connections made throughout grade level using a progress map. The map shows where supporting works (previous year)** -decimals & fractions are supported in Unit 1 and further develops major works of multiply/diriding fractions	**(Reviewer only.)** **__x__Meets** **____Does Not Meet/ Insufficient Evidence**
Metric NN2C: **Materials base content progressions on the grade-by-grade progressions in the Standards. Content from previous or future grades does not unduly interfere with or displace on-grade-level content.** **How to Find the Evidence:** Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, and lessons in both student and teacher materials. NOTE: In some cases it may be possible that aligned materials might address some aspects of a topic in a strategic way before or after the grade level in which the topic is central in the Standards' progressions; for example, a curriculum author might purposefully choose to explore adding fractions with unlike denominators in a way appropriate to grade four, recognizing that this work is not really required until the next grade. However, any such purposeful discrepancies in content progressions should enhance the required learning in each grade; not unduly interfere with or displace grade-level content; and be clearly aimed at helping students meet the Standards as written rather than effectively rewriting the progressions in the Standards. And in all cases, note that Non-Negotiable 1 must be met for materials to be aligned. For context, read Criterion #5a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Grade by grade progression is evident in the overview pg. xviii Learning progressions supported throughout Previous grade content supports major works of 6th grade Above grade level content can extend learning or be omitted - clearly marked!	**(Reviewer only.)** **___x_Meets** **____Does Not Meet/ Insufficient Evidence**

Metric NN2D: **Materials give all students extensive work with on-grade-level problems.** **How to Find the Evidence:** Evaluate both student and teacher materials. If the materials provide resources for differentiated learning, consider whether lower-performing students have opportunities to engage with grade-level problems. Also consider whether higher-performing students are given opportunities to learn current grade-level content in greater depth. For context, read Criterion #5b in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** IXL links for free Several different instructional approaches to each concept. Example: Fractions & Decimals - Lesson 2.1 (TM 35-38) Explore, exercise algorithms, exercise w word problems, finding mistakes in a problem, conversions, picture problems, tables, review problems -each block has a tic/tac/toe activity with multiple models.(pg. 34) -tiered worksheets (resource binder) extended response * challenge worksheet for deeper understanding	(Reviewer only.) __x__Meets ____Does Not Meet/ Insufficient Evidence
Metric NN2E: **Materials relate on-grade-level concepts explicitly to prior knowledge from earlier grades.** **How to Find the Evidence:** Evaluate both student and teacher materials. NOTE: Examples of evaluating this Criterion might include looking at the way the materials extend basic ideas of place value across the decimal point; or the role that properties of operations play when the materials extend arithmetic beyond whole numbers to fractions, variables, and expressions. More generally, cluster headings in the Standards sometimes signal key moments where reorganizing and extending previous knowledge is important in order to accommodate new knowledge (e.g., see cluster headings that use the phrase "Apply and extend previous understanding"). For context, read Criterion #5c in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Prior grade level content is denoted with a color code. standard is in number form to show what is 5th and what is 6th grade level Unit 1 - first three lessons are from prior grade level then builds on grade level concepts. See scope and sequence pg. xix	(Reviewer only.) __x__Meets ____Does Not Meet/ Insufficient Evidence
Metric NN2F: **Review of material from previous grades is clearly identified as such to the teacher, and teacher and students can see what their specific responsibility is for the current year.** **How to Find the Evidence:** Evaluate the table of contents, but do not stop there; also evaluate units, chapters, lessons, homework assignments and assessments. (Evaluate both student and teacher materials.) Identify any content from previous grades and check whether it is identified as such. For context, read Criterion #5a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** color coded lessons yellow - previous year red- current year green - future year also clearly marked in each lesson at the top of the page by color and standard number ie. pg. 14 in R&P is marked in red with standard number and M for major standard of the grade	(Reviewer only.) __x__Meets ____Does Not Meet/ Insufficient Evidence

Metric NN[illegible]: **Materials include learning objectives that are visibly shaped by CCSSM cluster headings.** **How to Find the Evidence:** Select several clusters from the Major Work in the grade being evaluated. Evaluate teacher and student materials in relation to these clusters. For context, read Criterion #6a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Learning targets are shown for each lesson ie. Lesson 2.4 learning target = solve problems using equivalent rates and unit rates Major works are listed at the top of the lesson page using ccss number and denoted with (M) for major works Student Self-assessment tracker TM shows clusters & learning objectives	(Reviewer only.) __x__Meets ____Does Not Meet/ Insufficient Evidence
Metric NN2H: **Materials include problems and activities that serve to connect two or more clusters in a domain, or two or more domains in a grade, in cases where these connections are natural and important.** **How to Find the Evidence:** In the grade being evaluated, choose two or more clusters or two or more domains for which connections are natural and important. Evaluate the units, chapters, and lessons that deal with the chosen topics, looking for problems and activities that serve to connect the chosen clusters or domains. NOTE: An example of evaluating this Criterion might include looking at whether problems in grade 4 sometimes or often involve students applying their developing computation skills (detailed in domain NBT) in the context of solving word problems (detailed in domain OA). For context, read Criterion #6b in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** xii shows breakdown of ccss for grades 6-8 and how they are connected pg. xiv-xvii shows each standard and the lessons they cover in detail connecting them to each context Decimals + Fractions includes 3 clusters Intro. Algebra – 4 clusters Ratios/Rates/Stats - 3 clusters	(Reviewer only.) ___x_Meets ____Does Not Meet/ Insufficient Evidence
Non-Negotiable 2: **Focus and Coherence** **Materials must focus coherently on the Major Work of the grade in a way that is consistent with the progressions in the Standards.** **NN 2** If all Metrics 2A – 2H were rated as Meets, then rate Non-Negotiable 2 as Meets. If one or more Metric was rated Does Not Meet/Insufficient Evidence, then rate Non-Negotiable 2 as Does Not Meet. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)** **Before moving to Alignment Criterion 1, record the final Meets or Does Not Meet rating in the Evaluation Summary.**		(Reviewer only.) __X__Meets ____Does Not Meet **Strengths/Weaknesses:**
Now continue by evaluating the Alignment Criterion 1 for Rigor and Balance.		

Directions for Alignment Criterion 1

Rigor and Balance

Alignment Criterion 1: Rigor and Balance **Materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.** The Standards set expectations for attention to all three aspects of rigor: conceptual understanding, procedural skill and fluency, and applications. Thus, materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.	**Required Materials** • Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf) • Focus by Grade Level for the grade being evaluated (achievethecore.org/focus) • Situation Types for the Operations in Word Problems (achievethecore.org/situation-types) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion:** Alignment Criterion 1 is rated as Meets or Does Not Meet. To rate Alignment Criterion 1, first rate metrics 1A, 1B, and 1C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). For each metric, guiding questions are provided to aid in gathering evidence. Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 1 if the materials rate 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as rigor and balance, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.
Metric AC1A: **The materials support the development of students' conceptual understanding of key mathematical concepts, especially where called for in specific content Standards or cluster headings.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Major Work for the grade being evaluated that relate specifically conceptual understanding to use throughout the questions associated with this metric. NOTE: Some examples of clusters or Standards that call for conceptual understanding include: K.OA.A.1, (1.NBT.B, 1.NBT.C), (2.NBT.A, 2.NBT.B), (3.OA.A.1, 3.OA.A.2), 4.NF.A, (4.NBT.A, 4.NBT.B), 5.NF.B, (5.NBT.A, 5.NBT.B), 6.RP.A, 6.EE.A.3, 7.NS.A, 7.EE.A, 8.EE.B, 8.F.A, 8.G.A Clusters or Standards grouped by parentheses are closely connected and could be analyzed together. For context, read Criterion #4a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	-Choose a cluster/Standard from the Major Work that is aligned to each aspect of rigor and use it to evaluate these metrics. It is most helpful if the same clusters/Standards are chosen for all of the programs being evaluated. (Guidance in choosing clusters/Standards is included in "How to Find the Evidence".)	**Use the questions for AC Metric 1A to evaluate Metric 1A. Record evidence for each question and rate Metric 1A.** **__x__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**

Is conceptual understanding attended to thoroughly where the Standards set explicit expectations for understanding or interpreting? Evaluate lessons, chapter/unit assessments and homework assignments, paying attention to work aligned to Standards that explicitly call for understanding or interpreting. NOTE: Examples of evaluating this Criterion might include looking at how well the multi-digit addition and subtraction algorithms are developed and explained on the basis of place value and properties of operations; or how well the multi-digit multiplication and division algorithms are developed and explained on the basis of place value and properties of operations; or how well solving equations is presented and explained as a process of reasoning.	**Evidence-** Conceptual understanding shown -Explore, pg. 3 -Tic Tac Toe activities - pg. 2 Excercises pg. 7 Communication prompt These activities / skills are practiced throughout each lesson - Manipulatives are referred to in lessons but none are provided as part of program	
Do the materials feature high-quality conceptual problems and conceptual discussion questions? Evaluate lessons, chapter/unit assessments, and homework assignments. NOTE: Example of conceptual problems might include such questions as "Find a number greater than 1/5 and less than 1/4," or "If the divisor does not change and the dividend increases, what happens to the quotient?"	**Evidence-** #22 - pg. 16 #14 - pg. 25 #13 - pg. 29 - Communication prompts in teacher's manual	
Do the materials feature opportunities to identify correspondences across mathematical representations? Evaluate lessons, chapter/unit assessments and homework assignments. NOTE: Examples of evaluating this Criterion might include looking at whether students are supported in identifying correspondences among: the verbal description of a situation, the diagrams that distill its mathematical features, and the equations that model it; or equivalent forms of numbers (e.g., 3 and 6/2) and the number line; or rational number operations and representations of them via models such as the vector model; or the expression that defines a function and the graph that shows the relationship.	**Evidence-** Mathematical representations shown in lesson in lesson 3.2, decimals percents, fractions, pg. 107, lesson 3.8 pg. 28, RP Lesson 4.1 – 4.7 3.1 – 3.4 5.1 – 5.4	
Metric AC1B: **The materials are designed so that students attain the fluencies and procedural skills required by the Standards.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Major Work for the grade being evaluated that relate specifically to fluency and procedural skill to use throughout the questions associated with this metric. NOTE: Some examples of Standards that call for procedural skill and fluency include: K.OA.A.5, 1.OA.C.6, 2.OA.B.2, 2.NBT.B.5, 3.OA.C.7, 3.NBT.A.2, 4.NBT.B.4, 5.NBT.B.5, 6.NS.B.2, and 6.NS.B.3, 6.EE.A, 7.NS.A, 7.EE.A.1,7.EE.B.4a, 8.EE.C.7, 8.EE.C.8b For context, read Criterion #4b in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).		**Use the questions for Metric 1B to evaluate Metric 1 B. Record evidence for each question and rate Metric 1B.** **(Reviewer only.)** **__x__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**

Is progress toward fluency and procedural skill interwoven with students' developing conceptual understanding of the operations in question? Evaluate lessons, chapter/unit assessments, daily routines, and homework assignments for evidence that the development of fluency and procedural skill is supported by conceptual understanding.	**Evidence-** **exercises for each lesson that build fluency:** **-Lesson 1.5 Area/Perimeter #48-53** **-Lesson 2.1 Fractions/Decimals #15-23** **Lesson 3.2 Percents, decimals, Fractions #1-18** -IXL has standards worksheets ,tiered worksheet	
Are purely procedural problems and exercises present that include cases in which opportunistic strategies are valuable and generic cases that require efficient algorithms present? Evaluate lessons, chapter/unit assessments, daily routines, and homework assignments. NOTE: Examples of problems in which opportunistic strategies are valuable might include the sum 698 + 240 or the system x + y = 1, 2x + 2y = 3. Examples of generic cases that require efficient algorithms might include the sum 8767+2286 or the system 6y + x = x + 3, – x = 1 + 2y.	**Evidence-** purely procedural activities in resource binder and in review and exercise activities pg 82 (review) pg. 91 (exercises) ixl practices Conceptual practice → procedural	
Do the materials in grades K–6 provide repeated practice toward attainment of fluency Standards? Evaluate lessons, daily routines, and homework assignments for evidence of repeated practice toward attainment of the following K–6 Standards that set an explicit expectation of fluent (accurate and reasonably fast) computation: K.OA.A.5, 1.OA.C.6, 2.OA.B.2, 2.NBT.B.5, 3.OA.C.7, 3.NBT.A.2, 4.NBT.B.4, 5.NBT.B.5, 6.NS.B.2, 6.NS.B.3.	**Evidence-** ixl online practices reviews repeated practice in exercises multiple opportunities for practice and review Viii in student book Starts w/ learning targets - multiple practices - review	
Metric AC1C: **The materials are designed so that teachers and students spend sufficient time working with engaging applications, without losing focus on the Major Work of each grade.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Major Work for the grade being evaluated that relate specifically application to use throughout the questions associated with this metric. NOTE: Some examples of clusters or Standards that call for application include: K.OA.A.2, 1.OA.A, 2.OA.A, 3.OA.A.3, 3.OA.D.8, 4.OA.A.3, 4.NF.B.3d, 4.NF.B.4c, 5.NF.B.6, 5.NF.B.7c, 6.RP.A.3, 6.NS.A.1, 6.EE.B.7, 6.EE.C.9, 7.RP.A, 7.NS.A.3, 7.EE.B.3, 8.EE.C.8c, 8.F.B For context, read Criterion #4c in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** **Engaging activities that focus on the major works include** **-tic-tac-toe** **- career focus** **- story problems that engage students** **--#17,18 pg. 121 (intro to stats)** **--exercises on pg. 87 (percent applications)**	**Use the questions for Metric 1C to evaluate Metric 1C. Record evidence for each question and rate Metric 1C.** **(Reviewer only.)** **__x__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Are there are single- and multi-step contextual problems, including non-routine problems, that develop the mathematics of the grade, afford opportunities for practice, and engage students in problem solving? Do the problems attend thoroughly to those places in the content Standards where expectations for multi-step and real-world problems are explicit? Evaluate lessons, chapter/unit assessments, and homew[illegible]ssignments.	**Evidence-** tic-tac-toe pg. 89 Explore activities are multistep pg. 54 Activity #13 pg. 29 (review)	

Do application problems particularly stress applying the Major Work of the grade? Evaluate lessons, chapter/unit assessments, and homework assignments. NOTE: Examples of evaluating this Criterion might include looking at: how well, by the end of grade 2, students using the materials as designed can represent and solve a full range of one-step addition and subtraction word problems; or how well, by the end of grade 3, students using the materials as designed can represent and solve a full range of one-step multiplication and division word problems; or how well these basic situation types for each operation are carried coherently across the grades, (e.g., with fractions and algebraic expressions); or, in all grades, whether the problems connect concepts, Standards, and domains in ways that are natural and important. For a list of situation types for one-step addition, subtraction, multiplication, and division problems, see Situation Types for the Operations in Word Problems	**Evidence-** Application problems stress major works -unit rate problems - pg. 51 -percent applications- pg. 87 (Exercises) - Many lessons start w/ word problems -explore skills of Major Works - Tic Tac Toe - Explore Tasks	
Does modeling build slowly across K–8, with applications that are relatively simple in earlier grades and when students are encountering new content? In grades 6–8, do the problems begin to provide opportunities for students to make their own assumptions or simplifications in order to model a situation mathematically? Read Standard for Mathematical Practice 4, Model with Mathematics. Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** Mathematical practices #4 - grades 6-8 Listed in teacher's manual using SMP pg. 85, 55, 129 Use of models to explore new concepts IA pg 7, 77 Explore, pg 84 DF pg 3, 93 RP pg 73	

Alignment Criterion 1: Rigor and Balance

Materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.

(Reviewer only.)

__x__Meets

____Does Not Meet

Strengths/Weaknesses:

AC1 Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 out of 6 points, the Criterion has not been met. Check the final rating.
Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)**

Before moving to Alignment Criterion 2, record the final Meets or Does Not Meet rating in the Evaluation Summary.

Directions for Alignment Criterion 2

Standards for Mathematical Practice

Alignment Criterion 2: Standards for Mathematical Practice

Materials must demonstrate authentic connections between content Standards and practice Standards.

The Standards require that designers of instructional materials connect the mathematical practices to mathematical content in instruction. Thus, materials must demonstrate authentic connections between content Standards and practice Standards.

Required Materials:

- Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf)
- Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)
- Focus by Grade Level for the grade being evaluated (www.achievethecore.org/focus)
- From the materials being evaluated: teacher guides, student texts and workbooks

Rating this Criterion

Alignment Criterion 2 is rated as Meets or Does Not Meet.

To rate Alignment Criterion 2, first rate metrics 2A, 2B, and 2C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). For each metric, guiding questions are provided to aid in gathering evidence.

Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 2 if the materials earn 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as mathematical practices, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.

Metric AC2A:
Materials address the practice Standards in such a way as to enrich the Major Work of the grade; practices strengthen the focus on Major Work instead of detracting from it, in both teacher and student materials.

How to Find the Evidence:

Familiarize yourself with the Major Work of the grade being evaluated (see the Focus by Grade Level documents.)

Evaluate teacher and student materials for evidence that the mathematical practices support and connect to the focus of the grade.

NOTE: Examples of evaluating this Criterion might include looking at whether, in grades K–5, students using the materials are supported to look for and express regularity in repeated reasoning about the addition table, the multiplication table, the properties of operations, the relationship between addition and subtraction or multiplication and division, and the place value system; or whether, in grades 6–8, students using the materials are supported to look for and express regularity in repeated reasoning about proportional relationships and linear functions.

For context, read Criterion #8 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013).

Evidence-
MP are embedded in lessons
-pg 49,
Explore pg. 48 prior knowledge needed to determine equivalency of unit rates
Explore activities for each unit progress through prior knowledge into focus standard

MP are embedded in each lesson in TM

Some examples-
RP pg 23, 35, 39, 49, 94
DF pg 74 83
IA pg 38 69 97

Some examples

(Reviewer only.)

__x__Meets (2)

____Partially Meets (1)

____Does Not Meet (0)

Metric AC[illegible]: **Materials attend to the full meaning of each practice Standard.** **How to Find the Evidence:** For context, read Criterion #7 and Criterion #9 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).		**Use the questions for Metric 2B to e[illegible]te Metric 2B. Record evidence for each question and rate Metric 2B.** **(Reviewer only.)** **__x__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Over the course of any given year of instruction, is each mathematical practice Standard meaningfully present in the form of assignments, activities, or problems that stimulate students to develop the habits of mind described in the practice Standard? Evaluate lessons, chapter/ unit assessments, and homework assignments for evidence of each mathematical practice being meaningfully present in instruction.	**Evidence-** SMPs are in each lesson/chapter meaningfully implemented and described using SMP # denotation pg. 78 2-4 per lesson	
Do the materials treat the practice Standards as developing across grades or grade bands? Are the practice Standards in early grades appropriately simple? Do they display an arc of growing sophistication across the grades?	**Evidence-** Lesson 3.3; Explore 1.4 Practice standards develop across grade bands. They get more difficult throughout the unit and require more critical thinking/sophistication Explore RRS	
Are there teacher-directed materials that explain the role of the practice Standards in the classroom and in students' mathematical development? Are alignments to practice Standards accurate?	**Evidence-** Mathematical practices - a closer look and teaching tips gives teachers instruction on methodology pg. 78 Explore activities/exercises align to practice standards Every lesson	
Metric AC2C: **Materials support the Standards' emphasis on mathematical reasoning.** **How to Find the Evidence:** For context, read Criterion #10 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).		**Use the questions for Metric 2C to evaluate Metric 2C. Record evidence for each question and rate Metric 2C.** **(Reviewer only.)** **___x_Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Do the materials support students in constructing viable arguments and critiquing the arguments of others concerning grade-level mathematics that is detailed in the content Standards? Read Standard for Mathematical Practice 3. Evaluate teacher and student materials to ensure that students are given opportunities to reason with grade-level mathematics.	**Evidence-** RP pg 13, 122 tic-tac-toe DC pg 130 tasks in resource binder IA pg 52 resource binder with higher level thinking activities academic vocabulary used throughout	
Do the materials support students in producing not only answers and solutions, but also, in a grade-appropriate way, arguments, explanations, diagrams, mathematical models, etc., especially in the Major Work of the grade? Familiarize yourself with the Major Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate teacher and student materials, to understand the types of work students are expected to produce.	**Evidence-** Describe solutions pg133 Variety of models in - evaluating situations - pg. 59 Problem solving activities in each lesson Dev. Solutions pg 89 -Task activities in resource binder -Drawing conclusions pg 106	

Do materials explicitly attend to the specialized language of Evidence	New vocab are in red vocab boxes embedded glossary in back	

Alignment Criterion 2:
Standards for Mathematical Practice

Materials must demonstrate authentic connections between content Standards and practice Standards.

AC2 Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 out of 6 points, the Criterion has not been met. Check the final rating.
Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion.
(Reviewer only.)

Before moving to Alignment Criterion 3, record the final Meets or Does Not Meet rating in the Evaluation Summary.

(Reviewer only.)

__x__Meets

____Does Not Meet

Strengths/Weaknesses:

Alignment Criterion 3:
Access to the Standards for All Students

Materials must provide supports for English Language Learners and other special populations.

Because Standards are for all students, alignment requires thoughtful support to ensure all students are able to meet the Standards. Thus, aligned materials must provide supports for English Language Learners and other special populations.

Required Materials:

- Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf)
- Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)
- From the materials being evaluated: teacher guides, student texts and workbooks

Rating this Criterion:
Alignment Criterion 3 is rated as Meets or Does Not Meet.

To rate Alignment Criterion 3, first rate metrics 3A, 3B, and 3C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points).

Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 3 if the materials earn 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as support for special population, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.

Metric AC[illegible]: **Support for English Language Learners and other special populations is thoughtful and helps those students meet the same Standards as all other students. The language in which problems are posed is carefully considered.** **How to Find the Evidence:** Evaluate teacher and student materials, paying attention to supports offered for special populations.	**Evidence-** Translated worksheets (Spanish) Tiered worksheets for students below grade level English/Spanish glossary ixl - offers a range of difficulty challenge worksheets for higher level lexile range is between 770-890 - that is between 2nd-5th grade level for ease of reading	**Reviewer only.)** **__x__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Metric AC3B: **Materials provide appropriate level and type of scaffolding, differentiation, intervention, and support for a broad range of learners with gradual removal of supports, when needed, to allow students to demonstrate their mathematical understanding independently.** **How to Find the Evidence:** Evaluate teacher and student materials, paying attention to whether materials provide differentiation that will lead all learners to engage with on-grade-level content.	**Evidence-** Differentiated activities in each lesson pg. 6-7 (multiple models) teaching tips to help with mathematical understanding communication prompt tic-tac-toe PowerPoints to supplement Guided examples IXL online practice	**Reviewer only.)** **__x__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Metric AC3C: **Design of lessons recommends and facilitates a mix of instructional approaches for a variety of learners such as using multiple representations (e.g., including models, using a range of questions, checking for understanding, flexible grouping, pair-share).** **How to Find the Evidence:** Evaluate teacher materials, noting instructional approaches suggested for whole class and differentiated lessons and activities.	**Evidence-** multiple approaches -teaching tips pg. 119 -strategies for mp - a closer look pg. 122 Communication prompts mostly whole group instruction lack of multiple teaching practices (ie. flexible grouping)	**Reviewer only.)** **__x__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**

Alignment Criterion 3: **Access to the Standards for All Students** **Materials must provide supports for English Language Learners and other special populations.** **AC3** Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 points, the Criterion has not been met. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion.**(Reviewer only.)** **Move to the Evaluation Summary and record the final Meets or Does Not Meet rating .**	**(Reviewer only.)** **__x__Meets** **____Does Not Meet** **Strengths/Weaknesses:**

Once an evaluation for alignment to the Shifts and major features of the CCSS has been conducted using Sections 1-3, it's important to evaluate for overall quality and best practices. A starting list of Indicators of Quality are suggested below. States, districts and others evaluating instructional materials are encouraged to add to this list to ensure materials reflect local contexts. For background information on some of the Indicators of Quality in this section, refer to pp.18–21 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).

Indicators of Quality	**Evidence- Give specific examples.**	**Rating: (Reviewers only.)**
1. Lessons are thoughtfully structured and support the teacher in leading the class through the learning paths at hand, with active participation by all students in their own learning and in the learning of their classmates.	**Evidence-** **Thoughtfully structured lessons natural progression from** **-explore** **-examples/solutions for whole class** **-independent work** **-review** -exit tickets, communication prompts lead to students explaining understanding -example lesson 4.1 pg. 117-121	**(Reviewer only.)** **____x__ Yes** **_____ No**

2. The underlying design of the materials includes both problems and exercises. (In solving problems, students learn new mathematics, whereas in working exercises, students apply what they have already learned to build mastery.) Each problem or exercise has a purpose. **NOTE: This Criterion does not require that the problems and exercises be labeled as such.**	**Evidence-** **Problems & Exercises in each lesson** - reviews -exercises -warm-ups extra examples Lesson 2.3 (example)	**(Reviewer only.)** **____x__ Yes** **_____ No**
3. Design of assignments is not haphazard: exercises are given in intentional sequences in order to strengthen students' mathematical understanding.	**Evidence-** **Sequence is logical** **- whole group examples & solutions** **-independent work varies in difficulty in exercises.** **pg. 122-126** Extension/Remedial activities	**(Reviewer only.)** **___x___ Yes** **_____ No**
4. There are separate teacher materials that support and **reward teacher study including, but not limited to: discussion of the mathematics of the units and the mathematical point of each lesson as it relates to the organizing concepts of the unit, discussion on student ways of thinking and anticipating a variety of students responses, guidance on lesson flow, guidance on questions that prompt students thinking, and discussion of desired mathematical behaviors being elicited among students.**	**Evidence-** **Teacher manual includes teaching tips pg. 142-143 in each lesson** **good instructions on how to use the tm (pg viii)** **helpful hints for teachers** **explicit information on ccss (pg. xiv and xv)** - Many teaching practices left up to teacher expertise	**(Reviewer only.)** **___x___ Yes** **_____ No**
5. Manipulatives suggested in the materials are faithful representations of the mathematical objects they represent and are connected to written methods.	**Evidence-** **very few are used in the middle school program** **models are visual - not connected to manipulatives** Manips are suggested but not supplied (Base Ten Blocks) (Algebra Tiles)	**(Reviewer only.)** **__X__ Yes** **_____ No**
6. Materials include a variety of curriculum-embedded assessments. Examples include pre-, formative, summative, and self-assessment resources.	**Evidence-** Warm ups for each lesson include concepts from previous lesson pg. 54 Review (pg. 57) Block Reviews (pg. 160-161) Communication Prompts IXL Exit tickets Review	**(Reviewer only.)** **__x___ Yes** **_____ No**

7. Assessments contain aligned rubrics, answer keys, and scoring guidelines that provide sufficient guidance for interpreting student performance.	**Evidence-** **Answer keys and task rubrics are available** ****no rubric that goes above or below "meets" scores** More of a key w point assignment	**(Reviewer only.)** __X__ **Yes** _____ **No**
8. Materials assess student proficiency using methods that are accessible and unbiased, including the use of course-level language in student prompts.	**Evidence-** **Multiple models of assessment** **True/False** **Multiple Choice & Multiple Answer** **Problem Solving Tasks**	**(Reviewer only.)** ___x___ **Yes** _____ **No**
9. Materials are carefully evaluated by qualified individuals, whose names are listed, in an effort to ensure freedom from mathematical errors and course-level appropriateness.	**Evidence-** 6 classroom teachers authored piloted in 6 districts in Oregon for 3 years	**(Reviewer only.)** ____x__ **Yes** _____ **No**
10. The visual design supports students in engaging thoughtfully with the subject. Navigation through the text is clear.	**Evidence-** **consistent language** **age appropriate graphics (pg. 4 - jelly beans)** **Easy to follow between warm ups, examples, solutions, practice, etc. All lessons are structured the same way**	**(Reviewer only.)** ___x___ **Yes** _____ **No**
11. The materials engage parents in appropriate ways. For example, homework assignments in elementary grades, consist of routine problems, practice with getting answers, and fluency-building exercises that parents can easily support.	**Evidence-** **Book lessons are available online** **narrated lessons** **IXL practice** **Lesson slideshows**	**(Reviewer only.)** ___x___ **Yes** _____ **No**

Reviewer IMET Evaluation Summary

Title/Level: __SMC Curriculum Grade 6__ Core Focus On Math

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ISBN:_____

Reviewer ID # JL TS

Date Review Completed:_____ 3/8/2016

Non-Negotiable Criteria- Each Non-Negotiable must be met in order for the Non-Negotiable Alignment Criteria to be met overall.	
Non-Negotiable 1: Freedom from Obstacles to Focus X _____ **Meets** _____ **Does Not Meet**	**Non- Negotiable 2: Focus and Coherence** ___x__ **Meets** _____ **Does Not Meet**
Non-Negotiable Overall: __X__ **Meets** _____ **Does Not Meet**	
Alignment Criteria- Each Alignment Criterion must be met with a sufficient number of points in order for Alignment Criteria to be labeled as "Meets" overall. The more points the materials receive on the Alignment Criteria, the better they are aligned.	

Alignment Criterion 1: Rigor and Balance	Alignment Criterion 2: Standards of Mathematical Practice	Alignment Criterion 3: Access to Standards for All Learners
Points: 6 of 6 possible. (Materials must receive at least 5 of 6 points to align.) X Meets _____ Does Not Meet	Points: 6 of 6 possible. (Materials must receive at least 5 of 6 points to align.) X Meets _____ Does Not Meet	Points: 6 of 6 possible. (Materials must receive at least 5 of 6 points to align.) X Meets _____ Does Not Meet

Alignment Criteria Overall:

X **Meets** _____ **Does Not Meet**

If the materials meet both Non-Negotiables and relevant Alignment Criterion, they are aligned to the Shifts and major features of the Core Standards. **Do the materials meet every Non-Negotiable and Alignment Criterion?** X **Yes** ____ **No**

What are the specific areas of strength and weakness based on this evaluation? Publishers or others modifying or developing assessments can use this information to make improvements and/or to remedy gaps in the alignment of assessment materials.

- Very clearly aligned to CCSS + mathmatical practices
- Multiple resources to practice major work
- Much of teaching strategies and practices are left to teacher's expertise
- Tiered worksheets for student learning / practice support

2015-16 Mathematics Interim Review Recommendation & Summary

Publisher Name:	SMC Curriculum
Title:	Core Focus
ISBN #	9781938801600
Grade Level(s) or Course:	7
Reviewer ID:	KC & DN

RECOMMENDED AS:

__X__ **Core Mathematics Program-** a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials. Substantial evidence clearly supports the designation of this program as Core.

_____ **Other Mathematics Program-** a program that substantially, but partially, meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for supplemental materials. Substantial evidence clearly supports the designation of this program as Other.

_____ **Component Mathematics Program-** a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs. Substantial evidence clearly supports the designation of this program as Component.

_____ **Intervention Program-** a program designed and intended to target and support students' specific needs. Substantial evidence clearly supports the designation of this program as Intervention.

_____ **Does not meet criteria** for recommendation as a Curricular Material or Online Resource for Mathematics.

EVIDENCE SUMMARY:

FOCUS- These texts cover major work of Grade 7. However, 44 of 78 lessons focus on standards below or above grade level.

COHERENCE- In order to comprehensively cover the work of Grade 7 schools would need to use materials 6th-8th grade. The lessons within each unit do build on one another in a cohesive manner.

RIGOR- These materials lack higher level conceptual problems. There are some problems which push students to apply their mathematical knowledge. However, many questions are broken down and simplified into steps for the students, rather than requiring them to grapple with the problem.

CONCEPTUAL UNDERSTANDING-

There are opportunities for students to develop conceptual understanding. Teachers will need to seek additional opportunities for reasoning and discussion. More problem solving is needed.

MATHEMATICAL PRACTICES-

Students are asked to apply the practice standards throughout the text. Teacher materials explain the role of these standards. At times, the text prompts students to help them avoid misconceptions, rather than having the student attend to precision.

ACCESSIBILITY OF STANDARDS TO ALL STUDENTS-

Materials are available in Spanish. The tiered worksheets offer differentiation. The quality of the worksheets is helpful to students, but lessons offer only limited problems for practice.

OTHER:

Overall, this program has strengths in connecting to CCSS & practice standards using an easy to follow format. Instructionally, it lacks opportunities for students to persevere through problems and reason abstractly due to the step-by-step nature of the text's instruction.

2015-1 nterim Mathematics Review

Mathematics Evaluation Tool – High School

Publisher: SMC Curriculum

Title of Material: Core Focus 7.

Author: McCaw, Armstrong, Schuhl, Terry, Valway

ISBN #: 9781938801600 **Copyright** 2014

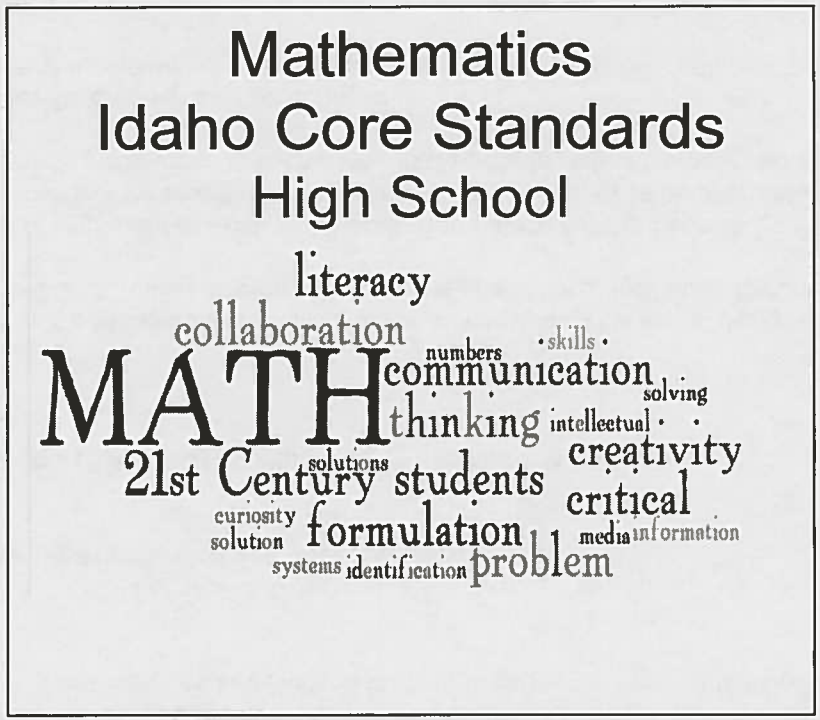
Reviewer ID: DN + KC

Core Mathematics Program- a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Core.

Other Mathematics Program- a program that substantially, but partially, meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Other.

Component Mathematics Program- a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs.
Substantial evidence clearly supports the designation of this program as Component.

Intervention Program- a program designed and intended to target and support students' specific needs.
Substantial evidence clearly supports the designation of this program as Intervention.



- Evaluation Form adapted from Instructional Materials Evaluation Toolkit (IMET).

The IMET was developed by Student Achievement Partners. Educators may use or adapt. http://creativecommons.org/licenses/by/3.0/ Download this tool at http://achievethecore.org/IMET

Instructional Materials Evaluation Tool

Mathematics, High School

What Are the Purposes of the IMET?

This Math IMET is designed to help educators determine whether instructional materials are aligned to the Shifts and major features of the Common Core State Standards (CCSS). The substantial instructional Shifts (http://www.corestandards.org/other-resources/key-shifts-in-mathematics/) at the heart of the Common Core State Standards are:

- **Focus** strongly where the Standards focus
- **Coherence**: Think across grades and link to major topics within the grade
- **Rigor**: In major topics, pursue conceptual understanding, procedural skill and fluency, and application with equal intensity.

The IMET draws directly from the following documents:

- Common Core State Standards for Mathematics (www.corestandards.org/Math)
- Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013) (http://www. corestandards.org/wp-content/uploads/Math_Publishers_Criteria_ HS_Spring_2013_FINAL1.pdf)

When to use the IMET

1. Purchasing materials: Many factors go into local purchasing decisions. Alignment to the Standards is a critical factor to consider. This tool is designed to evaluate alignment of instructional materials to the Shifts and the major features of the CCSS. It also provides suggestions of additional indicators to consider in the materials evaluation and purchasing process
2. Evaluating materials currently in use: The IMET can be used to analyze the degree of alignment of existing materials and help to highlight specific, concrete flaws in alignment. Even where materials and tools currently in use fail to meet one or more of these criteria, the pattern of failure is likely to be informative. States and districts can use the evaluation to create a thoughtful plan to modify or combine existing resources in such a way that students' actual learning experiences approach the focus, coherence, and rigor of the Standards.
3. Developing programs: Those developing new programs can use this tool as guidance for creating aligned curricula.

Please note this tool was designed for evaluating comprehensive curricula (including any supplemental or ancillary materials), but it was not designed for the evaluation of standalone supplemental materials.

Who Uses the IMET?

Evaluating instructional materials requires both subject-matter and pedagogical expertise. Evaluators should be well versed in the Standards (www.corestandards.org/Math) for all grades in which materials are being evaluated. This includes understanding the Widely Applicable Prerequisites (www.achievethecore.org/prerequisites), how the content fits into the progressions in the Standards (www. achievethecore.org/progressions), and the expectations of the Standards with respect to conceptual understanding, procedural skill and fluency, and application. Evaluators also should be familiar with the substantial instructional Shifts (http://www.corestandards.org/other-resources/key-shifts-in-mathematics/) of Focus, Coherence and Rigor that are listed above.

Getting Started

Prior to Evaluation

Assemble all of the materials necessary for the evaluation. It is essential for evaluators to have materials for all grades covered by the program, as some criteria cannot be rated without having access to each grade. In addition, each evaluator should have a reference copy of the Common Core State Standards for Mathematics (CCSSM) and the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).

2015-16 Interim Mathematics Review

Mathematics Evaluation Tool Grades K-8

Publisher: SMc Curriculum

Title of Material: Core Focus 7

Author: McCaw, Armstrong, Schuhl, Terry, Valway

ISBN #: 9781938801600 **Copyright** 2014

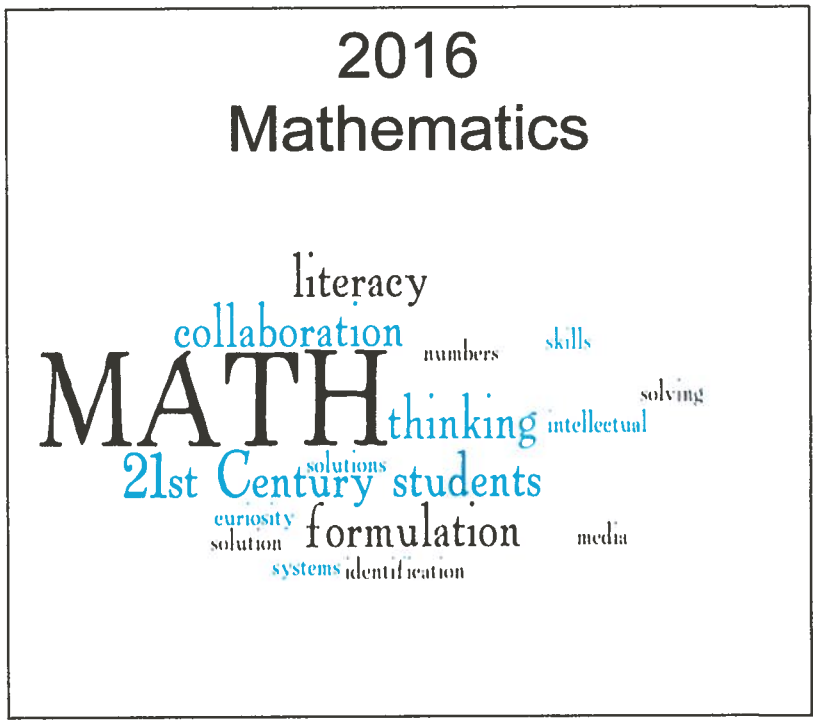
Reviewer ID: DN & KC

Core Mathematics Program- a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Core.

Other Mathematics Program- a program that substantially, but partially, meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Other.

Component Mathematics Program- a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs.
Substantial evidence clearly supports the designation of this program as Component.

Intervention Program- a program designed and intended to target and support students' specific needs.
Substantial evidence clearly supports the designation of this program as Intervention.



- Evaluation Form adapted from Instructional Materials Evaluation Toolkit (IMET).

The IMET was developed by Student Achievement Partners. Educators may use or adapt. http://creativecommons.org/licenses/by/3.0/ Download this tool at http://achievethecore.org/IMET

Instructional Materials Evaluation Tool
Mathematics, Grades K-8

What Are the Purposes of the IMET?
This Math IMET is designed to help educators determine whether instructional materials are aligned to the Shifts and major features of the Common Core State Standards (CCSS). The substantial instructional Shifts (http://www.corestandards.org/other-resources/key-shifts-inmathematics/) at the heart of the Common Core State Standards are:
- **Focus** strongly where the Standards focus
- **Coherence**: Think across grades and link to major topics within the grade
- **Rigor**: In major topics, pursue conceptual understanding, procedural skill and fluency, and application with equal intensity.

The IMET draws directly from the following documents:
- Common Core State Standards for Mathematics (www.corestandards.org/Math)
- Publishers' Criteria for the Common Core State Standards in Mathematics grade K-8 (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)

When to use the IMET
1. Purchasing materials: Many factors go into local purchasing decisions. Alignment to the Standards is a critical factor to consider. This tool is designed to evaluate alignment of instructional materials to the Shifts and the major features of the CCSS. It also provides suggestions of additional indicators to consider in the materials evaluation and purchasing process.

2. Evaluating materials currently in use: The IMET can be used to analyze the degree of alignment of existing materials and help to highlight specific, concrete flaws in alignment. Even where materials and tools currently in use fail to meet one or more of these criteria, the pattern of failure is likely to be informative. States and districts can use the evaluation to create a thoughtful plan to modify or combine existing resources in such a way that students' actual learning experiences approach the focus, coherence, and rigor of the Standards.

3. Developing programs: Those developing new programs can use this tool as guidance for creating aligned curricula.
Please note this tool was designed for evaluating comprehensive curricula (including any supplemental or ancillary materials), but it was not designed for the evaluation of standalone supplemental materials.

Who Uses the IMET?
Evaluating instructional materials requires both subject-matter and pedagogical expertise. Evaluators should be well versed in the Standards (www.corestandards.org/Math) for all grades in which materials are being evaluated. This includes understanding the Major Work of the grade (www.achievethecore/focus), the Supporting and Additional work, how the content fits into the progressions in the Standards (www.achievethecore.org/progressions), and the expectations of the Standards with respect to conceptual understanding, procedural skill and fluency, and application. Evaluators also should be familiar with the substantial instructional Shifts (http:// www.corestandards.org/other-resources/key-shifts-in-mathematics/) of Focus, Coherence and Rigor that are listed above.

Getting Started
Prior to Evaluation

Assemble all of the materials necessary for the evaluation. It is essential for evaluators to have materials for all grades covered by the program, as some criteria cannot be rated without having access to each grade. In addition, each evaluator should have a reference copy of the Common Core State Standards for Mathematics (CCSSM) and the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013).

Before conducting the evaluation itself, it is important to develop a protocol for the evaluation process. The protocol should include having evaluators study the Publishers' Criteria and the IMET. It will also be helpful for evaluators to get a sense of each program overall before beginning the process. At a minimum, this would include reading the front matter of the text, looking at the table of contents and paging through multiple chapters.

Sections 1-3 below should be completed to produce a comprehensive picture of the strengths and weaknesses of the materials under evaluation. Information about areas in need of improvement or supplementation should be shared with internal and external stakeholders.

Navigating the Tool

Begin with Section 1: Non-Negotiable Alignment Criteria

- The Non-Negotiable Alignment Criteria must each be met in full for materials to be considered aligned to the Shifts and the major features of the Common Core State Standards. Each Non-Negotiable Alignment Criterion has one or more metrics associated with it; every one of these metrics must be met in order for the criterion as a whole to be met.

- Examine the relevant materials and use evidence to rate the materials against each criterion and its associated metric(s).

- Record and explain the evidence upon which the rating is based.

Continue to Section 2: Alignment Criteria

- The Alignment Criteria must each be met for materials to be considered aligned to the Shifts and the major features of the Common Core State Standards. Each Alignment Criterion has one or more metric associated with it; a specific number of these metrics must be met or partially met in order for the criterion as a whole to be met.

- Examine the materials in relation to these criteria, assigning each metric a point value. Rate the criterion as "Meets" or "Does Note Meet" based on the number of points assigned. The more points the materials receive on the alignment Criteria, the better they are aligned.

Record and explain the evidence upon which the rating is based.

Proceed to Section 4: Indicators of Quality

- Indicators of Quality are important considerations that will help evaluators better understand the overall quality of instructional materials. These considerations are not criteria for alignment to the CCSS, but they provide valuable information about additional program characteristics. Evaluators may want to add their own indicators to the examples provided.

Directions for Non-Negotiable 1

Freedom from Obstacles to Focus

Criterion	Evidence- Give specific examples.	Rating: (Reviewer only.)
Non-Negotiable 1: **Freedom from Obstacles to Focus** **Materials must reflect the content architecture of the Standards by not assessing the topics named before the grade level where they first appear in the Standards.** The Standards foster students' progress to algebra by focusing strongly on arithmetic. Consistent with this focus, certain topics from outside of arithmetic appear only in later grades. Thus, to be aligned, materials must reflect the content architecture of the Standards by not assessing the topics named before the grade level where they first appear in the Standards. In this criterion, "topics named" means the topics that are explicitly named in Metric 1A. No other topics should be added to the list in Metric 1A. (Note that other topics in the standards are addressed in criterion NN2.)	**Required Materials** • Common Core State Standards for Mathematics (www.corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf) • From the materials being evaluated: teacher guides and all assessment components	**Rating this Criterion:** Non-Negotiable 1 is rated as Meets or Does Not Meet. To rate Non-Negotiable 1, begin by rating Metric 1A. Since Metric 1A is the only metric for Non-Negotiable 1, the rating for Non-Negotiable 1 is the same as the rating for Metric 1A. If Metric 1A is rated as Does Not Meet, include evidence of when the named topic(s) is/are assessed. If the metric is rated as Meets, list the grade(s) examined in the evaluation.

Metric NN1A: **Materials reflect the basic architecture of the Standards by not assessing the listed topics before the grade level indicated.** • Probability, including chance, likely outcomes, probability models. (Introduced in the CCSSM in grade 7) • Statistical distributions, including center, variation, clumping, outliers, mean, median, mode, range, quartiles; and statistical association or trends, including two-way tables, bivariate measurement data, scatter plots, trend line, line of best fit, correlation. (Introduced in the CCSSM in grade 6) • Similarity, congruence, or geometric transformations. (Introduced in the CCSSM in grade 8) • Symmetry of shapes, including line/ reflection symmetry, rotational symmetry. (Introduced in the CCSSM in grade 4) **How to Find the Evidence:** Evaluate the table of contents, all chapter tests, all unit tests, and other such assessment components (including rubrics). For context, read Criterion #2 from the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013). NOTE: Grade alignments of other topics are addressed in Non-Negotiable 2, Focus and Coherence.) In this criterion, "topics named" means the topics that are explicitly named in Metric 1A. No other topics should be added to the list in Metric 1A. (Note that other topics in the standards are addressed in criterion NN2.)	**Evidence-** All assessed standards are on grade level. There are a few foundational 6th grade skills addressed but the assessments are all on CCSS for 7th grade.	**(Reviewer only.)** **__X__Meets** **____Does Not Meet**
Non-Negotiable 1: Materials must reflect the content architecture of the Standards by not assessing the topics named* before the grade level where they first appear in the Standards. **NN 1** If Metric 1A was rated as Meets, then rate Non-Negotiable 1 as Meets. If Metric 1A was rated as Does Not Meet, then rate Non- Negotiable 1 as Does Not Meet. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion.**(Reviewer only.)** **Before moving to Non-Negotiable 2, record the final Meets or Does Not Meet rating in the Evaluation Summary.**		**(Reviewer only.)** **___X_Meets** **____Does Not Meet** **Strengths/Weaknesses:**

Directions for Non-Negotiable 2

Focus and Coherence

Non-Negotiable 2: **Focus and Coherence** **Materials must focus coherently on the Major Work of the grade in a way that is consistent with the progressions in the Standards.** Focus and coherence are the two major evidence-based design principles of the Common Core State Standards for Mathematics (CCSSM, p. 3). Focus is necessary in order to fulfill the ambitious promise the states have made to their students by adopting the Standards: greater achievement at the college and career ready level; greater depth of understanding of mathematics; and a rich classroom environment in which reasoning, sense-making, applications, and a range of mathematical practices flourish. In simpler terms, a mile-wide, inch-deep curriculum translates to less time per topic. Less time means less depth and moving on without many students. Thus, materials must focus coherently on the Major Work of the grade in a way that is consistent with the progressions in the Standards.	**Required Materials** • Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf) • Focus by Grade Level for the grade being evaluated (www.achievethecore.org/focus) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion:** Non-Negotiable 2 is rated as Meets or Does Not Meet. To rate Non-Negotiable 2, first rate metrics 2A–2H. Each of these eight metrics must be rated as Meets in order for Non-Negotiable 2 to be rated as Meets. Rate each metric 2A-2H as Meets or Does Not Meet/Insufficient Evidence. If the evidence examined shows that the Criterion is met, then mark the Criterion Meets. If the evidence examined shows that the Criterion is not met—or if there is insufficient evidence to make a determination—then mark the Criterion as Does Not Meet/Insufficient Evidence. Support all ratings with evidence.
Metric NN2A: **In each grade K–8, students and teachers using the materials as designed devote the large majority of time to the Major Work of the grade.** **How to Find the Evidence:** Familiarize yourself with the Major Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, lessons, homework assignments, and assessments. (Evaluate both student and teacher materials.) Consider time spent on the Major Work of the grade and judge qualitatively whether students and teachers using the materials as designed will devote the large majority of time to the Major Work of the grade. For context, read Criterion #1 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013)	**Evidence-** Of the three texts for the 7th grade only two focus on the major work of the grade. The third focuses on supporting and additional works. Of the 78 lessons total, only 34 address the major work.	**(Reviewer only.)** **____Meets** **__X__Does Not Meet/** **Insufficient Evidence**

Metric NN2D: **Materials gi[illegible]l students extensive work with on-grade-level problems.** **How to Find the Evidence:** Evaluate both student and teacher materials. If the materials provide resources for differentiated learning, consider whether lower-performing students have opportunities to engage with grade-level problems. Also consider whether higher-performing students are given opportunities to learn current grade-level content in greater depth. For context, read Criterion #5b in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Texts include ma[illegible]roblems for practice. Most of these are computational. Application of skills and problem solving activities are available for each lesson as well but appear to be guided step by step. Higher-level students can do challenge sheets.	(Reviewer only.) **__X__Meets** **____Does Not Meet/** **Insufficient Evidence**
Metric NN2E: **Materials relate on-grade-level concepts explicitly to prior knowledge from earlier grades.** **How to Find the Evidence:** Evaluate both student and teacher materials. NOTE: Examples of evaluating this Criterion might include looking at the way the materials extend basic ideas of place value across the decimal point; or the role that properties of operations play when the materials extend arithmetic beyond whole numbers to fractions, variables, and expressions. More generally, cluster headings in the Standards sometimes signal key moments where reorganizing and extending previous knowledge is important in order to accommodate new knowledge (e.g., see cluster headings that use the phrase "Apply and extend previous understanding"). For context, read Criterion #5c in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Throughout texts, a few 6th grade standard lessons are used to help further future content material. In the average lesson, prior skills are used but not explicitly identified. 1st lesson of each unit is a review lesson to connect to previous grade skills.	(Reviewer only.) **__X__Meets** **____Does Not Meet/** **Insufficient Evidence**
Metric NN2F: **Review of material from previous grades is clearly identified as such to the teacher, and teacher and students can see what their specific responsibility is for the current year.** **How to Find the Evidence:** Evaluate the table of contents, but do not stop there; also evaluate units, chapters, lessons, homework assignments and assessments. (Evaluate both student and teacher materials.) Identify any content from previous grades and check whether it is identified as such. For context, read Criterion #5a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Each lesson is clearly identified in both the student and teacher text by CCSS. For students, the map is simply the table of contents.	(Reviewer only.) **__X__Meets** **____Does Not Meet/** **Insufficient Evidence**

Metric NN2G: **Materials include learning objectives that are visibly shaped by CCSSM cluster headings.** **How to Find the Evidence:** Select several clusters from the Major Work in the grade being evaluated. Evaluate teacher and student materials in relation to these clusters. For context, read Criterion #6a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Target for each lesson is clear and common vocabulary is evident. The idea is also clearly linked to CCSS.	(Reviewer only.) **__X_ Meets** **____Does Not Meet/ Insufficient Evidence**
Metric NN2H: **Materials include problems and activities that serve to connect two or more clusters in a domain, or two or more domains in a grade, in cases where these connections are natural and important.** **How to Find the Evidence:** In the grade being evaluated, choose two or more clusters or two or more domains for which connections are natural and important. Evaluate the units, chapters, and lessons that deal with the chosen topics, looking for problems and activities that serve to connect the chosen clusters or domains. NOTE: An example of evaluating this Criterion might include looking at whether problems in grade 4 sometimes or often involve students applying their developing computation skills (detailed in domain NBT) in the context of solving word problems (detailed in domain OA). For context, read Criterion #6b in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Yes, lessons are designed to cover multiple standards when appropriate. This is clearly seen in Stage 2 Standards Correlation by Lesson. Ex: 2.4 Lessons and Probability	(Reviewer only.) **__X__ Meets** **____Does Not Meet/ Insufficient Evidence**
Non-Negotiable 2: **Focus and Coherence** **Materials must focus coherently on the Major Work of the grade in a way that is consistent with the progressions in the Standards.** NN 2 If all Metrics 2A – 2H were rated as Meets, then rate Non-Negotiable 2 as Meets. If one or more Metric was rated Does Not Meet/Insufficient Evidence, then rate Non-Negotiable 2 as Does Not Meet. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)** **Before moving to Alignment Criterion 1, record the final Meets or Does Not Meet rating in the Evaluation Summary.**		(Reviewer only.) **__X__Meets** **____Does Not Meet** **Strengths/Weaknesses:** **More opportunities for problem based learning are needed.**

Metric NN2B: **Supporting work, where present, enhances focus and coherence simultaneously by also engaging students in the Major Work of the grade.** **How to Find the Evidence:** Familiarize yourself with the Major Work and Supporting Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate chapters and lessons that focus on Supporting Work. NOTE: Example of evaluating this Criterion might include looking at whether materials for K–5 generally treat data displays as an occasion for solving grade-level word problems using the four operations (e.g., see 3.MD.B.3); or whether materials for grade 7 take advantage of opportunities to use probability to support ratios, proportions, and percentages. For context, read Criterion #3 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** Supporting work seems separate from major works. It doesn't appear that one facilities the other. Students are asked to connect ideas between lessons but lessons separated by text have different themes. This makes connections to Major Works difficult as text three seems to be primarily supporting work.	**(Reviewer only.)** **____Meets** **__X__Does Not Meet/ Insufficient Evidence**
Metric NN2C: **Materials base content progressions on the grade-by-grade progressions in the Standards. Content from previous or future grades does not unduly interfere with or displace on-grade-level content.** **How to Find the Evidence:** Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, and lessons in both student and teacher materials. NOTE: In some cases it may be possible that aligned materials might address some aspects of a topic in a strategic way before or after the grade level in which the topic is central in the Standards' progressions; for example, a curriculum author might purposefully choose to explore adding fractions with unlike denominators in a way appropriate to grade four, recognizing that this work is not really required until the next grade. However, any such purposeful discrepancies in content progressions should enhance the required learning in each grade; not unduly interfere with or displace grade-level content; and be clearly aimed at helping students meet the Standards as written rather than effectively rewriting the progressions in the Standards. And in all cases, note that Non-Negotiable 1 must be met for materials to be aligned. For context, read Criterion #5a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** The 6th grade standards are reviewed in the first days of the year & the first days of subsequent units. These lessons focus on skills, which need to be mastered prior to 7th grade work. Progressions are appropriate and do not interfere with grade level content.	**(Reviewer only.)** **_X_Meets** **____Does Not Meet/ Insufficient Evidence**

Now continue by evaluating the Alignment Criterion 1 for Rigor and Balance.

Directions for Alignment Criterion 1

Rigor and Balance

Alignment Criterion 1: Rigor and Balance **Materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.** The Standards set expectations for attention to all three aspects of rigor: conceptual understanding, procedural skill and fluency, and applications. Thus, materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.	**Required Materials** • Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf) • Focus by Grade Level for the grade being evaluated (achievethecore.org/focus) • Situation Types for the Operations in Word Problems (achievethecore.org/situation-types) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion:** Alignment Criterion 1 is rated as Meets or Does Not Meet. To rate Alignment Criterion 1, first rate metrics 1A, 1B, and 1C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). For each metric, guiding questions are provided to aid in gathering evidence. Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 1 if the materials rate 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as rigor and balance, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.
Metric AC1A: **The materials support the development of students' conceptual understanding of key mathematical concepts, especially where called for in specific content Standards or cluster headings.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Major Work for the grade being evaluated that relate specifically conceptual understanding to use throughout the questions associated with this metric. NOTE: Some examples of clusters or Standards that call for conceptual understanding include: K.OA.A.1, (1.NBT.B, 1.NBT.C), (2.NBT.A, 2.NBT.B), (3.OA.A.1, 3.OA.A.2), 4.NF.A, (4.NBT.A, 4.NBT.B), 5.NF.B, (5.NBT.A, 5.NBT.B), 6.RP.A, 6.EE.A.3, 7.NS.A, 7.EE.A, 8.EE.B, 8.F.A, 8.G.A Clusters or Standards grouped by parentheses are closely connected and could be analyzed together. For context, read Criterion #4a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	-Choose a cluster/Standard from the Major Work that is aligned to each aspect of rigor and use it to evaluate these metrics. It is most helpful if the same clusters/Standards are chosen for all of the programs being evaluated. (Guidance in choosing clusters/Standards is included in "How to Find the Evidence".)	**Use the questions for AC Metric 1A to evaluate Metric 1A. Record evidence for each question and rate Metric 1A.** **____Meets (2)** **__X__Partially Meets (1)** **____Does Not Meet (0)**

Is conceptual understanding attended to thoroughly where the Standards set e expectations for understanding or interpreting? Evaluate lessons, chapter/unit assessments and homework assignments, paying attention to work aligned to Standards that explicitly call for understanding or interpreting. NOTE: Examples of evaluating this Criterion might include looking at how well the multi-digit addition and subtraction algorithms are developed and explained on the basis of place value and properties of operations; or how well the multi-digit multiplication and division algorithms are developed and explained on the basis of place value and properties of operations; or how well solving equations is presented and explained as a process of reasoning.	**Evidence-** The step-by-step le on at the beginning of each lesson does not allow students to build their conceptual understanding. Some assignments and extensions do allow for higher level thinking, but only after the concept has been shown to the student.	
Do the materials feature high-quality conceptual problems and conceptual discussion questions? Evaluate lessons, chapter/unit assessments, and homework assignments. NOTE: Example of conceptual problems might include such questions as "Find a number greater than 1/5 and less than 1/4," or "If the divisor does not change and the dividend increases, what happens to the quotient?"	**Evidence-** Overall this section is lacking. Tic-Tac-Toe Activities can offer this level of learning but there are not enough discussion opportunities.	
Do the materials feature opportunities to identify correspondences across mathematical representations? Evaluate lessons, chapter/unit assessments and homework assignments. NOTE: Examples of evaluating this Criterion might include looking at whether students are supported in identifying correspondences among: the verbal description of a situation, the diagrams that distill its mathematical features, and the equations that model it; or equivalent forms of numbers (e.g., 3 and 6/2) and the number line; or rational number operations and representations of them via models such as the vector model; or the expression that defines a function and the graph that shows the relationship.	**Evidence-** Often times different representations are used. One example is for statistics (tree diagrams, probability charts…etc.) It is worth mentioning, often times text does encourage use of these models but rarely asks to generate them as part of the lesson.	
Metric AC1B: **The materials are designed so that students attain the fluencies and procedural skills required by the Standards.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Major Work for the grade being evaluated that relate specifically to fluency and procedural skill to use throughout the questions associated with this metric. NOTE: Some examples of Standards that call for procedural skill and fluency include: K.OA.A.5, 1.OA.C.6, 2.OA.B.2, 2.NBT.B.5, 3.OA.C.7, 3.NBT.A.2, 4.NBT.B.4, 5.NBT.B.5, 6.NS.B.2, and 6.NS.B.3, 6.EE.A, 7.NS.A, 7.EE.A.1,7.EE.B.4a, 8.EE.C.7, 8.EE.C.8b For context, read Criterion #4b in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).		**Use the questions for Metric 1B to evaluate Metric 1 B. Record evidence for each question and rate Metric 1B.** **(Reviewer only.)** **____Meets (2)** **__X__Partially Meets (1)** **____Does Not Meet (0)**

Is progress toward fluency and procedural skill interwoven with students' develo conceptual understanding of the operations in question? Evaluate lessons, chapter/unit assessments, daily routines, and homework assignments for evidence that the development of fluency and procedural skill is supported by conceptual understanding.	**Evidence-** The text seems to l opportunities for conceptual understanding activities. Usually the students practice an understanding through exercise rather than discovering and building their own conceptual understanding.	
Are purely procedural problems and exercises present that include cases in which opportunistic strategies are valuable and generic cases that require efficient algorithms present? Evaluate lessons, chapter/unit assessments, daily routines, and homework assignments. NOTE: Examples of problems in which opportunistic strategies are valuable might include the sum 698 + 240 or the system x + y = 1, 2x + 2y = 3. Examples of generic cases that require efficient algorithms might include the sum 8767+2286 or the system 6y + x = x + 3, – x = 1 + 2y.	**Evidence-** Generic: Algorithms are foundation for each lesson. All lessons are presented as a series of steps and procedures. Opportunistic: Not as common but seen in ratio and proportion problems.	
Do the materials in grades K–6 provide repeated practice toward attainment of fluency Standards? Evaluate lessons, daily routines, and homework assignments for evidence of repeated practice toward attainment of the following K–6 Standards that set an explicit expectation of fluent (accurate and reasonably fast) computation: K.OA.A.5, 1.OA.C.6, 2.OA.B.2, 2.NBT.B.5, 3.OA.C.7, 3.NBT.A.2, 4.NBT.B.4, 5.NBT.B.5, 6.NS.B.2, 6.NS.B.3.	**Evidence-** **N/A**	
Metric AC1C: **The materials are designed so that teachers and students spend sufficient time working with engaging applications, without losing focus on the Major Work of each grade.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Major Work for the grade being evaluated that relate specifically application to use throughout the questions associated with this metric. NOTE: Some examples of clusters or Standards that call for application include: K.OA.A.2, 1.OA.A, 2.OA.A, 3.OA.A.3, 3.OA.D.8, 4.OA.A.3, 4.NF.B.3d, 4.NF.B.4c, 5.NF.B.6, 5.NF.B.7c, 6.RP.A.3, 6.NS.A.1, 6.EE.B.7, 6.EE.C.9, 7.RP.A, 7.NS.A.3, 7.EE.B.3, 8.EE.C.8c, 8.F.B For context, read Criterion #4c in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** The tic-tac-toe activities are engaging. Also an introduction problem at the beginning of the lesson can be engaging. Lastly, the homework problems are usually more application based towards then end of the exercise section (usually word problems.)	**Use the questions for Metric 1C to evaluate Metric 1C. Record evidence for each question and rate Metric 1C.** **(Reviewer only.)** **__X__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Are there are single- and multi-step contextual problems, including non-routine problems, that develop the mathematics of the grade, afford opportunities for practice, and engage students in problem solving? Do the problems attend thoroughly to those places in the content Standards where expectations for multi-step and real-world problems are explicit? Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** Single-step problems are found throughout the text. Multistep problems are found in later homework questions but are rarely non-routine. These advanced problems seem very lacking throughout the text.	

Do application problems particularly stress applying the Major Work of the grade? Eval[illegible]essons, chapter/unit assessments, and homework assignments. NOTE: Examples of evaluating this Criterion might include looking at: how well, by the end of grade 2, students using the materials as designed can represent and solve a full range of one-step addition and subtraction word problems; or how well, by the end of grade 3, students using the materials as designed can represent and solve a full range of one-step multiplication and division word problems; or how well these basic situation types for each operation are carried coherently across the grades, (e.g., with fractions and algebraic expressions); or, in all grades, whether the problems connect concepts, Standards, and domains in ways that are natural and important. For a list of situation types for one-step addition, subtraction, multiplication, and division problems, see Situation Types for the Operations in Word Problems	**Evidence-** There are applicati[illegible]roblems for each set of units. It varies from unit to unit whether these activities provide rigorous application of the skills.	
Does modeling build slowly across K–8, with applications that are relatively simple in earlier grades and when students are encountering new content? In grades 6–8, do the problems begin to provide opportunities for students to make their own assumptions or simplifications in order to model a situation mathematically? Read Standard for Mathematical Practice 4, Model with Mathematics. Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** Modeling is appropriate to the problems but do not extend and build to deepen understanding. When presented, modeling is appropriate.	

Alignment Criterion 1: Rigor and Balance

Materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.

AC1 Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 out of 6 points, the Criterion has not been met. Check the final rating.
Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)**

Before moving to Alignment Criterion 2, record the final Meets or Does Not Meet rating in the Evaluation Summary.

(Reviewer only.)

____Meets

__X__Does Not Meet

Strengths/Weaknesses:

Students will develop computation and procedural knowledge, but rigor and problem based problems are lacking.

Directions for Alignment Criterion 2

Standards for Mathematical Practice

Alignment Criterion 2: Standards for Mathematical Practice **Materials must demonstrate authentic connections between content Standards and practice Standards.** The Standards require that designers of instructional materials connect the mathematical practices to mathematical content in instruction. Thus, materials must demonstrate authentic connections between content Standards and practice Standards.	**Required Materials:** • Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf) • Focus by Grade Level for the grade being evaluated (www.achievethecore.org/focus) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion** Alignment Criterion 2 is rated as Meets or Does Not Meet. To rate Alignment Criterion 2, first rate metrics 2A, 2B, and 2C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). For each metric, guiding questions are provided to aid in gathering evidence. Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 2 if the materials earn 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as mathematical practices, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.
Metric AC2A: **Materials address the practice Standards in such a way as to enrich the Major Work of the grade; practices strengthen the focus on Major Work instead of detracting from it, in both teacher and student materials.** **How to Find the Evidence:** Familiarize yourself with the Major Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate teacher and student materials for evidence that the mathematical practices support and connect to the focus of the grade. NOTE: Examples of evaluating this Criterion might include looking at whether, in grades K–5, students using the materials are supported to look for and express regularity in repeated reasoning about the addition table, the multiplication table, the properties of operations, the relationship between addition and subtraction or multiplication and division, and the place value system; or whether, in grades 6–8, students using the materials are supported to look for and express regularity in repeated reasoning about proportional relationships and linear functions. For context, read Criterion #8 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013).	**Evidence-** MP1: Present through solving. MP2: Students occasionally asked to reason. MP3: Constructing viable arguments is occasionally present but critiquing others ideas is rarely addressed. MP4: Models are presented as a means to explain rather than to deepen knowledge and conceptual understanding. MP5: Tools are given and told to use. Not open ended discovery through choosing the tools themselves. MP6: Present. MP7: Structure is often provided rather than presented. MP8: Lesson drives student initiative.	**(Reviewer only.)** **____Meets (2)** **__X__Partially Meets (1)** **____Does Not Meet (0)**

Metric AC2B: **Materials attend to the full meaning of each practice Standard.** **How to Find the Evidence:** For context, read Criterion #7 and Criterion #9 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).		**Use the questions for Metric 2B to evaluate Metric 2B. Record evidence for each question and rate Metric 2B.** **(Reviewer only.)** **__X__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Over the course of any given year of instruction, is each mathematical practice Standard meaningfully present in the form of assignments, activities, or problems that stimulate students to develop the habits of mind described in the practice Standard? Evaluate lessons, chapter/ unit assessments, and homework assignments for evidence of each mathematical practice being meaningfully present in instruction.	**Evidence-** MPs are present in different places and in different ways but are rather a coincidence rather than a thought out intentional plan.	
Do the materials treat the practice Standards as developing across grades or grade bands? Are the practice Standards in early grades appropriately simple? Do they display an arc of growing sophistication across the grades?	**Evidence-** MPs are appropriate to grade level and develop with the curriculum.	
Are there teacher-directed materials that explain the role of the practice Standards in the classroom and in students' mathematical development? Are alignments to practice Standards accurate?	**Evidence-** Yes. MPs are applicable as described by the text.	
Metric AC2C: **Materials support the Standards' emphasis on mathematical reasoning.** **How to Find the Evidence:** For context, read Criterion #10 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).		**Use the questions for Metric 2C to evaluate Metric 2C. Record evidence for each question and rate Metric 2C.** **(Reviewer only.)** **____Meets (2)** **__X__Partially Meets (1)** **____Does Not Meet (0)**
Do the materials support students in constructing viable arguments and critiquing the arguments of others concerning grade-level mathematics that is detailed in the content Standards? Read Standard for Mathematical Practice 3. Evaluate teacher and student materials to ensure that students are given opportunities to reason with grade-level mathematics.	**Evidence-** "Explore" activities ask students to justify but usually lack a critique of others.	
Do the materials support students in producing not only answers and solutions, but also, in a grade-appropriate way, arguments, explanations, diagrams, mathematical models, etc., especially in the Major Work of the grade? Familiarize yourself with the Major Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate teacher and student materials, to understand the types of work students are expected to produce.	**Evidence-** Students offer opportunities to explain and produce good work but often lend itself to a simplistic explanation.	

Do materials explicitly attend to the specialized language of mathematics? Is language of argument, problem solving, and mathematical explanations taught rather than assumed? Evaluate teacher and student materials, paying attention to how mathematical language is taught. NOTE: Examples of evaluating this Criterion might include looking at whether students are supported in: basing arguments on definitions; using the method of providing a counterexample; or recognizing that examples alone do not establish a general statement.	**Evidence-** Appropriate language is exercised and identified through the vocabulary. After being taught the vocabulary, it is modeled throughout the text.	

Alignment Criterion 2:
Standards for Mathematical Practice

Materials must demonstrate authentic connections between content Standards and practice Standards.

AC2 Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 out of 6 points, the Criterion has not been met. Check the final rating.
Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion.
(Reviewer only.)

(Reviewer only.)

____Meets

__X__Does Not Meet

Strengths/Weaknesses:

Before moving to Alignment Criterion 3, record the final Meets or Does Not Meet rating in the Evaluation Summary.

Alignment Criterion 3:
Access to the Standards for All Students

Materials must provide supports for English Language Learners and other special populations.

Because Standards are for all students, alignment requires thoughtful support to ensure all students are able to meet the Standards. Thus, aligned materials must provide supports for English Language Learners and other special populations.

Required Materials:

- Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf)
- Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)
- From the materials being evaluated: teacher guides, student texts and workbooks

Rating this Criterion:
Alignment Criterion 3 is rated as Meets or Does Not Meet.

To rate Alignment Criterion 3, first rate metrics 3A, 3B, and 3C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points).

Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 3 if the materials earn 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as support for special population, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.

Metric AC3A: **Support for [illegible]lish Language Learners and other special populations is thoughtful and helps those students meet the same Standards as all other students. The language in which problems are posed is carefully considered.** **How to Find the Evidence:** Evaluate teacher and student materials, paying attention to supports offered for special populations.	**Evidence-** Tiered worksheets [illegible] ELL resources are helpful and thoughtful.	**Reviewer only.)** **__X__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Metric AC3B: **Materials provide appropriate level and type of scaffolding, differentiation, intervention, and support for a broad range of learners with gradual removal of supports, when needed, to allow students to demonstrate their mathematical understanding independently.** **How to Find the Evidence:** Evaluate teacher and student materials, paying attention to whether materials provide differentiation that will lead all learners to engage with on-grade-level content.	**Evidence-** Teaching tips and resources give suggestions. Teachers are given different level of tiered worksheets to address special populations.	**Reviewer only.)** **__X__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Metric AC3C: **Design of lessons recommends and facilitates a mix of instructional approaches for a variety of learners such as using multiple representations (e.g., including models, using a range of questions, checking for understanding, flexible grouping, pair-share).** **How to Find the Evidence:** Evaluate teacher materials, noting instructional approaches suggested for whole class and differentiated lessons and activities.	**Evidence-** Each lesson follows a uniform platform. There are Explore activities and some hands on but overall the daily lessons ado not offer many varieties of instructional approaches.	**Reviewer only.)** **____Meets (2)** **__X__Partially Meets (1)** **____Does Not Meet (0)**

Alignment Criterion 3: **Access to the Standards for All Students** **Materials must provide supports for English Language Learners and other special populations.** AC3 Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 points, the Criterion has not been met. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion.**(Reviewer only.)** **Move to the Evaluation Summary and record the final Meets or Does Not Meet rating .**	**(Reviewer only.)** **__X__Meets** **____Does Not Meet** **Strengths/Weaknesses:** The text encourages every student to follow the same procedures, models, or strategies to find the solution, rather than allowing the student to develop their own path.

Once an evaluation for alignment to the Shifts and major features of the CCSS has been conducted using Sections 1-3, it's important to evaluate for overall quality and best practices. A starting list of Indicators of Quality are suggested below. States, districts and others evaluating instructional materials are encouraged to add to this list to ensure materials reflect local contexts. For background information on some of the Indicators of Quality in this section, refer to pp.18–21 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).

Indicators of Quality	**Evidence- Give specific examples.**	**Rating: (Reviewers only.)**
1. Lessons are thoughtfully structured and support the teacher in leading the class through the learning paths at hand, with active participation by all students in their own learning and in the learning of their classmates.	**Evidence-** Explore and Tic-Tac-Toe activities structure lessons well and engage students in active participation.	**(Reviewer only.)** **___X___ Yes** **_____ No**
2. The underlying design of the materials includes both problems and exercises. (In solving problems, students learn new mathematics, whereas in working exercises, students apply what they have already learned to build mastery.) Each problem or exercise has a purpose. **NOTE: This Criterion does not require that the problems and exercises be labeled as such.**	**Evidence-** Students are required to "work exercises" very often but solving problems seems to be more lacking. There are available problems but they often don't go as deep as we would like to see for the perseverance MP.	**(Reviewer only.)** **___X___ Yes** **_____ No**

3. Design of assignments is not haphazard: exercises are given in intentional sequences in order to strengthen students' mathematical understanding.	**Evidence-** Follows a logical order. Explore → Practice → Exit Problems.	**(Reviewer only.)** **___X___ Yes** **_____ No**
4. There are separate teacher materials that support and reward teacher study including, but not limited to: discussion of the mathematics of the units and the mathematical point of each lesson as it relates to the organizing concepts of the unit, discussion on student ways of thinking and anticipating a variety of students responses, guidance on lesson flow, guidance on questions that prompt students thinking, and discussion of desired mathematical behaviors being elicited among students.	**Evidence-** Teacher tips are great and resources are very helpful. No inherent reward comes from doing research beyond the night before the lesson. Teachers do not gain the ability to form a deep intellectual conversation or connections.	**(Reviewer only.)** **___X___ Yes** **_____ No**
5. Manipulatives suggested in the materials are faithful representations of the mathematical objects they represent and are connected to written methods.	**Evidence-** Manipulative are rarely used but those that are used are connected to written methods.	**(Reviewer only.)** **_____ Yes** **___X___ No**
6. Materials include a variety of curriculum-embedded assessments. Examples include pre-, formative, summative, and self-assessment resources.	**Evidence-** Include; Pre tests, Post tests, end of topic assessments, and self assessments.	**(Reviewer only.)** **___X___ Yes** **_____ No**
7. Assessments contain aligned rubrics, answer keys, and scoring guidelines that provide sufficient guidance for interpreting student performance.	**Evidence-** Answer keys are present but deep involving rubrics are not found. A rubric showing perfect work is present but anything less than that perfect is not described.	**(Reviewer only.)** **___X___ Yes** **_____ No**
8. Materials assess student proficiency using methods that are accessible and unbiased, including the use of course-level language in student prompts.	**Evidence-** All problems and assessments use grade level language and previously taught vocabulary. The text is unbiased and uses vocabulary appropriately.	**(Reviewer only.)** **___X___ Yes** **_____ No**

9. Materials are carefully evaluated by qualified individuals, whose names are listed, in an effort to ensure freedom from mathematical errors and course-level appropriateness.	**Evidence-** There is a list of teachers who vetted the material for 3 years. These teachers are relying on previous classroom experience, but do not seem to be based in research.	**(Reviewer only.)** **_____ Yes** **___X___ No**
10. The visual design supports students in engaging thoughtfully with the subject. Navigation through the text is clear.	**Evidence-** Visuals are thoughtful and relevant. The text is clear, concise, and easy to navigate for teacher and student. The three textbook design makes accessing text easier.	**(Reviewer only.)** **___X___ Yes** **_____ No**
11. The materials engage parents in appropriate ways. For example, homework assignments in elementary grades, consist of routine problems, practice with getting answers, and fluency-building exercises that parents can easily support.	**Evidence-** There are not materials specifically designed to connect with parents. There are homework assignments and online tools which could be shared with parents.	**(Reviewer only.)** **_____ Yes** **___X___ No**

Reviewer IMET Evaluation Summary **Title/Level:** Core Focus

Publisher: SMc Curriculum **Copyright:** 2014 **ISBN:** 9781938801600

Reviewer ID # DN & KC **Date Review Completed:** March 8, 2016

Non-Negotiable Criteria- Each Non-Negotiable must be met in order for the Non-Negotiable Alignment Criteria to be met overall.

Non-Negotiable 1: Freedom from Obstacles to Focus	Non- Negotiable 2: Focus and Coherence
X Meets	X Meets
_____ Does Not Meet	_____ Does Not Meet

Non-Negotiable Overall:

X Meets **_____ Does Not Meet**

Alignment Criteria- Each Alignment Criterion must be met with a sufficient number of points in order for Alignment Criteria to be labeled as "Meets" overall. The more points the materials receive on the Alignment Criteria, the better they are aligned.

Alignment Criterion 1: Rigor and Balance	Alignment Criterion 2: Standards of Mathematical Practice	Alignment Criterion 3: Access to Standards for All Learners
Points: 4 of 6 possible. (Materials must receive at least 5 of 6 points to align.)	Points: 4 of 6 possible. (Materials must receive at least 5 of 6 points to align.)	Points: 5 of 6 possible. (Materials must receive at least 5 of 6 points to align.)
_____ Meets	_____ Meets	X Meets
X Does Not Meet	X Does Not Meet	_____ Does Not Meet

Alignment Criteria Overall:

_____ Meets **X Does Not Meet**

If the materials meet both Non-Negotiables and relevant Alignment Criterion, they are aligned to the Shifts and major features of the Core Standards. **the materials meet every Non-Negotiable and Alignment Criterion? _____ Yes ___X__ No**

What are the specific areas of strength and weakness based on this evaluation? Publishers or others modifying or developing assessments can use this information to make improvements and/or to remedy gaps in the alignment of assessment materials.

Overall, this program has strengths in connecting to CCSS and Practice Standards using an easy to follow format. Instructionally, it lacks opportunities for students to persevere through problems and reason abstractly due to the step-by-step nature of the text's instruction.

2015-16 Mathematics Interim Review Recommendation & Summary

Publisher Name:	SMc Curriculum
Title:	Core Focus on Math (Stage III)
ISBN #	978193880-1761, 1778, 1785, 1631, 1648, 1655, 9781935033-929, 936, 943
Grade Level(s) or Course:	Grade 8 - Stage 3
Reviewer ID:	DN SDF

RECOMMENDED AS:

__X__ **Core Mathematics Program-** a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials. Substantial evidence clearly supports the designation of this program as Core.

_____ **Other Mathematics Program-** a program that substantially, but partially, meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for supplemental materials. Substantial evidence clearly supports the designation of this program as Other.

_____ **Component Mathematics Program-** a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs. Substantial evidence clearly supports the designation of this program as Component.

_____ **Intervention Program-** a program designed and intended to target and support students' specific needs. Substantial evidence clearly supports the designation of this program as Intervention.

_____ **Does not meet criteria** for recommendation as a Curricular Material or Online Resource for Mathematics.

EVIDENCE SUMMARY:

FOCUS- No materials assessed outside of grade level. Units developed in accordance with the CCSS with a majority focus on the Widely Applicable Prereqs.

COHERENCE- A variety of resources and tools are utilized to meet the CCSS. Interaction between clusters are expressed in each book.

RIGOR- Models and lessons build at an appropriate pace for grade level material. Steps can be follow easily and each progressive lesson builds on the previous ones.

CONCEPTUAL UNDERSTANDING- This is built up using the following standards; 8.ee.5 and 6 in linear equations lesson 2.8 All geometry standards build conceptual understanding. examples are lesson 2.3 + 2.4 etc. "Explore" activities reinforce this also.

MATHEMATICAL PRACTICES-
Every lesson maps specific practices to the material in an accurate manner.

ACCESSIBILITY OF STANDARDS TO ALL STUDENTS-
Through tiered and ELL worksheets all students can access the material in a fair unbiased manner.

OTHER: Generally the material is presented in a manner allowing the teacher to design a program for all students. 2 main points to consider;

1) Teacher resource book provides tremendous help to the teacher
2) Be careful not to get overwhelmed w/ the material.

2015-1[illegible]nterim Mathematics Review

Mathematics Evaluation Tool – High School

Publisher: SMc Curriculum

Title of Material: Core Focus - Stage III (8th Grade)

Author: McCaw, Armstrong, Schuhl, Terry, Valway

ISBN #: various **Copyright** 2014

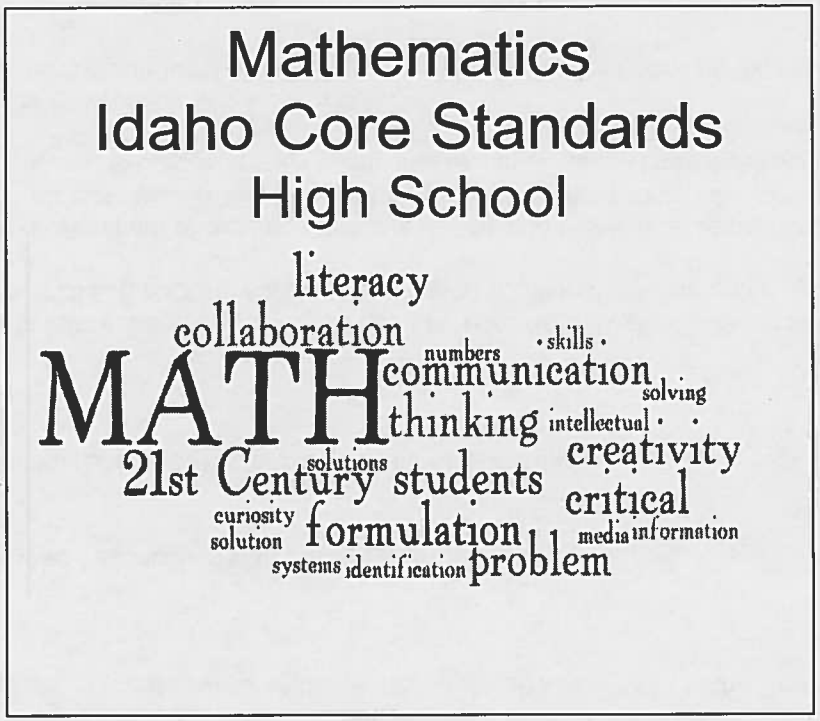
Reviewer ID: DN SF

Core Mathematics Program- a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Core.

Other Mathematics Program- a program that substantially, but partially, meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Other.

Component Mathematics Program- a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs.
Substantial evidence clearly supports the designation of this program as Component.

Intervention Program- a program designed and intended to target and support students' specific needs.
Substantial evidence clearly supports the designation of this program as Intervention.



- Evaluation Form adapted from Instructional Materials Evaluation Toolkit (IMET).

The IMET was developed by Student Achievement Partners. Educators may use or adapt. http://creativecommons.org/licenses/by/3.0/ Download this tool at http://achievethecore.org/IMET

Instructional Materials Evaluation Tool

Mathematics, High School

What Are the Purposes of the IMET?

This Math IMET is designed to help educators determine whether instructional materials are aligned to the Shifts and major features of the Common Core State Standards (CCSS). The substantial instructional Shifts (http://www.corestandards.org/other-resources/key-shifts-in-mathematics/) at the heart of the Common Core State Standards are:

- **Focus** strongly where the Standards focus
- **Coherence**: Think across grades and link to major topics within the grade
- **Rigor**: In major topics, pursue conceptual understanding, procedural skill and fluency, and application with equal intensity.

The IMET draws directly from the following documents:

- Common Core State Standards for Mathematics (www.corestandards.org/Math)
- Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013) (http://www. corestandards.org/wp-content/uploads/Math_Publishers_Criteria_ HS_Spring_2013_FINAL1.pdf)

When to use the IMET

1. Purchasing materials: Many factors go into local purchasing decisions. Alignment to the Standards is a critical factor to consider. This tool is designed to evaluate alignment of instructional materials to the Shifts and the major features of the CCSS. It also provides suggestions of additional indicators to consider in the materials evaluation and purchasing process
2. Evaluating materials currently in use: The IMET can be used to analyze the degree of alignment of existing materials and help to highlight specific, concrete flaws in alignment. Even where materials and tools currently in use fail to meet one or more of these criteria, the pattern of failure is likely to be informative. States and districts can use the evaluation to create a thoughtful plan to modify or combine existing resources in such a way that students' actual learning experiences approach the focus, coherence, and rigor of the Standards.
3. Developing programs: Those developing new programs can use this tool as guidance for creating aligned curricula.

Please note this tool was designed for evaluating comprehensive curricula (including any supplemental or ancillary materials), but it was not designed for the evaluation of standalone supplemental materials.

Who Uses the IMET?

Evaluating instructional materials requires both subject-matter and pedagogical expertise. Evaluators should be well versed in the Standards (www.corestandards.org/Math) for all grades in which materials are being evaluated. This includes understanding the Widely Applicable Prerequisites (www.achievethecore.org/prerequisites), how the content fits into the progressions in the Standards (www. achievethecore.org/progressions), and the expectations of the Standards with respect to conceptual understanding, procedural skill and fluency, and application. Evaluators also should be familiar with the substantial instructional Shifts (http://www.corestandards.org/other-resources/key-shifts-in-mathematics/) of Focus, Coherence and Rigor that are listed above.

Getting Started

Prior to Evaluation

Assemble all of the materials necessary for the evaluation. It is essential for evaluators to have materials for all grades covered by the program, as some criteria cannot be rated without having access to each grade. In addition, each evaluator should have a reference copy of the Common Core State Standards for Mathematics (CCSSM) and the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).

T ET was developed by Student Achievement Partners. Educators may use or adapt. http://creativecommons.org/l s/by/3.0/ Download this tool at http://achievethecore.org/IMET

Instructional Materials Evaluation Tool

Mathematics, Grades K-8

What Are the Purposes of the IMET?

This Math IMET is designed to help educators determine whether instructional materials are aligned to the Shifts and major features of the Common Core State Standards (CCSS). The substantial instructional Shifts (http://www.corestandards.org/other-resources/key-shifts-inmathematics/) at the heart of the Common Core State Standards are:

- **Focus** strongly where the Standards focus
- **Coherence**: Think across grades and link to major topics within the grade
- **Rigor**: In major topics, pursue conceptual understanding, procedural skill and fluency, and application with equal intensity.

The IMET draws directly from the following documents:

- Common Core State Standards for Mathematics (www.corestandards.org/Math)
- Publishers' Criteria for the Common Core State Standards in Mathematics grade K-8 (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)

When to use the IMET

1. Purchasing materials: Many factors go into local purchasing decisions. Alignment to the Standards is a critical factor to consider. This tool is designed to evaluate alignment of instructional materials to the Shifts and the major features of the CCSS. It also provides suggestions of additional indicators to consider in the materials evaluation and purchasing process.

2. Evaluating materials currently in use: The IMET can be used to analyze the degree of alignment of existing materials and help to highlight specific, concrete flaws in alignment. Even where materials and tools currently in use fail to meet one or more of these criteria, the pattern of failure is likely to be informative. States and districts can use the evaluation to create a thoughtful plan to modify or combine existing resources in such a way that students' actual learning experiences approach the focus, coherence, and rigor of the Standards.

3. Developing programs: Those developing new programs can use this tool as guidance for creating aligned curricula.

Please note this tool was designed for evaluating comprehensive curricula (including any supplemental or ancillary materials), but it was not designed for the evaluation of standalone supplemental materials.

Who Uses the IMET?

Evaluating instructional materials requires both subject-matter and pedagogical expertise. Evaluators should be well versed in the Standards (www.corestandards.org/Math) for all grades in which materials are being evaluated. This includes understanding the Major Work of the grade (www.achievethecore/focus), the Supporting and Additional work, how the content fits into the progressions in the Standards (www.achievethecore.org/progressions), and the expectations of the Standards with respect to conceptual understanding, procedural skill and fluency, and application. Evaluators also should be familiar with the substantial instructional Shifts (http://www.corestandards.org/other-resources/key-shifts-in-mathematics/) of Focus, Coherence and Rigor that are listed above.

Getting Started

Prior to Evaluation

Assemble all of the materials necessary for the evaluation. It is essential for evaluators to have materials for all grades covered by the program, as some criteria cannot be rated without having access to each grade. In addition, each evaluator should have a reference copy of the Common Core State Standards for Mathematics (CCSSM) and the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013).

Before conducting the evaluation itself, it is important to develop a protocol for the evaluation process. The protocol should include having evaluators study the Publishers' Criteria and the IMET. It will also be helpful for evaluators to get a sense of each program overall before beginning the process. At a minimum, this would include reading the front matter of the text, looking at the table of contents and paging through multiple chapters.

Sections 1-3 below should be completed to produce a comprehensive picture of the strengths and weaknesses of the materials under evaluation. Information about areas in need of improvement or supplementation should be shared with internal and external stakeholders.

Navigating the Tool

Begin with Section 1: Non-Negotiable Alignment Criteria

- The Non-Negotiable Alignment Criteria must each be met in full for materials to be considered aligned to the Shifts and the major features of the Common Core State Standards. Each Non-Negotiable Alignment Criterion has one or more metrics associated with it; every one of these metrics must be met in order for the criterion as a whole to be met.

- Examine the relevant materials and use evidence to rate the materials against each criterion and its associated metric(s).

- Record and explain the evidence upon which the rating is based.

Continue to Section 2: Alignment Criteria

- The Alignment Criteria must each be met for materials to be considered aligned to the Shifts and the major features of the Common Core State Standards. Each Alignment Criterion has one or more metric associated with it; a specific number of these metrics must be met or partially met in order for the criterion as a whole to be met.

- Examine the materials in relation to these criteria, assigning each metric a point value. Rate the criterion as "Meets" or "Does Not Meet" based on the number of points assigned. The more points the materials receive on the alignment Criteria, the better they are aligned.

- Record and explain the evidence upon which the rating is based.

Proceed to Section 4: Indicators of Quality

- Indicators of Quality are important considerations that will help evaluators better understand the overall quality of instructional materials. These considerations are not criteria for alignment to the CCSS, but they provide valuable information about additional program characteristics. Evaluators may want to add their own indicators to the examples provided.

Directions for Non-Negotiable 1

Freedom from Obstacles to Focus

Criterion	Evidence- Give specific examples.	Rating: (Reviewer only.)
Non-Negotiable 1: **Freedom from Obstacles to Focus** **Materials must reflect the content architecture of the Standards by not assessing the topics named before the grade level where they first appear in the Standards.** The Standards foster students' progress to algebra by focusing strongly on arithmetic. Consistent with this focus, certain topics from outside of arithmetic appear only in later grades. Thus, to be aligned, materials must reflect the content architecture of the Standards by not assessing the topics named before the grade level where they first appear in the Standards. In this criterion, "topics named" means the topics that are explicitly named in Metric 1A. No other topics should be added to the list in Metric 1A. (Note that other topics in the standards are addressed in criterion NN2.)	**Required Materials** • Common Core State Standards for Mathematics (www.corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf) • From the materials being evaluated: teacher guides and all assessment components	**Rating this Criterion:** Non-Negotiable 1 is rated as Meets or Does Not Meet. To rate Non-Negotiable 1, begin by rating Metric 1A. Since Metric 1A is the only metric for Non-Negotiable 1, the rating for Non-Negotiable 1 is the same as the rating for Metric 1A. If Metric 1A is rated as Does Not Meet, include evidence of when the named topic(s) is/are assessed. If the metric is rated as Meets, list the grade(s) examined in the evaluation.

ic NN1A: **Materials reflect the basic architecture of the Standards by not assessing the listed topics before the grade level indicated.** • Probability, including chance, likely outcomes, probability models. (Introduced in the CCSSM in grade 7) • Statistical distributions, including center, variation, clumping, outliers, mean, median, mode, range, quartiles; and statistical association or trends, including two-way tables, bivariate measurement data, scatter plots, trend line, line of best fit, correlation. (Introduced in the CCSSM in grade 6) • Similarity, congruence, or geometric transformations. (Introduced in the CCSSM in grade 8) • Symmetry of shapes, including line/ reflection symmetry, rotational symmetry. (Introduced in the CCSSM in grade 4) **How to Find the Evidence:** Evaluate the table of contents, all chapter tests, all unit tests, and other such assessment components (including rubrics). For context, read Criterion #2 from the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013). NOTE: Grade alignments of other topics are addressed in Non- Negotiable 2, Focus and Coherence.) In this criterion, "topics named" means the topics that are explicitly named in Metric 1A. No other topics should be added to the list in Metric 1A. (Note that other topics in the standards are addressed in criterion NN2.)	**E nce-** Example is in Geometry. Assessments are in line with 8th grade standards. No assessments go beyond the 8th grade standards The functions book is an extension and for advanced math students. The units are developed in accordance with each standard.	(Reviewer o __X _Meets ____Does Not Meet
Non-Negotiable 1: Materials must reflect the content architecture of the Standards by not assessing the topics named* before the grade level where they first appear in the Standards. **NN 1** If Metric 1A was rated as Meets, then rate Non-Negotiable 1 as Meets. If Metric 1A was rated as Does Not Meet, then rate Non- Negotiable 1 as Does Not Meet. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion.**(Reviewer only.)** **Strength- at the beginning of each book, standards are laid out and shown how each book accomplishes the criteria without going beyond the grade level requirements.** **Before moving to Non-Negotiable 2, record the final Meets or Does Not Meet rating in the Evaluation Summary.**		(Reviewer only.) _X__Meets ____Does Not Meet **Strengths/Weaknesses:**

Directions for Non-Negotiable 2

Focus and Coherence

Non-Negotiable 2: **Focus and Coherence** **Materials must focus coherently on the Major Work of the grade in a way that is consistent with the progressions in the Standards.** Focus and coherence are the two major evidence-based design principles of the Common Core State Standards for Mathematics (CCSSM, p. 3). Focus is necessary in order to fulfill the ambitious promise the states have made to their students by adopting the Standards: greater achievement at the college and career ready level; greater depth of understanding of mathematics; and a rich classroom environment in which reasoning, sense-making, applications, and a range of mathematical practices flourish. In simpler terms, a mile-wide, inch-deep curriculum translates to less time per topic. Less time means less depth and moving on without many students. Thus, materials must focus coherently on the Major Work of the grade in a way that is consistent with the progressions in the Standards.	**Required Materials** • Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf) • Focus by Grade Level for the grade being evaluated (www.achievethecore.org/focus) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion:** Non-Negotiable 2 is rated as Meets or Does Not Meet. To rate Non-Negotiable 2, first rate metrics 2A–2H. Each of these eight metrics must be rated as Meets in order for Non-Negotiable 2 to be rated as Meets. Rate each metric 2A-2H as Meets or Does Not Meet/Insufficient Evidence. If the evidence examined shows that the Criterion is met, then mark the Criterion Meets. If the evidence examined shows that the Criterion is not met—or if there is insufficient evidence to make a determination—then mark the Criterion as Does Not Meet/Insufficient Evidence. Support all ratings with evidence.
Metric NN2A: **In each grade K–8, students and teachers using the materials as designed devote the large majority of time to the Major Work of the grade.** **How to Find the Evidence:** Familiarize yourself with the Major Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, lessons, homework assignments, and assessments. (Evaluate both student and teacher materials.) Consider time spent on the Major Work of the grade and judge qualitatively whether students and teachers using the materials as designed will devote the large majority of time to the Major Work of the grade. For context, read Criterion #1 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013)	**Evidence-** Geometry major clusters- Angle types to understand congruence and develop similarity properties. Develop and prove Pythagorean theorem- also deals with expressions and equations major clusters. stage 3 standards lessons show 47 of 69 lessons focus on major works	**(Reviewer only.)** **_X__Meets** **____Does Not Meet/ Insufficient Evidence**

ric NN2B: **Supporting Work, where present, enhances focus and coherence simultaneously by also engaging students in the Major Work of the grade.** **How to Find the Evidence:** Familiarize yourself with the Major Work and Supporting Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate chapters and lessons that focus on Supporting Work. NOTE: Example of evaluating this Criterion might include looking at whether materials for K–5 generally treat data displays as an occasion for solving grade-level word problems using the four operations (e.g., see 3.MD.B.3); or whether materials for grade 7 take advantage of opportunities to use probability to support ratios, proportions, and percentages. For context, read Criterion #3 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**E nce-** In functions and data the supporting work example is in quadratic equations asking the student to analyze what happens in these graphs in different conditions. Also the student is asked to sketch problems arising from formulas. Supporting work is in the same lesson as major work, thus enhancing and reinforcing these major standards to be addressed.	**(Reviewer o** **_X__Meets** **____Does Not Meet/ Insufficient Evidence**
Metric NN2C: **Materials base content progressions on the grade-by-grade progressions in the Standards. Content from previous or future grades does not unduly interfere with or displace on-grade-level content.** **How to Find the Evidence:** Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, and lessons in both student and teacher materials. NOTE: In some cases it may be possible that aligned materials might address some aspects of a topic in a strategic way before or after the grade level in which the topic is central in the Standards' progressions; for example, a curriculum author might purposefully choose to explore adding fractions with unlike denominators in a way appropriate to grade four, recognizing that this work is not really required until the next grade. However, any such purposeful discrepancies in content progressions should enhance the required learning in each grade; not unduly interfere with or displace grade-level content; and be clearly aimed at helping students meet the Standards as written rather than effectively rewriting the progressions in the Standards. And in all cases, note that Non-Negotiable 1 must be met for materials to be aligned. For context, read Criterion #5a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** In the beginning of each teacher's edition the standards are laid out by lesson showing the progression each cluster follows to lead to the required learning. The progression is clear and teachers can follow it to assure all standards are covered.	**(Reviewer only.)** **__X__Meets** **____Does Not Meet/ Insufficient Evidence**
Metric NN2D: **Materials give all students extensive work with on-grade-level problems.** **How to Find the Evidence:** Evaluate both student and teacher materials. If the materials provide resources for differentiated learning, consider whether lower-performing students have opportunities to engage with grade-level problems. Also consider whether higher-performing students are given opportunities to learn current grade-level content in greater depth. For context, read Criterion #5b in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** In teacher resources Linear equations- multiple problems, evaluating expressions, two step problems, distributive property, and word problems with many problems available to engage all learners	**(Reviewer only.)** **__X _Meets** **____Does Not Meet/ Insufficient Evidence**

Metric NN2E: **Materials relate on-grade-level concepts explicitly to prior knowledge from earlier grades.** **How to Find the Evidence:** Evaluate both student and teacher materials. NOTE: Examples of evaluating this Criterion might include looking at the way the materials extend basic ideas of place value across the decimal point; or the role that properties of operations play when the materials extend arithmetic beyond whole numbers to fractions, variables, and expressions. More generally, cluster headings in the Standards sometimes signal key moments where reorganizing and extending previous knowledge is important in order to accommodate new knowledge (e.g., see cluster headings that use the phrase "Apply and extend previous understanding"). For context, read Criterion #5c in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** In working with Linear functions, the work starts with evaluating expressions using basic order of operations and progresses to word problems that demonstrate extending previous knowledge. Slope starts with developing a table to show rise over run to extending to using the equations and many various methods to find slope. Prior material is addressed but not always explicitly mentioned.	**(Reviewer only.)** **X__Meets** **____Does Not Meet/ Insufficient Evidence**
Metric NN2F: **Review of material from previous grades is clearly identified as such to the teacher, and teacher and students can see what their specific responsibility is for the current year.** **How to Find the Evidence:** Evaluate the table of contents, but do not stop there; also evaluate units, chapters, lessons, homework assignments and assessments. (Evaluate both student and teacher materials.) Identify any content from previous grades and check whether it is identified as such. For context, read Criterion #5a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** When the lesson's objective identifies its goals as 7th or 6th, then it is clear, otherwise it is not easily discernable. The goal for the year is clear for the teacher.	**(Reviewer only.)** **_X__Meets** **____Does Not Meet/ Insufficient Evidence**
Metric NN2G: **Materials include learning objectives that are visibly shaped by CCSSM cluster headings.** **How to Find the Evidence:** Select several clusters from the Major Work in the grade being evaluated. Evaluate teacher and student materials in relation to these clusters. For context, read Criterion #6a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** The clusters do guide the work. Each cluster is laid out and color coded so that the teacher can know each standard is covered in the material. Common vocabulary and ideas indicate a strong shaping from the CCSS. See chart in teacher's edition for functions on page xix	**(Reviewer only.)** **_X__Meets** **____Does Not Meet/ Insufficient Evidence**
Metric NN2H: **Materials include problems and activities that serve to connect two or more clusters in a domain, or two or more domains in a grade, in cases where these connections are natural and important.**	**Evidence-** Geometry uses linear equations to solve Pythagorean theorem problems. This is one example of crossover.	**(Reviewer only.)** **_X__Meets**

to Find the Evidence: In the grade being evaluated, choose two or more clusters or two or more domains for which connections are natural and important. Evaluate the units, chapters, and lessons that deal with the chosen topics, looking for problems and activities that serve to connect the chosen clusters or domains. NOTE: An example of evaluating this Criterion might include looking at whether problems in grade 4 sometimes or often involve students applying their developing computation skills (detailed in domain NBT) in the context of solving word problems (detailed in domain OA). For context, read Criterion #6b in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	C goal of this text is to accelerate students into getting into Algebra 1, often times domains and clusters overlap Book 1: 2.5, 1.8, 1.2 Book 2: 2.2 , 3.5	____Does Meet/ **Insufficient Evidence**

Non-Negotiable 2:

Focus and Coherence

Materials must focus coherently on the Major Work of the grade in a way that is consistent with the progressions in the Standards.

NN 2 If all Metrics 2A – 2H were rated as Meets, then rate Non-Negotiable 2 as Meets. If one or more Metric was rated Does Not Meet/Insufficient Evidence, then rate Non-Negotiable 2 as Does Not Meet. Check the final rating.
Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)**

Strength-This material uses great charts and opening material for the teacher to ensure the standards are being met. Interaction between clusters are expressed in each book and they intertwine well with each other.

Weakness- the teacher may be inclined to follow the pacing verbatim without altering for student knowledge

Before moving to Alignment Criterion 1, record the final Meets or Does Not Meet rating in the Evaluation Summary.

(Reviewer only.)

__X_Meets

____Does Not Meet

Strengths/Weaknesses:

Now continue by evaluating the Alignment Criterion 1 for Rigor and Balance.

Directions for Alignment Criterion 1

Rigor and Balance

gnment Criterion 1: **Rigor and Balance** **Materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.** The Standards set expectations for attention to all three aspects of rigor: conceptual understanding, procedural skill and fluency, and applications. Thus, materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.	**Requi aterials** • mon Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf) • Focus by Grade Level for the grade being evaluated (achievethecore.org/focus) • Situation Types for the Operations in Word Problems (achievethecore.org/situation-types) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this ion:** Alignment Cri on 1 is rated as Meets or Does Not Meet. To rate Alignment Criterion 1, first rate metrics 1A, 1B, and 1C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). For each metric, guiding questions are provided to aid in gathering evidence. Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 1 if the materials rate 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as rigor and balance, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.
Metric AC1A: **The materials support the development of students' conceptual understanding of key mathematical concepts, especially where called for in specific content Standards or cluster headings.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Major Work for the grade being evaluated that relate specifically conceptual understanding to use throughout the questions associated with this metric. NOTE: Some examples of clusters or Standards that call for conceptual understanding include: K.OA.A.1, (1.NBT.B, 1.NBT.C), (2.NBT.A, 2.NBT.B), (3.OA.A.1, 3.OA.A.2), 4.NF.A, (4.NBT.A, 4.NBT.B), 5.NF.B, (5.NBT.A, 5.NBT.B), 6.RP.A, 6.EE.A.3, 7.NS.A, 7.EE.A, 8.EE.B, 8.F.A, 8.G.A Clusters or Standards grouped by parentheses are closely connected and could be analyzed together.	-Choose a cluster/Standard from the Major Work that is aligned to each aspect of rigor and use it to evaluate these metrics. It is most helpful if the same clusters/Standards are chosen for all of the programs being evaluated. (Guidance in choosing clusters/Standards is included in "How to Find the Evidence".)	**Use the questions for AC Metric 1A to evaluate Metric 1A. Record evidence for each question and rate Metric 1A.** **__X__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**

ontext, read Criterion #4a in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).		
Is conceptual understanding attended to thoroughly where the Standards set explicit expectations for understanding or interpreting? Evaluate lessons, chapter/unit assessments and homework assignments, paying attention to work aligned to Standards that explicitly call for understanding or interpreting. NOTE: Examples of evaluating this Criterion might include looking at how well the multi-digit addition and subtraction algorithms are developed and explained on the basis of place value and properties of operations; or how well the multi-digit multiplication and division algorithms are developed and explained on the basis of place value and properties of operations; or how well solving equations is presented and explained as a process of reasoning.	**Evidence-** Conceptual understanding is built up using the following standards 8.ee.5, and 6 in Linear equations lesson 2.8 All geometry standards build conceptual understanding examples are lesson 2.3, 2.4 etc "Explore" activities from linear Equations conceptual understanding is attended to well.	
Do the materials feature high-quality conceptual problems and conceptual discussion questions? Evaluate lessons, chapter/unit assessments, and homework assignments. NOTE: Example of conceptual problems might include such questions as "Find a number greater than 1/5 and less than 1/4," or "If the divisor does not change and the dividend increases, what happens to the quotient?"	**Evidence-** Exercises build conceptual understanding and then apply that knowledge to problem sets.	
Do the materials feature opportunities to identify correspondences across mathematical representations? Evaluate lessons, chapter/unit assessments and homework assignments. NOTE: Examples of evaluating this Criterion might include looking at whether students are supported in identifying correspondences among: the verbal description of a situation, the diagrams that distill its mathematical features, and the equations that model it; or equivalent forms of numbers (e.g., 3 and 6/2) and the number line; or rational number operations and representations of them via models such as the vector model; or the expression that defines a function and the graph that shows the relationship.	**Evidence-** these books use a tool called daily communication prompts where the students are asked to discuss things in the day's lesson. Example page 33 in linear equations	
Metric AC1B: **The materials are designed so that students attain the fluencies and procedural skills required by the Standards.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Major Work for the grade being evaluated that relate specifically to fluency and procedural skill to use throughout the questions associated with this metric. NOTE: Some examples of Standards that call for procedural skill and fluency include: K.OA.A.5, 1.OA.C.6, 2.OA.B.2, 2.NBT.B.5, 3.OA.C.7, 3.NBT.A.2, 4.NBT.B.4, 5.NBT.B.5, 6.NS.B.2, and 6.NS.B.3, 6.EE.A, 7.NS.A, 7.EE.A.1,7.EE.B.4a, 8.EE.C.7, 8.EE.C.8b For context, read Criterion #4b in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).		**Use the questions for Metric 1B to evaluate Metric 1 B. Record evidence for each question and rate Metric 1B.** **(Reviewer only.)** **__X__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Is progress toward fluency and procedural skill interwoven with students' developing conceptual understanding of the operations in question? Evaluate lessons, chapter/unit assessments, daily routines, and homework assignments for evidence that the development of fluency and procedural skill is supported by conceptual understanding.	**Evidence-** the repetitive nature of the exercises develop procedural fluency after the concept is learned.	

	Goin[illegible]ack to "Explore" to help develop Conceptual understanding; there are examples problems building fluency	
Are purely procedural problems and exercises present that include cases in which opportunistic strategies are valuable and generic cases that require efficient algorithms present? Evaluate lessons, chapter/unit assessments, daily routines, and homework assignments. NOTE: Examples of problems in which opportunistic strategies are valuable might include the sum 698 + 240 or the system $x + y = 1$, $2x + 2y = 3$. Examples of generic cases that require efficient algorithms might include the sum 8767+2286 or the system $6y + x = x + 3$, $-x = 1 + 2y$.	**Evidence-** In Linear Expressions teacher resource – exercises lay the groundwork with much practice to develop the algorithms to solve the problems and extend thinking and Math Practices.	
Do the materials in grades K–6 provide repeated practice toward attainment of fluency Standards? Evaluate lessons, daily routines, and homework assignments for evidence of repeated practice toward attainment of the following K–6 Standards that set an explicit expectation of fluent (accurate and reasonably fast) computation: K.OA.A.5, 1.OA.C.6, 2.OA.B.2, 2.NBT.B.5, 3.OA.C.7, 3.NBT.A.2, 4.NBT.B.4, 5.NBT.B.5, 6.NS.B.2, 6.NS.B.3.	**Evidence-** NA	
Metric AC1C: **The materials are designed so that teachers and students spend sufficient time working with engaging applications, without losing focus on the Major Work of each grade.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Major Work for the grade being evaluated that relate specifically application to use throughout the questions associated with this metric. NOTE: Some examples of clusters or Standards that call for application include: K.OA.A.2, 1.OA.A, 2.OA.A, 3.OA.A.3, 3.OA.D.8, 4.OA.A.3, 4.NF.B.3d, 4.NF.B.4c, 5.NF.B.6, 5.NF.B.7c, 6.RP.A.3, 6.NS.A.1, 6.EE.B.7, 6.EE.C.9, 7.RP.A, 7.NS.A.3, 7.EE.B.3, 8.EE.C.8c, 8.F.B For context, read Criterion #4c in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).	**Evidence-** In reviewing each book, all standards are covered in the book. Major clusters have a significant amount of time devoted to the work. Specific task problems in resource book help keep focus on major work through engaging application problems. Each teacher's edition is evidence of this.	**Use the questions for Metric 1C to evaluate Metric 1C. Record evidence for each question and rate Metric 1C.** **(Reviewer only.)** **_X__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Are there are single- and multi-step contextual problems, including non-routine problems, that develop the mathematics of the grade, afford opportunities for practice, and engage students in problem solving? Do the problems attend thoroughly to those places in the content Standards where expectations for multi-step and real-world problems are explicit? Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** There a basic problems such as review problems on page 163 in functions and data. Non routine problems are addressed as tic tac toe with various types of situations presented to the students.	

pplication problems particularly stress applying the Major Work of the grade? Evaluate lessons, chapter/unit assessments, and homework assignments. NOTE: Examples of evaluating this Criterion might include looking at: how well, by the end of grade 2, students using the materials as designed can represent and solve a full range of one-step addition and subtraction word problems; or how well, by the end of grade 3, students using the materials as designed can represent and solve a full range of one-step multiplication and division word problems; or how well these basic situation types for each operation are carried coherently across the grades, (e.g., with fractions and algebraic expressions); or, in all grades, whether the problems connect concepts, Standards, and domains in ways that are natural and important. For a list of situation types for one-step addition, subtraction, multiplication, and division problems, see Situation Types for the Operations in Word Problems	**Evid -** This work provides a wide range of problems dedicated to the major work. In the beginning of each teacher edition, lessons are shown according to the standards, these lessons support the major work. Tasks are application problems addressing major works Explore problems are application problems addressing major work also	
Does modeling build slowly across K–8, with applications that are relatively simple in earlier grades and when students are encountering new content? In grades 6–8, do the problems begin to provide opportunities for students to make their own assumptions or simplifications in order to model a situation mathematically? Read Standard for Mathematical Practice 4, Model with Mathematics. Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** Modeling builds at the appropriate pace across groups. Steps can be followed easily and each progressive lesson builds on the previous one.	

Alignment Criterion 1: Rigor and Balance

Materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.

(Reviewer only.)

__X__Meets

____Does Not Meet

AC1 Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 out of 6 points, the Criterion has not been met. Check the final rating.
Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)**

Strengths/Weaknesses:

Strength – the lessons build well in each book starting with less difficult areas and building on each. Lessons are well designed. Problems provide for differentiation for all student levels.

Weakness- the content may make a teacher feel overwhelmed by the amount presented. If the teacher gets off the pacing the teacher may not have the ability to know where to come back to the lesson. There are not enough high quality conceptual problems.

Before moving to Alignment Criterion 2, record the final Meets or Does Not Meet rating in the Evaluation Summary.

Directions for Alignment Criterion 2

Standards for Mathematical Practice

gnment Criterion 2: Standards for Mathematical Practice

Materials must demonstrate authentic connections between content Standards and practice Standards.

The Standards require that designers of instructional materials connect the mathematical practices to mathematical content in instruction. Thus, materials must demonstrate authentic connections between content Standards and practice Standards.

Requi aterials:

- mon Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf)
- Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)
- Focus by Grade Level for the grade being evaluated (www.achievethecore.org/focus)
- From the materials being evaluated: teacher guides, student texts and workbooks

Rating this rion

Alignment Cr on 2 is rated as Meets or Does Not Meet.

To rate Alignment Criterion 2, first rate metrics 2A, 2B, and 2C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). For each metric, guiding questions are provided to aid in gathering evidence.

Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 2 if the materials earn 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as mathematical practices, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.

ric AC2A: **Materials address the practice Standards in such a way as to enrich the Major Work of the grade; practices strengthen the focus on Major Work instead of detracting from it, in both teacher and student materials.** **How to Find the Evidence:** Familiarize yourself with the Major Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate teacher and student materials for evidence that the mathematical practices support and connect to the focus of the grade. NOTE: Examples of evaluating this Criterion might include looking at whether, in grades K–5, students using the materials are supported to look for and express regularity in repeated reasoning about the addition table, the multiplication table, the properties of operations, the relationship between addition and subtraction or multiplication and division, and the place value system; or whether, in grades 6–8, students using the materials are supported to look for and express regularity in repeated reasoning about proportional relationships and linear functions. For context, read Criterion #8 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K-8 (Spring 2013).	**Evid -** Each major work is accompanied by a list of MAth practices that are factual and show the connection to the lesson. The enrich the overall work.	**(Reviewer c** **__X__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Metric AC2B: **Materials attend to the full meaning of each practice Standard.** **How to Find the Evidence:** For context, read Criterion #7 and Criterion #9 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).		**Use the questions for Metric 2B to evaluate Metric 2B. Record evidence for each question and rate Metric 2B.** **(Reviewer only.)** **__X__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Over the course of any given year of instruction, is each mathematical practice Standard meaningfully present in the form of assignments, activities, or problems that stimulate students to develop the habits of mind described in the practice Standard? Evaluate lessons, chapter/ unit assessments, and homework assignments for evidence of each mathematical practice being meaningfully present in instruction.	**Evidence-** Lessons have a special section devoted to Mathematical practices- showing which ones are covered in each lesson. These are in the teacher's editions. Lesson 1.3 Linear equations page 13	
Do the materials treat the practice Standards as developing across grades or grade bands? Are the practice Standards in early grades appropriately simple? Do they display an arc of growing sophistication across the grades?	**Evidence-** Lessons have a special section devoted to Mathematical practices- showing which ones are covered in each lesson. These are in the teacher's editions. Lesson 1.3 Linear equations page 13. These are grade appropriate.	

Are there teacher-directed materials that explain the role of the practice standards in the classroom and in students' mathematical development? Are alignments to practice Standards accurate?	**Evidence-** All practice standards are delineated in the teacher's editions. In reviewing, the problems presented do meet the standards accurately	
Metric AC2C: **Materials support the Standards' emphasis on mathematical reasoning.** **How to Find the Evidence:** For context, read Criterion #10 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).		**Use the questions for Metric 2C to evaluate Metric 2C. Record evidence for each question and rate Metric 2C.** **(Reviewer only.)** **__X__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Do the materials support students in constructing viable arguments and critiquing the arguments of others concerning grade-level mathematics that is detailed in the content Standards? Read Standard for Mathematical Practice 3. Evaluate teacher and student materials to ensure that students are given opportunities to reason with grade-level mathematics.	**Evidence-** In finding outliers as an example- the text questions students on how to interpret data and critique how others reviewed it. Also many problems ask students to construct arguments concerning how to solve problems as evidenced by page 158 in functions and data	
Do the materials support students in producing not only answers and solutions, but also, in a grade-appropriate way, arguments, explanations, diagrams, mathematical models, etc., especially in the Major Work of the grade? Familiarize yourself with the Major Work of the grade being evaluated (see the Focus by Grade Level documents.) Evaluate teacher and student materials, to understand the types of work students are expected to produce.	**Evidence-** Same as above In finding outliers as an example- the text questions students on how to interpret data and critique how others reviewed it. Also many problems ask students to construct arguments concerning how to solve problems as evidenced by page 158 in functions and data	
Do materials explicitly attend to the specialized language of mathematics? Is the language of argument, problem solving, and mathematical explanations taught rather than assumed? Evaluate teacher and student materials, paying attention to how mathematical language is taught. NOTE: Examples of evaluating this Criterion might include looking at whether students are supported in: basing arguments on definitions; using the method of providing a counterexample; or recognizing that examples alone do not establish a general statement.	**Evidence-** The materials use the language needed to be fluent in Math. For example in geometry lesson 3.5 uses the language for congruence and similarities for the students and uses it to build mastery for them	
Alignment Criterion 2: **Standards for Mathematical Practice** **Materials must demonstrate authentic connections between content Standards and practice Standards.** **AC2** Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 out of 6 points, the Criterion has not been met. Check the final rating.		**(Reviewer only.)** **_X__Meets** **____Does Not Meet**

, briefly describe the strengths and weaknesses of these materials in light of the ab riterion.
viewer only.)

Strength- the material makes language used in Math important for the student to learn. The tasks and additional materials stress arguments and critiquing.

No noticeable weaknesses in this area

Strengt Weak nesses:

Before moving to Alignment Criterion 3, record the final Meets or Does Not Meet rating in the Evaluation Summary.

Alignment Criterion 3:
Access to the Standards for All Students

Materials must provide supports for English Language Learners and other special populations.

Because Standards are for all students, alignment requires thoughtful support to ensure all students are able to meet the Standards. Thus, aligned materials must provide supports for English Language Learners and other special populations.

Required Materials:

- Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf)
- Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf)
- From the materials being evaluated: teacher guides, student texts and workbooks

Rating this Criterion:
Alignment Criterion 3 is rated as Meets or Does Not Meet.

To rate Alignment Criterion 3, first rate metrics 3A, 3B, and 3C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points).

Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 3 if the materials earn 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as support for special population, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.

Metric AC3A:
Support for English Language Learners and other special populations is thoughtful and helps those students meet the same Standards as all other students. The language in which problems are posed is carefully considered.

How to Find the Evidence:
Evaluate teacher and student materials, paying attention to supports offered for special populations.

Evidence-
The problems present examples that any student should understand for example in geometry some problems mention construction and needing cement. The problems also deal in Math nomenclature that all students need to learn. The exercises and problems can be worked in small steps to help those who are English language learners.

Reviewer only.)

_X__Meets (2)

____Partially Meets (1)

	Res ce book provides ELL worksheets and tasks and tiered worksheets for differentiation	____Doe t Meet (0)
Metric AC3B: **Materials provide appropriate level and type of scaffolding, differentiation, intervention, and support for a broad range of learners with gradual removal of supports, when needed, to allow students to demonstrate their mathematical understanding independently.** **How to Find the Evidence:** Evaluate teacher and student materials, paying attention to whether materials provide differentiation that will lead all learners to engage with on-grade-level content.	**Evidence-** The teacher editions provide several areas for support for students. There are explore activities that guide students in the direction of thinking the lesson wants and then there are examples that the teacher can work with the students. The books have exercises and the teacher resource book has many worksheets to help students demonstrate what they know	**Reviewer only.)** __X__Meets (2) ____Partially Meets (1) ____Does Not Meet (0)
Metric AC3C: **Design of lessons recommends and facilitates a mix of instructional approaches for a variety of learners such as using multiple representations (e.g., including models, using a range of questions, checking for understanding, flexible grouping, pair-share).** **How to Find the Evidence:** Evaluate teacher materials, noting instructional approaches suggested for whole class and differentiated lessons and activities.	**Evidence-** Each book has exercises and problems for students to learn from. The resource binder includes many helps and a great deal of variety for the students. Explore helps engage students	**Reviewer only.)** __X__Meets (2) ____Partially Meets (1) ____Does Not Meet (0)
Alignment Criterion 3: **Access to the Standards for All Students** **Materials must provide supports for English Language Learners and other special populations.** **AC3** Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 points, the Criterion has not been met. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion.**(Reviewer only.)** **Strength-there is a wide variety of material for the teacher to use. It allows for differentiation for gifted students without making it feel like extra work** **Weakness- the teacher has to decide what material to use for each student. The teacher has to choose and there is not much help for the teacher to make a decision.** **In tiered worksheets, not sufficient repetition to gain mastery and fluency** **Move to the Evaluation Summary and record the final Meets or Does Not Meet rating .**		**(Reviewer only.)** __X__Meets ____Does Not Meet **Strengths/Weaknesses:**

Once an evaluation for alignment to the Shifts and major features of the CCSS has been conducted using Sections 1-3, it's important to evaluate for overall quality and best practices. A starting list of Indicators of Quality are suggested below. States, districts and others evaluating instructional materials are encouraged to add to this list to ensure materials reflect local contexts. For background information on some of the Indicators of Quality in this section, refer to pp.18–21 in the Publishers' Criteria for the Common Core State Standards for Mathematics, Grades K–8 (Spring 2013).

Indicators of Quality	**Evidence- Give specific examples.**	**Rating: (Reviewers only.)**
1. Lessons are thoughtfully structured and support the teacher in leading the class through the learning paths at hand, with active participation by all students in their own learning and in the learning of their classmates.	**Evidence-** Many options are available for the teacher to develop the concept in an order that builds on itself. Many options involve different levels of knowledge. Active participation is not stressed. Participation appears to be more passive	**(Reviewer only.)** __X___ **Yes** _____ **No**
2. The underlying design of the materials includes both problems and exercises. (In solving problems, students learn new mathematics, whereas in working exercises, students apply what they have already learned to build mastery.) Each problem or exercise has a purpose. **NOTE: This Criterion does not require that the problems and exercises be labeled as such.**	**Evidence-** The exercises in the lessons help the student gain mastery by practicing the concepts learned during the lessons. The " Explore" problems apply this learning to new problems to extend the students thinking to real world problems.	**(Reviewer only.)** __X___ **Yes** _____ **No**
3. Design of assignments is not haphazard: exercises are given in intentional sequences in order to strengthen students' mathematical understanding.	**Evidence-** Assignments build thought in steps- teacher resources use blocks to organize materials. Sequence is logical, components help engage and teach materials	**(Reviewer only.)** __X___ **Yes** _____ **No**
4. There are separate teacher materials that support and **reward teacher study including, but not limited to: discussion of the mathematics of the units and the mathematical point of each lesson as it relates to the organizing concepts of the unit, discussion on student ways of thinking and anticipating a variety of students responses, guidance on lesson flow, guidance on questions that prompt students**	**Evidence-** Each Unit has a teacher edition book with questions and thoughts on how to help students. Teacher resources provide good worksheets and tests. Teacher has to develop connections independently.	**(Reviewer only.)** __X___ **Yes** _____ **No**

king, and discussion of desired mathematical behaviors being elicited among students.		
5. Manipulatives suggested in the materials are faithful representations of the mathematical objects they represent and are connected to written methods.	**Evidence-** One of the main physical manipulatives used are integer chips. The other models are visual representations that do not require physical tools	**(Reviewer only.)** **_X___ Yes** **_____ No**
6. Materials include a variety of curriculum-embedded assessments. Examples include pre-, formative, summative, and self-assessment resources.	**Evidence-** Each section has a tic-tac-toe section for critical thinking, assessments for various blocks. Each block has exit tickets and self-evaluation assessments for the students.	**(Reviewer only.)** **__X___ Yes** **_____ No**
7. Assessments contain aligned rubrics, answer keys, and scoring guidelines that provide sufficient guidance for interpreting student performance.	**Evidence-** In the teacher resources answer keys are available to grade the assessments and rubrics and the rubrics show how points should be assigned to each task.	**(Reviewer only.)** **__X___ Yes** **_____ No**
8. Materials assess student proficiency using methods that are accessible and unbiased, including the use of course-level language in student prompts.	**Evidence-** The assessments in this program are based on material taught using the appropriate math language. All learners can understand the test questions as they are not based on material that any group of people would not understand. Unbiased vocabulary	**(Reviewer only.)** **_X___ Yes** **_____ No**
9. Materials are carefully evaluated by qualified individuals, whose names are listed, in an effort to ensure freedom from mathematical errors and course-level appropriateness.	**Evidence-** the beginning of each book lists the people who produced the books and provided review of materials and answers	**(Reviewer only.)** **_X___ Yes** **_____ No**
10. The visual design supports students in engaging thoughtfully with the subject. Navigation through the text is clear.	**Evidence-** Visuals provide a pleasing use of color coding to guide the students in navigating the pages. Amount of text on the page is well set off by photos.	**(Reviewer only.)** **__X___ Yes**

		_____ No
11. The materials engage parents in appropriate ways. For example, homework assignments in elementary grades, consist of routine problems, practice with getting answers, and fluency-building exercises that parents can easily support.	**Evidence-** Worksheets show parents what work is being taught and provide examples that the teacher can work on in class with the student and then take home and use with parents	**(Reviewer only.)** __X___ **Yes** _____ **No**

Reviewer IMET Evaluation Summary Title/Level: Core focus on Math_____

Publisher: _SMc Curriculum LLC _ Copyright: __2014 ISBN:__See page 1__

Reviewer ID # _____SDF_____Date Review Completed:___2/0/2016___

Non-Negotiable Criteria- Each Non-Negotiable must be met in order for the Non-Negotiable Alignment Criteria to be met overall.

Non-Negotiable 1: Freedom from Obstacles to Focus	Non- Negotiable 2: Focus and Coherence
__X___ Meets _____ Does Not Meet	__X__ Meets _____ Does Not Meet

Non-Negotiable Overall:

__X__ Meets _____ Does Not Meet

Alignment Criteria- Each Alignment Criterion must be met with a sufficient number of points in order for Alignment Criteria to be labeled as "Meets" overall. The more points the materials receive on the Alignment Criteria, the better they are aligned.

Alignment Criterion 1: Rigor and Balance	Alignment Criterion 2: Standards of Mathematical Practice	Alignment Criterion 3: Access to Standards for All Learners
Points: __6__ of 6 possible. (Materials must receive at least 5 of 6 points to align.) ___X__ Meets _____ Does Not Meet	Points: _6___ of 6 possible. (Materials must receive at least 5 of 6 points to align.) __X____ Meets _____ Does Not Meet	Points: _6___ of 6 possible. (Materials must receive at least 5 of 6 points to align.) __X____ Meets _____ Does Not Meet

Alignment Criteria Overall:

__X__ Meets _____ Does Not Meet

If the materials meet both Non-Negotiables and relevant Alignment Criterion, they are aligned to the Shifts and major features of the Core Standards. **Do the materials meet every Non-Negotiable and Alignment Criterion? ___X_ Yes _____ No**

What are the specific areas of strength and weakness based on this evaluation? Publishers or others modifying or developing assessments can use this information to make improvements and/or to remedy gaps in the alignment of assessment materials.

Specific areas of Strength- the amazing amount of material that the teacher has available at their disposal would be very valuable to the student.

The organization for the teacher allows them to design a pace that fits into the calendar for the teacher.

The major weakness is that the material may overwhelm a teacher and if there is a deviation from the pacing in the book because of teacher knowledge.
If the teacher had two years to use this material, he could design a program to address all students and standards

2015-16 Mathematics Interim Review Recommendation & Summary

Publisher Name:	Walch Integrated Math
Title:	CCSS Integrated Pathway Mathematics 1
ISBN #	978-0-8251-7090-4
Grade Level(s) or Course:	Freshman (9)
Reviewer ID:	T. G. and R. K.

RECOMMENDED AS:

X **Core Mathematics Program-** a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials. Substantial evidence clearly supports the designation of this program as Core.

_____ **Other Mathematics Program-** a program that substantially, but partially, meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for supplemental materials. Substantial evidence clearly supports the designation of this program as Other.

_____ **Component Mathematics Program-** a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs. Substantial evidence clearly supports the designation of this program as Component.

_____ **Intervention Program-** a program designed and intended to target and support students' specific needs. Substantial evidence clearly supports the designation of this program as Intervention.

_____ **Does not meet criteria** for recommendation as a Curricular Material or Online Resource for Mathematics.

EVIDENCE SUMMARY:

FOCUS- 75% of time is spent on the WAP. 89% of the lessons have prerequisite skills identified. Developed specifically for the CCSM.

COHERENCE- The problems reflect grade level appropriateness through this program. They use prior knowledge to relate previous material to the new material.

RIGOR- Multiple representations are used throughout the text, high quality conceptual problems, lessons focus on content and rigor. Fluency and procedural skills are addressed consistently in the book.

CONCEPTUAL UNDERSTANDING- Conceptual understanding is used through multiple representations. Multi-step and single step problems are used to deepen the conceptual understanding.

MATHEMATICAL PRACTICES- The 8 mathematical practices are addressed all throughout the text and are found frequently. Through these practices students are required to go beyond just finding solutions, but understand in a deeper meaning.

ACCESSIBILITY OF STANDARDS TO ALL STUDENTS- Great access for honors and struggling students, but ELL support is somewhat lacking.

OTHER:

Strengths -

Honors and support supplements. Station activities are well set up and available. 100% designed for common core.

Weaknesses -

Not very much ELL support material. Somewhat of a bland text which is different than traditional textbooks.

2015-1 nterim Mathematics Review

Mathematics Evaluation Tool – High School

Publisher: Walch Integrated Math

Title of Material: CCSS Integrated Pathway Mathematics I

Author: Walch Integrated Math

ISBN #: 978-0-8251-7090-4 **Copyright** 2014

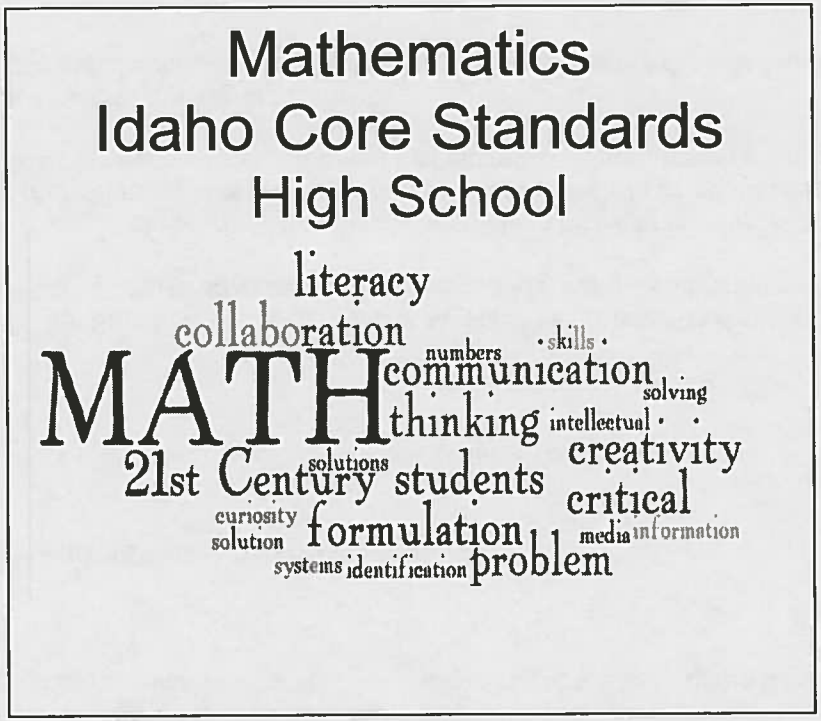
Reviewer ID: T.G. and R.K.

Core Mathematics Program- a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Core.

Other Mathematics Program- a program that substantially, but partially, meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Other.

Component Mathematics Program- a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs.
Substantial evidence clearly supports the designation of this program as Component.

Intervention Program- a program designed and intended to target and support students' specific needs.
Substantial evidence clearly supports the designation of this program as Intervention.



- Evaluation Form adapted from Instructional Materials Evaluation Toolkit (IMET).

The IMET was developed by Student Achievement Partners. Educators may use or adapt. http://creativecommons.org/licenses/by/3.0/ Download this tool at http://achievethecore.org/IMET

Instructional Materials Evaluation Tool

Mathematics, High School

What Are the Purposes of the IMET?

This Math IMET is designed to help educators determine whether instructional materials are aligned to the Shifts and major features of the Common Core State Standards (CCSS). The substantial instructional Shifts (http://www.corestandards.org/other-resources/key-shifts-in-mathematics/) at the heart of the Common Core State Standards are:

- **Focus** strongly where the Standards focus
- **Coherence**: Think across grades and link to major topics within the grade
- **Rigor**: In major topics, pursue conceptual understanding, procedural skill and fluency, and application with equal intensity.

The IMET draws directly from the following documents:

- Common Core State Standards for Mathematics (www.corestandards.org/Math)
- Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013) (http://www. corestandards.org/wp-content/uploads/Math_Publishers_Criteria_ HS_Spring_2013_FINAL1.pdf)

When to use the IMET

1. Purchasing materials: Many factors go into local purchasing decisions. Alignment to the Standards is a critical factor to consider. This tool is designed to evaluate alignment of instructional materials to the Shifts and the major features of the CCSS. It also provides suggestions of additional indicators to consider in the materials evaluation and purchasing process
2. Evaluating materials currently in use: The IMET can be used to analyze the degree of alignment of existing materials and help to highlight specific, concrete flaws in alignment. Even where materials and tools currently in use fail to meet one or more of these criteria, the pattern of failure is likely to be informative. States and districts can use the evaluation to create a thoughtful plan to modify or combine existing resources in such a way that students' actual learning experiences approach the focus, coherence, and rigor of the Standards.
3. Developing programs: Those developing new programs can use this tool as guidance for creating aligned curricula.

Please note this tool was designed for evaluating comprehensive curricula (including any supplemental or ancillary materials), but it was not designed for the evaluation of standalone supplemental materials.

Who Uses the IMET?

Evaluating instructional materials requires both subject-matter and pedagogical expertise. Evaluators should be well versed in the Standards (www.corestandards.org/Math) for all grades in which materials are being evaluated. This includes understanding the Widely Applicable Prerequisites (www.achievethecore.org/prerequisites), how the content fits into the progressions in the Standards (www. achievethecore.org/progressions), and the expectations of the Standards with respect to conceptual understanding, procedural skill and fluency, and application. Evaluators also should be familiar with the substantial instructional Shifts (http://www.corestandards.org/other-resources/key-shifts-in-mathematics/) of Focus, Coherence and Rigor that are listed above.

Getting Started

Prior to Evaluation

Assemble all of the materials necessary for the evaluation. It is essential for evaluators to have materials for all grades covered by the program, as some criteria cannot be rated without having access to each grade. In addition, each evaluator should have a reference copy of the Common Core State Standards for Mathematics (CCSSM) and the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).

Before conducting the evaluation itself, it is important to develop a protocol for the evaluation process. The protocol should include having evaluators study the Publishers' Criteria and the IMET. It will also be helpful for evaluators to get a sense of each program overall before beginning the process. At a minimum, this would include reading the front matter of the text, looking at the table of contents and paging through multiple chapters.

Sections 1-3 below should be completed to produce a comprehensive picture of the strengths and weaknesses of the materials under evaluation. Information about areas in need of improvement or supplementation should be shared with internal and external stakeholders.

Navigating the Tool

Begin with Section 1: Non-Negotiable Alignment Criteria

- The Non-Negotiable Alignment Criteria must each be met in full for materials to be considered aligned to the Shifts and the major features of the Common Core State Standards. Each Non-Negotiable Alignment Criterion has one or more metrics associated with it; every one of these metrics must be met in order for the criterion as a whole to be met.

- Examine the relevant materials and use evidence to rate the materials against each criterion and its associated metric(s).

- Record and explain the evidence upon which the rating is based.

Continue to Section 2: Alignment Criteria

- The Alignment Criteria must each be met for materials to be considered aligned to the Shifts and the major features of the Common Core State Standards. Each Alignment Criterion has one or more metric associated with it; a specific number of these metrics must be met or partially met in order for the criterion as a whole to be met.

- Examine the materials in relation to these criteria, assigning each metric a point value. Rate the criterion as "Meets" or "Does Note Meet" based on the number of points assigned. The more points the materials receive on the alignment Criteria, the better they are aligned.

- Record and explain the evidence upon which the rating is based.

Proceed to Section 4: Indicators of Quality

- Indicators of Quality are important considerations that will help evaluators better understand the overall quality of instructional materials. These considerations are not criteria for alignment to the CCSS, but they provide valuable information about additional program characteristics. Evaluators may want to add their own indicators to the examples provided.

Directions for Non-Negotiable 1

Focus and Coherence

Criterion	Evidence- Give specific examples.	Rating: (Reviewer only.)
Non-Negotiable 1: Focus and Coherence- Materials must focus coherently on the Widely Applicable Prerequisites in a way that is consistent with the progressions in the Standards. Focus and coherence are the two major evidence-based design principles of the Common Core State Standards for Mathematics (CCSSM, p. 3). Focus is necessary in order to fulfill the ambitious promise the states have made to their students by adopting the Standards: greater achievement at the college and career-ready level; greater depth of understanding of mathematics; and a rich classroom environment in which reasoning, sense-making, applications, and a range of mathematical practices flourish. In high school courses, narrowing and deepening the curriculum creates a structure that ties topics together. Thus, materials must focus coherently on the Widely Applicable Prerequisites in a way that is consistent with the progressions in the Standards.	Focus and coherence are the two major evidence-based design principles of the Common Core State Standards for Mathematics (CCSSM, p. 3). Focus is necessary in order to fulfill the ambitious promise the states have made to their students by adopting the Standards: greater achievement at the college and career-ready level; greater depth of understanding of mathematics; and a rich classroom environment in which reasoning, sense-making, applications, and a range of mathematical practices flourish. In high school courses, narrowing and deepening the curriculum creates a structure that ties topics together. Thus, materials must focus coherently on the Widely Applicable Prerequisites in a way that is consistent with the progressions in the Standards. **Required Materials:** • Common Core State Standards for Mathematics (www.corestandards.org/wpcontent/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_HS_Spring_2013_FINAL1.pdf) • Widely Applicable Prerequisites for College and Careers (http://achievethecore.org/prerequisites) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion:** Non-Negotiable 1 is rated as Meets or Does Not Meet. To rate Non-Negotiable 1, first rate Metrics 1A–1H. Each of these eight metrics must be rated as Meets in order for Non-Negotiable 1 to be rated as Meets. Rate each metric 1A–1H as Meets or Does Not Meet/Insufficient Evidence. If the evidence examined shows that the Criterion is met, then mark the Criterion as Meets. If the evidence examined shows that the Criterion is not met—or if there is insufficient evidence to make a determination—then mark the Criterion as Does Not Meet/Insufficient Evidence. Support all ratings with evidence.

Metric NN1A: **In any single course, students spend at least 50% of their time on Widely Applicable Prerequisites.** **How to Find the Evidence:** Familiarize yourself with the Widely Applicable Prerequisites. Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, lessons, homework assignments, and assessments. (Evaluate both student and teacher materials.) Consider time spent on the Widely Applicable Prerequisites and judge qualitatively whether students and teachers using the materials as designed will devote the majority of time to the Widely Applicable Prerequisites For context, read Criterion #1 in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** 75% of the time on the WAP of the 65 lessons 49 cover the WAP. Example - Unit 1, 100% focus on N ; Q and Algebra.	X **Meets** ____**Does Not Meet Insufficient Evidence**
Metric NN1B: **Student work in Geometry involves significant work with applications/modeling and problems that use algebra skills.** **How to Find the Evidence:** Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, lessons, homework assignments, and assessments. (Evaluate both student and teacher materials. NOTE: Since Geometry contains relatively fewer Widely Applicable Prerequisites, this Criterion is important to help foster students' college and career readiness. Problems that use algebra skills might include, for example, algebraic geometry problems in a coordinate setting, or problems of measurement involving unknown quantities.	**Evidence-** Units 5 ; 6 focus on Geometry. Unit 5 application and modeling portrais of Geometry. Unit 6 algebra integration.	X **Meets** ____**Does Not Meet Insufficient Evidence**

Metric NN1C: **There are problems at a level of sophistication appropriate to high school (beyond mere review of middle school topics) that involve the application of knowledge and skills from grades 6-8.** **How to Find the Evidence:** Evaluate lessons, chapter/unit assessments, and homework assignments. NOTE: Problems should include application of the following topics from grades 6-8: • Ratios and proportional relationships. • Percentage and unit conversions, e.g., in the context of complex measurement problems involving quantities with derived or compound units (such as mg/mL, kg/ m3, acre-feet, etc.). • Basic function concepts, e.g., by interpreting the features of a graph in the context of an applied problem. • Concepts and skills of geometric measurement e.g., when analyzing a diagram or schematic. • Concepts and skills of basic statistics and probability (see grades 6–8.SP) • Performing rational number arithmetic fluently. For context, read Table 1 on Page 8 of the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** 89% of the lessons have prerequisite skills identified. Tons of supplements for any level both remediation and enrichment.	X **Meets** ____ **Does Not Meet Insufficient Evidence**
Metric NN1D: **Materials base courses on the content specified in the Standards.** **How to Find the Evidence:** Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, and lessons in both student and teacher materials. For context, read Criterion #3a in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** All materials were developed for the common core, this is new material, not repackaged goods. 100% of this program is aligned to the common core.	X **Meets** ____ **Does Not Meet Insufficient Evidence**
Metric NN1E: **Materials give all students extensive work with course-level problems.** **How to Find the Evidence:** Evaluate both student and teacher materials. If the materials provide resources for differentiated learning, consider whether lower-performing students have opportunities to engage with course-level problems. Also consider whether higher-performing students are given opportunities to learn current course-level content in greater depth. For context, read Criterion #3b in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** Between all of the materials Problem Based Tasks, Applets, SWBK, and Student Resource Book for CCSS Integrated Pathway Math 1 there are 2015 problems Lexamples. This does not include the support or honors supplements.	X **Meets** ____ **Does Not Meet Insufficient Evidence**

Metric NN1F: **Materi elate course-level concepts explicitly to prior knowledge from earlier grades or courses. The materials are designed so that prior knowledge becomes reorganized and extended to accommodate the new knowledge.** **How to Find the Evidence:** Evaluate student and teacher materials, looking for problems that involve extending the knowledge learned in earlier grades and courses. NOTE: An example of evaluating this Criterion might be to look at whether materials connect the equation of a circle with the distance formula and the Pythagorean theorem. For context, read Criterion #3c in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** Lists of prerequisite skills, warm-ups and warm-up debriefs all link prior knowledge to the content in the lesson. Examples: TE U2-173 SWBK pg. 87 U2-179	X Meets ___Does Not Meet Insufficient Evidence
Metric NN1G: **Materials include learning objectives that are visibly shaped by CCSSM cluster and domain headings.** **How to Find the Evidence:** Select several clusters from the course being evaluated. Evaluate teacher and student materials in relation to these clusters. For context, read Criterion #4a in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** Materials were developed for the Commoncore. All objectives are shaped by the CCSSM cluster and domain. Each unit is named as it appears in Appendix A.	X Meets ___Does Not Meet Insufficient Evidence
Metric NN1H: **Materials include problems and activities that serve to connect two or more clusters in a domain, or two or more domains in a category, or two or more categories, in cases where these connections are natural and important.** **How to Find the Evidence:** In the course being evaluated, choose two or more clusters, two or more domains, or two or more categories for which connections are natural and important. Evaluate the units, chapters, and lessons that deal with the chosen topics, looking for problems and activities that serve to connect the chosen clusters or domains. NOTE: An example of evaluating this Criterion might be to look at whether materials include problems in which students analyze a situation by building a function, graphing it, and using it to create and solve an equation. For context, read Criterion #4b in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** As the course is integrated all of the clusters and domains are intermixed within each lesson in a cohesive manner. Example- Unit 1 covers both N:Q and Algebra. Lessons 2 and 3 have both N:Q and Algebra as well.	X Meets ___Does Not Meet Insufficient Evidence

Non-Negotiable 1: Focus and Coherence- Materials must focus coherently on the Widely Applicable Prerequisites in a way that is consistent with the progressions in the Standards.

Metric NN 1: If all metrics 1A–1H were rated as Meets, then rate Non-Negotiable 1 as Meets. If one or more metrics were rated as Does Not Meet/Insufficient Evidence, then rate Non-Negotiable 1 as Does Not Meet. Check the final rating.
Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)**

Before moving to Alignment Criterion 1, record the final Meets or Does Not Meet rating in the Evaluation Summary.

X **Meets**

____ **Does Not Meet**

Strengths/Weaknesses

Strengths – 100% aligned with CCSSM and the 8 MP's.

Now continue by evaluating Alignment Criterion 1 for Rigor and Balance.

Directions for Alignment Criterion 1

Rigor and Balance

Alignment Criterion 1:
Rigor and Balance- Materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.

The Standards set expectations for attention to all three aspects of rigor: conceptual understanding, procedural skill and fluency, and applications. Thus, materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.

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- Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf)
- Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_HS_Spring_2013_FINAL1.pdf)
- Widely Applicable Prerequisites for College and Careers (http://achievethecore.org/prerequisites)
- From the materials being evaluated: teacher guides, student texts and workbooks

Rating this Criterion:

Alignment Criterion 1 is rated as Meets or Does Not Meet.

To rate Alignment Criterion 1, first rate metrics 1A, 1B, and 1C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). For each metric, guiding questions are provided to aid in gathering evidence.
Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 1 if the materials rate 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as rigor and balance, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.

AC Metric 1A: **The materials support the development of students' conceptual understanding of key mathematical concepts, especially where called for in specific content Standards or cluster headings.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Widely Applicable Prerequisites that relate specifically to conceptual understanding to use throughout the questions associated with this metric. NOTE: Some examples of clusters or Standards that call for conceptual understanding include: N-RN.A.1, A-APR.B, A-REI.A.1, A-REI.D.10, A.REI.D.11, F.IF.A.1, F-LE.A.1, G.SRT.A.2, G-SRT.C.6, S-ID.C.7 For context, read Criterion #2a in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	• Choose a cluster/Standard from the Widely Applicable Prerequisites that is aligned to each aspect of rigor and use it to evaluate these metrics. It is most helpful if the same clusters and Standards are chosen for all of the programs being evaluated. (Guidance in choosing clusters/Standards is included in "How to Find the Evidence" below.)	**Use the questions for AC Metric 1A to evaluate Metric 1A. Record evidence for each question and rate Metric 1A.** X **Meets (2)** ____ **Partially Meets (1)** ____ **Does Not Meet (0)**
Is conceptual understanding attended to thoroughly where the Standards set explicit expectations for understanding or interpreting? Evaluate lessons, chapter/unit assessments and homework assignments, paying attention to work aligned to Standards that explicitly call for understanding or interpreting.	**Evidence-** Each sub lesson is aligned to the standards both in context, rigor and expectations. Example - U1 Lesson 3 NQ1 interpreting units and scales for graphs.	
Do the materials feature high-quality conceptual problems and conceptual discussion questions? Evaluate lessons, chapter/unit assessments, and homework assignments. NOTE: Examples of conceptual problems might include such questions as "What is the maximum value of the function f(t) = 5 – t2 ?" or "Is √2 a polynomial? How about ½(x + √2)+ ½ (-x + √2)?"	**Evidence-** Each lesson has guided practice, Problem Based Tasks, and practice problems all of which have high quality conceptual problems and discussions.	
Do the materials feature opportunities to identify correspondences across mathematical representations? Evaluate lessons, chapter/unit assessments and homework assignments. NOTE: An example of evaluating this metric might include looking at whether materials support students in identifying correspondences among the expression that defines a function, the graph that shows the relationship, and the behavior of the phenomenon being modeled (if any).	**Evidence-** Multiple representations are used (tables, graphs, equations) to model problems and students decide which one is best.	

AC Metric 1B: **The materials are designed so that students attain the fluencies and procedural skills required by the Standards.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Widely Applicable Prerequisites that relate specifically to fluency and procedural skill to use throughout the questions associated with this metric. NOTE: Some examples of Standards that call for procedural skill and fluency include: A-SSE.A.1b, A-SSE.2, A-APR.A.1, A-APR.C.6, F-BF.B.3, G-GPE.B.4, G-GPE.B.5, G-GPE.B.7, G-CO.A.1, G-SRT.B.5 For context, read Criterion #2b in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).		**Use the questions for AC Metric 1B to evaluate Metric 1B. Record evidence for each question and rate Metric 1B.** X **Meets (2)** ____ **Partially Meets (1)** ____ **Does Not Meet (0)**
Is progress toward fluency and procedural skill interwoven with the student's developing conceptual understanding of the skills in question? Evaluate lessons, chapter/unit assessments, daily routines, and homework assignments for evidence that the development of fluency and procedural skill is supported by conceptual understanding.	**Evidence-** Students are exposed to fluency and procedural skill through various guided practice activities. Through these skills students use conceptual understanding to complete each problem or task.	
Are purely procedural problems and exercises present that include cases in which opportunistic strategies are valuable and generic cases that require efficient and general procedures present? Evaluate lessons, chapter/unit assessments, daily routines, and homework assignments. NOTE: Problems in which opportunistic strategies are valuable might include such examples as solving x2 + 5 = 49 + 5 or (3x – 2)2 = 6x – 4. Generic cases that require efficient and general procedures might include such problems as solving c + 8 – c2 = 3(c – 1)2 – 5).	**Evidence-** Standards are designed to have students use multiple practices to think about and solve problems. Watch uses sub lessons to build the procedural and conceptual ideas to learn concepts.	
AC Metric 1C: **The materials are designed so that teachers and students spend sufficient time working with engaging applications, without losing focus on the Widely Applicable Prerequisites.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Widely Applicable Prerequisites that relate specifically to application to use throughout the questions associated with this metric. NOTE: Some examples of clusters or Standards that call for application include: N-Q.A, A-SSE.B.3, A-REI.D.11, F-IF.B, F-IF.C.7, F-BF.A.1, G-SRT.C.8, S-ID.A.2, S-IC.A.1 For context, read Criterion #2c in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).		**Use the questions for AC Metric 1C to evaluate Metric 1C. Record evidence for each question and rate Metric 1C.** X **Meets (2)** ____ **Partially Meets (1)** ____ **Does Not Meet (0)**
Are there single- and multi-step contextual problems, including non-routine problems, that develop the mathematics of the course, afford opportunities for practice, and engage students in problem solving? Do the problems attend thoroughly to those places in the content Standards where expectations for multi-step and real-world problems are explicit? Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** The tasks require students to solve single and multi-step contextual problems.	

Do application problems particularly stress applying the Widely Applicable Prerequisites? Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** The majority (75%.) of the content is based on Widely Applicable Prerequisites.	
Are there ample opportunities for students to engage with modeling problems? Do materials require students to use both individual parts of the modeling cycle as well as the full modeling cycle? Read the pages on High School—Modeling in the Standards for Mathematics (pp. 72 and 73). Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** (58%.) 38 of the 65 sub lessons address modeling standards.	
Alignment Criterion 1: Materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations. **AC 1:** Materials must earn at least 5 of 6 points to meet this Alignment Criterion. If materials earn less than 5 points, the Criterion has not been met. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)** **Before moving to Alignment Criterion 2, record the final Meets or Does Not Meet rating in the Evaluation Summary.**		X **Meets** ____ **Does Not Meet** **Strengths/Weaknesses:** Strength - rigor and balance is excellent in this program meeting the CCSSM.
Alignment Criterion 2: **Standards for Mathematical Practice- Materials must demonstrate authentic connections between content Standards and practice Standards.** The Standards require that designers of instructional materials connect the mathematical practices to mathematical content in instruction. Thus, materials must demonstrate authentic connections between content Standards and practice Standards.	The Standards require that designers of instructional materials connect the mathematical practices to mathematical content in instruction. Thus, materials must demonstrate authentic connections between content Standards and practice Standards. **Required Materials**: • Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_HS_Spring_2013_FINAL1.pdf) • Widely Applicable Prerequisites for College and Careers (http://achievethecore.org/prerequisites) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion:** Alignment Criterion 2 is rated as Meets or Does Not Meet. To rate Alignment Criterion 2, first rate metrics 2A, 2B, and 2C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). For each metric, guiding questions are provided to aid in gathering evidence. Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 2 if the materials rate 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as mathematical practices, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.

AC Metric 2A: **Materials address the practice Standards in such a way as to enrich the Widely Applicable Prerequisites; practices strengthen the focus of the course instead of detracting from it, in both teacher and student materials.** **How to Find the Evidence:** Familiarize yourself with the Widely Applicable Prerequisites. Evaluate teacher and student materials for evidence that the mathematical practices support and connect to the focus of the course. NOTE: An example of evaluating this Criterion might include looking at whether materials use regularity in repeated reasoning to illuminate formal algebra as well as functions, particularly recursive definitions of functions. For context, read Criterion #6 in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** 75% of the sublessons cover the WAP. The tasks help to support the 8 Mathematical Practices and are found throughout the text.	X **Meets (2)** ___ **Partially Meets (1)** ___ **Does Not Meet (0)**
AC Metric 2B: **Materials attend to the full meaning of each practice Standard.** **How to Find the Evidence:** For context, read Criterion #7 in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).		**Use the questions for AC Metric 2B to evaluate Metric 2B. Record evidence for each question and rate Metric 2B.** X **Meets (2)** ___ **Partially Meets (1)** ___ **Does Not Meet (0)**
Over the course of any given year of instruction, is each mathematical practice Standard meaningfully present in the form of assignments, activities, or problems that stimulate students to develop the habits of mind described in the practice Standard? Evaluate lessons, chapter/ unit assessments, and homework assignments for evidence of each mathematical practice being meaningfully present in instruction.	**Evidence-** Professional Development is available and all 8 Mathematical Practices are regularly addressed in each of the lessons.	
Are teacher-directed materials that explain the role of the practice Standards in the classroom and in students' mathematical development included? Are alignments to practice Standards accurate? Evaluate teacher materials, paying attention to explanations of the role of the practice Standards in the classroom and in students' mathematical development. Evaluate documents aligning lessons to practice Standards for accuracy. NOTE: Examples to look for when evaluating this metric might include the following: a highly scaffolded problem should not be aligned to MP.1; or a problem that directs a student to use a calculator should not be aligned to MP.5; or a problem about merely extending a pattern should not be aligned to MP.8.	**Evidence-** Being that this text was intently designed through the common core ideas and standards, the materials were built using the specific standards. The teacher resource program overview book is a great resource.	

AC Metric 2C: **Materials support the Standards' emphasis on mathematical reasoning.** **How to Find the Evidence:** For context, read Criterion #8 in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).		**Use the questions for AC Metric 2C to evaluate Metric 2C. Record evidence for each question and rate Metric.** X **Meets (2)** ____ **Partially Meets (1)** ____ **Does Not Meet (0)**
Do the materials support students in constructing viable arguments and critiquing the arguments of others concerning course-level mathematics that is detailed in the content Standards? Read Standard for Mathematical Practice 3. Evaluate teacher and student materials to ensure that students are given opportunities to reason with grade-level mathematics.	**Evidence-** The tasks allow multiple approaches, which then students must defend and explain. Through this process students are analyzing and critiquing others reasoning.	
Do the materials support students in producing not only answers and solutions, but also, in a course-appropriate way, arguments, explanations, diagrams, mathematical models, etc., especially in the Widely Applicable Prerequisites? Familiarize yourself with the Widely Applicable Prerequisites. Evaluate teacher and student materials to understand the types of work students are expected to produce.	**Evidence-** The tasks require students to go beyond just finding the answers as they must then explain the process they used and why it works.	
Do materials explicitly attend to the specialized language of mathematics? Is the language of argument, problem solving, and mathematical explanations taught rather than assumed? Evaluate teacher and student materials, paying attention to how mathematical language is taught. NOTE: An example of evaluating this Criterion might include looking at whether students are supported in: basing arguments on definitions; using the method of providing a counter example; or recognizing that examples alone do not establish a general statement.	**Evidence-** Through investigations students learn and apply mathematical language. Essential questions, vocabulary, introduction, guided practice before students just go solve problems.	
Alignment Criterion 2: Materials must demonstrate authentic connections between content Standards and practice Standards. **AC 2:** Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 points, the Criterion has not been met. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewers only.)** **Before moving to Alignment Criterion 3, record the final Meets or Does Not Meet rating in the Evaluation Summary.**		6 **Meets** ____ **Does Not Meet** **Strengths/Weaknesses:** CCSS Integrated Pathway Math 1 meets all 8 Math Practices as the course was developed with the CCSSM in mind.

Alignment Criterion 3: **Access to the Standards for All Students- Materials must provide supports for English Language Learners and other special populations.** Because Standards are for all students, alignment requires thoughtful support to ensure all students are able to meet the Standards. Thus, aligned materials must provide supports for English Language Learners and other special populations.	Because Standards are for all students, alignment requires thoughtful support to ensure all students are able to meet the Standards. Thus, aligned materials must provide supports for English Language Learners and other special populations. **Required Materials:** • Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math Publishers_Criteria_HS_Spring_2013_FINAL1.pdf) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion:** Alignment Criterion 3 is rated as Meets or Does Not Meet. To rate Alignment Criterion 3, first rate metrics 3A, 3B, and 3C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 3 if the materials rate 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as support for special population, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.
AC Metric 3A: **Support for English Language Learners and other special populations is thoughtful and helps those students meet the same Standards as all other students. The language in which problems are posed is carefully considered.** **How to Find the Evidence:** Evaluate teacher and student materials, paying attention to supports offered for special populations.	**Evidence-** Spanish/English glossary is great tool. Words to know are listed for each lesson, graphic organizers, coaching questions and support books.	X **Meets (2)** ____ **Partially Meets (1)** ____ **Does Not Meet (0)**
AC Metric 3B: **Materials provide appropriate level and type of scaffolding, differentiation, intervention, and support for a broad range of learners with gradual removal of supports, when needed, to allow students to demonstrate their mathematical understanding independently.** **How to Find the Evidence:** Evaluate teacher and student materials, paying attention to whether materials provide differentiation that will lead all learners to engage with on-grade-level content.	**Evidence-** Professional development is available which covers differentiation, intervention and support with supplement and honors materials that are available.	X **Meets (2)** ____ **Partially Meets (1)** ____ **Does Not Meet (0)**
AC Metric 3C: **Design of lessons recommends and facilitates a mix of instructional approaches for a variety of learners such as using multiple representations (e.g., including models, using a range of questions, checking for understanding, flexible grouping, pair-share).** **How to Find the Evidence:** Evaluate teacher materials, noting instructional approaches suggested for whole class and differentiated lessons and activities.	**Evidence-** Watch provides multiple teaching strategies. Direct instruction, problem based and group roles.	X **Meets (2)** ____ **Partially Meets (1)** ____ **Does Not Meet (0)**

Alignment Criterion 3: Materials must provide supports for English Language Learners and other special populations.	6 Meets ____ Does Not Meet
AC 3 Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 points, the Criterion has not been met. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewers only.)** **Move to the Evaluation Summary and record the final Meets or Does Not Meet rating .**	**Strengths/Weaknesses:** Strengths – all student Levels are addressed (Support)(Honors) and some ELL. Weakness – only ELL addressed not other special populations.

Once an evaluation for alignment to the Shifts and major features of the CCSS has been conducted using Sections 1-3, it's important to evaluate for overall quality and best practices. A starting list of Indicators of Quality are suggested below. States, districts and others evaluating instructional materials are encouraged to add to this list to ensure materials reflect local contexts. For background information on some of the Indicators of Quality in this section, refer to pp.16–18 in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).

Indicators of Quality	Evidence- Give specific examples.	Rating: (Reviewer only.)
1. Lessons are thoughtfully structured and support the teacher in leading the class through the learning paths at hand, with active participation by all students in their own learning and in the learning of their classmates.	Evidence- materials provided – warm-ups, power points, guided practice, tasks, practice problems, station activities, pre, progress and post tests.	(Reviewer only.) X Yes ____ No
2. The underlying design of the materials includes both problems and exercises. (In solving problems, students learn new mathematics, whereas in working exercises, students apply what they have already learned to build mastery.) Each problem or exercise has a purpose. **NOTE: This Criterion does not require that the problems and exercises be labeled as such.**	Evidence- Solving problems occur in guided practice and task. Exercises occur in the practice problems.	(Reviewer only.) X Yes ____ No

3. Design of assignments is not haphazard: exercises are given in intentional sequences in order to strengthen students' mathematical understanding.	**Evidence-** Designed specific to follow the standards and are very intent. The scope and sequence follow a pattern of strengthening students skills purposefully.	**(Reviewer only.)** X Yes ____ No
4. There are separate teacher materials that support and reward teacher study including, but not limited to: discussion of the mathematics of the units and the mathematical point of each lesson as it relates to the organizing concepts of the unit, discussion on student ways of thinking and anticipating a variety of students responses, guidance on lesson flow, guidance on questions that prompt students thinking, and discussion of desired mathematical behaviors being elicited among students.	**Evidence-** Professional development is available. Teacher resources and implementation guide help teachers improve learning and teaching.	**(Reviewer only.)** X Yes ____ No
5. Manipulatives suggested in the materials are faithful representations of the mathematical objects they represent and are connected to written methods.	**Evidence-** Manipulatives are used in station activities. The manipulatives are used to enhance mathematical understanding.	**(Reviewer only.)** X Yes ____ No
6. Materials include a variety of curriculum-embedded assessments. Examples include pre-, formative, summative, and self-assessment resources.	**Evidence-** There are pre and post tests for each Lesson, unit tests, Exam view to create multiple versions and online tests to mirror the SBAC.	**(Reviewer only.)** X Yes ____ No
7. Assessments contain aligned rubrics, answer keys, and scoring guidelines that provide sufficient guidance for interpreting student performance.	**Evidence-** There are answer keys available and sample prompts that go along for open ended responses.	**(Reviewer only.)** X Yes ____ No
8. Materials assess student proficiency using methods that are accessible and unbiased, including the use of course-level language in student prompts.	**Evidence-** Assessments are unbiased and use multiple designs and question types to assess students.	**(Reviewer only.)** X Yes ____ No

9. Materials are carefully evaluated by qualified individuals whose names are listed, in an effort to ensure freedom from mathematical errors and course-level appropriateness.	**Evidence-** As listed each book (see copyright page for full list)	**(Reviewer only.)** X **Yes** _____ **No**
10. The visual design supports students in engaging thoughtfully with the subject. Navigation through the text is clear.	**Evidence-** The book is very clean, basic and somewhat plain, but it doesn't have distracting elements.	**(Reviewer only.)** X **Yes** _____ **No**

Reviewer IMET Evaluation Summary **Title/Level:** _____

Publisher: _____ **Copyright:** _____ **ISBN:**_____

Reviewer ID # _____ **Date Review Completed:**_____

Non-Negotiable Criteria-The Non-Negotiable must be met in order for the Non-Negotiable Alignment Criteria to be met overall.
Non- Negotiable 1: Focus and Coherence _____ **Meets** _____ **Does Not Meet**

Non-Negotiable Overall:

X Meets _____ Does Not Meet

Alignment Criteria- Each Alignment Criterion must be met with a sufficient number of points in order for Alignment Criteria to be labeled as "Meets" overall. The more points the materials receive on the Alignment Criteria, the better they are aligned.

Alignment Criterion 1: Rigor and Balance	Alignment Criterion 2: Standards of Mathematical Practice	Alignment Criterion 3: Access to Standards for All Learners
Points: 6 of 6 possible. (Materials must receive at least 5 of 6 points to align.) X Meets _____ Does Not Meet	Points: 6 of 6 possible. (Materials must receive at least 5 of 6 points to align.) X Meets _____ Does Not Meet	Points: 6 of 6 possible. (Materials must receive at least 5 of 6 points to align.) X Meets _____ Does Not Meet

Alignment Criteria Overall:

X Meets _____ Does Not Meet

If the materials meet the Non-Negotiable Criterion and each Alignment Criterion, they are aligned to the Shifts and major features of the Co Standards. **Do the materials meet every Non-Negoti e and Alignment Criterion?** X **Yes** ____ **No**

What are the specific areas of strength and weakness based on this evaluation? Publishers or others modifying or developing assessments can use this information to make improvements and/or to remedy gaps in the alignment of assessment materials.

Strengths –

- honors supplements
- support supplements
- station activities
- 100% designed for common core.

Weaknesses –

- not alot of ELL support.
- bland text and non traditional textbook

2015-16 Mathematics Interim Review Recommendation & Summary

Publisher Name:	Walch Integrated Math
Title:	CCSS Integrated Pathway Mathematics II
ISBN #	978-0-8251-7168
Grade Level(s) or Course:	Integrated Mathematics II
Reviewer ID:	JB & CH

RECOMMENDED AS:

____X____**Core Mathematics Program-** a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials. Substantial evidence clearly supports the designation of this program as Core.

_____**Other Mathematics Program-** a program that substantially, but partially, meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for supplemental materials. Substantial evidence clearly supports the designation of this program as Other.

_____**Component Mathematics Program-** a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs. Substantial evidence clearly supports the designation of this program as Component.

_____**Intervention Program-** a program designed and intended to target and support students' specific needs. Substantial evidence clearly supports the designation of this program as Intervention.

_____ **Does not meet criteria** for recommendation as a Curricular Material or Online Resource for Mathematics.

EVIDENCE SUMMARY:

FOCUS-
The material is built around the units specified in the CCSS for Mathematics Appendix A. Units are organized around the important topics in mathematics and reflect the focus of the standards.

COHERENCE-
Each lesson identifies the necessary prerequisite skills and activates prior knowledge. However, the sequencing of some of the units is lacking and includes unnecessary material.

RIGOR-
The materials address conceptual understanding, procedural skill and fluency, and application. The guided practice problems build conceptual understanding and procedural skill and fluency. The problem based tasks address application and modeling.

CONCEPTUAL UNDERSTANDING-
The journal prompts, practice problems, and collaborative learning opportunities address student's conceptual understanding.

MATHEMATICAL PRACTICES-
The mathematical practices are embedded throughout the material. There are multiple ways for students to model, reason, and make sense of problems. However, the practice standards are not specifically stated in the text.

ACCESSIBILITY OF STANDARDS TO ALL STUDENTS-
Materials include supplemental materials for remediation. There is also a Honors Program for high achieving students. Students have access to a Workbook and Resource Book for each unit. There are multiple online resources also available. There is limited resources for ELL students.

OTHER:

Strengths

- Covers over 50% of the WAP
- Closely aligned to the CCSSM
- Multiple problem sets and examples
- Several resource materials (online and print)
- Standards clearly stated for each lesson
- Vocabulary and Key Concepts

Weakness

- Practice Standards are not stated
- Limited resources for ELL students
- Cohesion is lacking in some of the units

2015-1 nterim Mathematics Review

Mathematics Evaluation Tool – High School

Publisher: Walch Integrated Math

Title of Material: CCSS Integrated Pathway Mathematics II

Author: Walch Integrated Math

ISBN #: 978-0-8251-7168 **Copyright** 2013, 2014

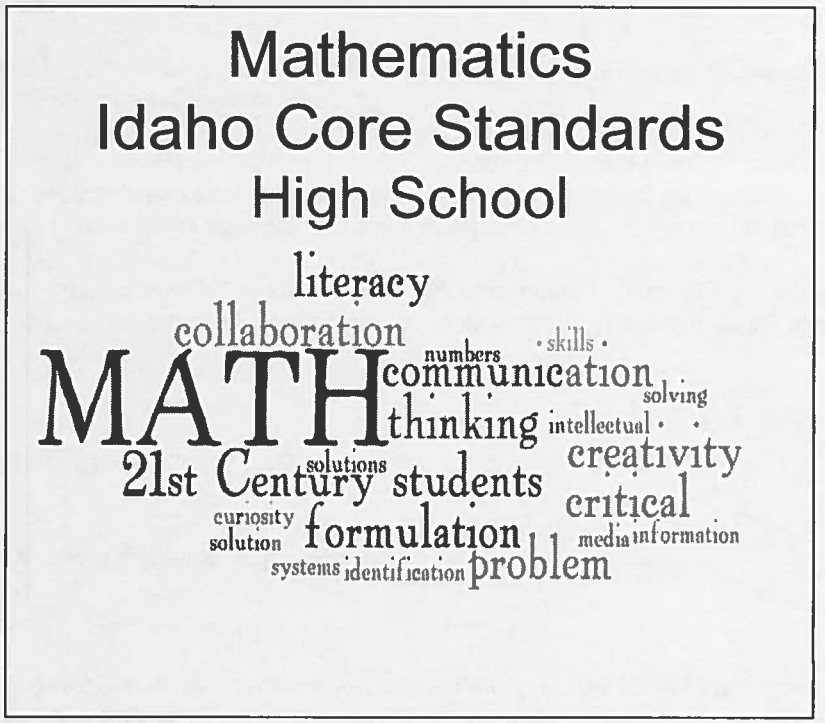
Reviewer ID: CA J.B

Core Mathematics Program- a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Core.

Other Mathematics Program- a program that substantially, but partially, meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Other.

Component Mathematics Program- a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs.
Substantial evidence clearly supports the designation of this program as Component.

Intervention Program- a program designed and intended to target and support students' specific needs.
Substantial evidence clearly supports the designation of this program as Intervention.



- Evaluation Form adapted from Instructional Materials Evaluation Toolkit (IMET).

The IMET was developed by Student Achievement Partners. Educators may use or adapt. http://creativecommons.org/licenses/by/3.0/ Download this tool at http://achievethecore.org/IMET

2015-16 Interim Mathematics Review

Mathematics Evaluation Tool – High School

Publisher: Walch

Title of Material: Integrated Math 2

Author: _____

ISBN #: _____ **Copyright** _____

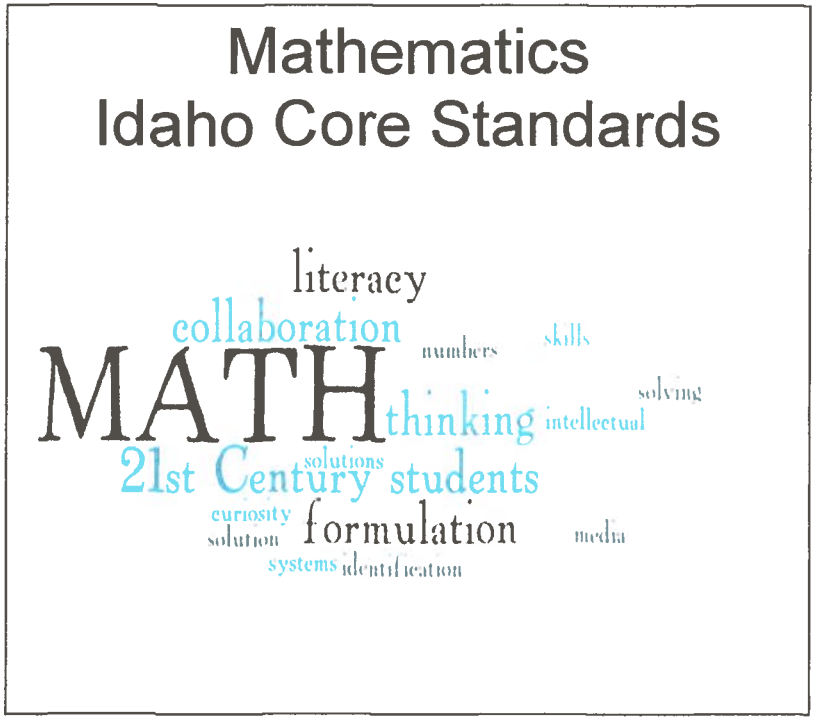
Reviewer ID: _____

Core Mathematics Program- a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Core.

Other Mathematics Program- a program that substantially, but partially, meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Other.

Component Mathematics Program- a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs.
Substantial evidence clearly supports the designation of this program as Component.

Intervention Program- a program designed and intended to target and support students' specific needs.
Substantial evidence clearly supports the designation of this program as Intervention.



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Instructional Materials Evaluation Tool

Mathematics, High School

What Are the Purposes of the IMET?

This Math IMET is designed to help educators determine whether instructional materials are aligned to the Shifts and major features of the Common Core State Standards (CCSS). The substantial instructional Shifts (http://www.corestandards.org/other-resources/key-shifts-in-mathematics/) at the heart of the Common Core State Standards are:

- **Focus** strongly where the Standards focus
- **Coherence**: Think across grades and link to major topics within the grade
- **Rigor**: In major topics, pursue conceptual understanding, procedural skill and fluency, and application with equal intensity.

The IMET draws directly from the following documents:

- Common Core State Standards for Mathematics (www.corestandards.org/Math)
- Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013) (http://www. corestandards.org/wp-content/uploads/Math_Publishers_Criteria_ HS_Spring_2013_FINAL1.pdf)

When to use the IMET

1. Purchasing materials: Many factors go into local purchasing decisions. Alignment to the Standards is a critical factor to consider. This tool is designed to evaluate alignment of instructional materials to the Shifts and the major features of the CCSS. It also provides suggestions of additional indicators to consider in the materials evaluation and purchasing process
2. Evaluating materials currently in use: The IMET can be used to analyze the degree of alignment of existing materials and help to highlight specific, concrete flaws in alignment. Even where materials and tools currently in use fail to meet one or more of these criteria, the pattern of failure is likely to be informative. States and districts can use the evaluation to create a thoughtful plan to modify or combine existing resources in such a way that students' actual learning experiences approach the focus, coherence, and rigor of the Standards.
3. Developing programs: Those developing new programs can use this tool as guidance for creating aligned curricula.

Please note this tool was designed for evaluating comprehensive curricula (including any supplemental or ancillary materials), but it was not designed for the evaluation of standalone supplemental materials.

Who Uses the IMET?

Evaluating instructional materials requires both subject-matter and pedagogical expertise. Evaluators should be well versed in the Standards (www.corestandards.org/Math) for all grades in which materials are being evaluated. This includes understanding the Widely Applicable Prerequisites (www.achievethecore.org/prerequisites), how the content fits into the progressions in the Standards (www. achievethecore.org/progressions), and the expectations of the Standards with respect to conceptual understanding, procedural skill and fluency, and application. Evaluators also should be familiar with the substantial instructional Shifts (http://www.corestandards.org/other-resources/key-shifts-in-mathematics/) of Focus, Coherence and Rigor that are listed above.

Getting Started

Prior to Evaluation

Assemble all of the materials necessary for the evaluation. It is essential for evaluators to have materials for all grades covered by the program, as some criteria cannot be rated without having access to each grade. In addition, each evaluator should have a reference copy of the Common Core State Standards for Mathematics (CCSSM) and the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).

Before conducting the evaluation itself, it is important to develop a protocol for the evaluation process. The protocol should include having evaluators study the Publishers' Criteria and the IMET. It will also be helpful for evaluators to get a sense of each program overall before beginning the process. At a minimum, this would include reading the front matter of the text, looking at the table of contents and paging through multiple chapters.

Sections 1-3 below should be completed to produce a comprehensive picture of the strengths and weaknesses of the materials under evaluation. Information about areas in need of improvement or supplementation should be shared with internal and external stakeholders.

Navigating the Tool

Begin with Section 1: Non-Negotiable Alignment Criteria

- The Non-Negotiable Alignment Criteria must each be met in full for materials to be considered aligned to the Shifts and the major features of the Common Core State Standards. Each Non-Negotiable Alignment Criterion has one or more metrics associated with it; every one of these metrics must be met in order for the criterion as a whole to be met.

- Examine the relevant materials and use evidence to rate the materials against each criterion and its associated metric(s).

- Record and explain the evidence upon which the rating is based.

Continue to Section 2: Alignment Criteria

- The Alignment Criteria must each be met for materials to be considered aligned to the Shifts and the major features of the Common Core State Standards. Each Alignment Criterion has one or more metric associated with it; a specific number of these metrics must be met or partially met in order for the criterion as a whole to be met.

- Examine the materials in relation to these criteria, assigning each metric a point value. Rate the criterion as "Meets" or "Does Note Meet" based on the number of points assigned. The more points the materials receive on the alignment Criteria, the better they are aligned.

- Record and explain the evidence upon which the rating is based.

Proceed to Section 4: Indicators of Quality

- Indicators of Quality are important considerations that will help evaluators better understand the overall quality of instructional materials. These considerations are not criteria for alignment to the CCSS, but they provide valuable information about additional program characteristics. Evaluators may want to add their own indicators to the examples provided.

Directions for Non-Negotiable 1

Focus and Coherence

Criterion	Evidence- Give specific examples.	Rating: (Reviewer only.)
Non-Negotiable 1: Focus and Coherence- Materials must focus coherently on the Widely Applicable Prerequisites in a way that is consistent with the progressions in the Standards. Focus and coherence are the two major evidence-based design principles of the Common Core State Standards for Mathematics (CCSSM, p. 3). Focus is necessary in order to fulfill the ambitious promise the states have made to their students by adopting the Standards: greater achievement at the college and career-ready level; greater depth of understanding of mathematics; and a rich classroom environment in which reasoning, sense-making, applications, and a range of mathematical practices flourish. In high school courses, narrowing and deepening the curriculum creates a structure that ties topics together. Thus, materials must focus coherently on the Widely Applicable Prerequisites in a way that is consistent with the progressions in the Standards.	Focus and coherence are the two major evidence-based design principles of the Common Core State Standards for Mathematics (CCSSM, p. 3). Focus is necessary in order to fulfill the ambitious promise the states have made to their students by adopting the Standards: greater achievement at the college and career-ready level; greater depth of understanding of mathematics; and a rich classroom environment in which reasoning, sense-making, applications, and a range of mathematical practices flourish. In high school courses, narrowing and deepening the curriculum creates a structure that ties topics together. Thus, materials must focus coherently on the Widely Applicable Prerequisites in a way that is consistent with the progressions in the Standards. **Required Materials:** • Common Core State Standards for Mathematics (www.corestandards.org/wpcontent/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_HS_Spring_2013_FINAL1.pdf) • Widely Applicable Prerequisites for College and Careers (http://achievethecore.org/prerequisites) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion:** Non-Negotiable 1 is rated as Meets or Does Not Meet. To rate Non-Negotiable 1, first rate Metrics 1A–1H. Each of these eight metrics must be rated as Meets in order for Non-Negotiable 1 to be rated as Meets. Rate each metric 1A–1H as Meets or Does Not Meet/Insufficient Evidence. If the evidence examined shows that the Criterion is met, then mark the Criterion as Meets. If the evidence examined shows that the Criterion is not met—or if there is insufficient evidence to make a determination—then mark the Criterion as Does Not Meet/Insufficient Evidence. Support all ratings with evidence.

Metric NN1A: **In any single course, students spend at least 50% of their time on Widely Applicable Prerequisites.** **How to Find the Evidence:** Familiarize yourself with the Widely Applicable Prerequisites. Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, lessons, homework assignments, and assessments. (Evaluate both student and teacher materials.) Consider time spent on the Widely Applicable Prerequisites and judge qualitatively whether students and teachers using the materials as designed will devote the majority of time to the Widely Applicable Prerequisites For context, read Criterion #1 in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** Using the content map, over 50% of the sub-lessons address a WAP. More specifically, the percent of sub-lessons that address at least on WAP per unit is listed below: Unit 1: Extending the Number System - 58% (exponents and rational exponents) Unit 2: Quadratic Functions and Modeling - 80% Unit 3: Expressions and Equations - 89% Unit 4: Applications of Probability - 0% Unit 5: Similarity, Right Triangle Trigonometry, and Proof - 65% Unit 6: Circles with and without Coordinates - 0%	**__X__Meets** **____Does Not Meet Insufficient Evidence**
Metric NN1B: **Student work in Geometry involves significant work with applications/modeling and problems that use algebra skills.** **How to Find the Evidence:** Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, lessons, homework assignments, and assessments. (Evaluate both student and teacher materials. NOTE: Since Geometry contains relatively fewer Widely Applicable Prerequisites, this Criterion is important to help foster students' college and career readiness. Problems that use algebra skills might include, for example, algebraic geometry problems in a coordinate setting, or problems of measurement involving unknown quantities.	**Evidence-** There are 2 units in the text that address geometry. Each lesson includes a problem based task that involves application problems. There are also problems that involve algebra skills. For example, 5.7.1 and 5.7.2 asks students to use slope, distance formula, and midpoint formula to prove properties of quadrilaterals. In lesson 6.6.1 and 6.6.2 students are asked to derive the equation of a circle and parabola.	**__X__Meets** **____Does Not Meet Insufficient Evidence**

Metric NN1C: **There are problems at a level of sophistication appropriate to high school (beyond mere review of middle school topics) that involve the application of knowledge and skills from grades 6-8.** **How to Find the Evidence:** Evaluate lessons, chapter/unit assessments, and homework assignments. NOTE: Problems should include application of the following topics from grades 6-8: • Ratios and proportional relationships. • Percentage and unit conversions, e.g., in the context of complex measurement problems involving quantities with derived or compound units (such as mg/mL, kg/ m3, acre-feet, etc.). • Basic function concepts, e.g., by interpreting the features of a graph in the context of an applied problem. • Concepts and skills of geometric measurement e.g., when analyzing a diagram or schematic. • Concepts and skills of basic statistics and probability (see grades 6–8.SP) • Performing rational number arithmetic fluently. For context, read Table 1 on Page 8 of the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** Examples of concepts that extends the following 6-8 Ratios and proportions - 5.8.1 Defining Trigonometric Ratios Percentages and Unit Conversions - 2.2.3 Average Rate of Change, Unit 3, lesson 5 compound units Applying basic function concepts - 2.6.1, 2.6.2 - Transforming Functions Geometric Measurement - 6.5.2 Volumes of cylinders, pyramids, cones and spheres Basic Statistics - Unit 4 - Applications of Probability and analyzing data Rational Number Arithmetic - Unit 1, lesson 3 - Operating with complex numbers	**__X__Meets** **____Does Not Meet Insufficient Evidence**
Metric NN1D: **Materials base courses on the content specified in the Standards.** **How to Find the Evidence:** Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, and lessons in both student and teacher materials. For context, read Criterion #3a in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** Every lesson addresses at least one of the common core standards. The curriculum was written after the standards were released and created to align to the Integrated Pathway Mathematics II outlines in Appendix A of the CCSS. Walch included an Alignment Analysis of the CCSS that was completed in 2013. According to the review, this material demonstrates strong alignment relationships to all standards and indicators (100%) specifies by the CCSS for Math II. Example: Unit 1: N-RN.1 & 2 Unit 2: A-SSE.1 & 3, A-REI.4, F-LE.1, A-APR.1 & 3 Unit 3: A-CED.1 & 2 Unit 4: S-IC.1 & S-ID.2 Unit 5: G-CO.9 & 10, G-SRT.2, 4 - 8	**_X___Meets** **____Does Not Meet Insufficient Evidence**

Metric NN1E: **Materials give all students extensive work with course-level problems.** **How to Find the Evidence:** Evaluate both student and teacher materials. If the materials provide resources for differentiated learning, consider whether lower-performing students have opportunities to engage with course-level problems. Also consider whether higher-performing students are given opportunities to learn current course-level content in greater depth. For context, read Criterion #3b in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** The material includes a variety of ways for students to work with coarse-level problems. Each sub-lesson includes several examples, a problem based task, homework practice problems. Each lesson includes a progress assessment. Each unit includes a unit assessment. The Student Resource Book includes a variety of guided practice questions. The Honors Book has higher level problems.	**__X__Meets** **____Does Not Meet Insufficient Evidence**
Metric NN1F: **Materials relate course-level concepts explicitly to prior knowledge from earlier grades or courses. The materials are designed so that prior knowledge becomes reorganized and extended to accommodate the new knowledge.** **How to Find the Evidence:** Evaluate student and teacher materials, looking for problems that involve extending the knowledge learned in earlier grades and courses. NOTE: An example of evaluating this Criterion might be to look at whether materials connect the equation of a circle with the distance formula and the Pythagorean theorem. For context, read Criterion #3c in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** Each sub-lesson identifies and often reviews the prior knowledge needed for the lesson. Each sub-lesson begins with a warm-up problem that activates prior knowledge. After the warm-up there is a section on how to make connections to the lesson. The TRB lists prerequisite skills needed for each sub-lesson. Example: Lesson 2.5.1 - Analyzing Exponential Functions. The prerequisite skills needed are: base and power rule of exponents, simplifying exponential expressions, applying order of operation. The warm-up involves finding the volume of a box which involves using exponents.	**_X___Meets** **____Does Not Meet Insufficient Evidence**
Metric NN1G: **Materials include learning objectives that are visibly shaped by CCSSM cluster and domain headings.** **How to Find the Evidence:** Select several clusters from the course being evaluated. Evaluate teacher and student materials in relation to these clusters. For context, read Criterion #4a in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** Each lesson begins with the CCSS that are addressed in the following sub-lessons. Then there is a list of essential questions. In Appendix A of the CCSS there is a suggested unit outline. This textbook very closely follows this outline. Example: Unit 1, Lesson 1 covers N-RN.1,2,3 and they are clearly stated at the beginning of the lesson.	**_X___Meets** **____Does Not Meet Insufficient Evidence**

Metric NN1H: **Materials include problems and activities that serve to connect two or more clusters in a domain, or two or more domains in a category, or two or more categories, in cases where these connections are natural and important.** **How to Find the Evidence:** In the course being evaluated, choose two or more clusters, two or more domains, or two or more categories for which connections are natural and important. Evaluate the units, chapters, and lessons that deal with the chosen topics, looking for problems and activities that serve to connect the chosen clusters or domains. NOTE: An example of evaluating this Criterion might be to look at whether materials include problems in which students analyze a situation by building a function, graphing it, and using it to create and solve an equation. For context, read Criterion #4b in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** There are several sub-lessons that cover two or more clusters in one domain. For example: Almost every sub-lesson in unit 3 covers a combination of A-SSE, A-CED and.or A-REI. There is also a lesson that covers two or more domains. For example: Lesson 9 in unit 5 - Applying Trig Ratios addresses G-SRT.8 and F-TF.8	**__X__Meets** **____Does Not Meet Insufficient Evidence**
Non-Negotiable 1: Focus and Coherence- Materials must focus coherently on the Widely Applicable Prerequisites in a way that is consistent with the progressions in the Standards. **Metric NN 1:** If all metrics 1A–1H were rated as Meets, then rate Non-Negotiable 1 as Meets. If one or more metrics were rated as Does Not Meet/Insufficient Evidence, then rate Non-Negotiable 1 as Does Not Meet. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)** **Before moving to Alignment Criterion 1, record the final Meets or Does Not Meet rating in the Evaluation Summary.**		**__X__Meets** **____Does Not Meet** **Strengths/Weaknesses** Clearly aligned to the CCSSM. Standards are clearly stated in each lesson. Majority of the time is spent addressing the WAP. Multiple practice problems that address application, procedural and conceptual. Coherence of some of the units are lacking.

Now continue by evaluating Alignment Criterion 1 for Rigor and Balance.

Directions for Alignment Criterion 1

Rigor and Balance

Alignment Criterion 1: **Rigor and Balance- Materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.** The Standards set expectations for attention to all three aspects of rigor: conceptual understanding, procedural skill and fluency, and applications. Thus, materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.	The Standards set expectations for attention to all three aspects of rigor: conceptual understanding, procedural skill and fluency, and applications. Thus, materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations. • Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_HS_Spring_2013_FINAL1.pdf) • Widely Applicable Prerequisites for College and Careers (http://achievethecore.org/prerequisites) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion:** Alignment Criterion 1 is rated as Meets or Does Not Meet. To rate Alignment Criterion 1, first rate metrics 1A, 1B, and 1C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). For each metric, guiding questions are provided to aid in gathering evidence. Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 1 if the materials rate 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as rigor and balance, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.
AC Metric 1A: **The materials support the development of students' conceptual understanding of key mathematical concepts, especially where called for in specific content Standards or cluster headings.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Widely Applicable Prerequisites that relate specifically to conceptual understanding to use throughout the questions associated with this metric. NOTE: Some examples of clusters or Standards that call for conceptual understanding include: N-RN.A.1, A-APR.B, A-REI.A.1, A-REI.D.10, A.REI.D.11, F.IF.A.1, F-LE.A.1, G.SRT.A.2, G-SRT.C.6, S-ID.C.7 For context, read Criterion #2a in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	• Choose a cluster/Standard from the Widely Applicable Prerequisites that is aligned to each aspect of rigor and use it to evaluate these metrics. It is most helpful if the same clusters and Standards are chosen for all of the programs being evaluated. (Guidance in choosing clusters/Standards is included in "How to Find the Evidence" below.)	**Use the questions for AC Metric 1A to evaluate Metric 1A. Record evidence for each question and rate Metric 1A.** **__X__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**

Is conceptual understanding attended to thoroughly where the Standards set explic ectations for understanding or interpreting? Evaluate lessons, chapter/unit assessments and homework assignments, paying attention to work aligned to Standards that explicitly call for understanding or interpreting.	**Evidence-** The materials nd to the conceptual understanding of students through the guided practice problems, problem based tasks, and homework sets. Students are asked to understand and interpret their solutions throughout the text. Example: Unit 4 Lessons 1 & 2 (S-CP) asks students to explain, use, and interpret data. Lesson 5.8.1 has students discover that ratio of sides of similar triangles stays the same.	
Do the materials feature high-quality conceptual problems and conceptual discussion questions? Evaluate lessons, chapter/unit assessments, and homework assignments. NOTE: Examples of conceptual problems might include such questions as "What is the maximum value of the function f(t) = 5 – t2 ?" or "Is √2 a polynomial? How about ½(x + √2)+ ½ (-x + √2)?"	**Evidence-** The problem based tasks feature high quality conceptual problems. Example: Unit 2 Lesson 2 practice has students find max/min, decreasing and increasing, and intercepts of quadratics. Then students apply their knowledge using real world examples.	
Do the materials feature opportunities to identify correspondences across mathematical representations? Evaluate lessons, chapter/unit assessments and homework assignments. NOTE: An example of evaluating this metric might include looking at whether materials support students in identifying correspondences among the expression that defines a function, the graph that shows the relationship, and the behavior of the phenomenon being modeled (if any).	**Evidence-** There are several times throughout the text that students are exposed to multiple representations. Example – Lesson 2.5.2 has students compare an equation, chart, and story problem to find the greatest maximum.	
AC Metric 1B: **The materials are designed so that students attain the fluencies and procedural skills required by the Standards.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Widely Applicable Prerequisites that relate specifically to fluency and procedural skill to use throughout the questions associated with this metric. NOTE: Some examples of Standards that call for procedural skill and fluency include: A-SSE.A.1b, A-SSE.2, A-APR.A.1, A-APR.C.6, F-BF.B.3, G-GPE.B.4, G-GPE.B.5, G-GPE.B.7, G-CO.A.1, G-SRT.B.5 For context, read Criterion #2b in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).		**Use the questions for AC Metric 1B to evaluate Metric 1B. Record evidence for each question and rate Metric 1B.** **__X__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**

Is progress toward fluency and procedural skill interwoven with the student's developing conceptual understanding of the skills in question? Evaluate lessons, chapter/unit assessments, daily routines, and homework assignments for evidence that the development of fluency and procedural skill is supported by conceptual understanding.	**Evidence-** Lessons begin with guided practice problems and then progresses into application problems. Students build fluency first then apply their knowledge. The homework exercises also help build fluency. Example: Unit 1 Station Activity 3 (A-APR.A.1) students discover transformations of vertex form of a quadratic. Lesson 2.6.1 & 2.6.2 has students discover transformation rules through the guided practice.	
Are purely procedural problems and exercises present that include cases in which opportunistic strategies are valuable and generic cases that require efficient and general procedures present? Evaluate lessons, chapter/unit assessments, daily routines, and homework assignments. NOTE: Problems in which opportunistic strategies are valuable might include such examples as solving $x2 + 5 = 49 + 5$ or $(3x - 2)2 = 6x - 4$. Generic cases that require efficient and general procedures might include such problems as solving $c + 8 - c2 = 3(c - 1)2 - 5)$.	**Evidence-** Lesson and homework usually begin with purely procedural exercises that allow students to build fluency before they apply their knowledge on application problems. Example: Unit 3 Lesson 5 has several examples of simplifying and solving rational equations that are purely procedural.	
AC Metric 1C: **The materials are designed so that teachers and students spend sufficient time working with engaging applications, without losing focus on the Widely Applicable Prerequisites.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Widely Applicable Prerequisites that relate specifically to application to use throughout the questions associated with this metric. NOTE: Some examples of clusters or Standards that call for application include: N-Q.A, A-SSE.B.3, A-REI.D.11, F-IF.B, F-IF.C.7, F-BF.A.1, G-SRT.C.8, S-ID.A.2, S-IC.A.1 For context, read Criterion #2c in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).		**Use the questions for AC Metric 1C to evaluate Metric 1C. Record evidence for each question and rate Metric 1C.** **__X__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**

Are there single- and multi-step contextual problems, including non-routine problems, that develop the mathematics of the course, afford opportunities for practice, and engage students in problem solving? Do the problems attend thoroughly to those places in the content Standards where expectations for multi-step and real-world problems are explicit? Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** Each lesson includes single and/or multi-step contextual problems. Most of these can be found in the Problem Based Tasks. Example: Unit 5 Lesson 6 has students set up algebra problem based on a picture, solve for x, then use x to find angle values. Lesson 3.6.1 the PBT students 2 investment options and students have to decide which option is best.	
Do application problems particularly stress applying the Widely Applicable Prerequisites? Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** There are ample application problems throughout the text. Each lesson includes real world examples. Example: Lesson 2.1 (F-IF) asks students to graph the function, find vertex, max/min, and explain the meaning in that scenario.	
Are there ample opportunities for students to engage with modeling problems? Do materials require students to use both individual parts of the modeling cycle as well as the full modeling cycle? Read the pages on High School—Modeling in the Standards for Mathematics (pp. 72 and 73). Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** There are opportunities for students to engage in modeling problems. Example: Lesson 2.5.1 (F-IF.8) - students are asked to compare investment growth Lesson 3.6.1(A-SSE.3) - predict the path of an object using quadratic functions Lesson 2.1 (F-IF.7 & 8) analyzing quadratic functions	

Alignment Criterion 1: Materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations. **AC 1:** Materials must earn at least 5 of 6 points to meet this Alignment Criterion. If materials earn less than 5 points, the Criterion has not been met. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)** **Before moving to Alignment Criterion 2, record the final Meets or Does Not Meet rating in the Evaluation Summary.**		**__X__Meets** **____Does Not Meet** **Strengths/Weaknesses:** Covers most of the WAP. Quality application problems. Exercises involve scaffolding and include rigorous problems. Lacking in multi-step problems. Some of the examples may be too complex for a regular education student.
Alignment Criterion 2: **Standards for Mathematical Practice- Materials must demonstrate authentic connections between content Standards and practice Standards.** The Standards require that designers of instructional materials connect the mathematical practices to mathematical content in instruction. Thus, materials must demonstrate authentic connections between content Standards and practice Standards.	The Standards require that designers of instructional materials connect the mathematical practices to mathematical content in instruction. Thus, materials must demonstrate authentic connections between content Standards and practice Standards. **Required Materials**: • Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_HS_Spring_2013_FINAL1.pdf) • Widely Applicable Prerequisites for College and Careers (http://achievethecore.org/prerequisites) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion:** Alignment Criterion 2 is rated as Meets or Does Not Meet. To rate Alignment Criterion 2, first rate metrics 2A, 2B, and 2C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). For each metric, guiding questions are provided to aid in gathering evidence. Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 2 if the materials rate 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as mathematical practices, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.

AC Metric 2A: **Materials address the practice Standards in such a way as to enrich the Widely Applicable Prerequisites; practices strengthen the focus of the course instead of detracting from it, in both teacher and student materials.** **How to Find the Evidence:** Familiarize yourself with the Widely Applicable Prerequisites. Evaluate teacher and student materials for evidence that the mathematical practices support and connect to the focus of the course. NOTE: An example of evaluating this Criterion might include looking at whether materials use regularity in repeated reasoning to illuminate formal algebra as well as functions, particularly recursive definitions of functions. For context, read Criterion #6 in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** The eight practice standards are embedded throughout the program materials. Examples: MP.4 - Thirty-seven of the sub-lessons address modeling. MP.5 is addressed in the lessons and activities. Lessons included step-by-step directions for using multiple types of calculators. MP.8 each lessons ends with a journal prompt. The activities ask students to explain to a partner.	**__X__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
AC Metric 2B: **Materials attend to the full meaning of each practice Standard.** **How to Find the Evidence:** For context, read Criterion #7 in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).		**Use the questions for AC Metric 2B to evaluate Metric 2B. Record evidence for each question and rate Metric 2B.** **____Meets (2)** **__X__Partially Meets (1)** **____Does Not Meet (0)**
Over the course of any given year of instruction, is each mathematical practice Standard meaningfully present in the form of assignments, activities, or problems that stimulate students to develop the habits of mind described in the practice Standard? Evaluate lessons, chapter/ unit assessments, and homework assignments for evidence of each mathematical practice being meaningfully present in instruction.	**Evidence-** The practice standards are embedded throughout the program materials. The practice standards are meaningfully present. Examples: MP.1 – Problem Based tasks require students to make sense of an application problem and solve it. MP.2 – Students are regularly asked to verbalize their learning MP.6 – Vocabulary is clearly stated in the SRB.	

Are teacher-selected materials that explain the role of the practice Standards in the classroom and in students' mathematical development included? Are alignments to practice Standards accurate? Evaluate teacher materials, paying attention to explanations of the role of the practice Standards in the classroom and in students' mathematical development. Evaluate documents aligning lessons to practice Standards for accuracy. NOTE: Examples to look for when evaluating this metric might include the following: a highly scaffolded problem should not be aligned to MP.1; or a problem that directs a student to use a calculator should not be aligned to MP.5; or a problem about merely extending a pattern should not be aligned to MP.8.	**Evidence-** No. The current curriculum does not include specific materials that explain the role of the practice standards in student understanding. Teacher text does include CCSSM, prerequisite skills, and words to know at the beginning of each lesson.	
AC Metric 2C: **Materials support the Standards' emphasis on mathematical reasoning.** **How to Find the Evidence:** For context, read Criterion #8 in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).		**Use the questions for AC Metric 2C to evaluate Metric 2C. Record evidence for each question and rate Metric 2C.** **_X___Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Do the materials support students in constructing viable arguments and critiquing the arguments of others concerning course-level mathematics that is detailed in the content Standards? Read Standard for Mathematical Practice 3. Evaluate teacher and student materials to ensure that students are given opportunities to reason with grade-level mathematics.	**Evidence-** The station activities require students to work together, share ideas, and solve problems. Some of the PBT asks students to explain their reasoning but the majority only ask them to find a solution.	
Do the materials support students in producing not only answers and solutions, but also, in a course-appropriate way, arguments, explanations, diagrams, mathematical models, etc., especially in the Widely Applicable Prerequisites? Familiarize yourself with the Widely Applicable Prerequisites. Evaluate teacher and student materials to understand the types of work students are expected to produce.	**Evidence-** Students are asked to solve problems. Often times there are multiple ways to solve the problem and students could use different diagrams or models. However, rarely does it ask for students to explain their solution in words or explain what their solution means. The station activities engage students in explaining their reasoning. Example: Unit 2, Station 4 – students explain direction of parabola	
Do materials explicitly attend to the specialized language of mathematics? Is the language of argument, problem solving, and mathematical explanations taught rather than assumed? Evaluate teacher and student materials, paying attention to how mathematical language is taught. NOTE: An example of evaluating this Criterion might include looking at whether students are supported in: basing arguments on definitions; using the method of providing a counter example; or recognizing that examples alone do not establish a general statement.	**Evidence-** The text uses appropriate mathematical language. The key concepts section of each sub lesson defines any mathematical vocabulary words that students will need to know. Not only are these the new math terms but also a review of previous math terms. The text tries to use the same language as the content standards	

Alignment Criterion 2: Materials must demonstrate authentic connections between content Standards and practice Standards.

AC 2: Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 points, the Criterion has not been met. Check the final rating.
Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewers only.)**

Before moving to Alignment Criterion 3, record the final Meets or Does Not Meet rating in the Evaluation Summary.

_X___Meets

____Does Not Meet

Strengths/Weaknesses:

Included multiple lower and higher end thinking problems. Definitions and prerequisites listed are useful to teachers and students. Extra resources listed at the beginning of each lesson to enhance or supplement the lesson.

The practice standards are not specifically stated.

Alignment Criterion 3:
Access to the Standards for All Students- Materials must provide supports for English Language Learners and other special populations.

Because Standards are for all students, alignment requires thoughtful support to ensure all students are able to meet the Standards. Thus, aligned materials must provide supports for English Language Learners and other special populations.

Because Standards are for all students, alignment requires thoughtful support to ensure all students are able to meet the Standards. Thus, aligned materials must provide supports for English Language Learners and other special populations.

Required Materials:

- Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf)
- Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math Publishers_Criteria_HS_Spring_2013_FINAL1.pdf)
- From the materials being evaluated: teacher guides, student texts and workbooks

Rating this Criterion:

Alignment Criterion 3 is rated as Meets or Does Not Meet.

To rate Alignment Criterion 3, first rate metrics 3A, 3B, and 3C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 3 if the materials rate 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as support for special population, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.

AC Metric 3A: **Support for English Language Learners and other special populations is thoughtful and helps those students meet the same Standards as all other students. The language in which problems are posed is carefully considered.** **How to Find the Evidence:** Evaluate teacher and student materials, paying attention to supports offered for special populations.	**Evidence-** The program overview book includes several graphic organizers that can be copied. The SRB and SWB include a glossary with English and Spanish definitions. The TRB includes guiding questions to assist students through problem based tasks. There are Support Supplement books for each unit. These include teaching and reviewing material specified per lesson. The problem based tasks would be difficult for ESL students. There are no differentiated homework or assessments.	**____Meets (2)** **__X__Partially Meets (1)** **____Does Not Meet (0)**
AC Metric 3B: **Materials provide appropriate level and type of scaffolding, differentiation, intervention, and support for a broad range of learners with gradual removal of supports, when needed, to allow students to demonstrate their mathematical understanding independently.** **How to Find the Evidence:** Evaluate teacher and student materials, paying attention to whether materials provide differentiation that will lead all learners to engage with on-grade-level content.	**Evidence-** Each lesson has guided practice problems with detailed step by step instructions for solving each problem. There are also the support materials as mentioned in the previous statement. The online resources provide a way for students to get extra instruction. There is an honors program for higher achieving students.	**_X___Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
AC Metric 3C: **Design of lessons recommends and facilitates a mix of instructional approaches for a variety of learners such as using multiple representations (e.g., including models, using a range of questions, checking for understanding, flexible grouping, pair-share).** **How to Find the Evidence:** Evaluate teacher materials, noting instructional approaches suggested for whole class and differentiated lessons and activities.	**Evidence-** Each unit/lesson provides the teacher with multiple instructional options. There are PPT for direct instruction, problem based tasks, online resources and applets, and station activities. Several of these options can be done using collaboration as decided by the teacher. Teachers can mix and match materials as they see fit.	**_X___Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**

Alignment Criterion 3: Materials must provide supports for English Language Learners and other special populations.	__X__Meets ____Does Not Meet
AC 3 Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 points, the Criterion has not been met. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewers only.)** **Move to the Evaluation Summary and record the final Meets or Does Not Meet rating .**	**Strengths/Weaknesses:** Multiple resources for teachers and students. There are supplemental and honors material for each unit. There is limited support for ELL students.

Once an evaluation for alignment to the Shifts and major features of the CCSS has been conducted using Sections 1-3, it's important to evaluate for overall quality and best practices. A starting list of Indicators of Quality are suggested below. States, districts and others evaluating instructional materials are encouraged to add to this list to ensure materials reflect local contexts. For background information on some of the Indicators of Quality in this section, refer to pp.16–18 in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).

Indicators of Quality	**Evidence- Give specific examples.**	**Rating: (Reviewer only.)**
1. Lessons are thoughtfully structured and support the teacher in leading the class through the learning paths at hand, with active participation by all students in their own learning and in the learning of their classmates.	**Evidence-** Teachers are provided with a variety of materials that can be used to support the teacher in the leading the class, such as warm-up exercise, PowerPoints with guided practice problems and interactive applets, problem-based tasks, practice problems, station activities, pre- and progress assessments, and recommended resources. The teacher is provided with detailed materials and can choose how to incorporate those into the class. A large portion of these materials require students to be actively involved in the lesson and learning.	**(Reviewer only.)** **___X___ Yes** **_____ No**

2.. The underlying design of the materials includes both problem[illegible]d exercises. (In solving problems, students learn new mathematics, whereas in working exercises, students apply what they have already learned to build mastery.) Each problem or exercise has a purpose. **NOTE: This Criterion does not require that the problems and exercises be labeled as such.**	**Evidence-** Each sub-lesson begins with a warm up. These exercises are typically a review that connects to the lesson. Then the sub-lesson has several examples as a guided practice. Typically these examples are problems because they are teaching students how to do something new. Then there is a problem-based task which would be considered an exercise because students are asked to apply their knowledge to a new situation. Finally, each sub lesson ends with 10 practice exercise for students build mastery on the concepts.	**(Reviewer only.)** __X____ **Yes** _____ **No**
3. Design of assignments is not haphazard: exercises are given in intentional sequences in order to strengthen students' mathematical understanding.	**Evidence-** There is an assignment following each sub-lesson. Each assignment is 10 questions. The questions are aligned with the problems presented in the lesson. Typically assignments begin with procedural problems then application problems.	**(Reviewer only.)** ___X___ **Yes** _____ **No**
4. There are separate teacher materials that support and reward teacher study including, but not limited to: discussion of the mathematics of the units and the mathematical point of each lesson as it relates to the organizing concepts of the unit, discussion on student ways of thinking and anticipating a variety of students responses, guidance on lesson flow, guidance on questions that prompt students thinking, and discussion of desired mathematical behaviors being elicited among students.	**Evidence-** Each lesson begins with instructions for the teacher. This includes the standards, essential questions, vocabulary, and recommended resources. The recommended resources are typically websites that provide additional tutorials or an interactive website to discover or review content. Each sub-lesson has a list of key concepts and a list of common errors/misconceptions to watch for. Each problem based tasks is accompanied with "Coaching" questions to guide students as well as sample responses. At the end of each sub lesson there is a recommended closure activity which is usually to select one of the essential questions and discuss it or write a journal entry. There is not a pacing guide provided, which could be useful.	**(Reviewer only.)** ___X___ **Yes** _____ **No**
5. Manipulatives suggested in the materials are faithful representations of the mathematical objects they represent and are connected to written methods.	**Evidence-** There is not a large amount of suggested manipulatives. At the end of each unit there are Station activities that provide some hands-on experiences. Some of these activities recommend using manipulatives. All suggestions are appropriate for the mathematical content and aid in student understanding. Example: Unit 2 has 4 stations. The manipulatives recommended are calculators and graph paper.	**(Reviewer only.)** ___X___ **Yes** _____ **No**

6. Materials include a variety of curriculum-embedded assessments. Examples include pre-, formative, summative, and self-assessment resources.	**Evidence-** Each unit features a variety of ways to assess student understand. Each lesson has a pre-assessment. Each sub-lesson has 10 exercises and a problem-based task. Then each lesson ends with a progress assessment. Finally each unit ends with a unit assessment. Paper and electronic assessments are available.	**(Reviewer only.)** **___X___ Yes** **_____ No**
7. Assessments contain aligned rubrics, answer keys, and scoring guidelines that provide sufficient guidance for interpreting student performance.	**Evidence-** There are answer keys to all homework exercises, warm ups, pre-assessments, progress assessments, and unit assessments. These are located in the back of each TRB for each unit. The tasks that accompany each lesson do not include a rubric or specific answer key. The answers can be found using the coaching responses.	**(Reviewer only.)** **__X____ Yes** **_____ No**
8. Materials assess student proficiency using methods that are accessible and unbiased, including the use of course-level language in student prompts.	**Evidence-** Assessments have multiple choice questions and open response questions. The open response questions are multi step.	**(Reviewer only.)** **__X____ Yes** **_____ No**
9. Materials are carefully evaluated by qualified individuals, whose names are listed, in an effort to ensure freedom from mathematical errors and course-level appropriateness.	**Evidence-** There are 18 people that developed and reviewed this curriculum. They are listed in on the title page of each book.	**(Reviewer only.)** **___X___ Yes** **_____ No**
10. The visual design supports students in engaging thoughtfully with the subject. Navigation through the text is clear.	**Evidence-** **Visual Design – Student book gives easily followed guided practice. It has key concepts listed and defined. Then gives extra practice problems.** **Navigation – Each unit is a separate book. Many of the sections are extremely long. The digital textbook is difficult to navigate.**	**(Reviewer only.)** **___X___ Yes** **_____ No**

Reviewer IMET Evaluation Summary **Title/Level: ___CCSS Integrated Pathway Math II_____**

Publisher: ___Walch Integrated Math_____ **Copyright: __2013/2014___**

ISBN:_978-0-8251-7168_____

Reviewer ID # ___JB & CH_____ **Date Review Completed:___3/9/2016_____**

Non-Negotiable Criteria-The Non-Negotiable must be met in order for the Non-Negotiable Alignment Criteria to be met overall.		
Non- Negotiable 1: Focus and Coherence **___X__ Meets** **_____ Does Not Meet**		
Non-Negotiable Overall: **___X__ Meets _____ Does Not Meet**		
Alignment Criteria- Each Alignment Criterion must be met with a sufficient number of points in order for Alignment Criteria to be labeled as "Meets" overall. The more points the materials receive on the Alignment Criteria, the better they are aligned.		
Alignment Criterion 1: Rigor and Balance **Points: __6___ of 6 possible.** **(Materials must receive at least 5 of 6 points to align.)** **_____X__ Meets** **_____ Does Not Meet**	**Alignment Criterion 2: Standards of Mathematical Practice** **Points: __5___ of 6 possible.** **(Materials must receive at least 5 of 6 points to align.)** **___X____ Meets** **_____ Does Not Meet**	**Alignment Criterion 3: Access to Standards for All Learners** **Points: __5___ of 6 possible.** **(Materials must receive at least 5 of 6 points to align.)** **____X___ Meets** **_____ Does Not Meet**

Alignment Criteria Overall:

__X___ Meets **_____ Does Not Meet**

If the materials meet the Non-Negotiable Criterion and each Alignment Criterion, they are aligned to the Shifts and major features of the Standards. **Do the materials meet every Non-Negotiable and Alignment Criterion? __X___ Yes _____ No**

What are the specific areas of strength and weakness based on this evaluation? Publishers or others modifying or developing assessments can use this information to make improvements and/or to remedy gaps in the alignment of assessment materials.

Strengths

- Covers over 50% of the WAP
- Closely aligned to the CCSSM
- Multiple problem sets and examples
- Several resource materials (online and print)
- Standards clearly stated for each lesson
- Vocabulary and Key Concepts

Weakness

- Practice Standards are not stated
- Limited resources for ELL students
- Cohesion is lacking in some of the units

2015-16 Mathematics Interim Review Recommendation & Summary

Publisher Name:	Walch Integrated Math
Title:	CCSS Integrated Pathway Mathematics III
ISBN #	978-0-8251-7456-8
Grade Level(s) or Course:	Integrated Mathematics III
Reviewer ID:	JB & CH

RECOMMENDED AS:

____X____**Core Mathematics Program-** a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials. Substantial evidence clearly supports the designation of this program as Core.

_____**Other Mathematics Program-** a program that substantially, but partially, meets the *focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for* supplemental materials. Substantial evidence clearly supports the designation of this program as Other.

_____**Component Mathematics Program-** a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs. Substantial evidence clearly supports the designation of this program as Component.

_____**Intervention Program-** a program designed and intended to target and support students' specific needs. Substantial evidence clearly supports the designation of this program as Intervention.

_____ **Does not meet criteria** for recommendation as a Curricular Material or Online Resource for Mathematics.

EVIDENCE SUMMARY:

FOCUS-
The material is built around the units specified in the CCSS for Mathematics Appendix A. Units are organized around the important topics in mathematics and reflect the focus of the standards.

COHERENCE-
Each lesson identifies the necessary prerequisite skills and activates prior knowledge. Some of the lessons address unnecessary material, such as 4th year content.

RIGOR-
The materials address conceptual understanding, procedural skill and fluency, and application. The guided practice problems build conceptual understanding and procedural skill and fluency. The problem based tasks address application and modeling. Some of the material may be too difficult for a regular student.

CONCEPTUAL UNDERSTANDING-
The journal prompts, practice problems, and collaborative learning opportunities address student's conceptual understanding.

MATHEMATICAL PRACTICES-
The mathematical practices are embedded throughout the material. There are multiple ways for students to model, reason, and make sense of problems. However, the practice standards are not specifically stated in the text.

ACCESSIBILITY OF STANDARDS TO ALL STUDENTS-
There is an Honors Program for high achieving students. Students have access to a Workbook and Resource Book for each unit. There are multiple online resources also available. There are limited resources for ELL students.

OTHER:

Strengths

- Covers over 50% of the WAP
- Closely aligned to the CCSSM
- Multiple problem sets and examples
- Several resource materials (online and print)
- Standards clearly stated for each lesson
- Vocabulary and Key Concepts

Weakness

- Practice Standards are not stated
- Limited resources for ELL students
- Difficulty level may be too high for the average student

2015-1 nterim Mathematics Review

Mathematics Evaluation Tool – High School

Publisher: Walch Integrated Math

Title of Material: CCSS Integrated Pathway Math III

Author: Walch Integrated Math

ISBN #: 978-0-8251-9456-8 **Copyright** 2014, 15

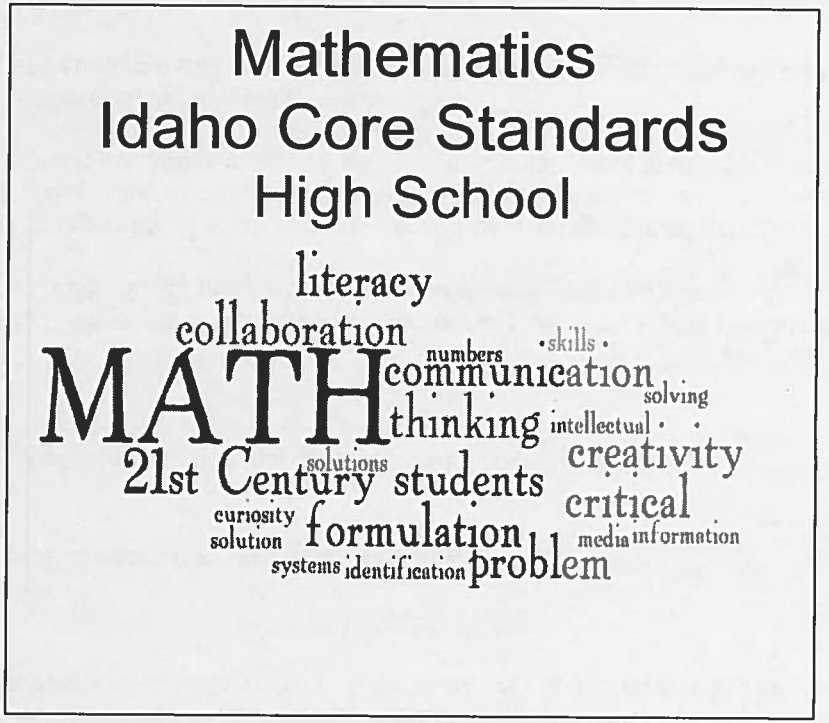
Reviewer ID: CH JB

Core Mathematics Program- a complete stand-alone program which meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with minimal or no need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Core.

Other Mathematics Program- a program that substantially, but partially, meets the focus, coherence and rigor of the Idaho Core Mathematics Standards, with some need for supplemental materials.
Substantial evidence clearly supports the designation of this program as Other.

Component Mathematics Program- a program designed and intended to be used with another program. This program supports and/or enhances the focus, coherence and rigor of Core and Other Programs.
Substantial evidence clearly supports the designation of this program as Component.

Intervention Program- a program designed and intended to target and support students' specific needs.
Substantial evidence clearly supports the designation of this program as Intervention.



- Evaluation Form adapted from Instructional Materials Evaluation Toolkit (IMET).

The IMET was developed by Student Achievement Partners. Educators may use or adapt. http://creativecommons.org/licenses/by/3.0/ Download this tool at http://achievethecore.org/IMET

Instructional Materials Evaluation Tool
Mathematics, High School

What Are the Purposes of the IMET?
This Math IMET is designed to help educators determine whether instructional materials are aligned to the Shifts and major features of the Common Core State Standards (CCSS). The substantial instructional Shifts (http://www.corestandards.org/other-resources/key-shifts-in-mathematics/) at the heart of the Common Core State Standards are:
- **Focus** strongly where the Standards focus
- **Coherence**: Think across grades and link to major topics within the grade
- **Rigor**: In major topics, pursue conceptual understanding, procedural skill and fluency, and application with equal intensity.

The IMET draws directly from the following documents:
- Common Core State Standards for Mathematics (www.corestandards.org/Math)
- Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013) (http://www. corestandards.org/wp-content/uploads/Math_Publishers_Criteria_ HS_Spring_2013_FINAL1.pdf)

When to use the IMET
1. Purchasing materials: Many factors go into local purchasing decisions. Alignment to the Standards is a critical factor to consider. This tool is designed to evaluate alignment of instructional materials to the Shifts and the major features of the CCSS. It also provides suggestions of additional indicators to consider in the materials evaluation and purchasing process
2. Evaluating materials currently in use: The IMET can be used to analyze the degree of alignment of existing materials and help to highlight specific, concrete flaws in alignment. Even where materials and tools currently in use fail to meet one or more of these criteria, the pattern of failure is likely to be informative. States and districts can use the evaluation to create a thoughtful plan to modify or combine existing resources in such a way that students' actual learning experiences approach the focus, coherence, and rigor of the Standards.
3. Developing programs: Those developing new programs can use this tool as guidance for creating aligned curricula.

Please note this tool was designed for evaluating comprehensive curricula (including any supplemental or ancillary materials), but it was not designed for the evaluation of standalone supplemental materials.

Who Uses the IMET?
Evaluating instructional materials requires both subject-matter and pedagogical expertise. Evaluators should be well versed in the Standards (www.corestandards.org/Math) for all grades in which materials are being evaluated. This includes understanding the Widely Applicable Prerequisites (www.achievethecore.org/prerequisites), how the content fits into the progressions in the Standards (www. achievethecore.org/progressions), and the expectations of the Standards with respect to conceptual understanding, procedural skill and fluency, and application. Evaluators also should be familiar with the substantial instructional Shifts (http://www.corestandards.org/other-resources/key-shifts-in-mathematics/) of Focus, Coherence and Rigor that are listed above.

Getting Started
Prior to Evaluation

Assemble all of the materials necessary for the evaluation. It is essential for evaluators to have materials for all grades covered by the program, as some criteria cannot be rated without having access to each grade. In addition, each evaluator should have a reference copy of the Common Core State Standards for Mathematics (CCSSM) and the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).

Before conducting the evaluation itself, it is important to develop a protocol for the evaluation process. The protocol should include having evaluators study the Publishers' Criteria and the IMET. It will also be helpful for evaluators to get a sense of each program overall before beginning the process. At a minimum, this would include reading the front matter of the text, looking at the table of contents and paging through multiple chapters.

Sections 1-3 below should be completed to produce a comprehensive picture of the strengths and weaknesses of the materials under evaluation. Information about areas in need of improvement or supplementation should be shared with internal and external stakeholders.

Navigating the Tool

Begin with Section 1: Non-Negotiable Alignment Criteria

- The Non-Negotiable Alignment Criteria must each be met in full for materials to be considered aligned to the Shifts and the major features of the Common Core State Standards. Each Non-Negotiable Alignment Criterion has one or more metrics associated with it; every one of these metrics must be met in order for the criterion as a whole to be met.

- Examine the relevant materials and use evidence to rate the materials against each criterion and its associated metric(s).

- Record and explain the evidence upon which the rating is based.

Continue to Section 2: Alignment Criteria

- The Alignment Criteria must each be met for materials to be considered aligned to the Shifts and the major features of the Common Core State Standards. Each Alignment Criterion has one or more metric associated with it; a specific number of these metrics must be met or partially met in order for the criterion as a whole to be met.

- Examine the materials in relation to these criteria, assigning each metric a point value. Rate the criterion as "Meets" or "Does Note Meet" based on the number of points assigned. The more points the materials receive on the alignment Criteria, the better they are aligned.

- Record and explain the evidence upon which the rating is based.

Proceed to Section 4: Indicators of Quality

- Indicators of Quality are important considerations that will help evaluators better understand the overall quality of instructional materials. These considerations are not criteria for alignment to the CCSS, but they provide valuable information about additional program characteristics. Evaluators may want to add their own indicators to the examples provided.

Directions for Non-Negotiable 1

Focus and Coherence

Criterion	Evidence- Give specific examples.	Rating: (Reviewer only.)
Non-Negotiable 1: Focus and Coherence- Materials must focus coherently on the Widely Applicable Prerequisites in a way that is consistent with the progressions in the Standards. Focus and coherence are the two major evidence-based design principles of the Common Core State Standards for Mathematics (CCSSM, p. 3). Focus is necessary in order to fulfill the ambitious promise the states have made to their students by adopting the Standards: greater achievement at the college and career-ready level; greater depth of understanding of mathematics; and a rich classroom environment in which reasoning, sense-making, applications, and a range of mathematical practices flourish. In high school courses, narrowing and deepening the curriculum creates a structure that ties topics together. Thus, materials must focus coherently on the Widely Applicable Prerequisites in a way that is consistent with the progressions in the Standards.	Focus and coherence are the two major evidence-based design principles of the Common Core State Standards for Mathematics (CCSSM, p. 3). Focus is necessary in order to fulfill the ambitious promise the states have made to their students by adopting the Standards: greater achievement at the college and career-ready level; greater depth of understanding of mathematics; and a rich classroom environment in which reasoning, sense-making, applications, and a range of mathematical practices flourish. In high school courses, narrowing and deepening the curriculum creates a structure that ties topics together. Thus, materials must focus coherently on the Widely Applicable Prerequisites in a way that is consistent with the progressions in the Standards. **Required Materials:** • Common Core State Standards for Mathematics (www.corestandards.org/wpcontent/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_HS_Spring_2013_FINAL1.pdf) • Widely Applicable Prerequisites for College and Careers (http://achievethecore.org/prerequisites) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion**: Non-Negotiable 1 is rated as Meets or Does Not Meet. To rate Non-Negotiable 1, first rate Metrics 1A–1H. Each of these eight metrics must be rated as Meets in order for Non-Negotiable 1 to be rated as Meets. Rate each metric 1A–1H as Meets or Does Not Meet/Insufficient Evidence. If the evidence examined shows that the Criterion is met, then mark the Criterion as Meets. If the evidence examined shows that the Criterion is not met—or if there is insufficient evidence to make a determination—then mark the Criterion as Does Not Meet/Insufficient Evidence. Support all ratings with evidence.

Metric NN1A: **In any single course, students spend at least 50% of their time on Widely Applicable Prerequisites.** **How to Find the Evidence:** Familiarize yourself with the Widely Applicable Prerequisites. Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, lessons, homework assignments, and assessments. (Evaluate both student and teacher materials.) Consider time spent on the Widely Applicable Prerequisites and judge qualitatively whether students and teachers using the materials as designed will devote the majority of time to the Widely Applicable Prerequisites For context, read Criterion #1 in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** Students spend more than 50% of their time on the Widely Applicable Prerequisites. The percent of each unit of the sub-lessons that address at least one WAP are as follows: Unit 1: 6% Unit 2A: 100% Unit 2B: 100% Unit 3: 0% Unit 4A: 67% Unit 4B: 67%	**__X__Meets** **____Does Not Meet Insufficient Evidence**
Metric NN1B: **Student work in Geometry involves significant work with applications/modeling and problems that use algebra skills.** **How to Find the Evidence:** Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, lessons, homework assignments, and assessments. (Evaluate both student and teacher materials. NOTE: Since Geometry contains relatively fewer Widely Applicable Prerequisites, this Criterion is important to help foster students' college and career readiness. Problems that use algebra skills might include, for example, algebraic geometry problems in a coordinate setting, or problems of measurement involving unknown quantities.	**Evidence-** Most of the geometry work done in Integrated Math 3 is trigonometry, Unit 3. In this unit students use law of sines and law of cosines in real world application problems, such has finding the height of a tree or the width of a river. Students are also asked to model periodic phenomena using trigonometric functions. In Unit 4B lesson 5 students are asked to do geometric modeling. This includes two-dimensional cross sections of three-dimensional shapes, density, and design. Although there are not a lot of geometry concepts addressed in this text, when there is there are always application and algebra skills involved.	**__X__Meets** **____Does Not Meet Insufficient Evidence**

Metric NN1C: **There are problems at a level of sophistication appropriate to high school (beyond mere review of middle school topics) that involve the application of knowledge and skills from grades 6-8.** **How to Find the Evidence:** Evaluate lessons, chapter/unit assessments, and homework assignments. NOTE: Problems should include application of the following topics from grades 6-8: • Ratios and proportional relationships. • Percentage and unit conversions, e.g., in the context of complex measurement problems involving quantities with derived or compound units (such as mg/mL, kg/ m3, acre-feet, etc.). • Basic function concepts, e.g., by interpreting the features of a graph in the context of an applied problem. • Concepts and skills of geometric measurement e.g., when analyzing a diagram or schematic. • Concepts and skills of basic statistics and probability (see grades 6–8.SP) • Performing rational number arithmetic fluently. For context, read Table 1 on Page 8 of the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** Most prerequisites of this course are from Integrated Math I and II. However the skills for 6-8 grade are also addressed. Examples of concepts that extends the following 6-8 Ratios and proportions - Lesson 1.4.1 Estimating Sample Proportions Percentages and Unit Conversions - Lesson 3.1.1 converting radians and degrees Applying basic function concepts - Lesson 3.3.2 - Using Trig Function to Model Periodic Phenomena Geometric Measurement - Unit 4B Lesson 5 - Geometric Modeling (cross sections, density...) Basic Statistics and Probability- Unit 1 - Inferences and Conclusions from Data Rational Number Arithmetic - Unit 2B Lesson 1 - Operating with Rational Equations	**__X__Meets** **____Does Not Meet Insufficient Evidence**
Metric NN1D: **Materials base courses on the content specified in the Standards.** **How to Find the Evidence:** Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, and lessons in both student and teacher materials. For context, read Criterion #3a in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** Every lesson addresses at least one of the common core standards. The curriculum was written after the standards were released and created to align to the Integrated Pathway Mathematics III outlines in Appendix A of the CCSS. Walch included an Alignment Analysis of the CCSS that was completed in 2013. According to the review, the material demonstrates strong alignment relationships to all standards and indicators (100%) specifies by the CCSS for Math III. Example: Unit 1 covers statistics and probability that go beyond the basics	**__X__Meets** **____Does Not Meet Insufficient Evidence**

Metric NN1E: **Materials give all students extensive work with course-level problems.** **How to Find the Evidence:** Evaluate both student and teacher materials. If the materials provide resources for differentiated learning, consider whether lower-performing students have opportunities to engage with course-level problems. Also consider whether higher-performing students are given opportunities to learn current course-level content in greater depth. For context, read Criterion #3b in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** The material includes a variety of ways for students to work with course-level problems. Each sub-lesson includes several examples, a problem based task, homework practice problems. Each lesson includes a progress assessment. Each unit includes a unit assessment. There are Honor supplementary material and online resources to give students more opportunities.	**_X___Meets** **____Does Not Meet Insufficient Evidence**
Metric NN1F: **Materials relate course-level concepts explicitly to prior knowledge from earlier grades or courses. The materials are designed so that prior knowledge becomes reorganized and extended to accommodate the new knowledge.** **How to Find the Evidence:** Evaluate student and teacher materials, looking for problems that involve extending the knowledge learned in earlier grades and courses. NOTE: An example of evaluating this Criterion might be to look at whether materials connect the equation of a circle with the distance formula and the Pythagorean theorem. For context, read Criterion #3c in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** Each sub-lesson identifies and often reviews the prior knowledge needed for the lesson. Each sub-lesson begins with a warm-up problem that activates prior knowledge. After the warm-up there is a section on how to make connections to the lesson. Example: Lesson 3.1.2 states that the prerequisite skills need for the sub-lesson are: measuring angles in radians, converting between radians and degrees, finding basic trig functions. The warm-up has student converting degrees to radians and finding arc length.	**__X__Meets** **____Does Not Meet Insufficient Evidence**
Metric NN1G: **Materials include learning objectives that are visibly shaped by CCSSM cluster and domain headings.** **How to Find the Evidence:** Select several clusters from the course being evaluated. Evaluate teacher and student materials in relation to these clusters. For context, read Criterion #4a in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** Each lesson begins with the CCSS that are addressed in the following sub-lessons. Then there is a list of essential questions. In Appendix A of the CCSS there is a suggested unit outline. This textbook very closely follows this outline. Example: Unit 4B covers A-CED.1,3, & 4, F-IF.4,5,6 & 9, G-MG.1, 2, 3	**__X__Meets** **____Does Not Meet Insufficient Evidence**

Metric NN1H: **Materials include problems and activities that serve to connect two or more clusters in a domain, or two or more domains in a category, or two or more categories, in cases where these connections are natural and important.** **How to Find the Evidence:** In the course being evaluated, choose two or more clusters, two or more domains, or two or more categories for which connections are natural and important. Evaluate the units, chapters, and lessons that deal with the chosen topics, looking for problems and activities that serve to connect the chosen clusters or domains. NOTE: An example of evaluating this Criterion might be to look at whether materials include problems in which students analyze a situation by building a function, graphing it, and using it to create and solve an equation. For context, read Criterion #4b in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** There are several sub-lessons that cover two or more clusters in one domain. Example: Lesson 4B.3.1 addresses F-IF.4, F-IF.5, and F-IF.6 There is also a lesson that covers two or more domains. Example: Lesson 4A.2.1 covers F-BF.4a and F-LE.4	**__X__Meets** **____Does Not Meet Insufficient Evidence**
Non-Negotiable 1: Focus and Coherence- Materials must focus coherently on the Widely Applicable Prerequisites in a way that is consistent with the progressions in the Standards. **Metric NN 1:** If all metrics 1A–1H were rated as Meets, then rate Non-Negotiable 1 as Meets. If one or more metrics were rated as Does Not Meet/Insufficient Evidence, then rate Non-Negotiable 1 as Does Not Meet. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)** **Before moving to Alignment Criterion 1, record the final Meets or Does Not Meet rating in the Evaluation Summary.**		**__X__Meets** **____Does Not Meet** Strengths/Weaknesses Closely aligned to CCSSM and clearly stated in each lesson. Address the WAP in at least 50% of the lessons. Connections are made between multiple domains and clusters throughout the text. Some of the material may be difficult or too rigorous for average students.

Now continue by evaluating Alignment Criterion 1 for Rigor and Balance.

Directions for Alignment Criterion 1

Rigor and Balance

Alignment Criterion 1: **Rigor and Balance- Materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.** The Standards set expectations for attention to all three aspects of rigor: conceptual understanding, procedural skill and fluency, and applications. Thus, materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations.	The Standards set expectations for attention to all three aspects of rigor: conceptual understanding, procedural skill and fluency, and applications. Thus, materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations. • Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_HS_Spring_2013_FINAL1.pdf) • Widely Applicable Prerequisites for College and Careers (http://achievethecore.org/prerequisites) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion:** Alignment Criterion 1 is rated as Meets or Does Not Meet. To rate Alignment Criterion 1, first rate metrics 1A, 1B, and 1C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). For each metric, guiding questions are provided to aid in gathering evidence. Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 1 if the materials rate 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as rigor and balance, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.
AC Metric 1A: **The materials support the development of students' conceptual understanding of key mathematical concepts, especially where called for in specific content Standards or cluster headings.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Widely Applicable Prerequisites that relate specifically to conceptual understanding to use throughout the questions associated with this metric. NOTE: Some examples of clusters or Standards that call for conceptual understanding include: N-RN.A.1, A-APR.B, A-REI.A.1, A-REI.D.10, A.REI.D.11, F.IF.A.1, F-LE.A.1, G.SRT.A.2, G-SRT.C.6, S-ID.C.7 For context, read Criterion #2a in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	• Choose a cluster/Standard from the Widely Applicable Prerequisites that is aligned to each aspect of rigor and use it to evaluate these metrics. It is most helpful if the same clusters and Standards are chosen for all of the programs being evaluated. (Guidance in choosing clusters/Standards is included in "How to Find the Evidence" below.)	**Use the questions for AC Metric 1A to evaluate Metric 1A. Record evidence for each question and rate Metric 1A.** **__X__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Is conceptual understanding attended to thoroughly where the Standards set explicit expectations for understanding or interpreting? Evaluate lessons, chapter/unit assessments and homework assignments, paying attention to work aligned to Standards that explicitly call for understanding or interpreting.	**Evidence-** Each lesson and sub-lesson addresses at least one CCSSM. Example: Unit 2B.1.1, A-SSE.1.2 and A-APR.6 are addressed. The problem based task makes them interpret and explain.	

Do the materials feature high-quality conceptual problems and conceptual discussion questions? Evaluate lessons, chapter/unit assessments, and homework assignments. NOTE: Examples of conceptual problems might include such questions as "What is the maximum value of the function f(t) = 5 – t2 ?" or "Is √2 a polynomial? How about ½(x + √2)+ ½ (-x + √2)?"	**Evidence-** Each lesson has conceptual problems. Some lessons ask students to discover concept using conceptual problems. The station activities ask students to discuss and collaborate.	
Do the materials feature opportunities to identify correspondences across mathematical representations? Evaluate lessons, chapter/unit assessments and homework assignments. NOTE: An example of evaluating this metric might include looking at whether materials support students in identifying correspondences among the expression that defines a function, the graph that shows the relationship, and the behavior of the phenomenon being modeled (if any).	**Evidence-** The materials feature opportunities to identify correspondence across multiple representations. In some situations students are asked to select which representation best serves the concept or situation at hand. Example: Unit 1 Lesson 1 students are asked to interpret data, read and compare histograms, plot data, and determine distribution.	
AC Metric 1B: **The materials are designed so that students attain the fluencies and procedural skills required by the Standards.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Widely Applicable Prerequisites that relate specifically to fluency and procedural skill to use throughout the questions associated with this metric. NOTE: Some examples of Standards that call for procedural skill and fluency include: A-SSE.A.1b, A-SSE.2, A-APR.A.1, A-APR.C.6, F-BF.B.3, G-GPE.B.4, G-GPE.B.5, G-GPE.B.7, G-CO.A.1, G-SRT.B.5 For context, read Criterion #2b in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).		**Use the questions for AC Metric 1B to evaluate Metric 1B. Record evidence for each question and rate Metric 1B.** **__X__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Is progress toward fluency and procedural skill interwoven with the student's developing conceptual understanding of the skills in question? Evaluate lessons, chapter/unit assessments, daily routines, and homework assignments for evidence that the development of fluency and procedural skill is supported by conceptual understanding.	**Evidence-** Development of procedural skill and fluency is embedded in the Guided Practice, Problem Based Task, and Practice Problems throughout the curriculum. Practice problems in the lesson and assignments address procedural skills first and then progress into application problems. Example: Unit 2B, Lesson 2 - The practice walks students through solving radicals, then gives some without step by step directions, then a problem based task to use it in a story problem.	

Are purely procedural problems and exercises present that include cases in which opportunistic strategies are valuable and generic cases that require efficient and general procedures present? Evaluate lessons, chapter/unit assessments, daily routines, and homework assignments. NOTE: Problems in which opportunistic strategies are valuable might include such examples as solving $x2 + 5 = 49 + 5$ or $(3x - 2)2 = 6x - 4$. Generic cases that require efficient and general procedures might include such problems as solving $c + 8 - c2 = 3(c - 1)2 - 5)$.	**Evidence-** The Practice Problems found in the SWB and SRB for each sub-lesson begin with procedural problems with a variety of cases. These skills are a step towards conceptual understanding and application problems. Example: Unit 2B, Lesson 2.2 - Question 1-3 keep getting more difficult, but are all procedural.	
AC Metric 1C: **The materials are designed so that teachers and students spend sufficient time working with engaging applications, without losing focus on the Widely Applicable Prerequisites.** **How to Find the Evidence:** Select one or more cluster(s) or Standard(s) from the Widely Applicable Prerequisites that relate specifically to application to use throughout the questions associated with this metric. NOTE: Some examples of clusters or Standards that call for application include: N-Q.A, A-SSE.B.3, A-REI.D.11, F-IF.B, F-IF.C.7, F-BF.A.1, G-SRT.C.8, S-ID.A.2, S-IC.A.1 For context, read Criterion #2c in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).		**Use the questions for AC Metric 1C to evaluate Metric 1C. Record evidence for each question and rate Metric 1C.** **__X__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Are there single- and multi-step contextual problems, including non-routine problems, that develop the mathematics of the course, afford opportunities for practice, and engage students in problem solving? Do the problems attend thoroughly to those places in the content Standards where expectations for multi-step and real-world problems are explicit? Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** Every Standard is addressed by multiple application problems, in the Practice Problems and Problem Based Tasks. All of these problems require students to apply mathematics to solve single and multi-step problems in meaningful real-world context. Example: Lesson 4B.2.3 has students create equations, use compositions to create equations.	
Do application problems particularly stress applying the Widely Applicable Prerequisites? Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** 54% of the sub-lessons address at least on of the Widely Applicable Prerequisites. Each sub-lesson includes a Problem-Based Task that requires students to do application problems that address the Standards. Example: Unit 4B Lesson 5, uses geometric modeling and Unit 4B Lesson 2.2 addresses F-LE with multiple equation models	

Are there ample opportunities for students to engage with modeling problems? Do materials require students to use both individual parts of the modeling cycle as well as the full modeling cycle? Read the pages on High School—Modeling in the Standards for Mathematics (pp. 72 and 73). Evaluate lessons, chapter/unit assessments, and homework assignments.	**Evidence-** 63% of the sub-lessons address a Modeling Standard. In these sub-lessons students engage with modeling problems and the modeling cycle. Example: Unit 4A, Lesson 2 - the problem breaks things up then has them graph, apply previous knowledge, and then write expressions.	
Alignment Criterion 1: Materials must reflect the balances in the Standards and help students meet the Standards' rigorous expectations. **AC 1:** Materials must earn at least 5 of 6 points to meet this Alignment Criterion. If materials earn less than 5 points, the Criterion has not been met. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewer only.)** **Before moving to Alignment Criterion 2, record the final Meets or Does Not Meet rating in the Evaluation Summary.**		**__x__Meets** **____Does Not Meet** **Strengths/Weaknesses:** Conceptual understanding, procedural skills and fluency and application are all addressed throughout. Multiple application and modeling problems. Some of the material might be too difficult for the average student.
Alignment Criterion 2: **Standards for Mathematical Practice- Materials must demonstrate authentic connections between content Standards and practice Standards.** The Standards require that designers of instructional materials connect the mathematical practices to mathematical content in instruction. Thus, materials must demonstrate authentic connections between content Standards and practice Standards.	The Standards require that designers of instructional materials connect the mathematical practices to mathematical content in instruction. Thus, materials must demonstrate authentic connections between content Standards and practice Standards. **Required Materials**: • Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf) • Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_HS_Spring_2013_FINAL1.pdf) • Widely Applicable Prerequisites for College and Careers (http://achievethecore.org/prerequisites) • From the materials being evaluated: teacher guides, student texts and workbooks	**Rating this Criterion:** Alignment Criterion 2 is rated as Meets or Does Not Meet. To rate Alignment Criterion 2, first rate metrics 2A, 2B, and 2C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). For each metric, guiding questions are provided to aid in gathering evidence. Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 2 if the materials rate 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as mathematical practices, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.

AC Metric 2A: **Materials address the practice Standards in such a way as to enrich the Widely Applicable Prerequisites; practices strengthen the focus of the course instead of detracting from it, in both teacher and student materials.** **How to Find the Evidence:** Familiarize yourself with the Widely Applicable Prerequisites. Evaluate teacher and student materials for evidence that the mathematical practices support and connect to the focus of the course. NOTE: An example of evaluating this Criterion might include looking at whether materials use regularity in repeated reasoning to illuminate formal algebra as well as functions, particularly recursive definitions of functions. For context, read Criterion #6 in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).	**Evidence-** Each lesson has problem based tasks that require students to employ most of the mathematical practices. There are station activities which require students to work in groups and explain thought process.	**__x__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
AC Metric 2B: **Materials attend to the full meaning of each practice Standard.** **How to Find the Evidence:** For context, read Criterion #7 in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).		**Use the questions for AC Metric 2B to evaluate Metric 2B. Record evidence for each question and rate Metric 2B.** **____Meets (2)** **___x_Partially Meets (1)** **____Does Not Meet (0)**
Over the course of any given year of instruction, is each mathematical practice Standard meaningfully present in the form of assignments, activities, or problems that stimulate students to develop the habits of mind described in the practice Standard? Evaluate lessons, chapter/ unit assessments, and homework assignments for evidence of each mathematical practice being meaningfully present in instruction.	**Evidence-** Although it is evident that most of the practice standards are addressed throughout the year of instruction, they are mostly found in the station activities.	
Are teacher-directed materials that explain the role of the practice Standards in the classroom and in students' mathematical development included? Are alignments to practice Standards accurate? Evaluate teacher materials, paying attention to explanations of the role of the practice Standards in the classroom and in students' mathematical development. Evaluate documents aligning lessons to practice Standards for accuracy. NOTE: Examples to look for when evaluating this metric might include the following: a highly scaffolded problem should not be aligned to MP.1; or a problem that directs a student to use a calculator should not be aligned to MP.5; or a problem about merely extending a pattern should not be aligned to MP.8.	**Evidence-** No. The current curriculum does not include specific materials that explain the role of the practice standards in student understanding.	

AC Metric 2C: **Materia[illegible]upport the Standards' emphasis on mathematical reasoning.** **How to Find the Evidence:** For context, read Criterion #8 in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).		**Use the questions for AC Metric 2C to evaluate Metric 2C. Record ev[illegible]ce for each question and rate Metric** **__x__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
Do the materials support students in constructing viable arguments and critiquing the arguments of others concerning course-level mathematics that is detailed in the content Standards? Read Standard for Mathematical Practice 3. Evaluate teacher and student materials to ensure that students are given opportunities to reason with grade-level mathematics.	**Evidence-** At the end of each sub-lesson there is a recommended closure activity that is typically a journal prompt or discussion question that addresses one of the essential questions.	
Do the materials support students in producing not only answers and solutions, but also, in a course-appropriate way, arguments, explanations, diagrams, mathematical models, etc., especially in the Widely Applicable Prerequisites? Familiarize yourself with the Widely Applicable Prerequisites. Evaluate teacher and student materials to understand the types of work students are expected to produce.	**Evidence-** There is a discussion guide included with the Station Activities for each unit. This includes discussion prompts/questions that address conceptual understanding and require students to mathematically explain their understanding. Some of the station activities also have leading questions that have students find answers, state what they notice, compare, and explain.	
Do materials explicitly attend to the specialized language of mathematics? Is the language of argument, problem solving, and mathematical explanations taught rather than assumed? Evaluate teacher and student materials, paying attention to how mathematical language is taught. NOTE: An example of evaluating this Criterion might include looking at whether students are supported in: basing arguments on definitions; using the method of providing a counter example; or recognizing that examples alone do not establish a general statement.	**Evidence-** The text uses appropriate mathematical language. The key concepts section of each sub-lesson defines any mathematical vocabulary words that students will need to know. Not only are there the new math terms but also a review of previous math terms. The text tries to use the same language as the content standards.	

Alignment Criterion 2: Materials must demonstrate authentic connections between content Standards and practice Standards.

AC 2: Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 points, the Criterion has not been met. Check the final rating.
Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewers only.)**

Before moving to Alignment Criterion 3, record the final Meets or Does Not Meet rating in the Evaluation Summary.

___x_Meets

____Does Not Meet

Strengths/Weaknesses:
Mathematical practices are embedded throughout, but not specifically stated. Multiple problem based tasks and station activities which require student to reason and model mathematics.

Alignment Criterion 3:
Access to the Standards for All Students- Materials must provide supports for English Language Learners and other special populations.

Because Standards are for all students, alignment requires thoughtful support to ensure all students are able to meet the Standards. Thus, aligned materials must provide supports for English Language Learners and other special populations.

Because Standards are for all students, alignment requires thoughtful support to ensure all students are able to meet the Standards. Thus, aligned materials must provide supports for English Language Learners and other special populations.

Required Materials:

- Common Core State Standards for Mathematics (http://corestandards.org/wp-content/uploads/Math_Standards.pdf)
- Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013) (http://www.corestandards.org/wp-content/uploads/Math Publishers_Criteria_HS_Spring_2013_FINAL1.pdf)
- From the materials being evaluated: teacher guides, student texts and workbooks

Rating this Criterion:

Alignment Criterion 3 is rated as Meets or Does Not Meet.

To rate Alignment Criterion 3, first rate metrics 3A, 3B, and 3C. Rate each metric as Meets (2 points), Partially Meets (1 point), or Does Not Meet (0 points). Since there are three metrics, and each metric is worth up to 2 points, the maximum possible rating across all three metrics is 6 points. Ideally, aligned materials will earn all 6 points; materials are judged to have met Alignment Criterion 3 if the materials rate 5 or 6 points. This threshold recognizes that evaluators sometimes differ in how they assess features such as support for special population, while at the same time ensuring that no single metric can receive a rating of zero and be aligned to the Shifts and major features of the CCSSM.

AC Metric 3A: **Support for English Language Learners and other special populations is thoughtful and helps those students meet the same Standards as all other students. The language in which problems are posed is carefully considered.** **How to Find the Evidence:** Evaluate teacher and student materials, paying attention to supports offered for special populations.	**Evidence-** The program overview book includes several graphic organizers that can be copied. The SRB and SWB includes a glossary with English and Spanish definitions. The TRB includes guiding questions to assist students through problem based tasks. The support for ELL and other special populations is limited.	**____Meets (2)** **__x__Partially Meets (1)** **____Does Not Meet (0)**
AC Metric 3B: **Materials provide appropriate level and type of scaffolding, differentiation, intervention, and support for a broad range of learners with gradual removal of supports, when needed, to allow students to demonstrate their mathematical understanding independently.** **How to Find the Evidence:** Evaluate teacher and student materials, paying attention to whether materials provide differentiation that will lead all learners to engage with on-grade-level content.	**Evidence-** Each lesson has guided practice problems with detailed step by step instructions for solving each problem. There is an Honors Program available for Integrated Math 1 - 3. There are resources listed at the beginning of each Lesson with online resources that could be used as supplemental instruction.	**__x__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**
AC Metric 3C: **Design of lessons recommends and facilitates a mix of instructional approaches for a variety of learners such as using multiple representations (e.g., including models, using a range of questions, checking for understanding, flexible grouping, pair-share).** **How to Find the Evidence:** Evaluate teacher materials, noting instructional approaches suggested for whole class and differentiated lessons and activities.	**Evidence-** Each unit/lesson provides the teacher with multiple instructional options. There are PPT for direct instruction, problem based tasks, online resources and applets, and station activities. Several of these options can be done using collaboration as decided by the teacher. Teachers can mix and match materials as they see fit	**__x__Meets (2)** **____Partially Meets (1)** **____Does Not Meet (0)**

Alignment Criterion 3: Materials must provide supports for English Language Learners and other special populations. **AC 3** Materials must earn at least 5 out of 6 points to meet this Alignment Criterion. If materials earn less than 5 points, the Criterion has not been met. Check the final rating. Then, briefly describe the strengths and weaknesses of these materials in light of the above Criterion. **(Reviewers only.)** **Move to the Evaluation Summary and record the final Meets or Does Not Meet rating .**	**_x___Meets** **____Does Not Meet** **Strengths/Weaknesses:** Multiple resources available to enhance and supplement lessons. Variety of techniques for teachers. Limited support for ELL students and limited remediation resources.

Once an evaluation for alignment to the Shifts and major features of the CCSS has been conducted using Sections 1-3, it's important to evaluate for overall quality and best practices. A starting list of Indicators of Quality are suggested below. States, districts and others evaluating instructional materials are encouraged to add to this list to ensure materials reflect local contexts. For background information on some of the Indicators of Quality in this section, refer to pp.16–18 in the Publishers' Criteria for the Common Core State Standards for Mathematics, High School (Spring 2013).

Indicators of Quality	**Evidence- Give specific examples.**	**Rating: (Reviewer only.)**
1. Lessons are thoughtfully structured and support the teacher in leading the class through the learning paths at hand, with active participation by all students in their own learning and in the learning of their classmates.	**Evidence-** Teachers are provided with a variety of materials that can be used to support the teacher in the leading the class, such as warm-up exercises, PowerPoints with guided practice problems and interactive applets, problem-based tasks, practice problems, station activities, pre- and progress assessments, and recommended resources. The teacher is provided with materials and can choose how to incorporate those into the class. A large portion of these materials require students to be actively involved in the lesson and learning.	**(Reviewer only.)** **__x____ Yes** **_____ No**

2. The underlying design of the materials includes both problems and exercises. (In solving problems, students learn new mathematics, whereas in working exercises, students apply what they have already learned to build mastery.) Each problem or exercise has a purpose. **NOTE: This Criterion does not require that the problems and exercises be labeled as such.**	**Evidence-** Each sub-lesson begins with a warm up. These exercises are typically a review that connects to the lesson. Then the sub-lesson has several examples as a guided practice. Typically these examples are problems because they are teaching students how to do something new. Then there is a problem-based task which would be considered an exercise because students are asked to apply their knowledge to a new situation. Finally, each sub-lesson ends with 10 practice exercise for students build mastery on the concepts.	**(Reviewer only.)** ___x___ **Yes** _____ **No**
3. Design of assignments is not haphazard: exercises are given in intentional sequences in order to strengthen students' mathematical understanding.	**Evidence-** There is an assignment following each sub-lesson. Each assignment is 10 questions. The questions are aligned with the problems presented in the lesson. Typically assignments begin with procedural problems then application problems.	**(Reviewer only.)** ____x__ **Yes** _____ **No**
4. There are separate teacher materials that support and reward teacher study including, but not limited to: discussion of the mathematics of the units and the mathematical point of each lesson as it relates to the organizing concepts of the unit, discussion on student ways of thinking and anticipating a variety of students responses, guidance on lesson flow, guidance on questions that prompt students thinking, and discussion of desired mathematical behaviors being elicited among students.	**Evidence-** Each lesson begins with instructions for the teacher. This includes the standards, essential questions, vocabulary, and recommended resources. The recommended resources are typically websites that provide additional tutorials or an interactive website to discover or review content. Each sub-lesson has a list of key concepts and a list of common errors/misconceptions to watch for. Each problem based tasks is accompanied with "Coaching" questions to guide students as well as sample responses. At the end of each sub lesson there is a recommended closure activity which is usually to select one of the essential questions and discuss it or write a journal entry. There is not a pacing guide provided, which could be useful.	**(Reviewer only.)** __x____ **Yes** _____ **No**
5. Manipulatives suggested in the materials are faithful representations of the mathematical objects they represent and are connected to written methods.	**Evidence-** There is not a large amount of suggested manipulatives. At the end of each unit there are Station activities that provide some hands-on experiences. Some of these activities recommend using manipulatives. All suggestions are appropriate for the mathematical content and aid in student understanding. Example: Unit 3 has 4 stations. The manipulatives recommended are calculators, paper and straws.	**(Reviewer only.)** ___x___ **Yes** _____ **No**
6. Materials include a variety of curriculum-embedded assessments. Examples include pre-, formative, summative, and self-assessment resources.	**Evidence-** Each unit features a variety of ways to assess student understanding. Each lesson has a pre-assessment. Each sub-lesson has 10 exercises and a problem-based task. Then each lesson ends with a progress assessment. Finally each unit ends with a unit assessment.	**(Reviewer only.)** __x____ **Yes** _____ **No**

7. Assessments contain aligned rubrics, answer keys, and scoring guidelines that provide sufficient guidance for interpreting student performance.	**Evidence-** There are answers to all homework exercises, warm ups, pre-assessments, progress assessments, and unit assessments. These are located in the back of each TRB for each unit. The tasks that accompany each lesson do not include a rubric or specific answer key. The answers can be found using the sample responses to the coaching questions.	**(Reviewer only.)** ___x___ **Yes** _____ **No**
8. Materials assess student proficiency using methods that are accessible and unbiased, including the use of course-level language in student prompts.	**Evidence-** Assessments use multiple choice and free response questions. The real world situations that are included throughout the text are typically things that high school students will have some prior knowledge of.	**(Reviewer only.)** __x____ **Yes** _____ **No**
9. Materials are carefully evaluated by qualified individuals, whose names are listed, in an effort to ensure freedom from mathematical errors and course-level appropriateness.	**Evidence-** There are 25 people that developed and reviewed this curriculum. They are listed in on the title page of each book.	**(Reviewer only.)** ___x___ **Yes** _____ **No**
10. The visual design supports students in engaging thoughtfully with the subject. Navigation through the text is clear.	**Evidence-** Visual Design – Student book gives easily followed guided practice. It has key concepts listed and defined. Then gives extra practice problems. Navigation – Each unit is a separate book. Many of the sections are extremely long. The digital textbook is difficult to navigate.	**(Reviewer only.)** __x____ **Yes** _____ **No**

Reviewer IMET Evaluation Summary Title/Level: CCSS Integrated Pathway Math III_____

Publisher: Walch Integrated Math _____ Copyright: _2014/2015_____ ISBN:978-0-8251-7456-8____

Reviewer ID # ___CH & JB_____ Date Review Completed:___3/9/2016_____

Non-Negotiable Criteria-The Non-Negotiable must be met in order for the Non-Negotiable Alignment Criteria to be met overall.

Non- Negotiable 1: Focus and Coherence

__X___ Meets

_____ Does Not Meet

Non-Negotiable Overall:

__X___ Meets _____ Does Not Meet

Alignment Criteria- Each Alignment Criterion must be met with a sufficient number of points in order for Alignment Criteria to be labeled as "Meets" overall. The more points the materials receive on the Alignment Criteria, the better they are aligned.

Alignment Criterion 1: Rigor and Balance	Alignment Criterion 2: Standards of Mathematical Practice	Alignment Criterion 3: Access to Standards for All Learners
Points: __6___ of 6 possible. (Materials must receive at least 5 of 6 points to align.)	**Points: __5___ of 6 possible.** (Materials must receive at least 5 of 6 points to align.)	**Points: __5___ of 6 possible.** (Materials must receive at least 5 of 6 points to align.)
___X____ Meets	**____X___ Meets**	**___X____ Meets**
_____ Does Not Meet	**_____ Does Not Meet**	**_____ Does Not Meet**

Alignment Criteria Overall:

___X__ Meets _____ Does Not Meet

If the materials meet the Non-Negotiable Criterion and each Alignment Criterion, they are aligned to the Shifts and major features of the Co[illegible]tandards. **Do the materials meet every Non-Negotia[illegible] and Alignment Criterion? __X___ Yes _____ N[illegible]**

What are the specific areas of strength and weakness based on this evaluation? Publishers or others modifying or developing assessments can use this information to make improvements and/or to remedy gaps in the alignment of assessment materials.

Strengths

- Covers over 50% of the WAP
- Closely aligned to the CCSSM
- Multiple problem sets and examples
- Several resource materials (online and print)
- Standards clearly stated for each lesson
- Vocabulary and Key Concepts

Weakness

- Practice Standards are not stated
- Limited resources for ELL students
- Difficulty level may be too high for the average student